

PENSIONS POLICY INSTITUTE

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The future of the
public sector
pensions

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In publishing this research the PPI is not calling for further reforms of the public sector pensions but aims to provide an evidence base which sets out the potential implications of possible Government reforms. The research considers the implications of possible further reforms to the public sector pensions for public sector employees but also for the overall affordability and sustainability of the schemes.

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A PPI research report by John Adams, Chris Curry and Sean James

Published by the Pensions Policy Institute

© November 2010

ISBN 978-1-906284-14-5

www.pensionspolicyinstitute.org.uk

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Introduction	1
Executive Summary	3
1. What is the current public sector pension provision?	10
2. Possible objectives and policy options for further reform of public sector pensions	20
3. What would be the impact of the policy options?	25
4. Adequacy of public sector pension schemes	30
5. Fairness in the public sector pension schemes	38
6. The role of public sector pension schemes in recruitment and retention	49
7. Affordability and sustainability of public sector schemes	52
8. Transparency of public sector pension schemes	62
Appendices	65
Acknowledgements and contact details	71
References	72

Introduction

Longer periods spent in retirement are increasing the cost to the Government and taxpayers of providing public sector pensions. Public sector employers and unions have been discussing reform proposals to all major public sector pension schemes since 2002. The previous Labour Government implemented a number of reforms to the public sector pensions between 2005 and 2008. The reforms ranged from increasing Normal Pension Age (NPA) for new joiners, increasing member contributions in some schemes and in the case of the Civil Service resulted in a move for new joiners from a pension based on final salaries to one based on average salary throughout the member's career.

Previous research by the Pensions Policy Institute examined the impact of the reforms introduced between 2005 and 2008 to the main public sector pension schemes, on public sector employees, on the sustainability of public sector pension schemes and on the differences between pay and pensions between the public and private sectors. The research found that the Labour Government's reforms have reduced the value of the main public sector pension schemes to public sector workers from being worth around 24% of a public sector worker's salary on average to around 21% of salary. However, the value of all the main public sector schemes is still substantially higher than most of the defined contribution pension schemes that are now more commonly offered by private sector employers.¹ A typical private sector defined contribution pension scheme is worth around 10% of salary on average to a typical private sector worker.²

There have recently been a number of calls for further reform of public sector pensions from political parties, business organisations and think tanks among others. The Coalition Government has appointed John Hutton to chair an Independent Public Service Pensions Commission (IPSPC) to "conduct a fundamental structural review of public service pension provision and to make recommendations to the Chancellor and Chief Secretary 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".³

This PPI research report on the future of the public sector pension schemes:

1. Identifies the policy objectives that any Government considering further reforms to the public sector pensions might aim to address
2. Identifies a set of possible further reforms for the public sector pension schemes that the Government could consider

¹ PPI (2008) www.pensionspolicyinstitute.org.uk

² This comprises the average employer's contribution to a private sector defined contribution pension scheme plus the employer's contribution to S2P

³ Independent Public Service Pensions Commission: terms of reference

3. Analyses a set of possible reforms against the identified policy objectives and identifies what the implications of such reforms might be for public sector employees, and for the overall affordability and sustainability of the schemes

The PPI is not calling for further reforms of the public sector pension schemes. The objective of this research is to provide an independent evidence base to help policymakers to understand the implications of alternative policies. It should also be noted that there is a very broad range of reform options that the Government could consider. This report sets out a small number of the possible range of reforms in order to highlight some of the main implications of different types of reforms.

Executive Summary

This report is intended as a contribution to the on-going policy debate about possible further reforms to the public sector pension schemes. In June 2010 the Coalition Government asked Lord Hutton of Furness to undertake a fundamental structural review of the public sector pension schemes and to report by the Budget 2011. This research suggests that there are four broad options that the Government could consider for further reforms of the public sector pension schemes. These range from:-

- **Continue with the current public sector pension schemes** as reformed by the Labour Government between 2005 and 2008. This option would envisage that the already agreed cost-sharing and cost-capping agreements would be implemented. Following the Coalition Government's announcement in June 2010, it would also entail public sector pensions being linked to the Consumer Price index (CPI) rather than to the Retail Price Index (RPI).
- Further reforms **within the structure of the existing final salary schemes**. Reforms of this type might involve changes to the Normal Pension Age, to member contribution rates or to the accrual rate of the final salary schemes. Caps on pensionable salary or on the benefits paid out would also fall into this category.
- Reforms to the structure of the schemes that involve **a greater sharing of risks** between the scheme member and the employer/taxpayer. Reforms of this type would include the introduction of career average pension schemes in which pension benefits are tied to average, rather than final salaries. They could also include hybrid schemes, for example, where the pension offered is defined benefit (either final salary or career average) upon a base level of salary, with a defined contribution scheme top-up at higher levels of salary. Collective defined contribution schemes could also be considered within this category.
- A move to **defined contribution pensions** arrangements that are more similar to the types of pension arrangements more commonly found in the private sector today. A defined contribution scheme could be funded in the way that such schemes operate in the private sector or it could be "notional" in a similar way to the model used for the public sector in Sweden. In a notional defined contribution scheme the Government does not build up a pot of assets to pay future pension promises but the scheme instead operates on a pay-as-you-go basis, with current pension contributions meeting current pension payments.

Lord Hutton published his interim report in October 2010. In it he concluded that a continuation of current policy was not tenable. However, he also ruled out a wholesale move to funded defined contribution schemes of the type that operate in the private sector. The review team have made clear that they will be looking carefully at models of public sector pension schemes that share risks more equally between pension scheme members and public sector employers/taxpayers and between current and future generations.

This research aims to provide an assessment of the full set of options that the PPI considers the Government could implement to the public sector pension schemes. It therefore includes an assessment of options that Lord Hutton has effectively ruled out, such as a move to a funded defined contribution arrangement.

The PPI has assessed these options against a range of policy objectives that the Government may have as policy objectives for the public sector pension schemes. These criteria include:

- to ensure that public sector pensions provide adequate pensions for public sector workers in their retirement,
- to address concerns that public sector pension schemes are unaffordable and not financially sustainable,
- to improve the transparency of the cost of the pensions being offered to public sector employees,
- to address perceptions that public sector pension schemes offer higher levels of benefits than private sector pension schemes,
- to address unfairness between members within the same public sector pension scheme, and
- to enable the Government to recruit and retain high quality staff.

These objectives are not necessarily all mutually compatible, for example there are likely to be trade-offs between ensuring adequacy and improving affordability.

Before setting out the main conclusions from the PPI's analysis it is worth saying something about our methodology and some of the caveats that should be borne in mind when interpreting this analysis. The public sector pension schemes are all quite different. There are substantial differences between the generosity of the public sector pension schemes that exist in the uniformed services (Armed Forces, Police & Fire) from those that are available in the larger public sector schemes (e.g. NHS, Teachers, Civil Servants and Local Government.) To model the full range of possible reforms in detail for each of the seven main schemes would be very cumbersome. As a result we have created a PPI proxy public sector pension scheme. This proxy scheme has similar characteristics to the reformed NHS, Teachers and Local Government schemes, including tiered levels of member contributions, at 5.25% for those earning less than £20,000, 6.5% for those earning over £20,000 and up to £40,000, 7% for those earning over £40,000 and up to £70,000, 7.5% for those

earning over £70,000 and up to £100,000 and 8% for those earning over £100,000. These schemes together account for 70% of the active membership of the public sector schemes and our objective here is to illustrate the broad impacts of any potential further reforms – rather than to provide very precise cost projections for a particular scheme.

In order to model the impact of hypothetical potential reforms to the public sector schemes on public sector workers and on the future affordability and sustainability of the schemes we have had to choose particular parameters for each reform that we wish to model. For example, we have had to form a judgement about how far the Normal Pension Age might rise, or how far an accrual rate might be reduced, or what type of career average scheme or defined contribution schemes the Government might implement. There are clearly an almost infinite number of possibilities for how such reforms could be structured – it is therefore important to focus more on the general lessons from our analysis of the reform options rather than to focus too much on the levels of benefit generosity or absolute levels of costs. For example it would be possible to design a very generous defined contribution scheme that actually offered higher levels of income replacement than the existing final salary schemes if the levels of employer contribution were sufficiently high.

In choosing the parameters to model we have tried as far as possible to be guided by existing custom and practice or where the Government has already indicated reforms in related areas (e.g. in proposals to increase the State Pension Age) we have linked our reform options to these proposals.

It is also important to note that the reforms are not necessarily always mutually exclusive – for example, it would be possible to both make changes to the Normal Pension Age and to amend the scheme structure to a career average defined benefit structure. The reform options that we have modelled in this paper include:-

Reforms within the structure of the existing final salary schemes

- 1.1 Linking changes to the Normal Pension Age to the increases in the State Pension Age already legislated for in the 2007 Pensions Act: the NPA increases from Age 65 to 66 by 2026, from 66 to 67 by 2036 and from 67 to 68 by 2046.
- 1.2 Reducing the accrual rate in the final salary schemes from 1/60ths to 1/80ths. Both accrual rates are commonly used in private sector final salary schemes.
- 1.3 Increasing member contributions by 1% across the board – this is intended as a ready reckoner approach and it should be recognised that increases in contributions could vary across the schemes or for employees with different salary levels.
- 1.4 Impose a cap on the pensionable salary used to calculate benefits at £75,000 per annum. This is consistent with the Conservative Party's pre-election proposal to cap the public sector pensions paid out to public sector workers at £50,000 per annum.

Risk-Sharing Reforms

- 2.1 Moving to a career average scheme with a benefit structure similar to the Nuvos section of the Civil Service scheme. However, as member contributions are low in the Nuvos scheme compared to other public sector pension schemes, we have modelled the tiered employee contribution structure of the PPI proxy scheme with contributions of between 5.25% and 8% depending on the salary of the scheme member. Member contributions in this modelled scheme are therefore considerably higher than in the actual Nuvos scheme.⁴
- 2.2 Moving to a Hybrid scheme – this is based on a Career Average scheme the same as in 2.1 above up to earnings of £37,000 per annum (the 75th percentile of public sector earnings). Earnings above that level are subject to a Defined Contribution top-up arrangement. We have assumed that the employee and the employer both contribute at 6.5% of salary on earnings above £37,000 per annum.

Defined Contribution Schemes

- 3.1 Move to a funded defined contribution scheme. We have assumed in this option that employees contribute 5% of salary and employers contribute 10% of salary. This is towards the generous end of current DC schemes in the private sector – only 10% of private sector employers and employees currently contribute at this level. Clearly the Government could implement any combination of employer and employee contributions that it chose to.
- 3.2 In the notional defined contribution model we have also assumed that employees contribute 5% of salary and employers contribute 10% of salary. We have revalued notional defined contribution pots in line with average earnings as operates in Sweden. However, a different index could be used.

The schemes modelled are intended to be illustrative, not definitive. It would be possible, for example, to design a Career Average scheme that might be expected to provide a higher pension than the current Final Salary scheme by increasing the Career Average accrual rate.

The results are therefore only relevant to the specific examples modelled here, and should not be generally applied across all schemes of a particular type – for example all Career Average schemes, or all Final Salary schemes. The examples that we have chosen here are closely linked to reform options put forward by stakeholders, or examples used in other countries, and it would be perfectly possible to design other suitable reform options.

It is also the case that no one single scheme design may be appropriate for all of the different public sector pension schemes. The analysis here considers the public sector pension schemes as a single entity, but in reality

⁴ Member contributions to the Nuvos scheme are 3.5% for all members, while in the modelled scheme member contributions range from 5.25% for low earners to 8% for the highest earners

they are different schemes meeting different needs for different employers.⁵ It could be perfectly possible that a scheme design that best meets the needs of, for example, the NHS, would not be suitable for the armed forces. This analysis is designed to show the differences between different types of schemes to aid evaluation and the choice of the right option for each separate public sector scheme.

The main conclusions that have emerged from the PPI's analysis in relation to each of the potential options modelled for possible further reform follows.

Continuation of Current Policy

A continuation of current policy assumes that the previous Labour Government's reforms to public sector pensions and that the Coalition Government's change from RPI indexation to CPI indexation announced in June 2010 are both implemented.

Prior to the Labour Government's reforms and the change to indexation the PPI estimated that a typical public sector pension scheme was worth around 24% of salary on average to a typical public sector worker. The Labour Government's reforms reduced this to around 21% of salary and the CPI change has further reduced this to 18% of salary for members who have joined the schemes since the reforms were implemented. The combined impact of the Labour Government's reforms and the Coalition's CPI change has been to reduce the value of a public sector pension scheme by 25% on average.

These changes have already reduced the cost to the taxpayer of providing the public sector pensions schemes. In 2010 the Government spends about 1.2% of GDP on the public sector pensions after deducting the contributions made directly by members themselves. Under the previous Labour Government reforms and RPI indexation this was predicted to rise to 1.3% of GDP in 2030 and then fall back to 1.2% of GDP by 2050. As a result of the CPI change, public expenditure on public sector pensions is now projected to fall over this time frame – from 1.2% of GDP in 2010, to 1.1% of GDP by 2030 to 1% of GDP by 2050.

A continuation of current policy would offer the most generous pension to public sector workers of the options that we have modelled. This may prove helpful to the Government as a recruitment and retention tool. Under current policy, a median earner could be expected to hit their target replacement rate with a projected replacement rate of 64%. This option also represents the highest cost to the taxpayer of the options that we have modelled, although it is important to note that expenditure by the Government is still projected to fall from 1.2% of GDP in 2010 to 1% of GDP by 2050 under a continuation of current policy. There may be concerns about the fairness of a system which

⁵ For example new entrants to the Civil Service are already entered into a career average scheme rather than a final salary scheme.

provides more generous pensions to high flyers than low-flyers and long-stayers than short-stayers.

Further Reforms within the structure of the existing final salary schemes

The reforms modelled here would keep the structure of the existing final salary schemes (higher Normal Pension Age, lower accrual rates, increased member contributions, or salary or benefit caps) but reduce the generosity and therefore the adequacy of public sector pension provision. For example, reducing the accrual rate in a final salary scheme from 1/60ths to 1/80ths would reduce the projected replacement rate from 64% to 52% for a median earner.

This may have a detrimental impact on recruitment and retention between the public and private sectors (although it may increase labour force mobility) compared to the current public sector pension schemes.

However, any impact on recruitment and retention is likely to be relatively small as the schemes would still be more valuable than those generally on offer in the private sector. The inherent unfairness between short and long-stayers, and low and high-flyers would remain, unless benefit or salary caps were low enough to affect a significant number of higher earners.

The impact of making changes within the structure of the final salary schemes on affordability and sustainability is likely to be relatively small. Of such reforms modelled, reducing the accrual rate has the largest impact on cost – reducing the cost to the taxpayer of public sector pensions in 2050 from 1% of GDP to 0.9% of GDP. Increasing the Normal Pension Age in line with the State Pension Age changes in Pensions Act 2007 will reduce the cost of providing benefits – but even by 2050 the amount saved would be less than 0.1% of GDP if this change applied only to new entrants. Setting a cap on pensionable salary at £75,000 has a negligible impact on the affordability of the schemes because so few public sector workers would be affected by such a cap.

Risk-sharing schemes

The Career Average and hybrid pension schemes analysed in this report would reduce levels of adequacy compared to the current final salary public sector pension schemes. The projected replacement rate for a median earner falls from 64% under the current final salary schemes to 55% under a career average benefit structure similar to the Nuvos scheme in the Civil Service.

As a result, the schemes would be more affordable for the taxpayer. Our projections suggest that a career average scheme with a benefit structure similar to the Nuvos scheme in the Civil Service but with much higher, tiered contributions might reduce public expenditure on public sector pensions to around 0.9% of GDP by 2050, compared to 1% of GDP under the current final salary schemes. The cost profile for the hybrid scheme modelled is broadly similar to the career average scheme modelled.

The reduced generosity of the public sector pension may mean that recruitment and retention may be made more difficult. However, labour mobility may be better if public sector employees are more willing to move to private sector jobs.

Differences would remain in the structure of public sector schemes and private sector provision, as the public sector pension would remain Defined Benefit rather than Defined Contribution, albeit a less generous version. However there would be more fairness between the members of public sector schemes, as a career average structure gives more equal outcomes between short and long-stayers, and between low and high-flyers.

Defined Contribution Schemes

Defined contribution pension schemes tend to receive lower contributions than defined benefit pension schemes. This leads to lower pensions being paid and a greater risk that income in retirement does not achieve the benchmark replacement rate. This could be offset to some extent by DC arrangements being contracted-in to S2P, which would increase the state pension received by public sector workers but would also increase the state's liability to pay state second pension.

It may be harder for the public sector to attract employees, but flexibility and movement between public and private sectors may be increased as public sector and private sector pensions become more comparable. There would not be any cross-subsidies or unfairness between different scheme members, as each member would have their own individual pot. A funded DC scheme would be more expensive than the current public sector pension schemes in the short to medium term as member contributions could no longer be used to fund pensions in payment.

Depending on the level of contributions to a Notional DC arrangement and the way in which contributions were indexed, the affordability and transparency of public sector pension schemes could be improved compared to the current system, with contributions being clear and long-term costs low. There would also be higher state pension costs, and higher levels of NI contribution collected each year.

The PPI modelled a notional DC scheme with a 10% employer contribution and a 5% employee contribution. A notional DC scheme of this type linked to increases in average earnings is projected to give a median earner a replacement rate of 43% even allowing for the additional state pension received. This is significantly lower than the replacement rate of 64% projected for a median earner from the current final salary schemes. Under this option, and allowing for the additional NI contributions raised and S2P expenditure arising from the schemes being contracted-in, Government spending on public sector pensions is projected to fall to 0.7% of GDP by 2050, compared to 1% of GDP under the existing arrangements.

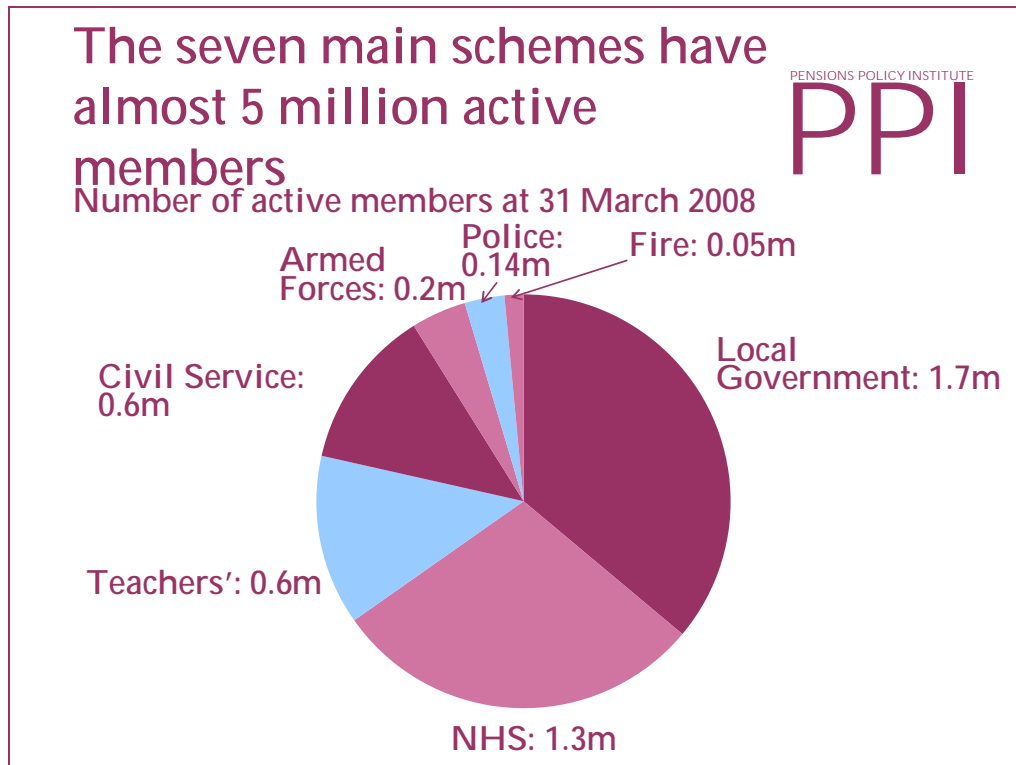
Chapter one: what is the current public sector pension provision?

