

The logo for the Social Market Foundation (SMF) is located in the top left corner. It consists of the lowercase letters "smf" in a white, bold, sans-serif font, with the full name "Social Market Foundation" in a smaller, white, sans-serif font directly below it. The logo is set against a dark teal background that has a folded-corner effect.

smf
Social Market Foundation

PUBLIC SECTOR PENSIONS

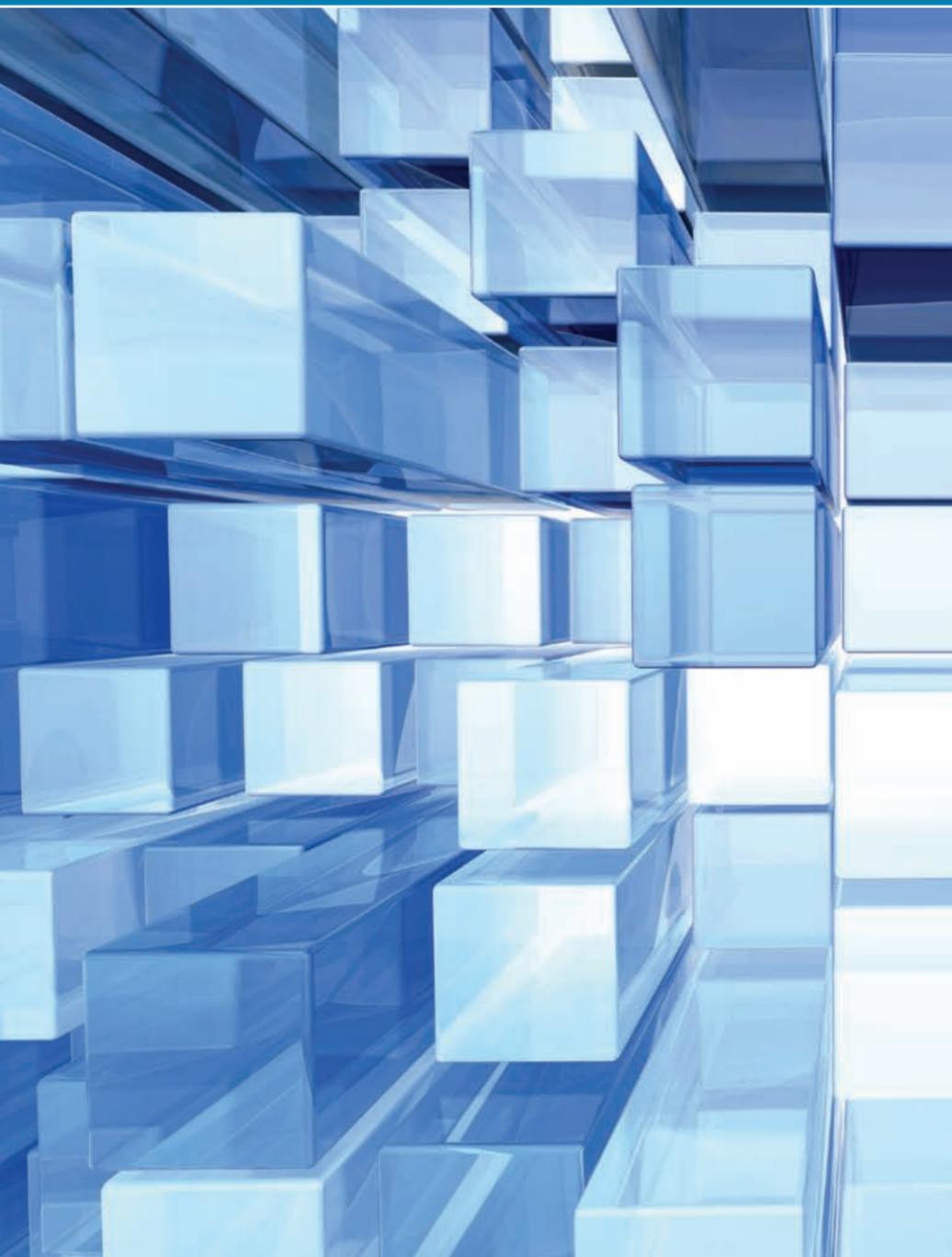
Planning the future

edited by James Lloyd

Copyright © Social Market Foundation, 2010

ISBN: 1-904899-72-2

£10.00



PUBLIC SECTOR PENSIONS

Planning the future

Edited by James Lloyd

Kindly supported by



FIRST PUBLISHED BY

The Social Market Foundation, December 2010

ISBN: 1-904899-72-2

11 Tufton Street, London SW1P 3QB

Copyright © The Social Market Foundation, 2010

The moral right of the authors has been asserted. All rights reserved. Without limiting the rights under copyright reserved above, no part of this publication may be reproduced, stored or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), without the prior written permission of both the copyright owner and the publisher of this book.

THE SOCIAL MARKET FOUNDATION

The Foundation's main activity is to commission and publish original papers by independent academic and other experts on key topics in the economic and social fields, with a view to stimulating public discussion on the performance of markets and the social framework within which they operate.

The Foundation is a registered charity and a company limited by guarantee. It is independent of any political party or group and is financed by the sale of publications and by voluntary donations from individuals, organisations and companies. The views expressed in publications are those of the authors and do not represent a corporate opinion of the Foundation.

CHAIR

Mary Ann Sieghart

MEMBERS OF THE BOARD

Viscount (Tom) Chandos

Gavyn Davies OBE

Daniel Franklin

Martin Ivens

Graham Mather

Brian Pomeroy CBE

DIRECTOR

Ian Mulheirn

DESIGN AND PRODUCTION

SoapBox

www.soapboxcommunications.co.uk

PRINTED BY

Repoint – Digital Print Solutions

www.repoint.com



Mixed Sources

Product group from well-managed forests and other controlled sources
www.fsc.org Cert no. SGS-COC-005493
© 1996 Forest Stewardship Council



CONTENTS

Acknowledgements	4
About the authors	5
Foreword Gillian Fawcett, ACCA	10
Introduction	11
Pension promises: comparing the public and private sector Dr Deborah Cooper, Mercer	14
An employee view on public sector pensions Jonathan Baume, General Secretary, FDA	30
Evaluating public and private sector pensions: the importance of sectoral pay differentials Dr Frank Eich, Pension Corporation	35
Public sector pensions: the case for defined contributions Malcolm Small, Director of Policy, TISA	54
Public sector pension design: the risk sharing revolution Graeme Muir, Association of Consulting Actuaries	59
The future of the public sector pensions: an assessment of possible reform options against a range of policy objectives Niki Cleal, Director, Pensions Policy Institute	72
Some lessons from the private sector John Moret, Director of Marketing, Suffolk Life	91
Conclusion	95

ACKNOWLEDGEMENTS

The SMF is very grateful to ACCA for making this publication possible. The think tank also owes many thanks to all of the authors for lending their time and expertise to what we hope is a topical, timely and high impact discussion of a crucial issue.

ABOUT THE AUTHORS

JAMES LLOYD

James Lloyd is a public policy analyst with an interest in social care, ageing and pensions. He has worked at the Social Market Foundation, International Longevity Centre - UK and Prime Minister's Strategy Unit. He read Philosophy at University College London and has masters degrees in Comparative Politics, and in Public Policy.

GILLIAN FAWCETT

Gillian is Head of Public Sector for ACCA responsible for developing policy on technical matters affecting public services and monitoring developments. Before joining ACCA, Gillian was a senior fellow working with the Office for Public Management (OPM) in the organisational development and policy team. She has also worked for the Audit Commission in the UK, where she was a senior policy advisor with expertise in corporate governance, financial management, performance management and human rights and equalities.

In 2005 she was seconded to the UK Parliament as deputy head of the Scrutiny Unit, responsible for providing professional support to select committees in the areas of value for money and financial management. Throughout her career Gillian has had extensive experience of working with a full range of public authorities, central government and other agencies to help improve performance and governance arrangements.

DR DEBORAH COOPER

Deborah is an actuary in Mercer's Tower Place office, where she leads its Retirement Resource Group. The Group's role includes helping colleagues interpret legislative and regulatory requirements, as well as helping to develop the services and products Mercer offers to its clients. Deborah also writes articles on pension and retirement issues and contributes to government consultation exercises on behalf of Mercer.

Before working at Mercer, Deborah was a lecturer in actuarial science. She has a doctorate in mathematics from the University of Wales.