This chapter describes the state of the current public sector pension scheme provision in the UK. It sets out what we mean by public sector pensions. It outlines the main public sector pension schemes and the reforms that the Labour Government introduced from 2002 up to those which came into force in 2008. It also discusses the implications of the Coalition Government's decision to index public sector pensions to the Consumer Prices Index (CPI) rather than the Retail Prices Index (RPI).

What are public sector pension schemes?

Public sector pension schemes are pension schemes run and sponsored by the Government for the benefit of public sector employees. The vast majority of members are in the seven main schemes, which have a combined active membership of around 5 million people (Chart 1).

Chart 1⁷



⁶ 'Active members' are those members who are building up new benefits in the scheme

⁷ Figures for Civil Service, Teachers, NHS and Armed Forces are from individual scheme accounts for 31 March 2009. Figures for Local Government from, CLG (2009) Table 7.2g. Figures for the Teachers' scheme are for England and Wales only. Figures for the Local Government scheme are for England only.

There are a number of much smaller schemes. The schemes for MPs, the Judiciary, and the Research Councils have a combined active membership of around 11,000 people.⁸ There are also 'quasi-public' sector pension schemes, where the Government owns all of or part of the sponsoring company or corporation (such as the Civil Aviation Authority Scheme or the BBC Scheme), or where the Government has underwritten part or all of the benefits (such as the British Coal Pension Scheme). Such schemes have a combined active membership of around 345,000 people.⁹

This report concentrates on the seven main schemes in Chart 1. Unless otherwise stated, this report refers to the England and Wales schemes. Some of the schemes are run as separate entities in Scotland and Northern Ireland.¹⁰

Three quarters of public sector pensions currently paid out are below £10,000 a year

The average level of pensions paid out by public sector pension schemes has been used to counter claims that public sector pensions are large. However, the use of a single figure can miss important information concerning the distribution of pensions. An understanding of the distribution and the factors behind the distribution is required in order to properly assess the potential that a public sector scheme has to provide an adequate pension:

- the mean pension being paid out to a PCSPS pensioner is around £6,000 however the median pension is around £4,500,¹¹
- only a quarter of all pensioners in the four largest unfunded public sector pension schemes pension receive a pension over £10,000 a year
- fewer than 1% of pensioners receive a pension of more than £35,000.

Chart 2 shows the distribution of the pensions provided by the main unfunded public sector pension schemes, the PCSPS, NHS scheme, Teachers' scheme and armed forces pension scheme.

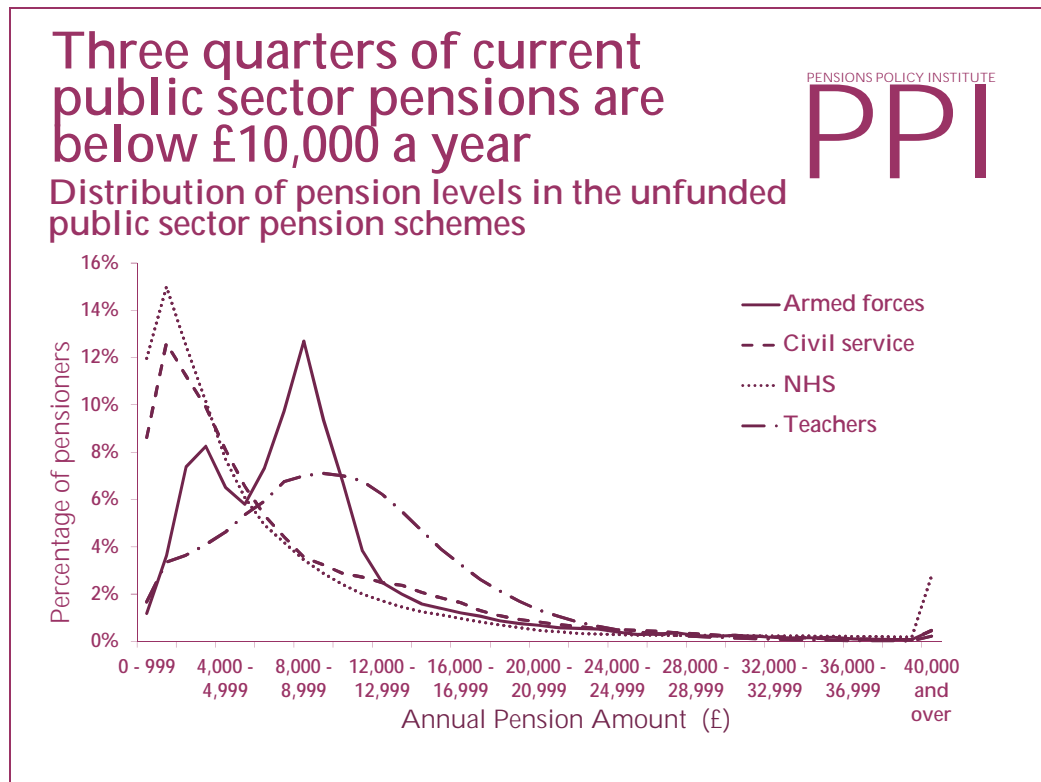
⁸ Figures from individual scheme accounts for 31 March 2009

⁹ PPI (2005) page 40

¹⁰ These are the Teachers', NHS and Local Government schemes

¹¹ PPI calculation based on figures presented in NAO (2010)

Chart 2¹²



The large number of relatively small annual pensions in payment may be, in part, a result of people leaving employment early and the greater reliance on part time workers in the public sector than in the private sector. For example, Government assumptions on withdrawal rates suggest that around 80% of people who join the Civil Service at age 25 leave before retirement, with around 35% of people leaving in the first 5 years.¹³

Six out of the seven main public sector pension schemes are unfunded

Six out of the seven main public sector pension schemes are unfunded, with the exception being the Local Government scheme. This means that pension benefits are met by current government income as and when they fall due. In contrast, all registered¹⁴ occupational pension schemes in the private sector are funded, which means that scheme members’ pension rights should be covered by assets held under trust.

Public sector employers who offer an unfunded public sector pension scheme for some of their employees pay contributions to a sponsoring government department as if the scheme were funded. Under this system, known as SCAPE (Superannuation Contributions Adjusted for Past Experience), employer contributions form part of the employer’s annual budget. The

¹² NAO (2010)

¹³ GAD (2010)

¹⁴ ‘Registered’ means that the scheme can qualify for tax advantages

Government pays out pensions to retired pension scheme members, netting off the employer and member contributions received.

The main public sector pension schemes are also:

- **Statutory.** This means that they were established and are reformed through Acts of Parliament.¹⁵ Private sector pension schemes can be amended by the trustees or closed down by the sponsoring company.
- **Nearly¹⁶ all Defined Benefit.** This means that the rules of the schemes set out a formula for the level of benefits that the scheme will provide for members. This contrasts with Defined Contribution schemes, where scheme members and employers pay contributions that are invested and the level of benefits depends on the size of a member's fund at retirement and the annuity rates available at the time of retirement.

In the private sector, only around 27% of Defined Benefit schemes are still open for new joiners.¹⁷ Larger Defined Benefit schemes are more likely to be open to new joiners than smaller Defined Benefit schemes: around 60% of active members of private sector DB schemes that are open to new joiners are in schemes of more than 10,000 members.¹⁸ With fewer Defined Benefit schemes being set up in the private sector,¹⁹ the number of active members of private sector Defined Benefit schemes is likely to continue to fall in future if current trends continue. The number of active members of private sector occupational Defined Contribution schemes has remained relatively constant in recent years at around 1 million.²⁰ There has been, however, a growth in the number of people in employer-sponsored personal pensions.²¹

- **Multi-employer schemes.** The NHS, Civil Service, Teachers', and Armed Forces schemes are all single schemes that are administered nationally. In each case, there are several employers (for example, individual NHS Trusts or Government Departments) that contribute to the same scheme. The Local Government, Police and Fire schemes are administered by local authorities. For example, there are 89 separate Local Government schemes in England and Wales. Although central government is responsible for the regulatory framework that applies across all of these schemes, the individual schemes are administered, managed and funded at a local authority level.

A single place of work in the public sector could contain employees in several different public sector pension schemes. For example, teachers in the Teachers' scheme work alongside teaching assistants in the Local Government scheme.

¹⁵ All of the main public sector pension schemes can now be amended by secondary legislation. Prior to 2005, amending the Armed Forces scheme required Acts of Parliament, which is more onerous procedure.

¹⁶ There are some public sector Defined Contribution schemes such as the Partnership section of the Civil Service scheme, but these have a very small membership

¹⁷ Figure for 2009. TPR and PPF (2009) page 27.

¹⁸ Figure for 2008. ONS (2009) page 10

¹⁹ PPI (2007) page 21

²⁰ ONS (2009) page 10. There was a decline between 1995 and 2008 from 1.1m to 1.0m.

²¹ DWP (2008 IA) Figure F.2

- **Operate a policy of auto enrolment.** This means that eligible employees in the public sector are automatically members of a pension scheme, unless they actively decide to opt out. The Pensions Act 2008 contains requirements that all employers, in both the private and the public sector, enrol automatically most employees²² into a private pension scheme from 2012.

There have been a number of reforms to the public sector pension schemes implemented between 2005 and 2008. For the most part these reforms affect new joiners to the schemes. The main components of these reforms are:

- **Increased Normal Pension Age for new joiners.** The Normal Pension Age (NPA) of new entrants to the NHS, Civil Service and Teachers' schemes has increased from 60 to 65. Existing members of the schemes have retained an NPA of 60. The LGPS retained an NPA of 65 for all members, but abolished the rule which allowed members over age 60 to retire when the total of their age plus service was 85 or over.
- **Changes to employee contribution rates.** A number of the schemes have changed the amount which employees have to pay in to the scheme. The Teachers' scheme has increased the rate of employee contributions from 6% to 6.4% for all members. The NHS and Local Government scheme have introduced tiered contributions based on the level of salary. Some lower paid staff may pay lower contributions than they would under the pre-reform schemes whereas higher paid staff may pay a higher level of contributions.
- **Change in the accrual rate.** Accrual rates have increased for the NHS, Teachers' and Local Government schemes for new entrants, from 80ths to 60ths of salary. The separate lump sum accrual, which used to provide a lump sum of 3/80ths of salary for each year of service, has been abolished for new entrants. New entrants to the schemes can now only receive a lump sum at retirement if they exchange (or 'commute') part of their pension.
- **Cost sharing and cost capping.** Cost sharing and cost capping agreements are in place for each of the main schemes. Cost sharing allocates unanticipated increases in the costs of the scheme 50:50 between the employer and the member. Cost capping limits the employer contributions at a certain level, unanticipated costs above this level may fall fully on the members.

²² Jobholders aged between 22 and state pension age and earning more than around £5,000 a year

Table 1 sets out the main provisions of the seven main public schemes and how they were reformed by the previous Labour Government.

Table 1: Summary of the main elements of the reforms to public sector pension schemes (all reforms are for new joiners only unless otherwise stated)

	NHS ²³	Teachers'	Civil Service ²⁴	LGPS (reformed for all members)	Armed Forces	Police	Fire
Normal Pension Age (NPA)	60 à 65	60 à 65	60 à 65	Remains 65; Rule of 85 abolished for new service with transitional protection	No change from 55	50 with 25 years' service (below 50 with 30 years); 55 (57 or 60 for higher ranks) à 55	55 (from 50 after 25 years' service) à 60
NPA for early leavers	Same as NPA	Same as NPA	Same as NPA	Same as NPA	60 à 65 (all members)	60 à 65	60 à 65
Basic design	Remains final salary	Remains final salary	Final salary à Career average	Remains final salary	Remains final salary	Remains final salary	Remains final salary
Accrual rate	80ths à 60ths	80ths à 60ths	60ths à 2.3%	80ths à 60ths	69ths (91ths after 22 years) ²⁵ à 70ths	60ths (30ths after 20 years) à 70ths	60ths (30ths after 20 years) à 60ths
Additional lump sum?	3 x pension à commutation	3 x pension à commutation	Commutation only	3 x pension à commutation	No change from 3 x pension	Commutation à 4 x pension	Commutation only
Late retirement enhancement?	No à Yes	No à Yes	No à Yes	No à Yes	No	No	No
Draw-down option?	Yes	Yes (all members)	Yes (all members)	Yes	No	No	No
Rate of employee contributions²⁶	6% (5%) à 5-8.5% (for all members)	6% à 6.4% (for all members)	No change from 3.5%	6% (5%) à 5.5-7.5%	Remains non-contributory	11% à 9.5%	11% à 8.5%
Cost sharing?	Yes	Yes	Yes	Yes	No	No	No
Eligibility for survivor's pension	Now includes non-legal partners and payable for life (but only for new joiners in the Police and Fire schemes)						
Survivor's pension on death in retirement	Remains a 160ths pension	Remains a 160ths pension	160ths à 3/8ths of member's pension	Remains a 160ths pension	50% à 62.5% of member's pension	Remains 50% of member's pension	Remains 50% of member's pension
Ill-health benefit	1-tier à 2-tier	1-tier à 2-tier	Remains 2-tier	1-tier à 3-tier (proposed)	1-tier à 2-tier	1-tier à 2-tier	Remains 2-tier
Timescale	1 April 2008	1 January 2007	30 July 2007	1 April 2008	6 April 2005	6 April 2006	6 April 2006

²³ The scheme for salaried staff is illustrated. Self-employed members, such as GPs and Dentists, have a career-average scheme that is not shown

²⁴ The Premium section of the Civil Service scheme is illustrated here, since the Classic section has been closed to new members from 2002.

²⁵ For other ranks. Officers have higher accrual rates.

²⁶ If a range is shown then employee contributions depend on pay. Figures in brackets denote special provisions for certain categories of workers.

Existing members may receive greater value from a pension scheme

The date on which the scheme changes were implemented is different for each scheme. Table 2 sets out the implementation dates for each of the 4 main schemes.

Table 2: Date of implementation of 2007/08 reforms

Scheme	Date of implementation
Teachers' Pension Scheme	1 January 2007
Principal Civil Service Pension Scheme	30 July 2007
NHS Pension Scheme	1 April 2008
Local Government Pension Scheme	1 April 2008

In this report an "existing member" is an employee who was a member of the scheme before the scheme's implementation date. A "new joiner" is an employee who joins after the implementation date.

Measuring the value of pensions to employees

To quantify the impacts of the reforms, the value of the public sector pension schemes to members of the schemes has been modelled. The measure used is the 'effective employee benefit rate', which:

- Is expressed as a percentage of salary.
- Is calculated as the amount that would be needed to 'buy' the benefits of the scheme, as if it were a funded scheme. Member contributions have been deducted, to show the notional remaining amount that is contributed by the employer.
- Takes account of the main features of the schemes' designs, including their normal pension age, accrual rate, survivors' benefits, ill-health benefits, and death-in-service benefits.
- Is an estimate of the additional value of the pension to an individual in each type of scheme.²⁷ If the effective employee benefit rate in Scheme A is 20% of salary and in Scheme B is 15% of salary, then the members of Scheme A are in effect receiving benefits worth 5% of salary more than those of Scheme B.

The average effective employee benefit to existing members of the four main public sector pension schemes (the NHS, Civil Service, Teachers and Local Government), before the Labour Government's reforms was 23%. The impact of the Labour Government's reforms was to reduce the value of the four main public sector schemes to 20% of salary.²⁸ Individual scheme members may

²⁷ This is different from the estimated cost of the scheme to the employer. Such employer cost calculations use assumptions that are specific to the scheme. This could lead to differences in value which are a result of differences in assumptions. We have used a single set of assumptions so that only differences in the benefits offered to an individual lead to a difference in value.

²⁸ PPI calculations

have been affected to a greater or lesser degree depending on their own characteristics.

The recent switch from RPI to CPI has reduced the value and cost of public sector pension schemes

One of the measures announced in the Coalition Government's Emergency Budget on 22 June 2010 was to replace the Retail Prices Index (RPI) with the Consumer Prices Index (CPI) for the purposes of pension indexation and the revaluation of deferred pensions. The annual change in the CPI tends to be lower than that of RPI. The impact of this change is to reduce the value of future pension payments. All projections and calculations in this report are based on the CPI change having been implemented unless otherwise stated. The impact of the change to CPI is to reduce the average value of the effective employee benefit rate of the seven main schemes from 21% to 18% for new members and from 24% to 20% for members who joined the schemes before the reforms introduced by the Labour Government (Table 3).

Table 3²⁹: Effective employee benefit rates under different combinations of date of joining and indexation levels

Average employee benefit rates	Members of scheme pre Labour reforms	Joiner of new scheme post Labour reforms
With RPI Indexation		
NHS, Teachers, LGPS and Civil Service	23%	20%
All 7 Main public sector pension schemes	24%	21%
With CPI Indexation		
NHS, Teachers, LGPS and Civil Service	19%	17%
All 7 Main public sector pension schemes	20%	18%

The schemes for the uniformed services – the armed forces, police and fire services – are much smaller than the main four schemes. Together, they have around 0.4 million active members, in comparison to the 4.1 million active members of the four main schemes. The pension schemes of the uniformed services are more valuable than the main schemes for pre-reform members. The reforms have reduced their value for new entrants; the average effective employee benefit rate for new entrants to the uniformed service schemes has fallen from 30% to 27% after allowing for the change to CPI indexation. However, they remain more valuable than the main schemes post-reform.

The impact of the change from RPI to CPI on people in retirement is to reduce the amount of pension increases that they receive each year. While the impact in any given year may be small, the cumulative effect can be substantial (Example 1).

²⁹ PPI (2008)

Example 1

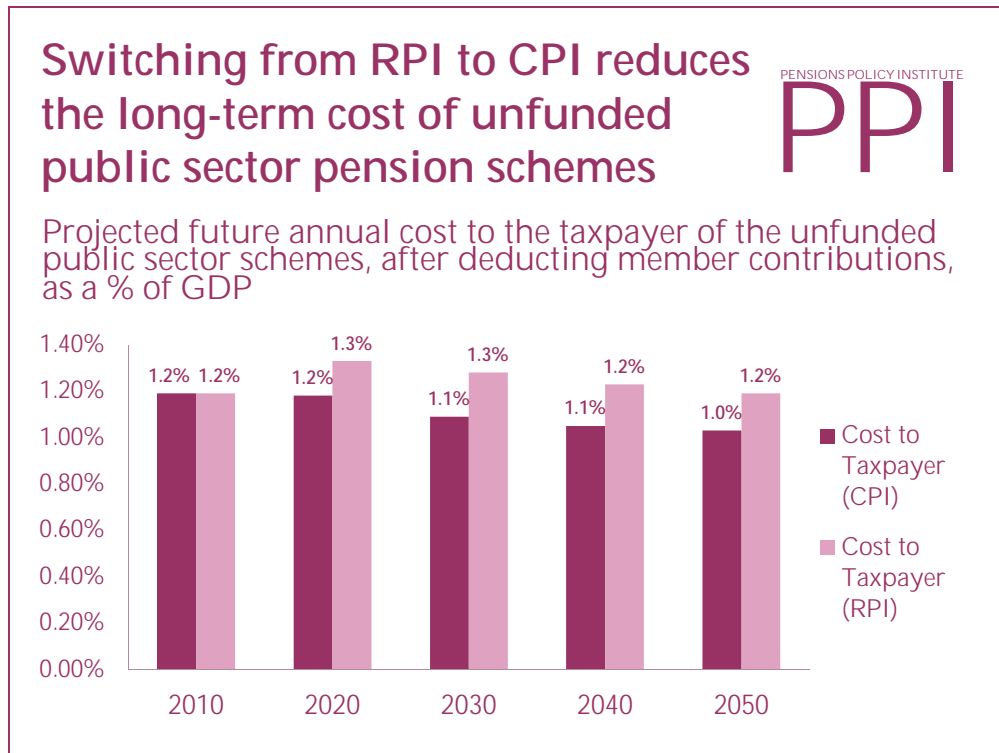
Callum retires in 2010 on a median level public sector pension of £4,500 a year. If the link to RPI had remained then in 2020 his pension would be £5,970 a year (£3,845 in 2010 earnings terms).³⁰

Under the CPI increases Callum's pension in 2020 would be £5,485 a year (£3,530 in 2010 earnings terms).

In this scenario the change from CPI to RPI would result in a pension 8% lower after 10 years in payment.

This reduction in the value of public sector pension schemes as a result of the switch from using RPI to the CPI for indexation and revaluation has also lowered the long-term cost of public sector pension schemes to the taxpayer (Chart 3). Following the Coalition Government's announcement that pension increases will be linked to the CPI the cost to the taxpayer of the unfunded schemes is projected to decrease over the next forty years, from 1.2% of GDP in 2010 to 1.0% of GDP in 2050. Had pension increases remained linked to RPI, the cost to the taxpayer would have increased from 1.2% of GDP in 2010 to around 1.3% of GDP by 2020, before falling back to around 1.2% by 2040. This excludes the Local Government Pension Scheme, which is a funded scheme.

³⁰ Assumes RPI increases of 2.87% a year, earnings increases of 4.5% a year and CPI increases of 2% a year. This is an illustrative example. The actual impact may be greater or smaller depending on how the RPI and CPI indices evolve in the future.

Chart 3³¹

Comparison between PPI and IPSPC (GAD) projections

The figures shown in Chart 3 and used throughout the rest of this report are the PPI's own calculations of the possible future annual cost to taxpayers of the unfunded public sector pension schemes. These are broadly comparable to similar estimates made by the Government Actuary's Department (GAD) for the IPSPC for the interim report published in October 2010. For example, both sets of projections show long term pensions in payment net of member contributions falling to around 1.0% of GDP by 2050, and the shape of the decline is similar.

There are some differences in the data, assumptions and methodology used in PPI and GAD projections that means that the results are not identical. They are however sufficiently similar for the PPI to be confident that the projections shown here are consistent with those made by GAD for the IPSPC and that the modelled impacts of alternative policy options are robust and credible. The key assumptions used by the PPI in the projections for this report are shown in Appendix 1.

³¹ PPI calculations. The projected figure may be different from those produced by GAD for the Independent Public Sector Pension Schemes Commission, due to slight differences in modelling assumptions and modelling techniques, GAD also has access to Government figures that are not publicly available. These figures allow for the additional £1 bn per year in additional member contributions that the Government expects to collect by 2015 under the existing cap and share arrangements.

Chapter two: possible objectives and policy options for further reform of public sector pensions

The Coalition Government has appointed John Hutton to chair an Independent Public Service Pensions Commission to “conduct a fundamental structural review of public service pension provision and to make recommendations to the Chancellor and Chief Secretary 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”.³² The commission produced an interim report on 7 October 2010, with a final report to follow in time for Budget 2011.

A number of organisations have called for further reforms of the public sector pension schemes. This chapter considers the possible policy objectives that any further reforms of the public sector pension schemes might aim to meet.

Some organisations believe further reforms are necessary

Calls for further reforms to the public sector pension schemes have been voiced by a number of organisations. Some of the political parties, business lobby groups and trade unions have publicly discussed possible options for the future of public sector pension schemes. In recent years a number of senior politicians have called for a review of public service pension provision suggesting a possible move to defined contribution,³³ capping benefits,³⁴ or simply calling for a review.³⁵ The Confederation of British Industry (CBI), the Institute of Economic Affairs (IEA) and the Institute of Directors (IoD) have all published papers calling for some reform of the public sector pension system in the last couple of years. The IEA and the IoD launched a joint enquiry body in December 2009 to investigate the need for further reform to public sector pensions and in June 2010 the Coalition Government asked former Labour cabinet minister John Hutton to chair an Independent Public Service Pensions Commission. The IPSPC concluded in its interim report that there is a case for long-term structural reform of public sector pensions.³⁶ The Trades Union Congress (TUC) has defended the current public sector pension schemes; they argue that the real problem is not over-generous public sector pension schemes but under-generous private sector pension schemes.

The PPI held a round table event hosted by the Nuffield Foundation on 28 January 2010. The purpose of the event was to seek views from stakeholders and interested parties on the appropriate objectives and policy options set out in this report. A list of the organisations represented at the round-table can be found in Appendix 2.

³² Independent Public Service Pensions Commission: terms of reference

³³ David Cameron suggested a “move increasingly towards defined contribution rather than final salary schemes” in November 2008

³⁴ George Osborne speech to the Conservative Party Conference in October 2009

³⁵ Vince Cable in his paper Tackling the Financial Crisis

³⁶ IPSPC (2010)

What might be the objectives of further reform of the public sector pension system?

The possible objectives for further reform of the public sector pensions might include:

- to ensure that public sector pensions provide adequate pensions for public sector workers in their retirement,
- to address concerns that public sector pension schemes are unaffordable and not financially sustainable,
- to improve the transparency of the cost of the pensions being offered to public sector employees,
- to address perceptions that public sector pension schemes offer higher levels of benefits than private sector pension schemes,
- to address unfairness between members within the same public sector pension scheme, and
- to enable the Government to recruit and retain high quality staff.

The objectives are not necessarily all mutually compatible, for example there are likely to be trade-offs between ensuring adequacy and improving affordability.

Possible policy options for further reforms of public sector pensions

There is a range of potential policy options that the Government could consider for the future of public sector pension provision. The PPI is not proposing or calling for a particular reform option, but rather aiming to set out and analyse a range of reforms that could be considered to inform the policy debate.

The policy options that are analysed fall into a number of broad categories. These broad categories are:

- Continue current policy,
- Make further changes to existing final salary schemes,
- Risk sharing or hybrid schemes, and
- Move to defined contribution arrangements.

Continue current policy

Continue current policy assumes that the public sector schemes continue as they are, and that the already agreed reforms for new entrants and the Coalition's plans for CPI indexation are implemented with no further change. In particular, it assumes that the already agreed cost sharing and cost capping agreements are implemented. Cost sharing allocates unanticipated increases in the costs of the scheme 50:50 between the employer and the member. Cost capping limits the employer contributions at a certain level, unanticipated costs above this level may fall fully on the members.

Make further changes to existing final salary schemes

There are a number of further changes that could be made to reduce the generosity of public sector pension schemes while still maintaining the structure of a final salary pension scheme. For example:

- Change normal pension age: Increasing the normal pension age will tend to reduce the effective value of the pension. This is due to the effects of discounting and because a pension which comes into payment at an older age will be paid for less time. The reform option modelled in this paper is the linking of the scheme retirement ages with the SPA changes legislated in the Pensions Act 2007. However, other changes to normal pension age could be made and the Coalition Government has already announced that the increase in State Pension Ages to 66 will be brought forward to 2020.
- Reduce the rate at which benefits are accrued: Members build up their pension by receiving a proportion of their salary for every year they are employed. This is known as the accrual rate. The accrual rate could be reduced in order to alter the speed at which the pension is built up. In this paper the PPI has modelled the impact of reducing the accrual rate from 60ths to 80ths.
- Increase the member contribution rate: This reduces the costs paid by the employer, and ultimately the taxpayer. This paper models the impact of increasing member contributions by 1% across the board. Although it should be recognised that increased contributions could vary for different schemes or for individuals with different earnings levels.
- Impose a cap on salary used to calculate benefits: The final salary used to calculate the pension can be capped at a certain level. The reform option modelled in this paper is to cap the salary at £75,000. This level is consistent with the proposals made by the Conservative Party in October 2009 to cap public sector pensions at £50,000 a year.³⁷
- Extend the coverage of the recent reforms which applied to new entrants to include existing members: This would affect only the future accrual of the existing members; any pension already built up would retain its value under the arrangements in place at the time.

Risk sharing

Final salary schemes place a lot of the risks associated with running a pension scheme on the employer, there may be ways to design the pension scheme that pass on some of the risks to the employee. For example, the Government could:

- Move from final salary to career average: Career average pensions accrue an amount of pension for each year of service based on the salary in that year, rather than basing the entire pension on an unknown future final salary. This reduces the risk to the employer of having to pay a pension based on a high final salary but receiving contributions on a lower current salary. The Civil Service scheme has already moved to a career average

³⁷ The Conservative Party pre-election policy on public sector pensions included "a cap on the biggest government pensions, including those for senior civil servants, local council executives and quango managers". Under this policy the pension accrual would cease at the time where the accrued pension hits £50,000. At that point neither the employer nor the member would make any further contributions.

scheme for new entrants. The Career Average scheme benefits that are modelled in this paper mirrors those available in the Nuvos scheme currently offered to new staff members in the Civil Service. However, as member contributions to the Nuvos scheme are much lower than in some other public sector schemes, the scheme modelled in this paper assumes that contributions are tiered, ranging from 5.25% for the lowest earning members to 8% for the highest earning members, which are considerably higher than existing member contributions in the Nuvos scheme.

- Move to a hybrid scheme: A hybrid scheme contains elements of both defined benefit and defined contribution schemes. Possible arrangements include:
 - Defined contribution with a level of defined benefit guarantee
 - Base level of defined benefit provision up to a certain salary level with a defined contribution portion on top
 - The Hybrid scheme modelled assumes a Career Average on salary up to the 75th percentile of public sector earnings (around £37,000 a year),³⁸ for salary over that amount, the employee and employer are assumed to pay into a Defined Contribution fund at 6.5% each. There are a wide range of hybrid arrangements that could be considered.

Move to defined contribution arrangements

In a defined contribution scheme the amount of the final pension depends on the value of the pension pot that has been built up due to a combination of contributions and investment returns. The final pension will also depend on the available annuity rates at the time that the employee purchases an annuity. Defined contribution arrangements transfer more of the risks associated with running a pension scheme from the employer on to the employee. For example, the Government could:

- Move to funded defined contribution: Employees are allocated individual pots where contributions are invested in assets. The pots receive an investment return based on the asset performance. At retirement the fund is used to purchase an annuity at market rates. A change to a DC scheme that actually has funded pots in the public sector will increase short to medium term costs for the Government. The Government would still have to pay out the pensions of current pensioners but would be unable to use the contributions of today's public sector workers which would be required to be invested in the DC scheme.
- Move to a pay-as-you-go notional defined contribution scheme: These are based on the Swedish model where contributions in respect of current employees are notionally invested in a pension pot. The pot receives a notional investment return in line with an economic indicator and is converted into a pension at retirement. The contributions are only notionally invested; the money is instead used to pay pensions to current

³⁸ ONS Annual Survey of Hours and Earnings 2009 Table 13.7a The 75th percentile of earnings was chosen so as a round percentile point which was approximate to the level of the Upper Earnings Limit in 2008/09 and was at a similar level to the DB cut-off salary used by the hybrid scheme of a large private sector company.

pensioners in the same way as the current pay as you go defined benefit system.

The modelling in this paper for both types of defined contribution scheme assumes that employee and employer contributions are paid at a rate of 5% and 10% of salary respectively, making a total contribution of 15% into the scheme. These contributions represent the higher end of DC pension contributions in the private sector with only 10% of employees and employers contributing more than these levels.³⁹

Approach to analysing the public sector pensions

There are a large number of different public sector schemes. This report does not intend to precisely cost the policy options, rather to give an indication of the possible impact of each option modelled. In order to do this a proxy public sector pension scheme has been adopted in the analysis. It is used as a standard benchmark against which to measure the various impacts of reforms. The benefit structure of the proxy public sector pension scheme is broadly similar to the open sections of the NHS Pension Scheme, Teachers' Pension Scheme and Local Government Pension Scheme; it is a defined benefit scheme and, like the NHS Pension Scheme and the Local Government Pension Scheme, has member contributions that increase with salary. These three schemes together account for around 70% of the active membership of the public sector schemes. The proxy public sector scheme is set out in more detail in Appendix 3.

In the following chapters in this report (using the proxy scheme to represent current policy) each policy option is assessed against a range of policy objectives that the Government may have for public sector pensions:

- Adequacy
- Fairness
- Recruitment and Retention
- Affordability and Sustainability
- Transparency

The next chapter summarises this evaluation.

³⁹ PPI calculation from ONS (2009a) Tables 3.6 and 3.7

Chapter three: what would be the impact of the policy options?

Introduction

This chapter aims to briefly set out the possible impact of a range of policy options for the future of the public sector pensions that the Government could consider. Table 4 sets out each of the reform options and assesses them against in terms of the policy objectives that the Government may consider important. The remaining chapters will consider each of the policy objectives separately and develop the issues raised in this chapter in more detail.

The analysis of options presented in this and subsequent chapters depends on a number of assumptions. These include parameters assumed in the scheme design such as the accrual rate in the pension scheme and the contributions paid into the scheme.

The schemes modelled are intended to be illustrative, not definitive. It would be possible, for example, to design a Career Average scheme that might be expected to provide a higher pension than the current final salary scheme by increasing the Career Average accrual rate.

The results are therefore only relevant to the specific examples modelled here, and should not be generally applied across all schemes of a particular type – for example all Career Average schemes, or all Final Salary schemes. The examples that we have chosen here are closely linked to reform options put forward by stakeholders, or examples used in other countries, and it would be perfectly possible to design other suitable reform options.

It is also the case that no single scheme design may be appropriate for all of the different public sector pension schemes. The analysis here considers the public sector pension schemes as a single entity, but in reality they are different schemes meeting different needs for different employers.⁴⁰ It could be perfectly possible that a scheme design that best meets the needs of, for example, the NHS, would not be suitable for the armed forces. This analysis is designed to show the differences between different types of scheme to aid evaluation and the choice of the right option for each separate public sector scheme.

⁴⁰ For example new entrants to the Civil Service are already entered into a career average scheme rather than a final salary scheme.

Table 4: Impact of the reform options against the policy objectives

	Adequacy	Recruitment and retention	Fairness		Affordability	Transparency	
			Fairness (public v private)	Fairness (within scheme)		Transparency of value to employee	Transparency of cost
Continue current policy	<ul style="list-style-type: none"> Pensioner with full service likely to attain replacement rate 	<ul style="list-style-type: none"> Government not currently having problems recruiting staff 	<ul style="list-style-type: none"> Criticism of being overly generous Similar to medium generosity private DB scheme More valuable than most DC schemes in the private sector 	<ul style="list-style-type: none"> There are many cross subsidies High-flyer v low-flyer Short stayer v Long stayer 	<ul style="list-style-type: none"> Concern about long term affordability Cost sharing and cost capping agreements limit unexpected future cost increases 	<ul style="list-style-type: none"> Public sector pensions are considered valuable, but little ability to judge No need to explain changes 	<ul style="list-style-type: none"> Difficult to obtain transparent figures Occasionally published in various sources Membership details obscure for some schemes
Amend existing final salary schemes	<ul style="list-style-type: none"> Some changes could affect adequacy Reducing accrual rate from 1/60th to 1/80th reduces adequacy more than other options 	<ul style="list-style-type: none"> Public sector schemes likely to remain more generous than private sector schemes 	<ul style="list-style-type: none"> Likely to remain more generous than private sector schemes 	<ul style="list-style-type: none"> Likely to maintain many of the cross subsidies 	<ul style="list-style-type: none"> Depends on amount of benefits Reducing accrual rate decreases costs by more than other options 	<ul style="list-style-type: none"> Change in benefits may damage perceived value Still final salary, still perceived as high value 	<ul style="list-style-type: none"> Unlikely to affect transparency without further measures
Introduce risk sharing arrangements	<ul style="list-style-type: none"> CARE scheme may improve adequacy for some employees but reduces it for higher earners Hybrid DB base scheme may allow to target basic adequacy with DC top-up 	<ul style="list-style-type: none"> Uncommon structure in the private sector May be difficult for potential employees to make comparisons with the private sector 	<ul style="list-style-type: none"> Likely to remain more generous than private sector schemes 	<ul style="list-style-type: none"> May remove some cross subsidies, particularly the high v low-flyer issue and the short stayer v long stayer. 	<ul style="list-style-type: none"> Some risk is transferred to employees May reduce unexpected costs to taxpayer 	<ul style="list-style-type: none"> More difficult to understand CARE and hybrid schemes Complexity of hybrid scheme 	<ul style="list-style-type: none"> Unlikely to affect transparency without further measures
Introduce Defined Contribution	<ul style="list-style-type: none"> Depends on level of contributions, returns and annuity rates at retirement Risk of inadequacy fall on employee 	<ul style="list-style-type: none"> Higher employer contributions than private sector may be attractive May damage ability to recruit/retain staff if not competitive 	<ul style="list-style-type: none"> Similar structure to the pension offered in private sector 	<ul style="list-style-type: none"> Individual pots mean no cross subsidies 	<ul style="list-style-type: none"> All risks are on employee Notional DC arrangements may leave some insurance risks with taxpayer 	<ul style="list-style-type: none"> Value of current contributions is clear Value of projected pension unclear especially as percentage of final salary Easier to compare to private sector 	<ul style="list-style-type: none"> Contributions more transparent On-going costs of accrued benefits remain opaque

Continue current policy

Adequacy

Under the final salary schemes common in most of the public sector schemes, members with full service may be likely to achieve their Pension Commission benchmark replacement rate. The current system therefore delivers pensions for public sector workers that are perceived to be adequate.

Recruitment and retention

The current public sector pension system may be a recruitment tool to attract employees into the public sector. The contrast of less risky benefits enables public sector employers to differentiate themselves from private sector employers who offer Defined Contribution pension schemes. The final salary element may encourage employees to stay in the public sector in order to maximise the value of the pension that they build up. This may help with retention of key staff, but may also reduce the flexibility of labour in the public sector. Individuals may be less likely to move jobs if moving job could have a significant impact on the value of their existing pension provision as well as future levels.

Fairness

The current system of public sector schemes has faced criticism for being too generous in comparison with pensions offered in the private sector. The public sector final salary schemes are actually very similar value to typical final salary schemes in the private sector. However the availability of such schemes in the private sector is reducing as employers are closing final salary pension schemes in favour of DC schemes.⁴¹ This means that fewer private sector employees have access to the kind of final salary pension provision available in the public sector.

DC schemes transfer many of the risks associated with pension provision from the employer to the employee. This means that members of DC schemes face a very different profile of risk than those who are members of defined benefit schemes like the public sector pension schemes. The cap and share measures that were implemented following the previous set of public sector pension reforms aim to limit the impact of some risks on the employer. These measures share the cost of longevity improvements and other risks with the members.

The current system contains implicit unfairness between members of the same public sector pension schemes. Early leavers in a final salary scheme receive an effective reduction in their accrued benefit on leaving the scheme. When an employee leaves their employer before retirement the link between pension and earnings is broken. Their eventual pension is based on the salary at the time they left their post and then increased in line with changes in the CPI. This means that at the point of leaving their employer the value of the pension falls in real terms if CPI is expected to increase at a lower rate than their salary would have.

⁴¹ OPSS 2008

High-flyers receive benefits of greater value than employees with slower salary progression in final salary schemes. This is because high-flyers, particularly those who receive promotions late in their career, make contributions on lower levels of salary but receive pensions linked to their high final salary.

Affordability

There are concerns that the pensions promises made to public sector workers under the current arrangements are unaffordable.

The cost to the taxpayer of paying public sector pensions under the current policy, after deducting employee contributions, is around 1.2% of GDP. This is projected to remain at around 1.2% of GDP up to 2020, before falling to around 1.0% of GDP by 2050⁴² and remaining at that level. The affordability of paying pensions to public sector employees at this level is a matter of judgment and political belief.

Transparency

There is wide perception that the existing public sector pensions are valuable benefits for public sector workers. Final salary pension schemes may be relatively easy to explain to employees as they are based simply on the number of years of service and the final salary at retirement.

However, there is currently no central source of information on the public sector pension schemes. Figures on the on-going costs are published in general Government expenditure reports.⁴³ Membership information is published in the scheme accounts for individual schemes but not as a whole. It can therefore be very difficult to get a clear picture of the different measure of cost to the Government of providing Public Sector Pension provision, and what estimates there are tend to be driven by what discount rate has been used in the calculations.

Amend existing final salary schemes

The amendments considered here (higher Normal Pension Age, increased member contributions, salary or benefit caps, lower accrual rates) will reduce the generosity and therefore the adequacy of public sector pension provision. This may have a detrimental impact on recruitment and retention (though possibly increase labour force mobility) compared to the current public sector pension schemes.

However, any impact on recruitment and retention is likely to be relatively small as the schemes would still be more valuable than those generally on offer in the private sector. The inherent unfairness between short and long-stayers and between low and high-flyers would remain, unless benefit or salary caps were low enough to affect a significant number of higher earners.

⁴² PPI Projections

⁴³ The Treasury include public sector pensions in payment in the Public Sector Expenditure Analysis. HMT (2010)

The impact on affordability and sustainability is likely to be relatively small, and transparency is unlikely to be improved.