Deborah is a member of the UK Actuarial Profession's Council and chairs the Research Committee of its Pensions Executive Committee. She is also a member of the Professions' Pensions Executive Committee and its Public Affairs Advisory Committee.

JONATHAN BAUME

Jonathan Baume was elected general secretary of the First Division Association (FDA) in 1997, re-elected in 2002 and again in 2006. He joined the FDA as deputy general secretary in 1989, previously working at the TUC specialising in employment law and equality issues.

After studying politics, philosophy and economics at Keble College Oxford, he joined Oxfordshire County Council in 1974 as a graduate trainee, and entered the Department of Employment Group in 1977. From 1980 until leaving for the TUC in 1986, he worked for the Civil and Public Services Association.

Jonathan is a member of the TUC General Council, and has a strong interest in constitutional and public service reform.

DR FRANK EICH

Dr Frank Eich was senior economist at Pension Corporation between 2008 and 2010, where he co-led on the Thought Leadership project. Prior to joining Pension Corporation, Frank worked for the German Federal Finance Ministry on international economic policy issues, and HM Treasury on long-term macroeconomic and public finances issues including population ageing and pensions. He started his professional career at the Economist Intelligence Unit (EIU) and holds a PhD and MSc in Economics from the London School of Economics. Frank's professional interests remain firmly in the areas of macroeconomics and welfare reforms.

MALCOLM SMALL

With a background in law, heavy engineering and public administration, Malcolm has spent nearly 25 years in retail financial services at senior level. He specialises in pensions and distribution of financial products in the UK, having spent 14 years with Norwich Union and, more recently, five years with Merchant Investors, a specialist pension provider. He retains a number of directorships in financial services and acts as a policy adviser in pensions to public bodies. His outside interests include motorcycling and wine appreciation, although never simultaneously.

GRAEME MUIR

Graeme Muir studied Actuarial Mathematics and Statistics at Heriot-Watt University in Edinburgh in 1985 and qualified as an actuary in 1989. In 2006 Graeme joined Barnett Waddingham as senior partner in the Glasgow office together with his clients and his team. Having set up his public sector actuarial practice in 2002, Graeme and his team now look after nearly 20% of the local authority market.

He is a member of the Association of Consulting Actuaries Main Committee and is a former chairman of the Association of Consulting Actuaries Local Government Pensions Sub-committee having served on that committee for many years. Graeme has advised the Chartered Institute of Public Finance and Accountancy on a number of pension accounting issues including the implementation of FRS17 and is a regular speaker at Local Authority Pensions Seminars and Conferences.

NIKI CLEAL

Niki Cleal is the director of the Pensions Policy Institute (PPI) with overall responsibility for leading and managing the PPI. The Pensions Policy Institute is an educational research charity with an objective to inform the public policy debate on pensions and retirement provision. The PPI has published extensive research and analysis on the Government's pension reforms, including

proposals to introduce auto-enrolment, on state pension reform and on reforms to the public sector pensions. Niki is a member of the editorial board of *Pensions: an international journal* and is also a member of the Financial Reporting Council's Actuarial User Committee.

JOHN MORET

John is director of marketing at Suffolk Life and also chair of The Pensions Network. A non-practicing actuary he has worked in the pensions industry for over 40 years and is often referred to as "Mr SIPP" having spent much of his working life since 1990 promoting the advantages of self-invested personal pension. He was the inaugural chairman of the SIPP Provider Group – now known as Association of Member-Directed Pension Schemes – and has worked closely with Government and regulators on a range of issues. He helped shape the income drawdown regime introduced in 1995.

John is a frequent contributor to a wide range of pensions journals and other trade magazines. He is a non-executive director of the Salisbury Playhouse theatre. He is also a non-executive director of Investor in Customers – a small company that provides diagnostic analysis of the strength of customer relationships. He is a board member of the Investment and Life Assurance Group.

ABOUT ACCA

ACCA (the Association of Chartered Certified Accountants) is the global body for professional accountants. We aim to offer business-relevant, first-choice qualifications to people of application, ability and ambition around the world who seek a rewarding career in accountancy, finance and management.

Founded in 1904, ACCA has consistently held unique core values: opportunity, diversity, innovation, integrity and accountability. We believe that accountants bring value to economies at all stages of their development. We seek to develop capacity in the profession and encourage the adoption of global standards. Our values are aligned to the needs of employers in all sectors and we ensure that, through our qualifications, we prepare accountants for business. We seek to open up the profession to people of all backgrounds and remove artificial barriers, innovating our qualifications and their delivery to meet the diverse needs of trainee professionals and their employers.

We support our 140,000 members and 404,000 students in 170 countries, helping them to develop successful careers in accounting and business, based on the skills required by employers. We work through a network of 83 offices and centres and more than 8,000 Approved Employers worldwide, who provide high standards of employee learning and development. Through our public interest remit, we promote appropriate regulation of accounting and conduct relevant research to ensure accountancy continues to grow in reputation and influence.

FOREWORD

BY GILLIAN FAWCETT, ACCA

The subject of pensions for public sector workers is clearly a controversial and emotive subject. It has become even more so given the current economic climate and where commentators complain about 'gold plated' pension provisions for public services.

This publication is timely and adds to the debate on how to deal with the thorny issue of public sector pensions in a time of financial retrenchment. The authors give a range of perspectives: from exploring the risks associated with specific pension schemes to commenting on the potential for new and innovative pension schemes. The authors also set out a range of challenges to be taken in to account when designing a new system for public sector pensions.

At a time when the world is getting older, with 35% of the population in developed countries over 60 by 2050, there is little doubt that people living longer will swallow up a much larger share of the budget, and some pension schemes will become increasingly unsustainable. In some cases this may mean negative cash flows and pension schemes having to realize their assets. This publication sets out a number of ideas and alternatives for pension design which can lead to sustainable public sector pensions.

It is widely acknowledged that long-term financial sustainability, affordability, fairness and transparency are at the heart of public sector pension reform, and it is pleasing to see that the authors have consistently dealt with these issues and that they have focused on how best to achieve a cost effective pension system which doesn't constitute a 'race to the bottom' or measure up to the lowest common denominator in private pension provision.

I very much hope that this publication will help to stimulate debate and inform the current inquiry on public sector pensions led by Lord Hutton.

INTRODUCTION

JAMES LLOYD

After years of speculation, argument and conjecture, reform of public sector pensions is now a reality. The coalition Government has signalled its willingness to undertake root-and-branch, long-term reform of the pensions of public sector workers in the UK. With Lord Hutton's Commission on Public Service Pensions due to report to the Chancellor in March 2011, the policy debate is unusually open.

Reform may have been precipitated by the dire fiscal environment facing the UK in the wake of the global financial crisis that began in 2007. Nevertheless, the issues underpinning the case for reform stretch back much further. Increases in longevity have seen the liabilities imposed by public sector pensions increase steadily. The changing nature of the public sector labour force, and the effective mismatch between pension payments going out and notional contributions coming in, has created unfunded liabilities that taxpayers have to meet. Critics have also noted that 'final salary' schemes generously reward career 'high flyers', even as lower paid public sector workers may see very modest pension incomes.

However, as policymakers have long known, facilitating a balanced and informed debate on a topic as complex as pensions is far from easy. This edited collection seeks to do just that, bringing together key experts and commentators to explore different aspects of the political and policy debate surrounding public sector pension reform.

The collection begins with 'Pension promises: comparing the public and private sector' by Dr Deborah Cooper of Mercer. Pensions are best seen as a form of insurance against different types of risks, chiefly that of uncertainty over how long we will live.

Cooper unpicks the precise risks involved in pension schemes, and examines how their treatment differs across the private and public sectors.

Both critics and defenders of public sector pensions have often conducted debate through a loud hailer. However, a careful examination of the issues from the perspective of public sector employees is clearly merited. In 'An employee view on public sector pensions', Jonathan Baume, General Secretary of the FDA, situates existing public sector pension schemes in the context of the 'psychological contract' that forms part of public sector employment, and the motivations that drive the professionalism of public sector workers.

A particular bone of contention in debate on public sector pensions – not least on the pages of tabloid newspapers – has been whether more generous pensions in the public sector reflect lower salaries compared to the private sector. But this statement – or indeed its refutation – can only be taken seriously if there is strong evidence to support it. In 'Evaluating public and private sector pensions: the importance of sectoral pay differentials', Dr Frank Eich of the Pension Corporation analyses the make-up of the labour force. He argues that public sector and private sector jobs – and matching salaries – simply cannot be directly or reasonably compared. This being the case, it is wrong to think of public sector pensions as providing some sort of compensation for lower salaries relative to the private sector.