Introduce risk sharing arrangements

The Career Average and hybrid pension schemes analysed in this report would reduce levels of adequacy compared to the current public sector pension schemes. As a result, the schemes would be more affordable for the taxpayer, but recruitment and retention may be made more difficult. In this scenario public sector employees may be more willing to move to private sector jobs.

Differences would remain between the structure of public sector schemes and private sector provision, as the public sector pensions would remain Defined Benefit rather than Defined Contribution, albeit a less generous version. However there would be more fairness between the members of public sector schemes, as a career average structure gives more equal outcomes between short and long-stayers, and between low and high—flyers.

Introduce defined contribution arrangements

DC pension schemes tend to receive lower contributions than DB pension schemes. This leads to lower pensions being paid and a greater risk that income in retirement does not achieve the benchmark replacement rate. This could be offset to some extent by DC arrangements being contracted-in to S2P, which would increase the state pension received by public sector workers.⁴⁴ It may be harder for the public sector to attract employees, but flexibility and movement between public and private sectors may be increased as public sector and private sector pensions become more comparable. There would not be any cross-subsidies between different scheme members, as each member would have their own individual pot.

A funded DC scheme would be more expensive than the current public sector pension schemes in the medium term (as member contributions could no longer be used to fund pensions in payment).

Depending on the level of contributions to a Notional DC arrangement and the way in which contributions were indexed the affordability and transparency of public sector pension schemes could be improved compared to the current system, with contributions being clear and long-term costs low. There would also be higher state pension costs, and higher levels of NI contribution collected each year.

⁴⁴ HoC Hansard 12 Mar 2010 : Column 36WS Ministerial Statement Angela Eagle

Chapter four: adequacy of public sector pension schemes

This chapter examines how well public sector pension schemes provide adequate pensions to members in retirement. It considers how adequacy of pensions in retirement can be measured, the level of pension achieved under the current system and what the impact of further reforms could be.

It should be noted that the PPI has modelled a discrete number of illustrative reform options. However, the parameters of the schemes could be altered and these would impact on the future generosity of the schemes and the level of adequacy they would provide.

Box 1: Summary of findings on the adequacy of public sector pension provision

- The current final salary schemes offered in the public sector may provide retirement income which, when taken with their State Pension, fulfils the Pension Commission's suggested required replacement rates for employees who have worked a full career in the scheme.
- A career average pension scheme with a benefit structure similar to the Nuvos scheme offered in the Civil Service may be able to provide benefits at a similar level to the current final salary schemes for members who remain in public service for their entire career.
- A hybrid scheme with a career average base and a DC top-up will behave in the same way as the underlying scheme for members who earn below the cap. However, higher earners may have reduced replacement rates as a result of the DC top-up element when compared to a final salary pension scheme but this depends on the contribution rate chosen for the DC element.
- The pension received on retirement from a DC scheme depends on the level of contributions, the return on investment on the fund as it is building up and the cost of annuities at retirement. A funded DC pension scheme with actual investment returns would be very expensive to implement in the Public Sector for the next 30 years or so, as the unfunded pensions already built up in the past would still have to be paid, and any future member contributions used to fund individual pensions. A Notional DC scheme with returns based on inflation or average earnings growth may provide a lower benefit.

What is an adequate pension in retirement?

One of the main reasons that employers give for providing pensions is to look after their employees in retirement.⁴⁵ This implies that an objective of pension provision may be to ensure that members have adequate money to live on while in retirement.

⁴⁵ DWP (2008)

A common measure of adequacy when considering the income from pension schemes is the replacement rate. The replacement rate compares the income received by a person after retirement, including benefits from the state as well as private pension income, as a proportion of the salary that they received before retirement. The income from the state may include state pensions in the form of the Basic State Pension (BSP), State Second Pension (S2P) and the predecessor of S2P, the State Earnings Related Pension Scheme. The Pensions Commission suggested “benchmark replacement rates” as a “reasonable judgement to guide assessment of adequacy”, which would allow individuals to broadly replicate in retirement the living standards they had had while working (Table 5).

Table 5: Benchmark replacement rates⁴⁶

Earnings (2004 earnings terms)	Earnings (2010 earnings terms) ⁴⁷	Replacement rate
Over £50,000	Over £60,000	50%
£25,000 - £50,000	£30,000 - £60,000	60%
£17,500 - £25,000	£21,000 - £30,000	67%
£9,500 - £17,500	£11,500 - £21,000	70%
Less than £9,500	Less than £11,500	80%

State benefits provide some level of income in retirement but are unlikely to fulfil a replacement rate on their own. This leads to a gap which must be filled from elsewhere. For public sector workers this gap may be filled by public sector pensions.

Public sector workers with a full work history and continuous membership of a final salary pension may find that they can achieve their replacement rate. However if public sector pensions were to provide lower levels of retirement income in the future then there may be a potential need for further government spending in other areas, for example state pension or means tested benefits.

However, there are other sources of income and assets that could be used to help meet a replacement rate at retirement, and meet needs beyond retirement, including other savings and housing wealth.⁴⁸ Even if a public sector pension on top of the state pension does not provide a full replacement rate by itself, it does not automatically follow that it is inadequate.

Current public sector pensions may help employees achieve an adequate income in retirement

As a result of previous changes to public sector schemes there are different levels of benefit available to members depending on when they started service. For example, new entrants into the NHS and Teachers’ pension

⁴⁶ Pensions Commission (2004) p143

⁴⁷ PPI calculation, salary bands updated to 2010 earnings terms in line with increases in National Average Earnings

⁴⁸ The PPI Retirement Income and Asset series has investigated the use of other assets to support retirement. Reports 1-4 available from www.pensionspolicyinstitute.org.uk

schemes receive benefits at age 65 based on $1/60^{\text{th}}$ of their salary at leaving for each year worked. Employees who joined these schemes before the reforms receive $1/80^{\text{th}}$ of their salary from age 60 plus a cash lump sum of three times the pension.

The current public sector pension schemes, as represented by the proxy scheme based on the NHS Teacher and Local Government schemes and set out in Appendix 3, provide the potential for employees to secure an adequate pension in retirement. The public sector pension schemes provide a good level of benefits and, because of their defined benefit nature, remove many of the risks to the employee associated with pension provision.

Chart 4 shows the expected gross replacement rate at age 68 for a low earning male employee aged 25 in 2010 after 40 years of service. In the current final salary scheme (after allowing for the Labour Government reforms and the switch from RPI to CPI indexation) he would be expected to have a replacement rate at SPA of 79% of his pre-retirement income. This compares to his target replacement rate of 70%. The PPI has also projected the replacement rate that this individual might attain under alternative pension arrangements.

The projected replacement rates depend on a number of assumptions. These include parameters assumed in the scheme design such as the accrual rate in the pension scheme, the contributions paid into the Defined Benefit scheme etc. The schemes modelled are intended to be illustrative, not definitive. It would be possible, for example, to design a Career Average scheme that might be expected to provide a higher pension than the current Final Salary scheme by increasing the Career Average accrual rate.

Other important assumptions relate to the expected experience of the member throughout their working life, such as the salary progression that the member may experience and the rate of CPI and investment returns. The outcomes projected in the following figures are highly dependent on all of these assumptions and should be seen as illustrative of the possible impact of the reform options modelled rather than predictions.

Chart 4 sets out the replacement rates achieved at retirement by a low earner under some of the reform options. The options modelled are the current final salary scheme, a final salary scheme with a lower accrual rate ($1/80^{\text{ths}}$), two risk sharing arrangements and a notional defined contribution arrangement. The benefits payable under the risk sharing arrangements are a career average scheme and a hybrid scheme with career average structure up to a base salary of £37,000 and notional DC on top. The notional DC scheme has contributions of 10% from the employer and 5% of salary from the employee. The funds in the notional DC scheme are indexed in line with average earnings, as in the Swedish notional DC system.

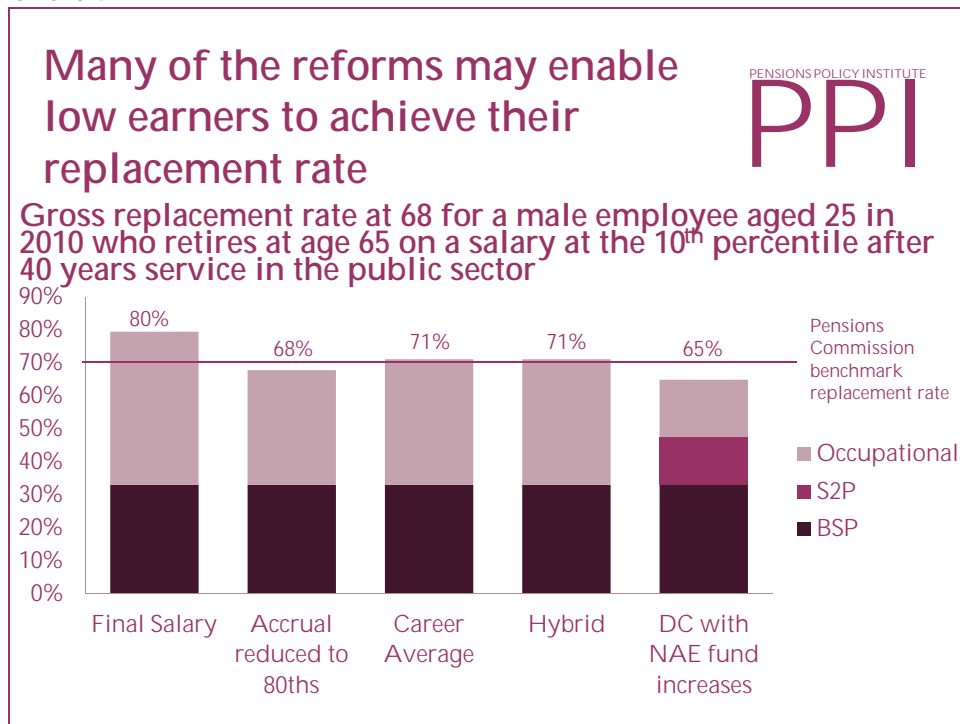
Chart 4⁴⁹

Chart 4 shows that, under the modelled reform options, lower earning employees may be able to achieve the benchmark replacement rate of 70% of pre-retirement income as a result of membership in the current final salary system, or in either of the risk sharing arrangements, using the combined income from the workplace pension and the basic state pension.⁵⁰

The career average and hybrid proposals result in the same level of benefit for a lower earning member. This is because the schemes offer an identical pension unless a member's salary exceeds the base salary. This member's salary does not exceed that level.

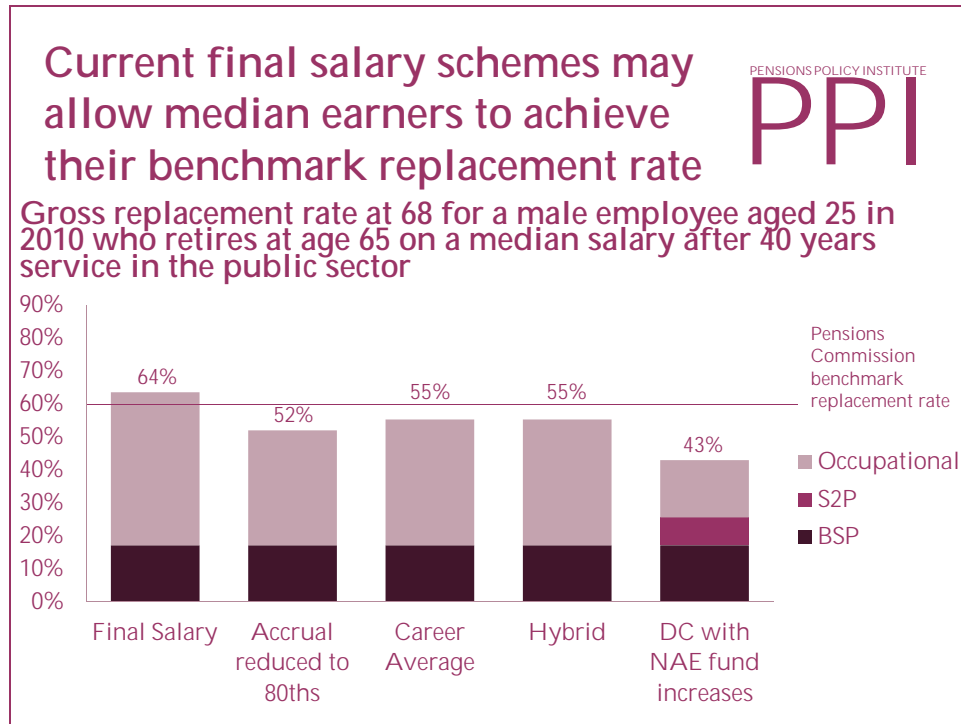
Both the lower accrual rate final salary and the notional defined contribution options get close to, but not up to, the target replacement rate. The notional DC scheme is assumed to be "contracted-in" which means that the employee would be eligible for the additional state pension S2P. As a result there is a risk that some of the savings achieved from reduced public sector pensions could be offset by increased Government expenditure on S2P.

⁴⁹ PPI estimates based on the PPI Individual Model. The individual is assumed to earn at the 10th percentile of public sector employees for his age during each year that he is in employment, and would have earnings of £17,000 a year in the year before retirement. In this example SPA is 68.

⁵⁰ Replacement rate at SPA are calculated as occupational and state pension in payment at that date compared to final salary on leaving employment at age 65, indexed in line with expected earnings growth to SPA.

A median earning employee would have a benchmark replacement rate of 60%. Chart 5 shows that the employee would be able to achieve the replacement rate in the final salary pension scheme but may be less likely to under the other reform options.

Chart 5⁵¹

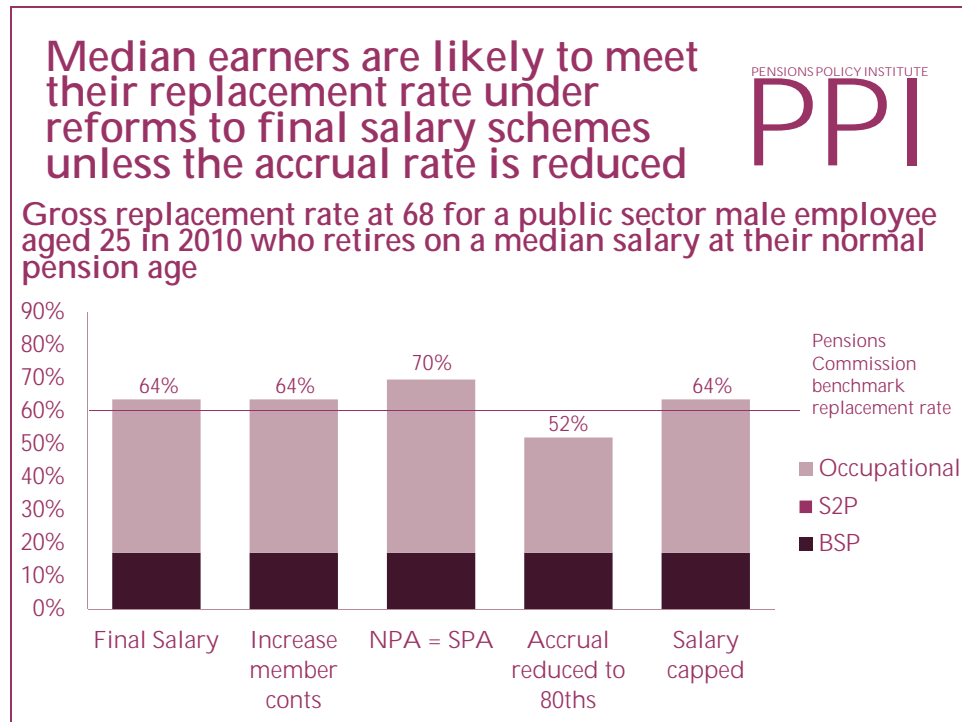


Under the existing final salary scheme, the median earning employee achieves a 64% replacement rate at SPA. The career average and hybrid pension schemes both provide a replacement rate of around 55% because the earnings of this employee are not high enough to push them into the defined contribution tier of the pension scheme. The Notional DC pension scheme with NAE fund growth may provide a replacement rate of just over 40%, even allowing for the additional state pension received through S2P.

⁵¹ PPI estimates based on the PPI Individual Model. The individual is assumed to earn at the median of public sector employees for his age during each year that he is in employment, and would have earnings of £33,000 a year in the year before retirement. In this example SPA is 68.

Chart 6 shows the impact on adequacy of pension at SPA to a median earning employee of the various reforms which maintain a final salary scheme.

Chart 6⁵²



Under the existing final salary scheme, the median earning employee achieves a 64% replacement rate at SPA. Increasing member contributions does not affect the pension paid; it changes the balance of who pays for the pension. Capping the pensionable salary affects only higher earners who earn above the level of the cap. For employees earning at the median level, the cap on pensionable salary has no impact on the replacement rate. So under reforms which increase member contributions or cap the pensionable salary, the replacement rate for a median earning employee remains at 64%.

Increasing the normal pension age in line with the changes in SPA set out in the Pensions Act 2007 allows employees to earn further service and further salary increases, provided they remain in employment. The increased service and higher final salary can increase the replacement rate achieved by SPA. Chart 6 shows that a median earning employee who is 25 in 2010 may be able to achieve a replacement rate of 70% if they remain in service for 3 extra years from 65 to 68. If they left service at age 65, and became a deferred member they would receive the same replacement rate as the unadjusted final salary member, although they would not have received any pension income between ages 65 and 68. If they were to take early retirement at age 65, their pension

⁵² PPI estimates based on the PPI Individual Model. The individual is assumed to earn at the median of public sector employees for his age during each year that he is in employment, and would have earnings of £33,000 a year in the year before retirement. In this example SPA is 68.

would be reduced to allow for the extra years of payment: the reduction for early retirement could lead to a replacement rate of around 57%⁵³ by age 68.

Reducing the accrual rate from 60ths to 80ths leads to a directly proportional reduction in the pension paid out from the public sector pension scheme. The replacement rate would reduce to 52% if the accrual rate was reduced from 1/60ths to 1/80ths.

Chart 7⁵⁴

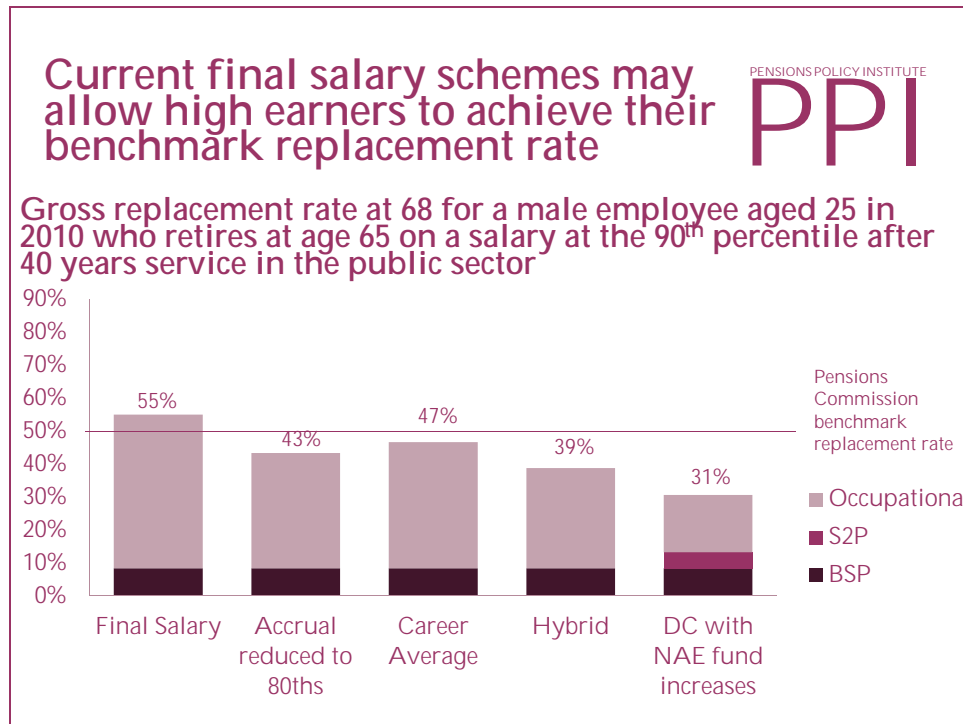


Chart 7 shows the possible replacement rates for a higher earner after working for 40 years under the reform options. This higher earner needs to meet a replacement rate of 50% to be considered to have an adequate income. Under the Final Salary scheme, the member meets this target and achieves a replacement rate of 55%. The Final Salary scheme is again the only scheme which meets the Pension Commission benchmark replacement rate.