To the extent that consensus has emerged over public sector pension reform, it is that defined benefit schemes should continue to play a role. However, it is important to question assumptions as soon as they appear. In 'Public sector pensions: the case for defined contributions', Malcolm Small, Director of Policy at The Tax Incentivised Savings Association (TISA), argues that fairness and pragmatism requires the public sector to follow the private sector

into defined contribution pension schemes. But, he argues, with its high participation and contribution rates, the public sector could become the savior of defined contribution pensions rather than taking part in a race to the bottom.

In truth, the pensions industry has for years been theorising and arguing about the many potential models of pension-saving and risk-sharing that exist between so-called 'pure DB' and 'pure DC'. Navigating through this mass of ideas, Graeme Muir of the Association of Consulting Actuaries picks out and evaluates some of the key approaches in 'Public sector pension design: the risk sharing revolution'. He concludes by making the case for a 'Conditional Career Average' – just the sort of model, embodying different trade-offs, which policymakers will have to consider.

The need to be clear about what objectives public sector pensions are actually trying to achieve is as important as new thinking. In 'The future of public sector pensions', Niki Cleal, Director of the Pensions Policy Institute identifies some principal objectives such as sustainability, adequacy and recruitment. Cleal explores how different models of public sector pensions perform against these objectives, but recognises that in the end, it will be up to policymakers to make judgements about the trade-offs involved.

As the public sector considers taking a step closer to the model of private sector pension schemes, John Moret of Suffolk Life offers 'Some lessons from the private sector'. Moret argues that as public sector employers look to begin a new conversation with employees about their pension rights, communication and education will be key. Technology and online platforms may prove to be useful vehicles in this challenge, but the challenge of raising awareness of how long retirement may last is an issue stretching right across the public and private sector.

PENSION PROMISES: COMPARING THE PUBLIC AND PRIVATE SECTOR

DR DEBORAH COOPER

BACKGROUND

Public sector employees are provided with pension benefits through a variety of different schemes and arrangements, although the perception is of a monolithic benefit structure. However, particularly over the past 10 years, public sector employers have renegotiated the design of their pension schemes, at least in respect of new entrants, and so the range and value of benefits provided has become more diverse. Even so, except in some very limited circumstances (for example, the civil service ‘partnership arrangement’) the schemes remain ‘defined benefit’, rather than defined contribution. This means that public sector employers’ obligations towards the schemes can be viewed as a series of cash flows that must be paid between the age each member retires until he or she (or their dependants, if they survive the member) dies.

As defined benefit schemes, the cash flows are determined by the service and salary that each employee experiences during their working lifetime as members of the scheme and sometimes by the choices they make at retirement. Once in payment, the pensions paid are linked to inflation, so, all else being equal, each payment is as financially important as another.

So, the risks faced by the employer include salary growth, inflation and longevity and, in this regard, public sector employers’ risks are little different from those faced by private sector employers that provide defined benefit schemes for their employees. However, the degree of risk does differ, because even where schemes appear similar (for example, they are final salary), differences in design affect the level of exposure.

Public sector schemes are largely unfunded, or 'pay as you go' (PAYG), which means the cash flows are financed from the contributions paid to the scheme by employers and members. Recently, because the amount of pensions paid out by public sector schemes has increased relative to the contributions paid, HM Treasury has also contributed towards the pensions paid (since the government underwrites these schemes).

So, on the expenditure side, the risk faced is that the contributions are insufficient to meet the cash flows and, as a result, HM Treasury's top-up has to increase.

The main exception to the unfunded rule occurs in the Local Government Pension Schemes (LGPS), although there are other, smaller, funded schemes in the public sector.

In theory, whether a scheme is funded or not makes little difference: many 'funded' schemes have deficits and so are partially unfunded; and in some countries PAYG schemes are partially funded. However, funded pension schemes impose financial discipline and, in the private sector, provide some transparency to members about the security available to them in the event of their employer's insolvency. On the other hand, the need to manage assets creates new risks, so, in practice there are differences. The new risks include investment and interest rate risk.

RISKS ASSOCIATED WITH DEFINED BENEFIT SCHEME DESIGN

What are the principal risks confronted by public sector employers in relation to offering pension schemes? How does the treatment of these risks compare across the private and public sector?

Longevity

Longevity risk – uncertainty regarding how long someone will live – has always been more significant for public sector than private

sector employers. Until 1988, when contracted-out schemes were required to provide increases to pensions in payment in respect of guaranteed minimum payments, most private sector schemes provided at best discretionary increases to pensions in payment; it has only been a requirement to increase non contracted-out rights since 1997. So, particularly in periods of high inflation, payments made in the last years of a pensioner's life contributed only a small part to private sector scheme costs. Even now, statutory pension increases are capped, so pensions paid from private sector schemes are not completely protected from inflation throughout payment.

Public sector schemes, on the other hand, have for a long time increased pensions in line with inflation, with no cap, so the length of time the pension is paid for is a far more material part of the equation. However, both public and private sector employers have been surprised by the improvements in life expectancy that have been experienced during the past 30 years.

Private sector employers reacted to evidence that life expectancy was increasing by increasing normal pension ages (NPA – the age at which members can draw pension without consent and with no reduction), although, the state pension age has acted in most cases as a natural constraint to this. In the 1990s, following equal treatment legislation, employers who permitted women to retire earlier than men took the opportunity to increase women's NPA to men's (typically an increase from age 60 to age 65), although this was normally only possible in respect of service after the date of change. Since 2000, most private sector schemes that had an equalised NPA of 60 took steps to increase this to 65.

Although a bigger issue for public sector schemes, public sector employers have been far slower to act. For example, the civil service scheme only increased its NPA to 65 in July

2007, and even then the change only applied to new entrants. Anyone who had joined the scheme prior to that date retained the right to retire at 60 in respect of all their service before and after 2007.

Inflation

Because public sector pensions are linked to inflation with no cap, public sector employers also have greater exposure to inflation risk than private sector employers.

Private sector pension scheme rules do not normally provide for increases in payment, or revaluation in deferment, greater than those imposed in legislation, although trustees often have the right to provide discretionary increases subject to employer agreement. Until recently, discretionary increases to pensions in payment were granted fairly regularly, particularly where schemes had surpluses on their funding basis, in an effort to maintain pensioners' standard of living. However, it is rare for deferred pensions to be revalued at rates greater than those provided for in scheme rules.

Public sector employers appear to have taken no steps to consider whether it is reasonable to retain a full inflation link in scheme rules. Private sector employers have reacted very differently. Since the Pensions Act 2004 changed the cap on increases to pensions in payment from 5% to 2.5% in respect of accrual after 6 April 2005, many schemes have changed their rules to take advantage of this; the Pensions Act 2008 made a similar change to statutory revaluation in deferment in respect of accrual after 6 April 2009, and most scheme rules also reflect this.

It is possible that it is more difficult to exercise discretion in public sector schemes, because of the very different governance structure, in which case it could be more appropriate to retain

rules that require full indexation. However, the extent to which full indexation is necessary (rather than desirable) and the alternative of providing discretionary increases do not appear to have been considered. Until the recent announcement by the Government that it would determine the rate of increase to public sector pensions by reference to the consumer prices index (CPI), rather than the retail prices index (RPI), this was another area where steps taken by private sector employers to limit their exposure to risk had not been directly echoed in the public sector.

As a measure, CPI inflation will, on average, be less than RPI inflation so the rate at which benefit cash flows increase will be reduced. However, CPI's formula means it is also likely to better reflect individuals' spending patterns and so appears a reasonable alternative, and the government's risk is still open ended, since no cap has been introduced.

Table 1: Examples of the cost of an annuity of £1 per annum for a man born in 1945*

	RPI link	LPI link	CPI link
NPA 60	22.9	21.7	20.8
NPA 65	19.5	18.7	17.9

* Where the annuity is paid from an NPA of either 60 or 65 throughout his life, indexed to RPI, LPI (RPI with a 5% cap) or CPI.