The career average reform option enables the member to achieve a lower replacement rate of 47%, just under the Pension Commission benchmark for a high earner. The replacement rate for such an earner in the hybrid scheme is lower at 39%. The replacement rate for the hybrid scheme is lower than the replacement rate for this member under a career average scheme because the hybrid scheme offers a career average pension on a base level of salary of up to £37,000 with a less generous DC pension available on the higher levels of

⁵³ PPI calculation based on an early retirement reduction that takes off 4% of pension for each year of difference between retirement age and NPA.

⁵⁴ PPI estimates based on the PPI Individual Model. The individual is assumed to earn at the 90th percentile of public sector employees for his age during each year that he is in employment, and would have earnings of £67,000 a year in the year before retirement. In this example SPA is 68.

salary. This employee's salary is at such a level as to be subject to the DC pension on part of their salary. High earners are likely to have a lower replacement rate than lower earners in a hybrid scheme that is structured in this way.

The projected income in retirement again falls short of the benchmark replacement rate for higher earning members of the notional DC pension scheme with a replacement rate of 31%. This is the case even after allowing for the additional income from S2P and it should be noted that the contributions in the DC scheme we have modelled are relatively generous – with the employer contributing 10% and the employee 5% of salary.

Chapter five: fairness in the public sector pension schemes

It may be considered important that the pensions offered by public sector pension schemes are fair. This chapter considers two types of fairness:

- Fairness between the public and private sectors, and
- Fairness amongst members of the same pension scheme.

Employees in the public sector tend to be offered membership of defined benefit pension schemes, whereas such schemes have been diminishing in the private sector, in favour of defined contribution pension schemes. This has been described as unfair by some commentators.

The second element of fairness considered here is fairness between the various types of employees within a particular public sector scheme. Some members may, due to their particular characteristics receive a higher value of benefit than others. In such cases there is a cross subsidy between the members.

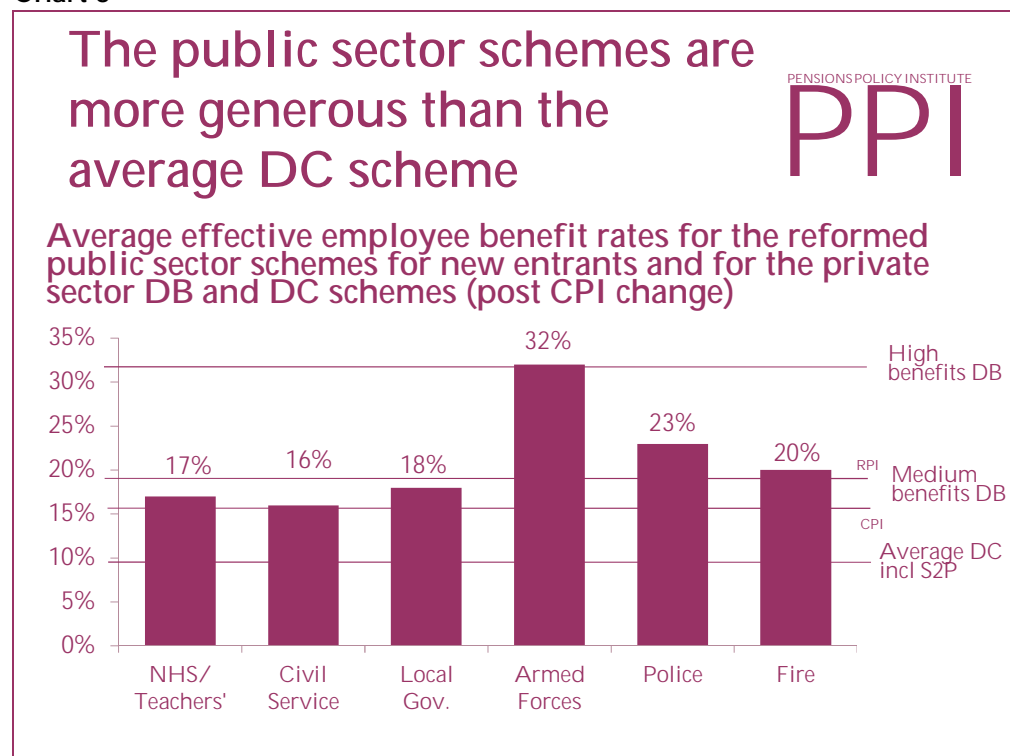
Box 2: Summary of findings on the fairness for public sector pension schemes

- Public sector pension schemes are similar in value to Defined Benefit schemes in the private sector, but many private sector employers have closed their Defined Benefit pension schemes to new entrants and instead offer access to Defined Contribution.
- The majority of public sector employees are members of final salary pension schemes. Some members of final salary pension schemes do better than others out of the scheme.
- Employees with better than average salary progression receive higher value from Final Salary schemes. This unfairness is largely removed by Career Average and Defined Contribution schemes.
- Employees in final salary pension schemes lose value in their pensions by leaving their employer before retirement. This effect may be mitigated by Career Average and Defined Contribution schemes.
- There are currently disparities in the value of public sector pension schemes on offer to longstanding members of the public sector pension schemes and those on offer to more recent joiners. Previous reforms for many of the public sector schemes implemented by the Labour Government only applied to employees who join the pension scheme after the reforms were introduced rather than for the future service of all members. The Coalition Government will need to decide whether any further reforms should apply only to new entrants or also to existing members' future service.

Public sector pension schemes are seen as more generous and less risky than private sector pension schemes

Chart 8 shows that the value of the four largest public sector pensions, following the recent reforms, are generally broadly equivalent in value to private sector defined benefit pension schemes with an employee benefit rate of around 15% to 20% of salary depending on whether private sector DB scheme benefits are linked to RPI or CPI. However, the values of the pensions on offer to the uniformed services remain substantially more generous than those on offer in the private sector.

Chart 8⁵⁵



However, Defined Benefit schemes are becoming less common in the private sector, with many employers instead offering access to Defined Contribution schemes. There has been a tendency for employers to reduce the generosity of their provision when switching from DB to DC. The average employee benefit rate of a private sector DC pension scheme is around 10% of salary, allowing for the fact that these schemes are likely to be contracted-in to S2P.

The emphasis on public sector schemes reducing in generosity in order to mirror private sector provision, rather than pressure being put on private sector employers to improve their pension schemes, has been characterised as a “race to the bottom”. However, in the recent interim report of the IPSPC,

⁵⁵ PPI analysis. The figures for the public sector incorporate the Coalition Government’s CPI indexation change. In the private sector employers may or may not change their indexation policy. We have therefore shown two median benefit private sector scheme benchmarks – one based on RPI indexation and one based on CPI indexation. The high benefit DB scheme has a higher accrual rates and assumes RPI indexation.

Lord Hutton of Furness clearly rejected the view that the public sector should automatically follow this course.⁵⁶

A second area of difference between public sector and private sector pension provision is in the risks faced by members of the schemes. In a final salary scheme the size of the pension is 'guaranteed', and the risks associated with providing that pension, such as having the money to make the payment and increases in life expectancies, rest with the employer.

Defined contribution pensions transfer risks from the employer to the employee. Under a DC arrangement the employee faces the risk that:

- Underperforming investments lead to a lower pension fund with which to purchase a pension at retirement
- Low interest rates and/or improvements in expected mortality lead to expensive annuity rates at retirement

It is therefore often suggested that while there is no risk to pensions in the public sector, individuals face all the risk in the private sector. However, Defined Benefit schemes are not totally risk-free to public sector employees. The rules of public sector pension schemes can be changed to reduce the future build-up of benefits. Such changes could significantly alter the expected retirement pension of an employee. Pensions that have already accrued have some protection under legislation,⁵⁷ but even these are not fully protected as can be seen from the recent decision by the Coalition Government to use CPI rather than RPI to index and revalue public sector pensions, including future indexation and revaluation of those pension rights already accrued and/or in payment.⁵⁸

The Government has stated that it is not considering any changes to public sector pensions that reduce the benefits already built up. The terms of reference of the Independent Public Service Pensions Commission state that the commission will "conduct a fundamental structural review of public service pension provision and...make recommendations...while protecting accrued rights".⁵⁹ Reducing expenditure by reducing the benefits of current pensioners would not protect accrued rights and was rejected by the IPSPC in its interim report.⁶⁰

Final salary schemes have some inherent unfairness between members with different characteristics

There are concerns that some members do better than others in the same public sector scheme. The public sector pension schemes are nearly all final salary schemes. Final salary schemes can lead to cross subsidies developing where the benefits to one group of people are of a lower value than those to another group. This can be a source of unfairness within a scheme.

⁵⁶ IPSPC (2010) p4

⁵⁷ Pension Act 1995 (section 67)

⁵⁸ See chapter 1 of this report

⁵⁹ HMT (2010a) Independent Public Service Pensions Commission: terms of reference

⁶⁰ IPSPC (2010) p121

Potential sources of unfairness within final salary pension schemes include:

- high flyers with fast career progression are subsidised by low-flyers
- long-stayers are subsidised by short-stayers because deferred pensions break the link of pensions and salary increases
- differences between existing members and new entrants if changes are made to the scheme which only affects new entrants

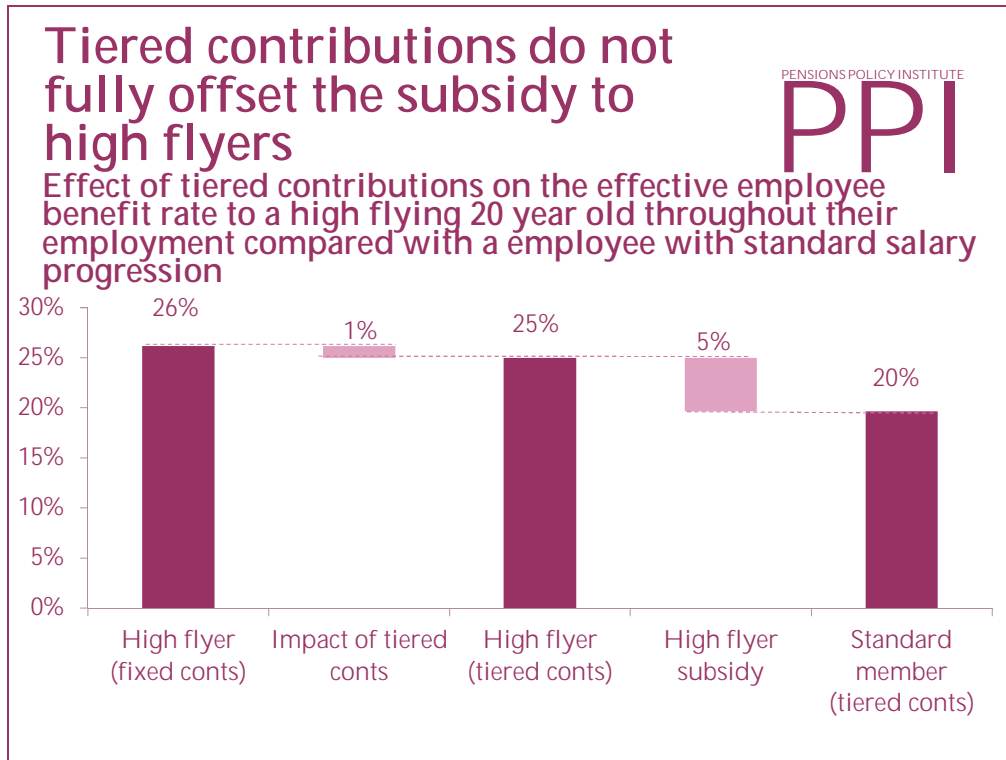
High-flyers vs low-flyers

One area of concern is that, because the pension payable from a final salary scheme is linked to the last years of earnings, some individuals who see high increases in pay at the end of their careers will get a larger pension relative to the amount that they have paid in than someone who is on a more steady earnings path.

To try and overcome this, some public sector pension schemes have tiered contributions where employees contribute a higher percentage of their salary when their earnings reach certain levels. This shifts the balance in cost toward the employee for the higher paid. This means that people who start on a low salary but achieve accelerated increases in their salary pay more toward their pension as a percentage of salary than those who remain on the same low starting salary. However, the increase in value of the pension for the high-flyer as a result of accelerated earnings increases often exceeds the increase in contributions from the tiered contributions.

A high flying employee who experiences salary growth of 1% a year more than average salary growth would have an employee benefit rate of 26% without tiered contributions. The introduction of tiered contributions reduces their benefit rate by 1% to 25% of their salary. This is 5% higher than that of a colleague earning at average salary growth and suggests that there is a high-flyer subsidy of around 5% of salary even with tiered contributions (Chart 9).

Chart 9⁶¹



Short-stayers vs long-stayers

In a final salary scheme the pension paid is based on the salary level achieved when the member left the scheme, whether through retirement or by leaving their employer part way through their working life. A short stayer is someone who leaves active service before retirement.

On leaving service the employee becomes categorised as a deferred member and the salary link is broken; the pension accrued by a short stayer is based on their leaving salary, indexed to retirement in line with increases in the CPI. CPI increases are likely to be lower than the increase in earnings that would otherwise have applied. Short stayers therefore receive lower value of Final Salary pension per year of service than members who spend their entire working life with the same employer (Chart 10).

⁶¹ PPI analysis

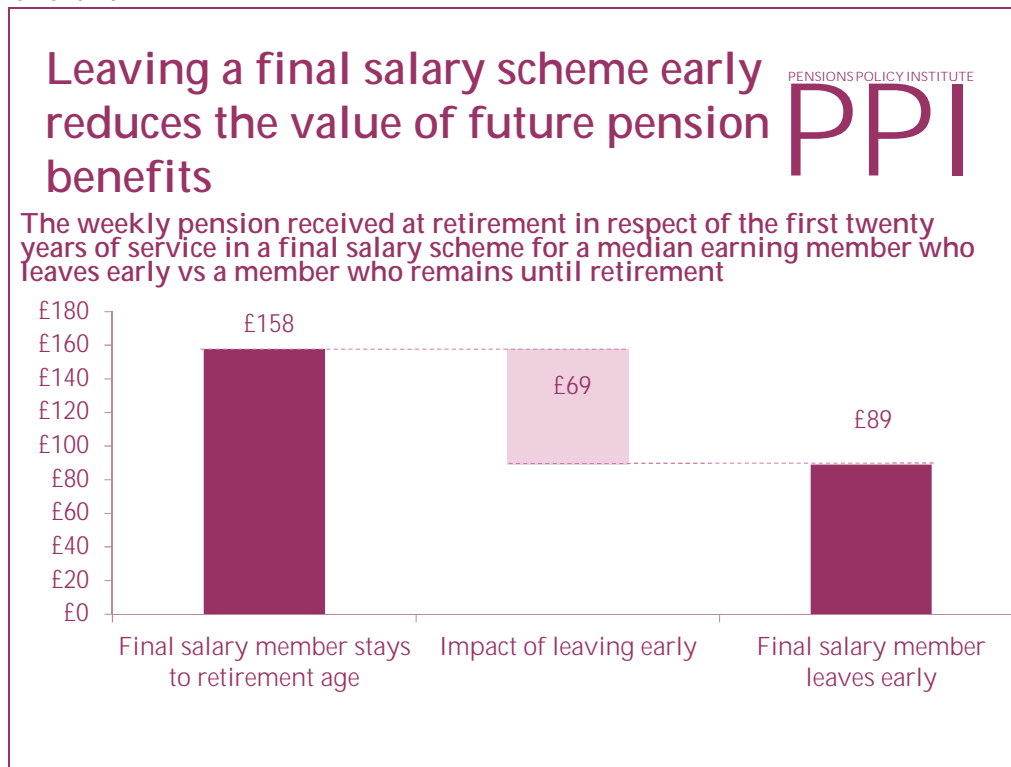
Chart 10⁶²

Chart 10 shows that a median earning employee who started work at age 25 and continued in public sector employment until their retirement may receive a pension of £158 a week in respect of their first 20 years of service.⁶³ An employee in an identical job with identical salary history but who left the public sector at age 45 after 20 years may receive a pension of £89 a week at retirement in respect of that service. This is £69 a week or 44% less than the pension earned over the same period by the member who stays to retirement.

Existing members have different pension schemes to new joiners

Following the reforms from 2005 to 2008 most public sector employers set up a new section of their scheme for new employees to join and allowed current members to maintain the scheme structure in which they were currently members.⁶⁴ Maintaining different structures for different members based on when they joined creates unfairness between existing members and members who join after the reforms. This could lead to two employees performing the same job on the same salary but with different pension benefits.

If it is considered desirable to address this unfairness, the public sector pension schemes could protect accrued benefits under previous arrangements and close the existing scheme for future accrual moving all members to the

⁶² PPI calculations. Pension amount assumes 25% of pension taken as a tax free lump sum in both cases.

⁶³ Total projected pension is £316 a week in respect of 40 years service at retirement at age 65. Pension in respect of first 20 years service is therefore $20/40 \times £316 = £158$. Assumes promotional salary increases up to retirement in line with GAD assumptions for Public Sector Pension Cashflow Projections. GAD (2010)

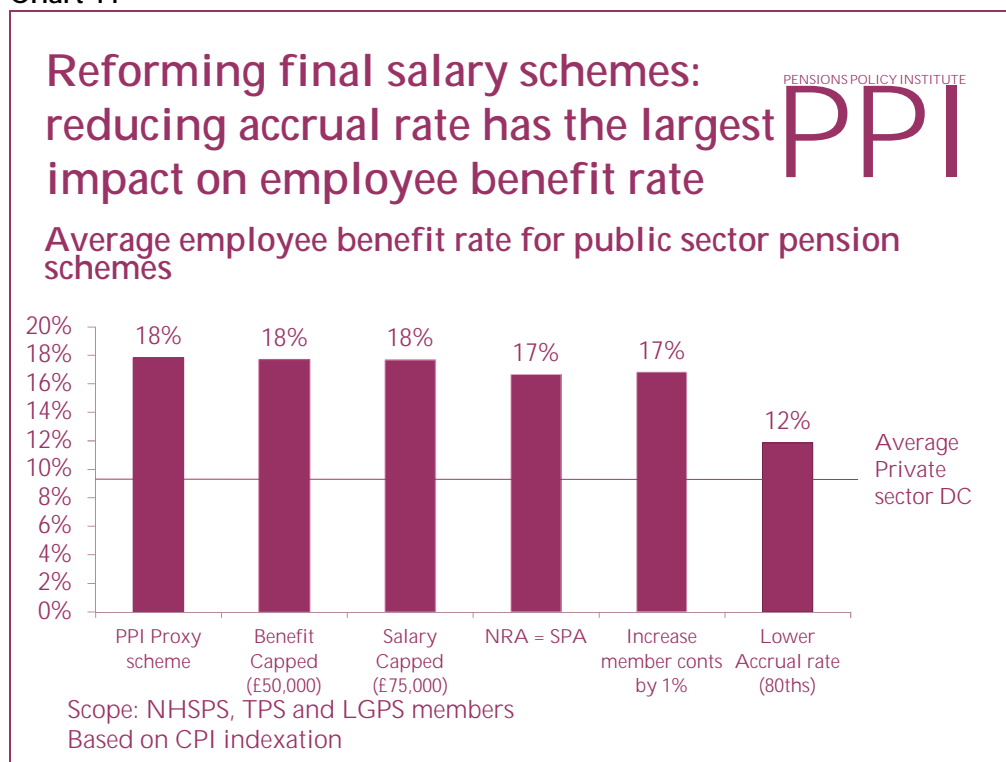
⁶⁴ The exception was the LGPS which applied the scheme reforms to existing members as well as new entrants

reformed pension scheme for future accrual. This issue is not addressed in this chapter, but is an important consideration for reform and has important knock-on consequences in the other possible policy options (see for example the next chapter on affordability and sustainability).

Amending the existing final salary schemes has little impact on fairness

Reforming the public sector pension schemes by making amendments but retaining the final salary structure will not significantly reduce concerns about the fairness of the schemes. Even a lower accrual rate would still result in a public sector scheme worth more than the average private sector DC scheme to the average member (Chart 11). As the final salary structure is retained, concerns about the relative holding of risk would also be unchanged.

Chart 11⁶⁵



Increasing employee contributions may increase perceived fairness if it is considered that public sector employees are paying an additional amount to retain a final salary scheme. The cap and share mechanism by which employees pay toward increases in the cost of the pension scheme is an attempt to address this point. The Government assumes that by 2015 the cap and share arrangement will have led to an increase in member contributions of £1bn. ⁶⁶ The Comprehensive Spending Report announced on 20 October 2010 that a further £1.8bn per year would be raised in member contributions by 2015, broadly equivalent to an extra 3% on top of existing contributions

⁶⁵ PPI calculations

⁶⁶ OBR (2010)

although the Government has acknowledged that the increases may need to be staggered and there may need to be protections for lower paid workers.⁶⁷

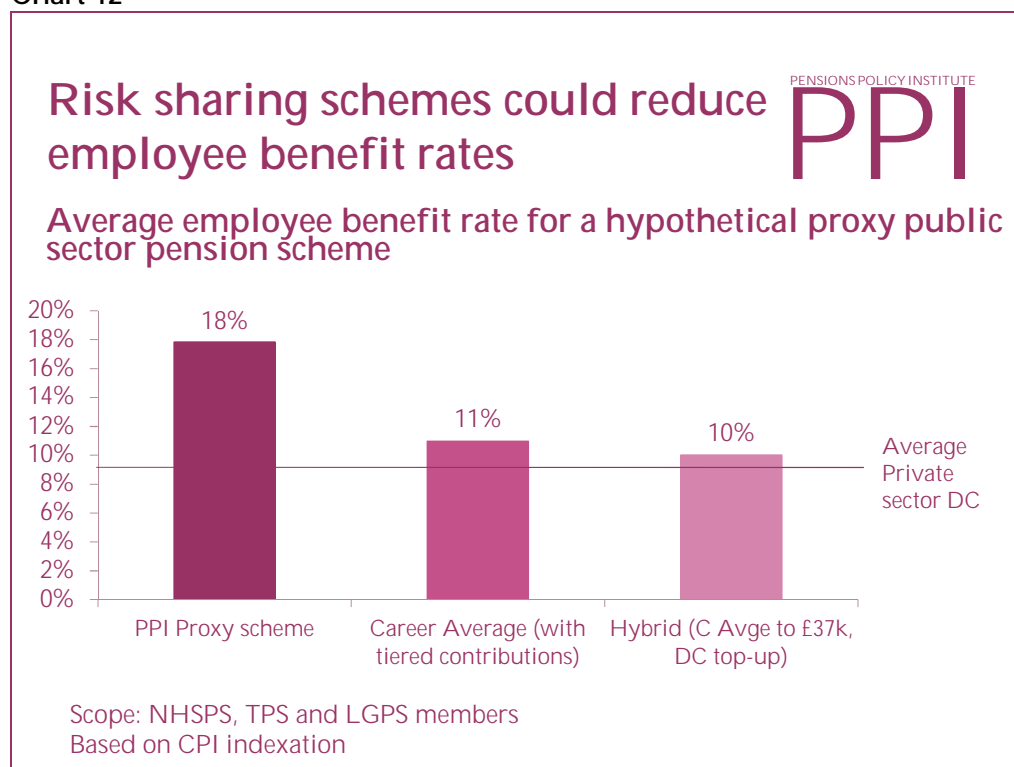
As the final salary structure would be retained, differences between short and long-stayers and between low and high-flyers would remain.

Risk sharing schemes may address unfairness within public sector pension schemes

Career average and hybrid pension schemes do exist in the private sector but are relatively uncommon.⁶⁸ Although these are still fundamentally Defined Benefit schemes and the majority of the risks remain with the employer rather than the employee, a hybrid scheme based on a career average base pension with a DC top up may be seen as approaching private sector style of provision, at least for high earners.

The average employee benefit rate in the career average pension and hybrid schemes analysed here⁶⁹ is around 11% (Chart 12). This is closer in value to the average DC pension scheme in the private sector than the current policy.

Chart 12⁷⁰



⁶⁷ HMT (2010b). The Government have yet to announce how the member contributions will be increased, and they expressed the aim of doing so in a ‘progressive’ way so as not to place excessive burdens on low earners.

⁶⁸ According to the Occupational Pensions Scheme Survey 2008, of the 2.6 million active members of private sector defined benefit schemes there are 0.3 million employees in schemes where average earnings over the working life are used to calculate benefits.

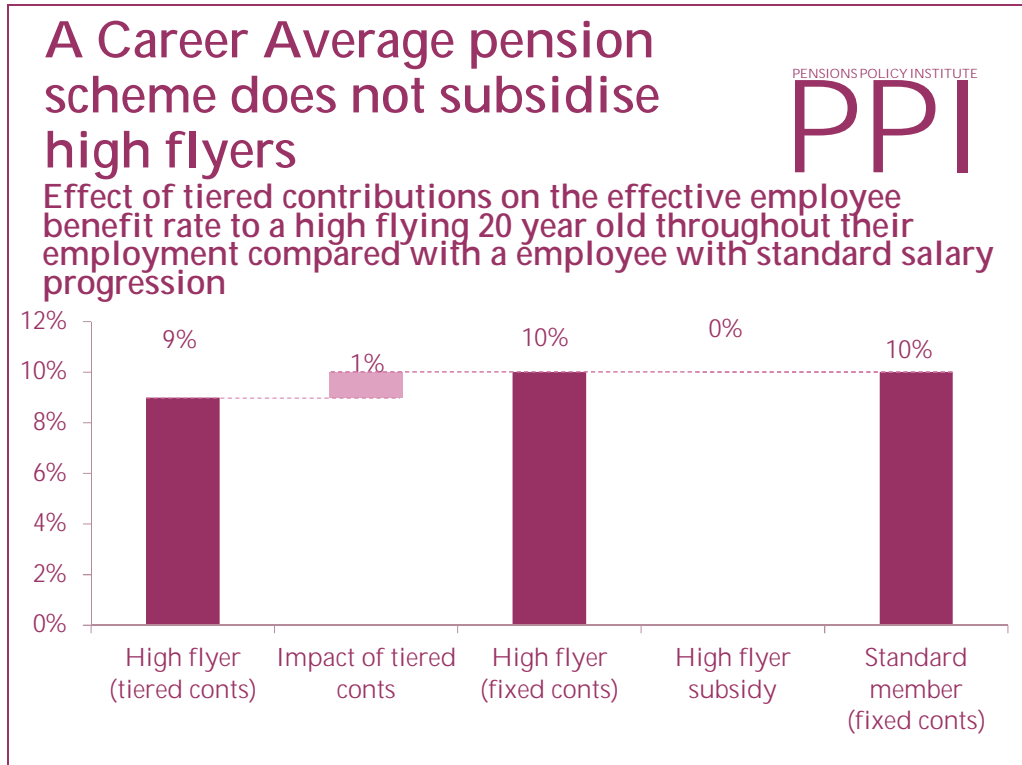
⁶⁹ The Career Average pension scheme modelled has benefits based on the Nuvos scheme which is offered to new joiners of the Civil Service but retaining the much higher employee contribution structure of the PPI proxy scheme

⁷⁰ PPI calculations

Career average based schemes may also remove some of the cross subsidies that exist within the current final salary public sector pension schemes.

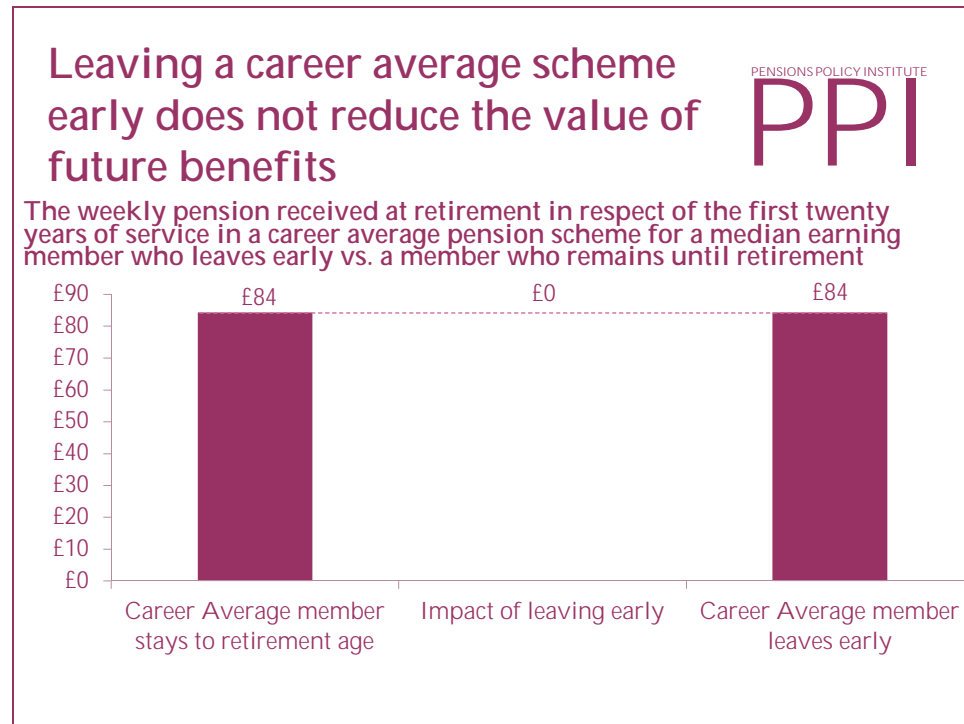
The pension earned from a career average pension scheme is based on the entire salary history of an employee rather than allowing the final salary to determine the value of the pension. Each year, both the contributions paid and the pension accrued are directly based on the salary achieved in that year. This removes the unfairness in favour of high-flyers (Chart 13).

Chart 13⁷¹



⁷¹ PPI calculations

As the pension earned in a particular year is based on the salary earned in that year, in a career average scheme a short stayer's pension is up-rated to retirement in exactly the same way as that part of the pension of a longer serving employee. The pension accrued over a certain period of employment leads to the same eventual level of pension in respect of that period whether the member is currently active or deferred. So there is no unfairness between short stayers and long stayers (Chart 14).

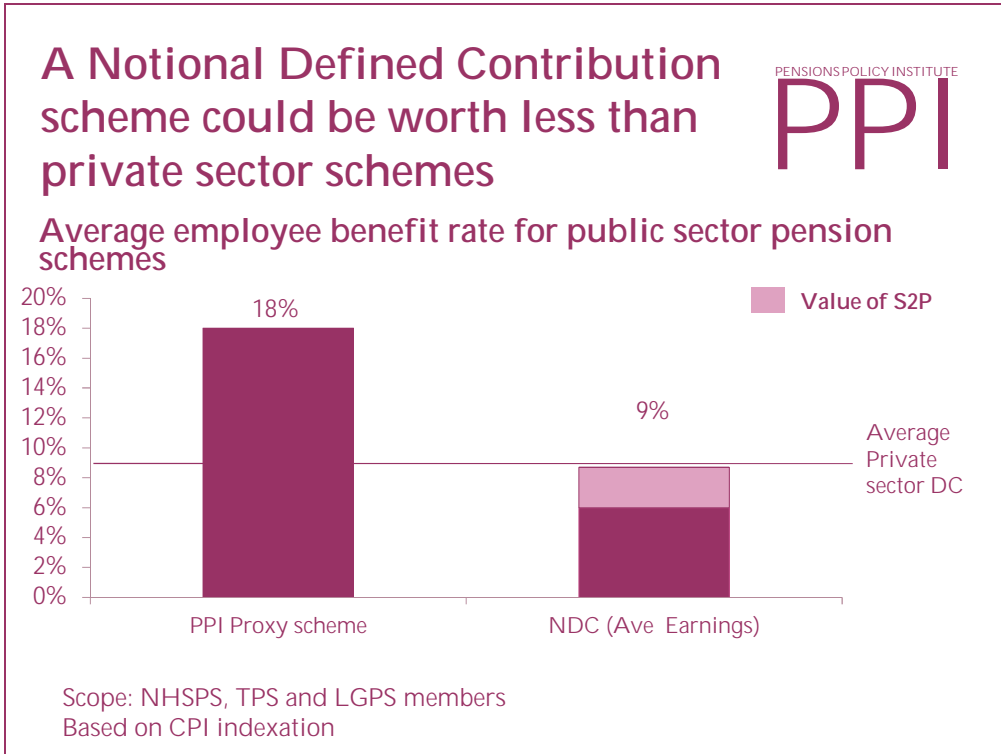
Chart 14⁷²

A DC scheme would remove differences between public and private sector and cross subsidies within the public sector

DC schemes are increasingly common in the private sector following the closure of many private sector defined benefit schemes. A public sector pension scheme which replicates the structure of a private sector DC scheme may be seen to address many of the criticisms regarding fairness, but may also substantially reduce the adequacy of public sector pensions (Chart 15). A notional DC scheme that is revalued in line with average earnings could result in a scheme of broadly the same value as that on offer on average in the private sector.

⁷² PPI calculations

Chart 15⁷³



DC schemes also tend to have fewer cross-subsidies than final salary schemes. The pension is linked to the fund built up by each individual, reflecting their own salary history and circumstances. High-flyers do not therefore gain from faster than average salary increases boosting their whole pension. Also, in a DC pension scheme the pension pot attracts the same level of return whether the member is currently active or deferred. Short stayers are therefore not adversely affected relative to members who stay to retirement.

⁷³ PPI Calculation. The contributions in to the NDC scheme are 10% employer and 5% employee. The 10% employer contributions does not automatically correspond to a 10% employee benefit rate because the notional fund grows in line with average earnings up to retirement which is lower than the discount rate used to calculate a present value of the pension.

Chapter six: the role of public sector pension schemes in recruitment and retention

Introduction

The Government is an employer which operates in the same labour market as private sector employers. In order to recruit and retain staff it has to offer employees a package of working conditions, salary and benefits which is competitive with those available from an alternative employer. Pension arrangements may be helpful in recruiting and retaining staff, but may also act as a barrier to staff moving between the public and private sector.

Box 3: Summary of findings on the role of public sector schemes in recruitment and retention

- Current public sector pension arrangements may be helpful in recruiting and retaining staff, but may also act as a barrier to staff moving between the public and private sector.
- Moving to a career average or hybrid approach may reduce the usefulness of public sector pensions as a recruitment and retention tool, but could increase labour mobility between the public and private sectors
- Introducing notional Defined Contribution schemes into the public sector would lead to competition for employees between the private and public sector based on other elements of the remuneration package, such as pay, other benefits and working conditions.

The current public sector schemes are more valuable than private sector pensions

Chapters 4 and 5 considered the adequacy of public sector pension schemes, and compared the value of public sector pension schemes to the schemes typically offered by pensions in the private sector. The chapters showed that the current public sector pension schemes are more valuable than those typically on offer in the private sector. As a result of this, the current public sector pension schemes are likely to be a useful tool for recruitment of public sector workers. However, pensions cannot be viewed in isolation, as they are part of a broader package of pay and remuneration.

The relationship between pay in the public and private sector is not clear

It is very difficult to compare levels of pay between the public and private sector. Simply comparing for example the median level of pay in one sector with the median level of pay in the other is extremely misleading, as it does not account for a range of factors that are important in determining how much an individual is paid, including:

- Age
- Gender
- Education and skill level
- Region
- Level of managerial responsibility

Allowing for all of these factors is challenging, and even when they can be allowed for, the findings can be unclear. Moreover pay may not be higher in one sector or another for all groups or individuals. Although a job-for-job type comparison of pay is difficult to make between the private and public sectors, women and low-skilled male workers seem to be paid relatively more on average in the public than the private sector. High-skilled male workers are paid more in the private than the public sector given their levels of skills, education and experience.⁷⁴

There may be factors other than pay and pensions to take into account when making comparisons between the relative attractiveness of working in the private and public sectors, including:

- Working conditions, such as the availability of flexible or part-time working
- Job security. Jobs in the public sector have often been seen as more secure than jobs in the private sector, although the recently announced cuts in public sector employment may make this less of an issue.
- Other forms of remuneration, such as health care, employee share schemes or company cars may be more prevalent in the private sector.

In this evaluation, as the only factor that is changing is the pension arrangements, the reform options are compared purely on their potential impact on recruitment and retention issues relative to the current system of public sector pensions.

Final salary schemes can prevent labour mobility

Although a generous pension scheme can act as a good way of recruiting and retaining valuable staff, it can also act as a barrier to public sector employees moving out of the private sector, particularly at older ages. This is especially true of final salary schemes, where the expectation of higher pay can make a substantial difference to the relative value of a pension scheme, or where deferring a pension can make a large value to the final pension received (Chart 10, chapter 5).⁷⁵ Recent research has highlighted how the value of the pension benefit forgone as part of a job move can reduce mobility between jobs.⁷⁶

Amending final salary schemes could have little impact on recruitment and retention

Amending the public sector pension schemes but retaining the final salary structure could have little impact on the recruitment and retention properties of the public sector pension schemes. The schemes would still be attractive relative to private sector pension arrangements, and the final salary element would still be likely to act as a barrier to movement from the public sector to the private sector.

⁷⁴ Chatterji and Mumford (2007)

⁷⁵ This will have been exacerbated by the recent switch from RPI to CPI for the revaluation of deferred pensions.

⁷⁶ IPSPC (2010) p 105, quoting forthcoming research from the Institute of Fiscal Studies

Career average and hybrid schemes could increase labour market mobility

Moving to the risk sharing arrangements analysed in this report could help increase labour market mobility, as the final pension is less reliant on how much is earned at the time of leaving the employment, whether the pension is deferred (Chart 14, chapter 5) or taken as an income, even for high flyers (Chart 13, chapter 5).

While a risk sharing or hybrid public sector pension would be less valuable than the current public sector pension arrangements, it would still be more valuable than private sector DC arrangements, so it could still have a positive impact on public sector recruitment and retention.

Moving to DC could make public sector working less attractive

Switching public sector pension arrangements to a notional DC arrangement would leave public sector pension schemes looking more like private sector pension arrangements. Any advantage that the public sector schemes give public sector employers in recruitment and retention would be removed, which may lead to problems recruiting staff where skills are scarce or where the private sector has more flexibility to construct remuneration packages. Other parts of the remuneration package – such as pay, other benefits and working conditions – would become more important.

However, a notional DC arrangement would not hinder movement of workers between the private and public sectors.

Chapter seven: affordability and sustainability of public sector schemes

This chapter examines the issues surrounding the affordability and sustainability of public sector pension schemes. It considers what impact future reforms to the schemes could have on the future affordability and sustainability of the schemes. It should be noted that the PPI has modelled a discrete number of illustrative reform options. However, the parameters of the schemes could be altered and these would impact on the future costs to Government of the schemes.

Box 4: Summary of key findings on the affordability and sustainability of public sector pension schemes

- The cost of pension schemes are often measured in two main ways, the size of outstanding liabilities or the expected year on year running costs of providing benefits.
- The running costs show the expected level of cash payments as a percentage of GDP that the schemes require to pay out pensions that will be met by the taxpayer.
- The liability figure is the value in today's terms of all expected future payments based on pensions built up to date. It is not a figure that will ever need to be paid at one time and does not reflect the fact that both member contributions and future service leading to more pension entitlement will continue. The calculated liability varies considerably depending on the assumptions used, in particular the discount rate used.
- Affordable and sustainable are politically relative terms. Whether a scheme is affordable or sustainable depends on the Government's view on the importance of providing public sector pensions.
- The change from RPI to CPI for uplifting pensions is expected to reduce the future cost of paying public sector pensions.
- The possible impact of the reform options modelled in this report suggests that a change to Notional DC pensions is likely to have the greatest impact on cutting costs, but this depends on the employer contribution level and the fund indexation.
- The impact of reforms that cap benefits for higher earners depends on the level the cap is set at. If the cap only affects high earners then the reduction in cost is likely to be very limited.

Improving the affordability and financial sustainability of public sector pension schemes

Public sector pension schemes are often described as unsustainable. An objective of any further reforms may be to ensure that no unreasonable burden is placed on the taxpayer in the short or long term, either through centrally collected or local taxes.

There are two different measures commonly used to identify the cost of the public sector pension schemes:

- Outstanding liability, a calculation of how much would need to be invested in a fund in order to be able to meet all expected future benefits. This can be used to gain insight into the overall size of the pension schemes.
- On-going cost, this is the payments made by the pension scheme in the future. This figure can indicate how much cash is required each year from contributions and taxes in order to run the scheme.