Table 1 is provided largely to show the relative costs of annuities providing different types of indexation. The actual cost depends also on the mortality rate assumed and the discount rate and price inflation assumptions.¹ It is obvious that the pension from age 65 costs less than the pension from age 60, but, in

¹ The calculations assume standard mortality tables, a basis slightly weaker than gilts, and a 75 basis point difference between RPI and CPI expectations.

funded schemes the later payment also provides the employer with an extra five years to finance the benefit, which reduces the cost as a percentage of annual pay further.

Salary risk

Inflation and longevity are likely to make the most material contribution toward benefit risk, but in final salary schemes salary inflation is also significant. Salary risk is less apparent where cash flows are the focus for measuring risk exposure: instead it emerges via the reserves (notional or actual) required in respect of the accrued liabilities of those still in employment. The risk arises because, in final salary schemes, each salary increase does not just impact the pay and pension accrual in the year it is awarded, but increases the value of all past accrual.

Public sector employers are also likely to have greater exposure to this risk compared to private sector employers, because pay increases are likely to be less controllable (because of contractual salary scales and trade union influence) and average job tenure in the public sector is longer, so, on average, the past service liability per employee will be larger.²

Membership

When employees enter public sector employment, they are auto-enrolled into the appropriate pension scheme. Although not strictly a 'risk' to employers, this does affect the size of the exposure. In his interim report, Lord Hutton noted that 85% of public sector employees are members of an occupational pension scheme, whereas only 35% of private sector employees are.³ The lower percentage in the private sector reflects the large proportion of employees who do not have access to employer sponsored retirement saving, but because private sector schemes often do

² Office for National Statistics, "Public sector employment trends 2005", (London: October 2005).

³ Independent Public Service Pensions Commission, "Interim report", (London: October 2010).

not auto enrol employees, even where they are provided the proportion of employees who are members tends to be lower.

The other fundamental membership difference is that, while the majority of private sector defined benefit pension schemes are closed to new entrants, public sector schemes remain open. As a result the duration of the risk in the public sector is longer, and continuing to grow.

BENEFIT CHANGES IN THE PUBLIC SECTOR

Public sector employers have taken steps to reduce their exposures to the risks described above, but these have hardly amounted to baby steps, when compared to the great changes made in the private sector, particularly in the civil service:

- In 2002 the civil service pension scheme changed its structure from the traditional 1/80th accrual plus a lump sum to mimic the more common 1/60th accrual found in the private sector. In doing so, public sector employers adopted increased longevity risk at a time when private sector employers were reducing accrual rates and closing final salary schemes to new entrants. (Although because the commutation rate is less than actuarially neutral – at 12:1 – if members commute the maximum allowed the increased exposure will be less acute.)
- In 2007, the civil service scheme stopped offering final salary benefits to new entrants, and offered career average accrual instead (called Nuvos). When this step is taken in the private sector, the previous final salary accrual rate is normally retained, so that exposure to all benefit risks is reduced: although the NPA was increased to 65 at the same time, so longevity risk was reduced, the civil service scheme increased the accrual rate so that exposure to inflation risk was retained. The only risk taken entirely off the table was salary risk.⁴

⁴ Accrual in the Nuvos scheme will, in future, be revalued in line with CPI inflation, which will result in a significant cost saving and consequent reduction in risk exposure.

- The civil service scheme has also not increased member contribution rates to the same levels as some other public sector schemes. However, for increased member contributions to provide long term benefit, employers have to be careful that employees do not demand additional salary increases to compensate.

The most significant public sector reform is the 'cost capping' mechanism, which provides that increases in the cost of accrual due to improvements in longevity or other factors will be shared between employers and scheme members, either by increasing member contributions, or reducing the accrual rate. However, the mechanics of this have not been tested and any impact is unlikely to be felt in the short term. In addition, whilst it might limit exposure to future risk, it does not address the risk that has already been accrued in respect of past service.

The Pensions Policy Institute has carried out analysis of the costs saved by the recent reforms.⁵ It's clear from this that the reforms have reduced public sector employers' costs in respect of future accrual for new entrants; but the effects of this will not be felt for some time and pension payments are expected to increase in real earnings terms at least over the next 20 years.⁶

RISKS ASSOCIATED WITH SCHEME FINANCING

Unfunded schemes

In unfunded schemes, the greatest financing risk is that income from contributions will become insufficient to meet cash flows. In the public sector, if contributions become inadequate (which they are currently), then the taxpayer is required to provide the difference. There is substantial resistance among private sector employers and

5 Pensions Policy Institute, "An assessment of the Government's reforms to public sector pensions", (London: 2008).

6 National Audit Office, "The cost of public service pensions", (London: 2010)

employees to becoming the provider of last resort to public sector pensioners, particularly when they have taken steps to reduce their own exposures to pensions risk. For example, the Institute of Directors has combined with others to establish the Public Sector Pension Commission, to investigate options for reform. In its first report the Commission calls for more transparency over the costs of unfunded provision and notes the increasing disparity in provision between the private and public sectors.⁷

The National Audit Office report estimates that, although the amounts of pension paid increases in real terms, the cost of public sector pension provision does not change materially over the long term (the next fifty years) as a percentage of gross domestic product (GDP).⁸ However, the portion of the cost that is met by taxpayers is likely to increase, as public sector employment is expected to fall dramatically following the coalition government's spending cuts. Although taxpayers' liability is likely to remain small as a percentage of GDP, it is the difference between two large numbers (pension outgo and contribution income) that are subject to material risks that cannot be entirely controlled and so it is likely to be volatile. Since pensions will have to be paid, this variability could constrain governments' ability to support other projects.

This highlights another difference in the way pension risks are borne in the private and public sectors. In the former, risks are generally understood in the sense that they make it less likely that scheme members' benefits will be paid. In the latter, scheme members are unlikely to suffer the effects directly, except potentially by the (so far untried) cost sharing and capping mechanisms; instead taxpayers generally will feel the effect, as government spending on welfare, education or defence, for example, suffers or tax increases.

7 Public Sector Pension Campaign, "Reforming public sector pensions: solutions for a growing challenge", (London: 2010).

8 See footnote 4.

It is perhaps this discipline that makes pension scheme members in the private sector far more acquiescent to changes in pension schemes that effectively reduce the value of their future remuneration: in negotiating pay and conditions, private sector employee councils or trade unions have to consider the effects of their proposals on the future security of the employer and its ability to retain employment and remain profitable. The perceived 'gilt edged' security of public sector employment has meant that the cost and risks of pension provision never need come home to roost, although this might change in the current economic and political climate.

Funded arrangements

In funded schemes, as well as employer and member contributions, income and capital growth generated by the schemes' investments are also available to provide benefits. This removes the risk to the taxpayer by at least one step, but it exposes the contributors to the risk that the investments fail to produce the returns expected.⁹ So, whilst the challenges in funded public sector schemes are different, the consequences are likely to be similar to those in unfunded schemes.

Public and private sector employer risks are, again, similar in nature to funded schemes, but the exposure is different. In this case, because public sector employers are practically equivalent to the government in terms of their security, it is possible that they are more able to bear investment risks since their insolvency is unlikely and they can be expected to continue through economic cycles. In any case, although generally the legislation that provides for these schemes does not always prescribe that the government will underwrite the liabilities in the event of the employer's failure, since they do not have access to the Pension Protection Fund, it seems reasonable to assume that it will do so.¹⁰

9 It is not clear what the status of a LGPS would be if the local authority responsible for its funding was unable to meet its commitments.

10 The proposed privatisation of the Royal Mail, which will involve transfer of its pension scheme's assets and liabilities to the government, sets a precedent for this.

Ultimately, therefore, they should be able to bear adverse investment performance for longer than schemes in the private sector. In one sense, this mirrors the Pensions Regulator's attitude to regulating private sector schemes, which accepts that it is reasonable for trustees to rely on the strength of company covenant when determining their measure of technical provisions. However, counter to this, since it seems reasonable to assume that public sector employers have greater longevity than private sector employers (albeit in different manifestations), it is possible to defend less constraint over the period over which shortfalls should be financed.

This is not to defend funding shortfalls in public sector schemes: ideally they should not arise and, as long as they exist they place pressure on those that provide finance to the employers (for example, in the case of local authority employers, indirectly, tax payers via government allocations, and, directly, council tax payers). However, LGPS administering authorities (for example) would have more latitude in determining what is 'reasonably affordable' than the Pensions Regulator might consider is appropriate in the private sector.

How the shortfall is calculated is a separate issue that is not only relevant to funded public sector schemes and is being considered by Lord Hutton's review.

PUBLIC SECTOR EMPLOYMENT

Pension schemes form part of an employee's remuneration: since the public and private sectors compete in broadly the same labour market, if all else were equal, we would expect that the value of the total remuneration from both sectors would be equivalent. Some components of total remuneration are intangible (conditions at work, flexibility) but even so, it is reasonable to expect the financial aspects of remuneration (primarily pay and pensions) to be broadly equivalent unless there is a material difference in the type of people employed.

The public sector accounts for about 20% of the employment in the UK¹¹ (approximately 6 million people), but its pension liabilities represent about 50% of the country's total defined benefit liabilities.¹² The relatively high proportion can be partly explained by lower pension scheme membership in the private sector, longer service and higher average pay in the public sector: but, even allowing for these factors, on average pensions form a more valuable part of pay in the public sector than they do in the private sector.¹³

However, there are differences between the employees in the two sectors. Some of these are set out in Table 2.¹⁴

Table 2: Comparison between public and private sector employees

Percentage of employees who:	Public sector	Private sector
are female	65.5%	41.1%
have degrees	38%	23%
are classed as professional	64%	32%
are aged over 35	70%	61%

Source: Office of National Statistics

Although the higher percentage of women should be expected to reduce average pay levels, the gender pay differential is less in the public sector and all the other factors act in the opposite direction. So it is reasonable (ignoring the intangible parts of remuneration) to expect higher pay in the public sector.

11 ONS statistical bulletin, "Public sector employment Q2", (London: 2010).

12 Pensions Regulator and Pensions Protection Fund, *The purple book* (London: 2010) vs. various public sector estimates.

13 Patterns of pay: results of the annual survey of hours and earnings 1997 to 2009, ONS, which provides evidence that both median and mean rates of pay are higher in the public sector, and (at least in the case of median pay) have been consistently so for some time. ONS, "Public Sector employment trends 2005" (London: 2005).

14 David Matthews, "The changing face of public sector employment 1999-2009", *Economic and labour market review*, (London: ONS, 2010).

Even in the absence of auto-enrolment, these differences would also explain some of the higher rate of participation in public sector pension schemes, since age and socio-economic status are both positively correlated with membership of an employer's scheme, but not entirely.¹⁵ In the private sector, even amongst higher social classes, pension scheme membership is at much lower rates and, particularly for new employees, likely to be in a defined contribution arrangement.

The public sector is able to retain relatively high pension benefits for all employees largely because the financial disciplines that exist in the private sector are much weaker; sections of the public sector (primarily the civil service), have been able to retain disproportionately high benefits for those that joined before 2007 (the actual date depends on the scheme) because of some of the intangible aspects of their remuneration, including relatively strong job protection. Possibly as a result, public sector employers appear to have been able to ignore the adjustments in remuneration felt elsewhere in the labour market.

PENSION JOURNEYS: COMPARING EVOLUTION ACROSS THE PRIVATE AND PUBLIC SECTOR

However, it is important to remember the different pension journeys taken by the private and public sectors, which will have affected employees' expectations.

Public sector pension provision had not changed much, over the past 40 years, until the recent reforms. In particular, throughout this period they had some degree of preservation for early leaver benefits and pensions in deferment and payment were fully indexed. In contrast, in the private sector 40 years ago, pension schemes generally did not preserve early leaver benefits and provided virtually no indexation.

¹⁵ ONS, *Pension trends*, (London: 2010) Chapter 7.

Throughout the 1980s and 1990s, legislation was passed making private sector pension provision closer to public sector provision, although indexation was still capped. In 2001, UK accounting standards changed so that companies in the private sector had to disclose their pension liabilities on their balance sheets, making defined benefit scheme risk transparent to investors in a way that still eludes parts of the public sector; at the same time, new information about longer life expectancy was becoming available. Almost immediately, employers began to look more closely at the level of provision they made, with a view to closing schemes or reducing the level of benefit provided. However, in 2003, the government decreed that, if employers wanted to remove their exposure to pension scheme liabilities, they had to buy out the benefits in full with an insurance company.

At this point, the cost and risk of private sector pension provision became too close to public sector provision for comfort, and employers actively sought ways to reduce and mitigate the risks imposed. Because defined benefit provision had become so closely prescribed, most looked to defined contribution provision for new employees and some for future service for existing employees. Although existing defined contribution provision is criticised as too low, its cost is, on average, about the same as the cost of the final salary schemes private sector employers provided about 40 years ago.

The public sector journey has been different. Apart from a desire to provide 'gold standard' employee benefits, the relatively generous nature of the public sector pension was originally perceived as compensating for low wages relative to private sector pay. However, while the nature of the pensions provided might not have changed in the way borne by the private sector, the cost, and the exposure to risk, of the schemes did change. As discussed above, the public sector's benefit design (in particular, unlimited

indexation) and workforce (largely female with a relatively high proportion of long serving professional staff) meant the effect on the public sector was more severe.

Public sector legislators that forced private sector schemes to become more like public sector schemes were blind to the advantages in private sector provision. By making it more difficult for employers to act flexibly in relation to scheme benefits, they discouraged them from continuing with defined benefit provision, particularly given the transparency provided by the new accounting standards.

The public sector, with no cost transparency, did not (until recently) have the financial discipline to mitigate the effect of the demographic changes on the cost of provision.

CONCLUSION

Public sector employers include the largest employers in the UK – the civil service and the NHS, so it is no surprise that their pension liabilities are large. However, because the schemes auto-enrol and remain open to new entrants, public sector employers' exposure to pension scheme risk is larger than a similar private sector employer's would be, both in terms of number of members and in terms of duration.

So the real difference between public and private sector pension provision is not the difference in provision, but the way it has been left to evolve (or not evolve). While private sector employers reacted to the greater cost and risk imposed on them by the increases in longevity, having absorbed the costs arising from the imposition of indexation, the public sector did not.

Over the past 40 years life expectancy at age 60 has increased by more than one third – from about 15 years to over 20. Because each

public sector pension payment is indexed to price inflation, all else being equal, the cost of a pension at 60 has also increased by a third over the same period. While it is reasonable to assume that part of this increase in cost could be absorbed or justified by productivity growth, nonetheless this represents a material real terms increase in remuneration. Unlike in the private sector, for most public sector employees, except for some increases to member contribution levels, this has not been compensated for either by reducing the pension benefit or by reducing compensation elsewhere.

To regain the balance between pay and pensions that existed previously, public sector employers have to find some way of reducing this cost in respect of both past and future accrual. The change to CPI indexation, although unwelcome to members, will have helped in this regard. The outcome from Lord Hutton's review seems likely to demand that further change is undertaken.

AN EMPLOYEE VIEW ON PUBLIC SECTOR PENSIONS

JONATHAN BAUME

People enter public service for a number of reasons, not least because they want to 'make a difference'; and the public sector often provides highly challenging, interesting and satisfying work. But there is also, rightly, an expectation that they will be properly rewarded for the work they do. And part of their 'total reward' is access to decent pension provision.

Particularly at more senior levels, pay levels in the public sector have been historically set at lower levels than for comparable jobs in the private sector, which reflects in part the value of pension provision. Base pay, for example, represents a much smaller proportion of total remuneration in the private sector (between 49% and 73%) than it does in the public sector (80% to 83%). Although pension provision may be generally inferior in the private sector, the value of other benefits more than compensates for the difference.

As a consequence, any consideration of savings and affordability in relation to the cost of public sector pension provision must be undertaken within the context of a review of all aspects of total remuneration. When considering any potential savings that can be made, and indeed the long-term affordability of pension provision, the Government will need to take account of the needs of public service employers in terms of recruitment and retention.

There is also a growing concern at the possibility of a significant capping of the level of earnings that are applicable for pension entitlements and accruals, which would further undermine the overall 'reward package' for more senior staff.

For many employees, public sector pensions are modest rather than gold-plated. The average pension paid to pensioner members

is about £7,800 a year, and about half of pensioners receive less than £5,600 a year, and 90% of pensioners receive less than £17,000 a year.¹⁶

But there are many critics – in the media and elsewhere - who claim that civil servants retire on unreformed gold-plated pension schemes. Public servants resent these unwarranted attacks – unwarranted because those who make them fail to recognise that substantial changes were made to the Principal Civil Service Pension Scheme (PCSPS) in 2007, with the introduction of Nuvos – a career average scheme – for new entrants into the civil service. Pension age for these new staff is now 65 – up from 60 for the earlier schemes.