Outstanding liability figures depend heavily on the assumptions used in the calculation

The most recent Government estimate of the outstanding liability of the unfunded pension schemes is £770bn⁷⁷ in 2008. This figure does not include the Local Government pension scheme which is a funded scheme, nor does it allow for the change from RPI to CPI for pension indexation.

Recent Government estimates of the liabilities have been on an upward trend (Table 6), however, this does not by itself suggest that the actual underlying cost of public sector pensions to the taxpayer is increasing. Much of the change is attributable to accounting effects such as changes in the discount rate⁷⁸, which do not mean that the size or timing of future pension payments by the schemes have been altered, but which reflect the recording and presentation of the liability of these payments in the scheme accounts.

Table 6:⁷⁹ Recent Government estimates of the liability of the public sector pension schemes and the underlying discount rate assumptions

31 March	Liability (£ billion)	Real discount rate	
		Schemes funded directly by central Government	Police & Fire schemes
2004	460	3.5%	3.5%
2005	530	3.5%	2.4%
2006	650	2.8%	1.6%
2007	810	1.8%	
2008	770	2.5% ⁸⁰	

Different discount rates may be useful for different objectives. For example, market based corporate bond yields such as those used by the Government in Table 5 are consistent with those used by private sector companies to account for their pension scheme liabilities. The liabilities disclosed by Government accounting of their pension schemes may therefore be compared on a consistent basis with those of private sector companies.

⁷⁷ HMT (2009)

⁷⁸ This is the interest rate used to adjust future liabilities to current values. See Appendix 2 for more information.

⁷⁹ Liability figure includes the schemes for the NHS, Teachers, Civil Service, Armed Forces, Police, Firefighters, Judiciary and Atomic Energy Authority. HMT (2009), HMT (2008) page 38 and HMT (2006 PSP).

⁸⁰ HMT (2008 PES)

It can be hard to interpret liabilities and make comparisons over time when using any market related discount rate whether corporate bonds or gilt yields. The differences that arise as a result of using continuously changing discount rates can overshadow any fundamental differences arising in the scheme before and after reforms.

The calculation of the liability to the Government of the public sector schemes sets out the value of liabilities built up to date. This liability value does not reflect the on-going expenditure requirements of the Government as it does not need to be paid out at any one time. It also does not reflect future accruals, or account for on-going member contributions. As such, looking at the Government's total liability in isolation is not a very meaningful way of measuring the cost to the taxpayer of meeting future public sector promises

On-going cost of public sector pension schemes

The other commonly used indicator of the cost of running the public sector pension schemes is to look at the annual expenditure on pensions. The public sector pensions operate as a Pay-As-You-Go system where the current pensions in payment are financed by the contributions collected in respect of current employees' pension accrual with the Treasury providing any balance of cost as required.

The projected level of the balancing cost paid by the Treasury has been highlighted by some commentators, including the Deputy Prime Minister Nick Clegg MP,⁸¹ as evidence of an increasing cost of public sector pensions. The amount of the expenditure on pensions in payment is unrelated to the contributions in respect of the accrual of current employees so there is no reason why they should be equivalent.

A better measure of the cost to the taxpayer is the how much the Government needs to pay out each year to meet its public sector pension obligations less the amount already contributed by the members of the public sector schemes. This gives an estimate of the annual cost to the taxpayer of the unfunded schemes (Chart 16).

⁸¹ In a speech on 14 June 2010 Nick Clegg commented on the projected increase of the OBR's projection that the balancing cost would increase from £4bn in 2010/11 to £9bn by 2014/15

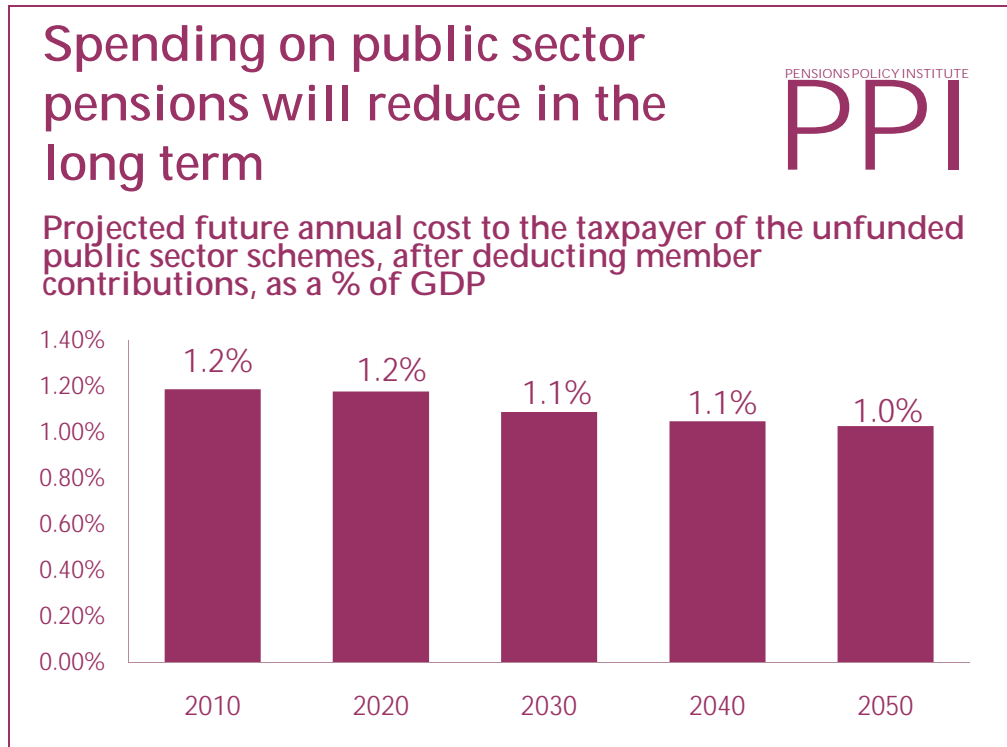
Chart 16⁸²

Chart 16 shows the annual cost to the taxpayer of the unfunded schemes. Following the Coalition Government's announcement that pension increases will be linked to the CPI, the cost to the taxpayer of the unfunded schemes is projected to decrease over the next forty years, from 1.2% of GDP in 2010 to 1.0% of GDP in 2050. This excludes the Local Government Pension Scheme, which is a funded scheme. The figures allow for the additional £1bn per year that the Government expects to collect in member contributions by 2015 under the existing cap and share arrangements.⁸³ It does not, however, take account of any further increases in the level of member contributions that the Government may implement in the future.

Attempts to cut the cost of public sector pension provision may have limited impact in the short term.

The pay as you go nature of most public sector pension schemes means that current expenditure is to pay for current pensioners. It is therefore not directly linked to benefits currently being built up. So any reforms which reduce currently accruing benefits will have no impact until those pensions come into payment.

Expenditure in the short term can only be reduced by reducing the current pensions paid out by the Government or by asking current public sector workers to contribute more to the cost of their pension. To reduce the

⁸² PPI calculations. The projected figure may be different from those produced by GAD for the Independent Public Service Pension Schemes Commission. This is due to slight differences in modelling assumptions and modelling techniques, the IPSPC also has access to Government figures that are not publically available.

⁸³ OBR (2010)

pensions in payment would require the Government to go back on promises made to people who have retired. Cutting benefits that have been previously built up could be highly controversial and may be illegal under current pension law. The cost savings may be reduced if people who have their pensions cut become eligible for higher levels of means tested benefit.

Increasing member contributions may cut costs in the short term

If no further changes are to be made to accrued rights then one remaining option to cut the cost to Government in the short term is to increase the member's share of the contributions.

Increasing member contributions does not affect the level of benefits currently being paid out nor does it reduce future benefit promises. It decreases the cost to the exchequer by asking for a greater share of the cost to be met by the employees currently accruing pensions. In 2008/09 the employee contributions to the four largest unfunded public sector pension schemes⁸⁴ were £4.4 billion while the total cost to the taxpayer was £15 billion (comprising employer contributions of £12.5 billion and the balancing cost to the Treasury for pension related payments of £2.5 billion).⁸⁵ However, in order to achieve a significant saving to the taxpayer, the employee contributions would be required to increase a large amount. For example, to cover the £2.5 billion cost of the balance payment to the Treasury the employee contribution would have to increase from £4.4 billion to £6.9 billion, an increase of over 50%.

In the Comprehensive Spending Review on 20 October 2010, the Government announced that it would raise member contributions in a 'progressive way' so as to increase the amount collected in member contributions to the unfunded public sector schemes in 2015 by an extra £1.8bn per year, on top of current plans.⁸⁶ This excludes the members of the Local Government Pension Scheme which is a funded pension scheme.

Impact of the reforms on the future cost of providing benefits

As set out in chapter 2, the reforms are split into three categories:

- Reforming the final salary scheme
- Moving to risk sharing scheme structure
- Moving from defined benefit to defined contribution

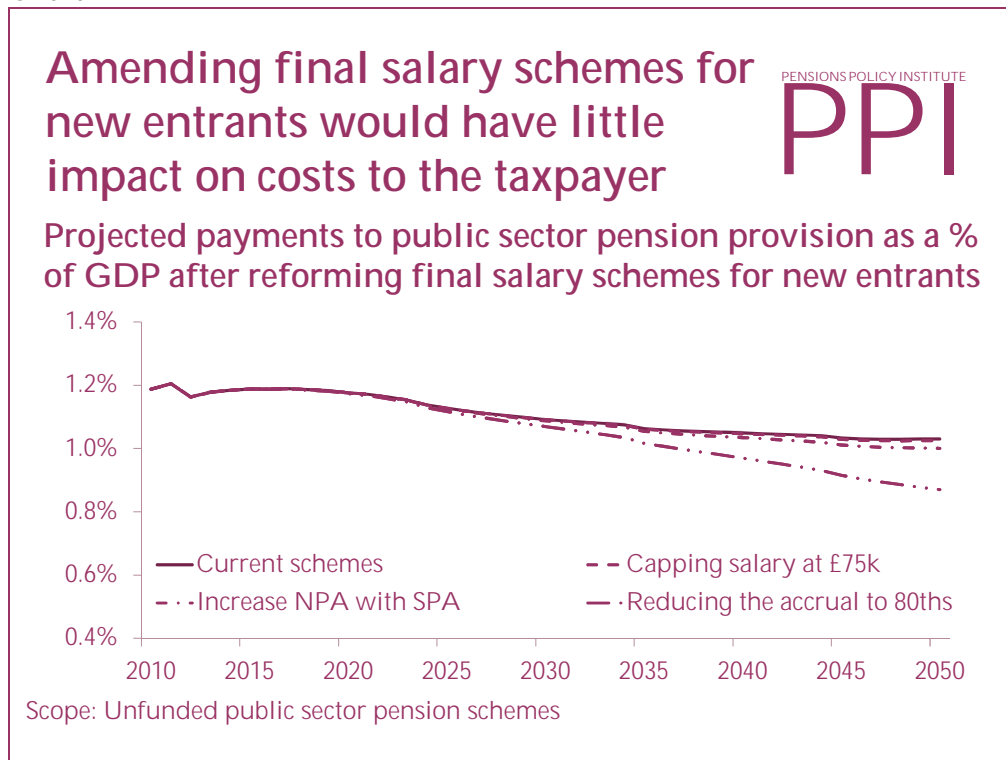
Amending the existing Final Salary schemes

Chart 17 sets out the impact on Government expenditure on public sector pensions of various reforms to the pension schemes which maintain a final salary scheme.

⁸⁴ The four largest unfunded public sector pension schemes are those of the Armed Forces, Civil Service, NHS and Teachers

⁸⁵ NAO (2010) The cost of public service pensions

⁸⁶ HMT (2010b)

Chart 17⁸⁷

Of the reforms modelled, the highest impact on cost saving while maintaining a final salary pension scheme is to reduce the accrual rate from 60ths to 80ths. This reduces the cost to the taxpayer of public sector pensions in 2050 from 1.0% of GDP to 0.9% of GDP. This reform affects every new member across the board regardless of salary level. As such it may prevent low paid workers from achieving their required replacement rates.

The efficiency of imposing a cap on the salary as a cost saving measure depends on the level at which the cap is set. In Chart 17 the cap on salary is set at £75,000. This was selected as the level which would be consistent with a pension benefit cap of £50,000 for someone with a full two thirds pension. This is the level at which the Conservative Party said they would cap public sector pension benefits in their pre-election policy. Setting a cap at this level has hardly any impact on the cost of providing benefits because the majority of public sector workers do not earn salaries at a high enough level for the reform to bite.

Increasing the Normal Pension Age in line with changes in the SPA as legislated in the Pensions Act 2007 will reduce the cost of providing benefits because there will be fewer pensioners. However, even by 2050 the amount saved on pension expenditure would be less than 0.1% of GDP if this only applied to new entrants to public sector pension schemes, reducing

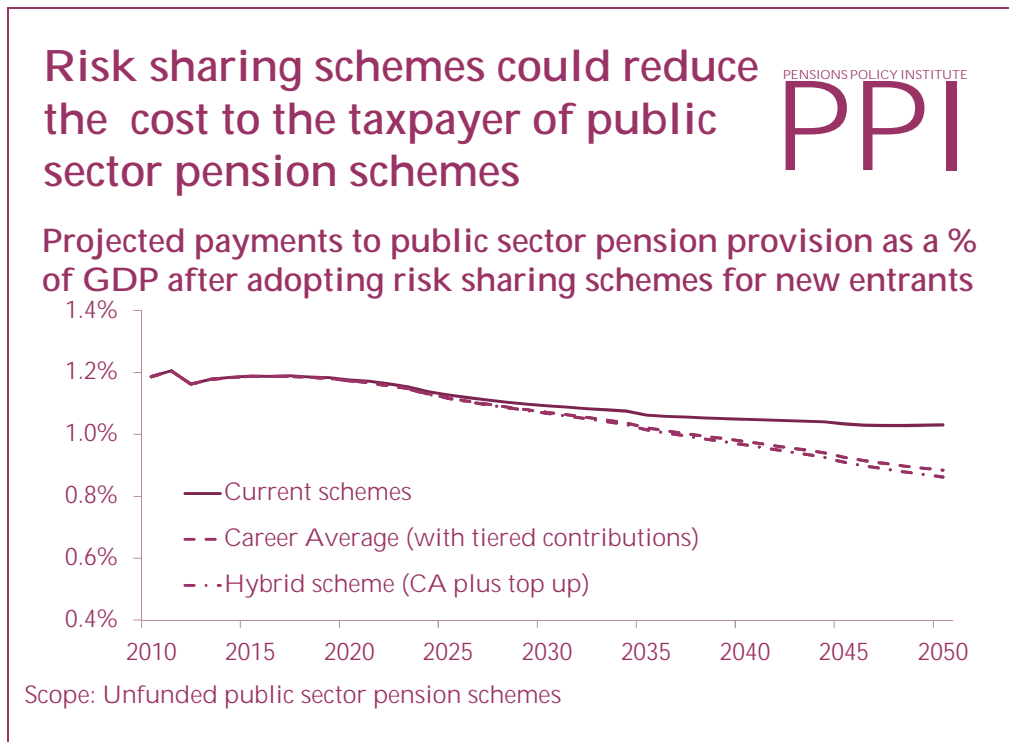
⁸⁷ PPI estimates see appendix 1 for detailed assumptions. Figures shown are pensions in payment net of member contributions.

Government expenditure on the public sector pensions in 2050 from 1.03% of GDP under current policy to 1.00% of GDP with the NPA change.

Moving to risk sharing schemes

Chart 18 sets out the impact on Government expenditure on public sector pensions of various risk sharing reforms to the public sector pension schemes. The reforms are based on moving to a career average scheme with a benefit structure similar to that of the Civil Service Nuvo scheme but using the much higher, tiered, employee contributions structure of the PPI Proxy scheme.

Chart 18⁸⁸



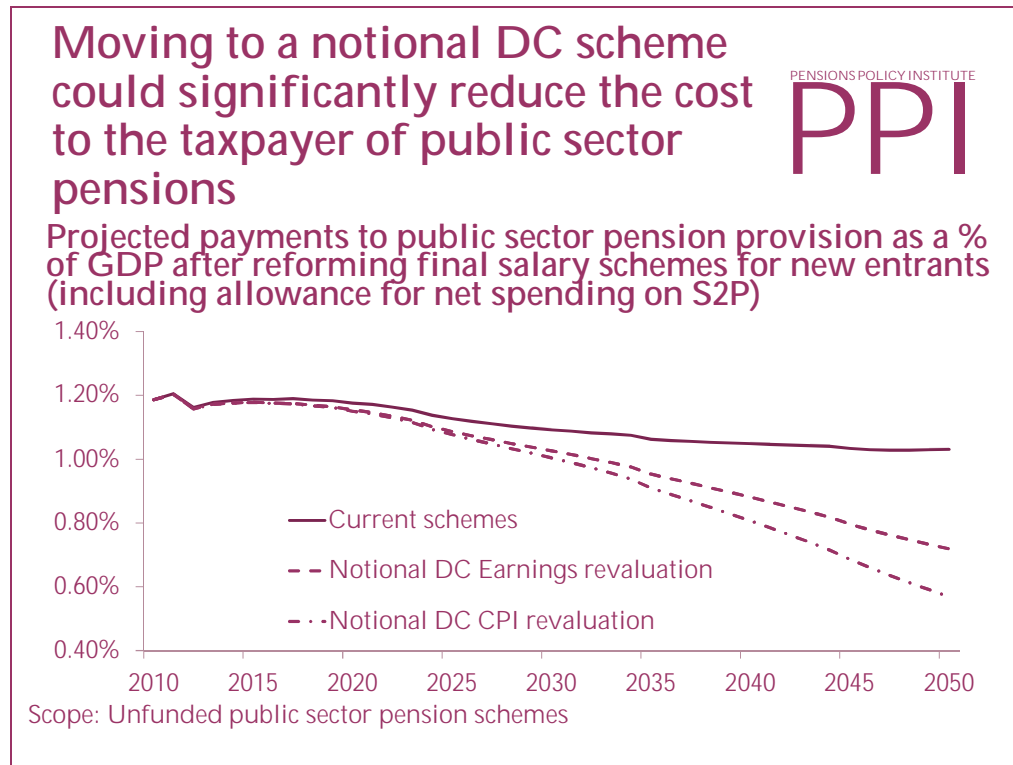
The career average schemes are projected to reduce the annual cost to the taxpayer from a peak of around 1.2% of GDP in 2020 to around 0.9% of GDP by 2050. This is around 10% lower than the project spending under the current schemes. There is very little variance between the different types of career average and hybrid schemes modelled. The hybrid scheme modelled by the PPI offers a career average pension on salary of up to £37,000 with a defined contribution top-up above this salary level. Most employees in the public sector do not earn more than £37,000, so the results are very similar to those on the unadjusted career average.

⁸⁸ PPI estimates see appendix 1 for detailed assumptions. Figures shown are pensions in payment net of member contributions.

Moving from defined benefit to notional defined contribution

Chart 19 sets out the impact on expenditure on public sector pensions of moving to some form of notional defined contribution arrangement. The reforms are based on moving to a notional defined contribution scheme with combined employer and employee contributions of 15%.

Chart 19⁸⁹



The impact of moving to a notional DC scheme depends on the level of contributions and the notional rate of fund growth applied to revalue the pension pots. In the private sector DC pensions are invested in assets such as bonds and equities which generate a return. Notional defined contribution schemes do not have a fund backing them so there is a choice to be made concerning the rate of growth to revalue the funds each year. The higher the level of revaluation in the notional fund, the greater the pension expenditure, and therefore the less is the saving from the reform.

As a result of the Pensions Act 2007, DC pensions will be unable to contract-out of the State Second Pension (S2P) from 2012. Therefore a notional DC scheme would be contracted-in, so there would be some increases in spending on S2P, but also some cost saving from increased NI contributions. Allowing for the net impact of S2P and NI contributions, a notional DC fund that had returns linked to National Average Earnings (NAE) would be projected to reduce the annual cost to the taxpayer to around 0.7% of GDP by 2050. Spending would be even lower if returns were linked to CPI.

⁸⁹ PPI estimates see appendix 1 for detailed assumptions. Figures shown are pensions in payment net of member contributions.

In the short term the value of the increase in employee national insurance contributions would be greater than the S2P coming into payment. This would lead to a small net reduction in the cost to the taxpayer of providing public sector pensions. However, in the longer term as more people retire with eligibility to S2P it is likely to lead to a net increase in spending. By 2050, the spending on S2P in respect of former public sector workers and the annual income from additional NI contributions could be broadly the same at around 0.1% of GDP. Thereafter, contracting-in the public sector pensions to S2P is likely to be a net expenditure cost to the taxpayer.