We believe there is no compelling case for further reform. The FDA has also argued on behalf of its senior public servant members that any proposals to introduce, extend or lower any caps on pensions must have universal application and not be confined to the public sector.

Our members across the UK also believe that the wholesale disintegration of private sector pension provision is not justification for pensions in the public sector following the same course. There should be no equality of misery.

Pension provision within the civil service is at the heart of the psychological contract between civil servants and government. This unwritten and unconscious contract between employee and employer is predicated on a concept of mutuality. It can be best described as a relationship based on behavioural expectations whereby, in exchange for hard work and loyalty to their organisation, an employee is assured job and financial security.

¹⁶ Independent Public Sector Pensions Commission, *Interim report* (London: HM Treasury, 2010).

Some commentators have pointed out generational differences when exploring the nature of this relationship between employees and employers. It is said the psychological contract is stronger for baby boomers – the generation born between 1946 and 1964 and who saw their parents define themselves by hard work and strong loyalty to their employer – than for the younger Generation X and Generation Y employees who were born after 1965. The extent to which this differentiation holds true for the civil and public servant is unclear.

There is no doubt that the psychological contract is at breaking point. Financial security for public servants has come under attack in a way not seen for more than a decade – with announcements of job losses, a two-year pay freeze and the changing of pension indexation from the retail prices index (RPI) to the consumer prices index (CPI), which was announced in the Emergency Budget of 2010. Although there have been periods when CPI has been higher than RPI, overall this is not the case. The effect of the change to CPI indexation is to reduce – over time – the real value of public sector pension benefits and deliver substantial cost savings to HM Treasury. Analysis commissioned for the Independent Public Sector Pensions Commission shows that the change to CPI – together with the reforms made to public sector schemes in 2007 – may have reduced the value of pension benefits by 25% compared to their value pre-reform and with RPI indexation.

One of the seven principles of public life is the idea of selflessness, but also important is the notion of fairness, which is deeply embedded in the psyche of public servants. To have worked in public service with a reasonable expectation of a decent – but relatively modest – pension on retirement is more than just part of the psychological contract and that is why the public servants have always argued – and will continue to argue – that accrued pension rights must be protected in any negotiations for further reforms to pension arrangements.

Related to the psychological contract is the issue of morale. The uncertainty surrounding public sector pension provision can only have a negative effect on the morale of current civil servants and those in the wider public sector. This is especially significant for managers who not only have the task of managing restructuring and redundancies at a time when their own jobs are threatened, but also have to ensure that morale and motivation is maintained so that services continue to be delivered to a high standard.

A reduction in the value of pension benefits will also make it harder for public service organisations to recruit externally people of high calibre, and to retain talented internal staff, and thus would do a great disservice to the long-term strength and viability of the public sector as an employer.

The public services are also undergoing a period of rapid and substantial change, and any proposals to worsen pension provision will be seen in the wider context of what are considered to be attacks on the job security and employment conditions in the wake of the Spending Review.

The government must also recognise in any proposals for change that pension reform is not susceptible to 'quick fixes', and that it would be unfair to seek to introduce significant changes for those late in their career and with insufficient time to make alternative plans.

The FDA has identified three overarching principles that will inform our approach to any proposals that might emerge from the government. These are that:

- Pensions are a key element of total reward and of the 'psychological contract' between senior public service managers and professionals and their employers;

- Any changes to pension arrangements must be subject to full negotiation and agreement before any change occurs; and
- Any changes for existing staff must be phased.

These principles are ones shared by many other organisations representing public service staff. A different approach would run the serious risk of shattering the psychological contract entirely.

EVALUATING PUBLIC AND PRIVATE SECTOR PENSIONS: THE IMPORTANCE OF SECTORAL PAY DIFFERENTIALS¹⁷

DR FRANK EICH

INTRODUCTION

This chapter discusses the issue of pay differentials between the public and private sector in the UK prior to the economic and financial crisis and what implications they might have had for the public sector labour market. The chapter argues that an assessment of pay differentials cannot be based on a comparison of median or mean earnings across the public and private sectors – as has been done in the media – as these aggregate figures do not allow for a like-for-like comparison. A more meaningful comparison ought to take into account individual characteristics such as educational attainment, occupation (or related education), gender and location.

The chapter highlights a number of important issues that ought to be taken into account when embarking on any policy reform in the area of public sector pay and pensions in the future. For example, the chapter finds that regional wage variation is more compressed in the public sector than in the private sector. This suggests that at least in principle the degree to which public sector pensions might be seen to compensate for lower lifetime earnings might vary across the regions of the UK. A nationwide policy reform in the area of public sector pensions might therefore have very different labour market implications in different parts of the UK.

Section II discusses trends in public and private sector employment in the decade up to 2008, in other words during the

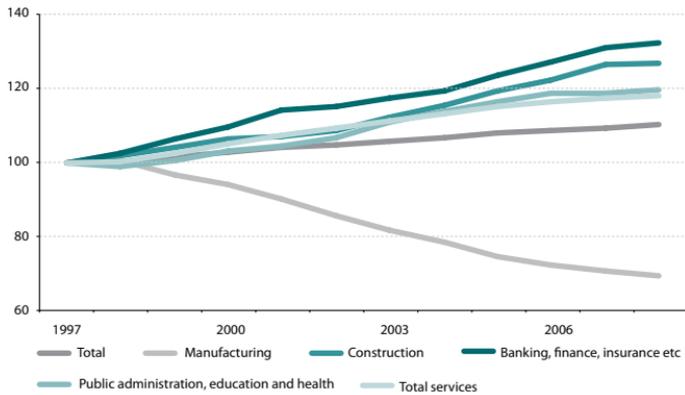
¹⁷ This chapter is based on the May 2009 Pension Corporation Research paper of the same name, which Dr Frank Eich published while he was senior economist at Pension Corporation.

years of steady economic growth. Section III compares earnings in the public and private sectors, Section IV presents a number of factors that ought to be taken into account when comparing public and private sector pay, while Section V discusses the implications of pay differentials on the labour market. Section VI concludes.

PUBLIC AND PRIVATE SECTOR EMPLOYMENT TRENDS IN THE DECADE UP TO 2008

Workforce jobs increased by a tenth to 31.6 million between 1997 and 2008.¹⁸ Growth was particularly strong in banking, finance, insurance, etc (+32 per cent); construction (+27 per cent) and public administration, education and health (+20 per cent). By contrast, growth in workforce jobs was negative in manufacturing (Chart 1).

Chart 1: Workforce jobs in industries (1997=100)



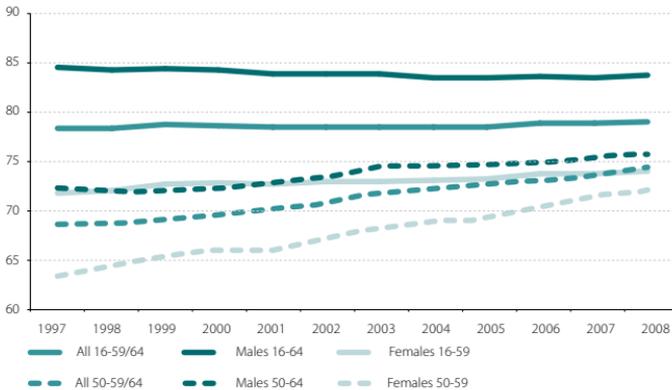
Source: ONS Employment Trends

The increase in employment reflects mainly an increase in the number of people of working age from around 35.5 million

¹⁸ www.statistics.gov.uk/downloads/theme_labour/wfjreport.pdf.

in 1997 to roughly 38 million by 2008 and to a lesser extent a fall in the number of people unemployed.¹⁹ The economic activity rate remained very stable at nearly 80% though this aggregate stability hides developments across the genders and cohorts. For example, the economic activity rates of males and in particular females aged 50 years and older increased substantially over those years. At the other end of the age spectrum (16 and 17 year olds) the economic activity rate dropped from 60% in 1997 to less than 50% in 2008 as a result of extended schooling. For the group of 24 to 49 year olds there was a moderate increase in the female economic activity rate, which was offset by a modest decline in male rates (Chart 2).