With the notional DC options there may also be an impact on other areas of Government spending. For example, adequacy for low earners is less in notional DC options than in the other options examined in this analysis, and this could lead to increased expenditure on means-tested benefits. Any additional spending would need to be properly considered in the comparison between reform options.

Moving to a funded scheme would increase costs in the short to medium term

If public sector funds were to switch from the predominant current Pay as You Go system to a pre-funded defined contribution system, as is prevalent in private sector pension schemes, then there would be short to medium term cost implications for the Government. The Government would be required to invest the contributions of today's working age public sector workers, but would still have to pay out the pensions of current pensioners. This would have to be funded through higher taxes, greater borrowing or further cutbacks in other areas of government spending.

Example 2⁹⁰

For example, in 2008-09 the amount paid out to pensioners was £22.5 billion, while the employer and employee contributions to the public sector pension schemes were £19.5 billion.

As the current contributions were not enough to cover current pension spending on their own, the Treasury paid the required extra £3 billion.

If the scheme had moved to a funded basis in 2008 then the £19.5 billion in contributions would be invested and the Treasury would have had to pay the full £22.5 billion from another source.

Greater long term cost savings may arise as a result of reforms affecting all future accruals, not just new entrants

The speed and extent to which the reforms could impact on the costs of the schemes depend on whether reforms are limited to new entrants only, or whether existing members will also be subject to the reforms. This would not mean altering the terms of the benefits that scheme members have already accrued, but would mean that any future accrual would be under the terms of

⁹⁰ HMR (2010) Public Expenditure Statistical Analysis

a reformed scheme, and not their current scheme. This is similar to a private sector employer closing a scheme and moving all members to a new scheme.

In the Interim IPSPC Report Lord Hutton was clear that 'protecting accrued rights does not extend as far as protecting current terms for future accrual'.⁹¹ Table 7 shows the relative impact of introducing alternative pension reforms for a) all employees' future service and b) for new entrants only.

Table 7: Impact of applying reforms to all members' future service on annual expenditure on public sector pension schemes (as a proportion of GDP)⁹²

Year	2030		2050	
	New entrants only	All Members	New entrants only	All Members
Current policy	1.1%	1.1%	1.0%	1.0%
Career Average	1.1%	1.1%	0.9%	0.8%
Hybrid	1.1%	1.0%	0.9%	0.8%
Notional DC (Average earnings linked fund)	1.0%	1.0%	0.7%	0.7%

Table 7 shows that the on-going cost to the taxpayer of paying out public sector pensions is reduced if the reforms are applied to all members rather than just employees who join the scheme after the reforms are implemented. By 2050 an additional 0.1% of GDP could be saved by applying reforms to all future accruals rather than just new entrants.

The notional DC scheme would be contracted-in, so there would be some impact on spending on S2P. Employees who are contracted in to S2P pay higher national insurance contributions and accrue rights to S2P. In the short term the value of the increase in employee national insurance contributions would be greater than the S2P coming into payment. This would lead to a net reduction in the cost to the taxpayer of providing public sector pensions. However, in the longer term as more people retire with eligibility to S2P it is likely to lead to a net increase in spending. By 2050, in the scenario that all employees are contracted in, the spending on S2P in respect of former public sector workers would exceed the annual income from additional NI contributions by around 0.1% of GDP. This expenditure on S2P offsets the saving that would otherwise have been made by having all employees, as opposed to just new entrants, being members of a lower cost scheme.⁹³

⁹¹ IPSPC (2010) p5

⁹² PPI modelling, figures rounded to the nearest 0.1% GDP

⁹³ See Appendix 4 for further details and estimates of the relative impact of NI contributions and S2P payments

Chapter eight: transparency of public sector pension schemes

Introduction

The concept of transparency of the public sector pension schemes has two sides: the transparency of the value of the benefit to the members and the transparency of the true cost, in terms of the accounting cost, of the public sector pensions to taxpayers.

The ease of understanding the value of pensions to the members (and potential members) of the scheme may impact the effectiveness of the pension scheme as a recruitment tool. If members do not understand the value of the pension being offered they may not make the most advantageous decision regarding their employment and retirement provision.

Similarly, it has been argued that if the accounting cost of providing public sector pension schemes is not being correctly presented by the Government, then decisions as to how much Government Departments should be paying in employer contributions might not be optimal.

Box 5: Summary of key findings on the transparency of public sector pension provision

- It may be considered important for employees to be able understand their pension scheme they so they can engage with it.
- Final salary pension schemes may be relatively easy for employees to understand in terms of what benefits to expect, and enable planning for retirement.
- Risk sharing schemes tend to be more complex and therefore may be more difficult for employees to understand. Retirement planning may be more difficult as the retirement income has no direct relation to the salary immediately before retirement.
- Defined contribution schemes operate in a similar way to other savings products, such as ISAs, during the accumulation phase so may have some familiarity for employees. However the risks around investment returns and the annuity rate to be used may make retirement planning more difficult.
- There are disagreements regarding the value of public sector pensions that are accruing and therefore how much employers should pay in annual contributions. The source of the disagreement tends to be around the discount rate assumed for future payments.
- Adjustments to the structure of the pension schemes are unlikely to have a major impact on transparency. Most of the reform options will require assumptions to be made in order to place a value on benefit promises. These assumptions will remain open to challenge.

Understanding the value of public sector pension schemes can be difficult for individuals

Final Salary pension schemes offer a benefit based on the number of years the employee has been a member of the scheme and the level of salary at retirement. Knowing how much they will receive from their pension as a proportion of their salary may enable employees to plan for their retirement. However, this still relies on individuals having reasonable certainty about how much longer they may work in that job and how much their pay may change before reaching pension age. This is likely to be easier for those approaching retirement.

It is even more difficult for employees to understand the value of their pension scheme when trying to compare it with the value of pensions on offer in the private sector where defined contribution schemes predominate. As public sector pensions are defined in terms of the value of the pension received and private sector defined contribution pensions in terms of how much is paid in, meaningful comparisons are very difficult without financial advice.

Accounting cost arguments tend to come down to disagreements about valuation assumptions

There are currently a number of different views as to how Government departments and other relevant bodies should calculate and account for the contributions that they make to public sector pensions on behalf of their employees.⁹⁴ As with valuation of the liabilities (see chapter 7), many of the discussions concern the appropriate discount rate to use.

Switching to a risk sharing approach could have limited impact on transparency

The reform options under consideration are mainly concerned with the structure of the pension and how it is built up. Transparency is about the availability of understandable information.

Risk sharing pension schemes such as Career Average and Hybrid schemes are more complex than final salary schemes so they may be more difficult for employees to understand. Risk sharing schemes also make estimating the eventual level of pension benefits more difficult for employees and may therefore make retirement planning more difficult. And they would face the same difficulties with comparability with the DC schemes available in the private sector.

Ideally, employees would understand the benefits being offered in their public sector scheme and have a method of comparing the value of the schemes of potential employers. This comparison should allow for a consistent value of benefits between employers. For example, if a private sector employer offers the same benefits package as a public sector employer, the value should appear equal to the employee, as they would receive the

⁹⁴ Reference Neil Record or the IoD/iea Public Sector Pensions Commission

same value from each, irrespective of how much it 'cost' the employer to provide them.

DC schemes could remove debate about the appropriate level of employer contributions

The build-up of funds in DC pension schemes may be relatively simple for employees to understand as they operate in a similar way to an ISA or other savings vehicle. Employees with experience of such provision in the private sector may already understand the DC pension scheme. However, the level of the eventual pension in payment is very difficult to estimate and is dependent on the annuity rates available at the point of retirement. While it would be easier for an individual to compare public and private sector pensions if public sector pensions were offered on a DC basis, individuals may have less idea what they will actually receive in retirement.

The liability and cost of benefits building up in a DC environment are a fund value, whether real or notional. As the contributions that are payable by the employer are defined as part of the scheme, this removes the debate and uncertainty surrounding the setting of the employer contribution level that is necessary in a final salary arrangement. The liabilities would still need to be calculated (to account for the future growth of the fund), but the assumptions used may be less controversial.

Appendix 1: Assumptions and methodology used in PPI public sector pension projections

This appendix describes modelling assumptions used in this report. The modelling uses two models – the Individual Model and the Aggregate Model – which were developed with a grant from the Nuffield Foundation.

Individual modelling

The modelling of the pension pot sizes of hypothetical individuals uses the PPI Individual Model.⁹⁵ Detailed assumptions have been made about the individuals' working and saving behaviours and these are described in the main report. Throughout, the modelling assumes:

- Future annual consumer price inflation of 2.0%.
- Future annual retail price inflation of 2.87%.
- Future annual earnings growth of 4.5%.
- Expected nominal investment returns of 6.0%, corresponding to a mixed equity/bond fund and to a real rate of 3%.

Promotional salary increases are assumed to follow the assumptions set out by GAD⁹⁶

The assumptions used by the PPI are regularly assessed by a modelling review board consisting of a range of experts in financial modelling.

Aggregate modelling

The modelling of the aggregate size of the annual spending on public sector pensions uses an adapted version of the PPI Aggregate Model. The annual cost of public sector pensions to the taxpayer is modelled as the projected amount of pensions in payment less the employee contributions.

The projected level of pensions in payment allow for the running down of pensions as current pensioners die, and the retirement of current employees who may build up pensions under the rules of the reform options.

The impact of the various reform options is modelled by adjusting the rate at which employees build up their pensions. The adjustment is calculated as the difference in the weighted average value of the pension built up under the reform as compared with the weighted average value of the current pension scheme.

The public sector workforce, as a proportion of the total working population, is assumed to reduce by 10% between 2010 and 2020. Thereafter it is assumed to remain as a constant proportion of the total working population.

More detail about the general PPI Aggregate modelling methodology is available on the PPI website.⁹⁷

⁹⁵ For more information on the Individual Model, see PPI (2003) *The Under-pensioned*

⁹⁶ GAD (2010)

⁹⁷ For more information on the Aggregate Model, see PPI (2005) *What will pensions cost in future?*

The options modelled include parameters assumed in the scheme design such as the accrual rate in the pension scheme, the contributions paid into the Defined Benefit scheme etc. The schemes modelled are intended to be illustrative, not definitive. The results can be very sensitive to the assumed parameters chosen. In choosing the parameters to model we have tried as far as possible to be guided by existing custom and practice or where the Government has already indicated reforms in related areas (e.g. in proposals to increase the State Pension Age) we have linked our reform options to these proposals.

Appendix 2: Participating organisations at the round table discussion

The following organisations were represented by participants at a round table discussion hosted by the Nuffield Foundation in January 2010 to discuss the potential reform objectives and policy options:

Pensions Policy Institute
Trades Union Congress
Confederation of British Industry
Public Sector Pensions Commission
Institute of Directors
National Association of Pension Funds
Chartered Institute of Public Finance and Accountability
London Pensions Fund Authority
Nuffield Foundation

Participation in the round table does not imply support for all or any of the objectives or policy options presented in this report.

Appendix 3: PPI Proxy public sector pension scheme

A proxy public sector pension scheme has been used as a standard benchmark against which to measure the broad impacts of reforms. This approach enables us to model the size of the overall impacts of without having to model every individual public sector pension scheme.

The proxy public sector pension scheme used for the modelling has been designed to broadly emulate the reformed NHS, Teachers and Local Government schemes. The detailed assumptions within the proxy schemes are as follows:

Type of scheme	Final Salary																		
Normal Pension age	65																		
Member contributions subject to cost sharing mechanism	<table border="1"> <thead> <tr> <th>Band</th> <th>Range</th> <th>Rate</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>£0-£20,000</td> <td>5.25%</td> </tr> <tr> <td>2</td> <td>£20,000- £40,000</td> <td>6.5%</td> </tr> <tr> <td>3</td> <td>£40,000- £70,000</td> <td>7.0%</td> </tr> <tr> <td>4</td> <td>£70,000- £100,000</td> <td>7.5%</td> </tr> <tr> <td>5</td> <td>Over £100,000</td> <td>8.0%</td> </tr> </tbody> </table>	Band	Range	Rate	1	£0-£20,000	5.25%	2	£20,000- £40,000	6.5%	3	£40,000- £70,000	7.0%	4	£70,000- £100,000	7.5%	5	Over £100,000	8.0%
Band	Range	Rate																	
1	£0-£20,000	5.25%																	
2	£20,000- £40,000	6.5%																	
3	£40,000- £70,000	7.0%																	
4	£70,000- £100,000	7.5%																	
5	Over £100,000	8.0%																	
Normal Retirement Pension	1/60th of salary for each year of service with pension increases in line with RPI Lump sum by commutation (12:1)																		
Dependant's pension	1/160th of salary for each year of service with service enhancement if died in service																		
Lump Sum Death benefit																			
Death in Service	3 x annual pensionable salary																		
Death after Retirement	5 year guarantee																		

The tiered contributions in the PPI proxy scheme are set to fall within the existing tiered contributions of the NHSPS and the LGPS.

Appendix 4: The impact of contracting-in on Notional DC scheme costs

Currently the public sector pension schemes are contracted-out of the State Second Pension (S2P). This means that employees do not accrue benefits through S2P and in return receive a rebate on their National Insurance contributions. The Pensions Act 2007 abolishes the facility for contracting-out of S2P through Defined Contribution pension schemes from 2012. Contracted-in employees who were previously contracted-out of S2P will start to accrue S2P benefits and will pay higher NI contributions as they are no longer eligible for the NI contribution rebate.

When modelling the impact of DC reforms to the public sector pension schemes, the PPI has allowed for the increase in NI contributions and the increased Government spending on S2P benefits that would result from contracting public sector workers in to S2P.

The following tables show a breakdown of the components of the projected Government expenditure on public sector schemes and S2P spending under the Notional DC reform option with fund revaluation in line with increases in earnings.

The components of the estimates of total cost are shown rounded to the nearest 0.01% of GDP, to show the relative importance of each component. However, these are necessarily broad estimates and as such are unlikely to be accurate to this degree. The total impact on Government expenditure (in the tables below and in the report) have therefore been rounded to the nearest 0.1% of GDP.

Table A1: Breakdown of Government expenditure on public sector pensions if only new entrants are enrolled in the Notional DC pension scheme ⁹⁸

	2010	2030	2050
Benefits payable	1.58%	1.40%	1.04%
Employee contributions	0.39%	0.35%	0.32%
Benefits net of contributions	1.19%	1.05%	0.72%
Increased employee NI contributions	0.00%	0.03%	0.06%
Increased S2P payments	0.00%	0.01%	0.06%
Net impact of contracting-in	0.00%	-0.02%	0.00%
Total Government expenditure	1.2%	1.0%	0.7%

⁹⁸ PPI modelling, figures rounded to the nearest 0.01%GDP, totals to 0.1% GDP

Table A2: Breakdown of Government expenditure on public sector pensions if all members are enrolled in the Notional DC pension scheme ⁹⁹

	2010	2030	2050
Benefits payable	1.58%	1.36%	0.94%
Employee contributions	0.33%	0.32%	0.32%
Benefits net of contributions	1.25%	1.03%	0.62%
Increased employee NI contributions	0.07%	0.07%	0.06%
Increased S2P payments	0.00%	0.05%	0.10%
Net impact of contracting-in	-0.07%	-0.01%	0.04%
Total Government expenditure	1.2%	1.0%	0.7%

⁹⁹ PPI modelling, figures rounded to the nearest 0.01%GDP, totals to 0.1% GDP

Acknowledgements and Contact Details

The Pensions Policy Institute is grateful for input from many people in support of this paper, including:

Shaun Butcher	Leandro Carrera	Niki Cleal
Ruth Hancock	Michael Hatchett	John Hawksworth
Maritha Lightbourne	Daniela Silcock	Nigel Stanley
Adam Steventon	Holly Sutherland	Mike Taylor
Andrew Young	Tom Younger	

Editing decisions remained with the author who takes responsibility for any remaining errors or omissions.

The Pensions Policy Institute is an educational charity promoting the study of retirement income provision through research, analysis, discussion and publication. The PPI takes an independent view across the entire pensions system.

The PPI is funded by donations, grants and benefits-in-kind from a range of organisations, as well as being commissioned for research projects. To learn more about the PPI, see: www.pensionspolicyinstitute.org.uk

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Contact:

Niki Cleal, Director

Telephone: 020 7848 3744

Email: info@pensionspolicyinstitute.org.uk

Pensions Policy Institute

King's College

26 Drury Lane

3rd Floor, Room 311

London WC2B 5RL

The PPI is grateful for the continuing support of its Platinum members:

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References

Armed Forces Pension Scheme (2009) Armed Forces Pension Scheme (Incorporating the Armed Forces Compensation Scheme) Resource Accounts 2008-09 The Stationary Office

Cabinet Office (2009) Civil Superannuation Resource Accounts 2008-09 The Stationary Office

Cable, V. (2009) Tackling the Financial Crisis Reform

Chatterji, M. and Mumford, K. (2007) Public-Private Sector Wage Gaps for British Full-Time Male Employees: Across Occupations and Workplaces. Office of Manpower Economics.

Communities and Local Government (CLG) (2009) Local Government Financial Statistics England No.19 www.communities.gov.uk

Department of Work and Pensions (DWP) (2008) Employers' Pension Provision Survey www.dwp.gov.uk

Department for Work and Pensions (DWP) (2008 IA) Pensions Bill – Impact Assessment 24 April 2008 www.dwp.gov.uk

Disney, R., Emmerson, C., and Tetlow, G. (2009) What is a Public Sector Pension Worth? *The Economic Journal*, 119 (November), F517–F535

Government Actuary's Department (GAD) (2010) Pay-As-You-Go Public Service Pension Schemes December 2009 Cashflow Projections Methodology, data and assumptions www.gad.gov.uk

HM Treasury (HMT) (2008) Long-term public finance report: an analysis of fiscal sustainability www.hm-treasury.gov.uk

HM Treasury (HMT) (2009) Long-term public finance report: an analysis of fiscal sustainability www.hm-treasury.gov.uk

HM Treasury (HMT) (2009a) Securing the recovery: growth and opportunity Pre-Budget Report 2009 www.hm-treasury.gov.uk

HM Treasury (HMT) (2010) Public Expenditure Statistical Analyses 2010 www.hm-treasury.gov.uk

HM Treasury (HMT) (2010a) Independent Public Service Pensions Commission: terms of reference www.hm-treasury.gov.uk

HM Treasury (HMT) (2010b) Spending Review 2010 www.hm-treasury.gov.uk

Independent Public Service Pensions Commission (IPSPC) (2010) Interim Report
www.hm-treasury.gov.uk/indreview_johnhutton_pensions.htm

National Audit Office (NAO) (2010) The cost of public service pensions
www.nao.org.uk

NHS Pension Scheme (2009) NHS Pension Scheme and NHS Compensation for Premature Retirement Scheme Resource Accounts 2008-2009 The Stationary Office

Office for Budget Responsibility (2010) Budget 2010: The economy & public finances – supplementary material budgetresponsibility.independent.gov.uk

Office for National Statistics (ONS) (2008) Annual Survey of Hours and Earnings Pension Analysis

Office for National Statistics (ONS) (2008a) Occupational Pension Schemes Annual Report No. 15 2007 edition Office for National Statistics

Office for National Statistics (ONS) (2009) Annual Survey of Hours and Earnings

Office for National Statistics (ONS) (2009a) Occupational Pension Schemes Annual Report No. 16 2008 edition Office for National Statistics

Pensions Commission (2004) First Report of the Pensions Commission

Pensions Policy Institute (PPI) (2008) An assessment of the Government's reforms to public sector pensions

Pensions Policy Institute (PPI) (2009) Retirement income and assets: do pensioners have sufficient income to meet their needs?

Record, N. (2009) Public Sector Pensions: The UK's Second National Debt Policy Exchange

The Pensions Regulator (TPR) and the Pension Protection Fund (PPF) (2007) The purple book: DB pensions universe risk profile 2007
www.thepensionsregulator.gov.uk

Teachers' Pension Scheme (TPS) (2009) Teachers' Pension Scheme (England and Wales) Resource Accounts 2008-09 The Stationary Office

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Published by
PENSIONS POLICY INSTITUTE

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www.pensionspolicyinstitute.org.uk
ISBN 978-1-906284-14-5