Chart 2: Labour market activity rates (per cent)



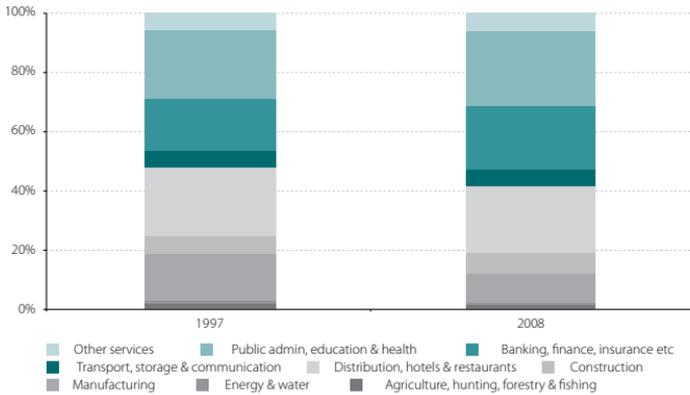
Source: ONS Labour Market statistics

Different workforce job growth rates across the industries had a marked effect on the composition of UK employment. The share of people employed in public administration, education and health increased slightly to 25.3 per cent in 2008. While distribution, hotels and restaurants continued to be the second biggest industry in terms of employment, the financial services industry's share increased markedly and came a close third

¹⁹ www.statistics.gov.uk/STATBASE/Expodata/Spreadsheets/D9543.xls.

(Chart 3). The big picture is that over the period 1997 to 2008 there was a shift away from manufacturing to construction, public administration, education and health and banking, finance, insurance.

Chart 3: Distribution of employment across industries



Source: ONS Employment Trends

The shift was away from low-skilled employment to more highly skilled employment. ONS data from 2004 shows that the banking, finance and insurance industries had the highest proportion of people with a degree or equivalent, followed closely by public administration, education and health. The proportion was lower in manufacturing, other services, and energy and water. Those least likely to be educated to degree level or equivalent could be found in transport and communication, agriculture and fishing, construction, and distribution, hotels and restaurants. The ranking changes only slightly once A levels are taken into account.²⁰

In terms of public and private sector employment there were two million full-time (FT) males employed in the public sector compared to 8½ million in the private sector. The corresponding

²⁰ ONS, "Labour market trends" (London: June 2004) 231.

figures for females were 2½ and 3.8 million respectively. The public sector is thus a much more important employer for females than for males, even more so once part-time (PT) employment is taken into account.²¹

Public sector employment trends between 1999 and 2008 reflected the government's policy priorities over those years, with employment in the NHS, education, and in law and order expanding strongly. Civil servants make up around a tenth of the public sector workforce (Table 1).

Table 1: Public sector employment (full-time equivalent, '000)

	1999	2008	Change
HM Forces	218	193	-11.5
Police	220	275	25.0
Public admin	969	1005	3.7
Education	794	986	24.2
NHS	982	1259	28.2
Other health and social	292	275	-5.8
Other	605	609	0.7
Total	4080	4602	12.8

Source: ONS

More than three quarters of the increase in public sector employment was in female employment.²² This largely reflects the fact that female employment rates have historically been lower than those for males but also that socio-economic changes over the last few decades have led an increasing number of females to enter the labour market. Many of these younger females are well educated and are well suited to take on functions in the high-skill health or education sector. The public sector has also taken a leading role in

21 www.statistics.gov.uk/STATBASE/Expodata/Spreadsheets/D9543.xls.

22 See ONS, *Annual survey of hours and earnings (ASHE)* (London: 1997 and 2006 or 2008).

providing flexible working arrangements, which makes it easier for females to achieve an acceptable work-life balance. The increase in female economic activity rates for the age groups 25 to 49 years can probably mainly be explained by the increase in female public sector employment (Table 2).

Table 2: Public sector employment by gender ('000)

	1997	2008	Change
Males full-time	1,899	2,005	106
Males part-time	164	266	102
Females full-time	2,007	2,553	546
Females part-time	1,505	1,812	307

Sources: ONS ASHE 1997 and 2008

Note that the economic and financial crisis has had a significant impact on the UK's labour market and that at least some of the trends observed prior to 2008 will likely be reversed in the coming years.

COMPARISON OF EARNINGS IN THE PUBLIC AND PRIVATE SECTORS

The British media has reported that median FT weekly pay in the public sector overtook pay in the private sector in recent years. This pay gap is not a recent phenomenon; it can be traced back to at least 1997 (Table 3).²³

The table also shows that the ratio is substantially larger for females than for males, with female median FT weekly pay in the public sector nearly a third higher than in the private sector. For males the ratio varied around 1.1. Furthermore, the pay gap between males and females was consistently smaller in the public

²³ See ASHE. Before 1997 a different data set was used. Latest ONS data show that the picture remained similar in 2009, see www.statistics.gov.uk/elmr/09_10/downloads/ELMR_Sep10_Levy.pdf

sector than in the private sector. This suggests that either gender pay differentials are much smaller in the public sector than in the private sector and/or that males and females do more similar jobs in the public sector than in the private sector.

Table 3: Median gross weekly pay (full-time, £)

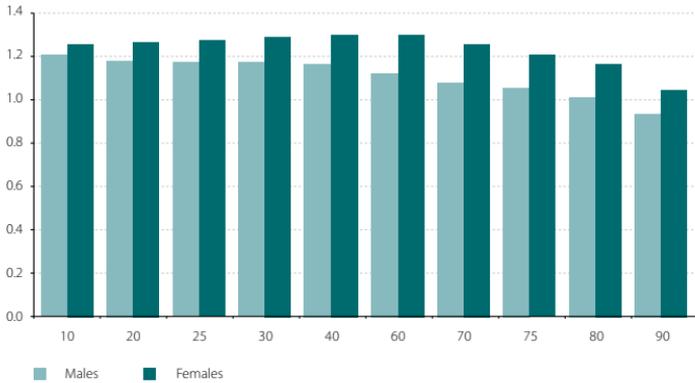
	1997	2000	2003	2008
Public sector	349,3	384,8	431,3	522,6
Private sector	309,2	345,5	392,5	460,0
Ratio public/ private	1.13	1.11	1.10	1.14
Median gross weekly pay (full-time, £, females)				
Public sector	314.60	349.40	396.50	480.70
Private sector	237.30	269.70	307.50	366.10
Ratio public/ private	1.33	1.30	1.29	1.31
Median gross weekly pay (full-time, £, males)				
Public sector	389.00	423.70	473.90	574.40
Private sector	347.40	384.80	435.70	503.70
Ratio public/ private	1.12	1.10	1.09	1.14

Sources: ONS ASHE, 1997, 2000, 2003, 2008

Crucially, the fact that median FT weekly pay is higher in the public sector than in the private sector does not necessarily imply that public sector employees get a better pay deal than private sector employees. To conclude this, one would have to demonstrate that someone with the same characteristics (e.g. educational attainment, occupation, location of workplace) earned more in the public sector than in the private sector. This conclusion cannot be drawn from median pay statistics.

Chart 4 shows the ratio of public to private sector gross weekly pay for FT males and females along the income percentiles. The chart confirms the above findings that the female ratio is higher than the male ratio.

Chart 4: Ratio public/private sector median gross weekly pay in percentiles (Full time, 2008)



Source: ONS, ASHE 2008

It is important to note that the underlying income distributions are not the same and that, for example, a male FT employee in the public sector at the 20th percentile on the public sector income distribution might have a different set of qualifications and skills, and job responsibilities to his private sector counterpart. Comparing median pay or pay along the income percentiles will not compare like with like.

This can be seen by looking at the median annual pay in the different sectors of the UK economy. FT median annual pay for males across all sectors stood at £27,500 in 2008, with median annual pay in manufacturing, transport, and wholesale and retail trade lower than the overall median. This is to be expected given the relatively low level of educational attainment of employees in these sectors. These three sectors employed around 45% of all FT employed males and will most likely have been all in the private sector, pulling down the entire income distribution for male private sector employees.

The picture is even more obvious for females, with the highest median annual pay in 2008 to be found in education, which will

have been overwhelmingly in the public sector. Nearly a quarter of all FT females are employed in that sector. At the other end of the pay scale, around a quarter of females were employed in the hotels and restaurants, wholesale and retail trade and manufacturing sectors; all of which will have been in the private sector. It is not surprising that on an aggregate level the income distribution appears to be relatively generous for females in the public sector.

Further evidence that low paid jobs are mainly if not entirely clustered within the private sector can be found by analysing who is affected by the minimum wage. It turns out that with the possible exception of social care all low paying sectors can be found in the private sector.²⁴

TOWARDS A MEANINGFUL COMPARISON

A comparison of median pay in the public and private sectors should not be used to draw conclusions regarding relative pay generosity. This should only be done once individual characteristics have been taken into account. Important individual characteristics to consider are:

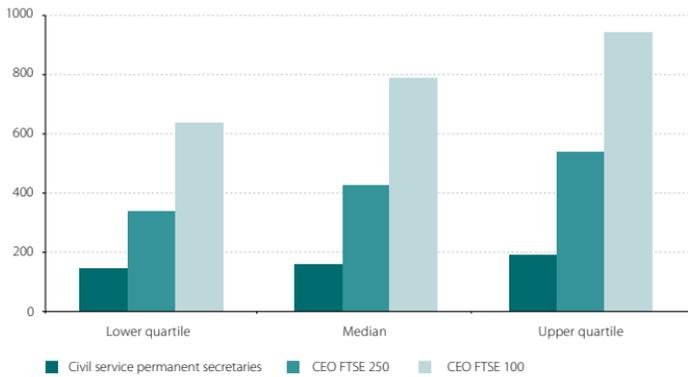
- Educational attainment
- Occupation
- Location
- Age.

Educational attainment (or as proxy occupation) is a major individual characteristic. Everything else equal, how does public sector pay compare to private sector pay for individuals with comparable educational backgrounds or – as a proxy for education – occupation?

24 Low Pay Commission, "National minimum wage low pay commission report", (London: 2008), 6.

The following illustrates some of the issues involved. First, consider those at the very top end of the civil service and private sector income distribution.²⁵ At the very top of the senior civil service are 40 permanent secretaries. Their base salary in 2008 was within the range of £135k and £235k, with a median of around £160k.²⁶ Given their seniority and set of responsibilities, permanent secretaries are best compared to chief executive officers (CEOs) in the private sector. Chart 5 shows that the base pay received by permanent secretaries was only a fraction of that received by CEOs of FTSE100 and FTSE250 companies.

Chart 5: Median base pay of senior executives (£ '000, 2008)



Source: FTSE350 Executive Pay 2008, Addleshaw Godd

The 4-digit Standard Occupational Classification (S.O.C.) system provides a breakdown of earnings data for different occupations such as architects, laboratory technicians, receptionists, or tyre, exhaust and windscreen fitters. Table 4 provides median weekly pay data for senior, medium and lower level occupations where public sector employees can be identified explicitly.

²⁵ Senior civil servants are not necessarily the highest paid in the public sector.

²⁶ ONS, "Civil service statistics 2008", (London: 2008).

Table 4: Median pay in public and private sectors (full-time all, £ weekly pay)

Senior level (manager and senior officials)	
Senior officials in national government (1111)	1,276
Directors and chief executives of major organisations (1112)	1,878
Medium level (business and public service professionals)	
Legal professionals (241)	834
Business and statistical professionals (242)	723
Architects, town planners, surveyors (243)	685
Public service professionals (244)	570
Librarians and related professionals (245)	487
Lower level (administrative occupations)	
Government and related organisations (411)	372
Finance (412)	373
Records (413)	362
Communications (414)	453
General (415)	339

Source: ONS ASHE 2008 Table 14.1a

Table 4 shows that there remains a substantial income gap between public sector and private sector workers on the senior level below that of the permanent secretaries and CEOs (classification 1111 captures around 7000 individuals, classification 1112 around 60,000 individuals). On the middle level, median pay for public service professionals trails that for three out of the four other 3-digit classifications but is comfortably ahead of that for librarians and related professionals. On the lower level median pay for administrators in government and related organisations appears to be about average.²⁷

27 For a more general discussion on these issues, see Richard Disney, "Public-private sector wage differentials around the world: methods and evidence", (Bristol: 2007). <http://www.bristol.ac.uk/cmipo/events/2007/public/disney.pdf>.

Location is another important characteristic. The academic literature on spatial wage differentiation is well developed. The general picture of UK public and private sector spatial wage variation is that the private sector compensates its employees more highly than the public sector for working in a low amenity and/or high cost area. On the same token, the private sector pays relatively less than the public sector in high amenity and/or low cost areas, i.e. private sector pay is more sensitive to market forces than public sector pay. This has important policy implications. Chart 6 shows a stylised wage distribution.

Chart 6: Stylised spatial wage variation public/private sectors

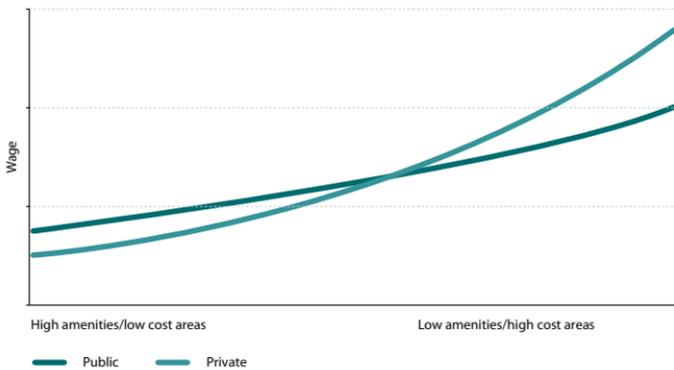
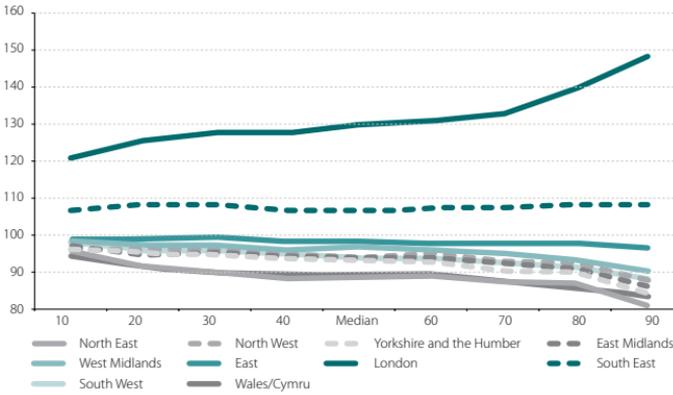


Chart 7 shows the regional wage variation along the income distribution for all FT males (public and private sector) in 2008. The variation is shown as a percentage of the UK average. Two features stand out: first, there were only two regions in which weekly pay is above the UK average; in seven regions it was below.²⁸ Second, and related to the first observation, London was unique as a region, with median weekly pay 20% higher than the UK average on the 10th percentile and nearly 50% higher for the 90th percentile.

28 Excludes Northern Ireland.

Chart 7: Regional pay dispersion full time males, (UK average = 100, based on weekly pay)



Source: ONS ASHE 2006

One cannot conclude though from the wide regional wage variation that all FT males in London earn more than the UK national average. The variation is also due to a different composition of the workforce in London relative to that for the UK as a whole. For example, managers and senior officials make up 22% of all full-time male employment nationally compared with 29% in London, while elementary occupations such as farming, construction, catering or cleaning account for 11.3% of all employment nationally but only 8.9% in London. In short, London's workforce is geared towards higher-valued added jobs.

London's dominant position is mainly due to private sector pay differentials. For males, the London mark up is less than 20% on the 10th percentile but then steadily rises to reach 60% for the 90th percentile. There is also some regional pay variation within the public sector but the degree of variation is smaller than in the economy overall. The key difference between male public and private sector pay variations across the regions is that with the exception of those on the 10th percentile, male public sector

workers command a much smaller mark up in London over the national average than their private sector counterparts. This difference becomes the more marked, the further up the pay distribution.

One explanation for this could be that even at the upper end of the income distribution, male public sector jobs in London resemble more the national average than in the private sector. For example, senior managers in NHS hospitals will have similar backgrounds and responsibilities regardless of where they are. By contrast, with London home to the majority of the larger publicly-listed companies in the UK and the UK base for many international companies, London-based male managers will generally demand a pay premium. Equally, other professionals in London from lawyers to architects to advertising executives will generally be involved in more specialised and higher value-added roles than the national average, again justifying a pay premium. In addition, London is the most international city in the UK and as such pay needs to be competitive on a global stage too. This dimension will be important in the private sector but less so in the public sector.

That the regional pay variation identified is not entirely due to compositional effects of jobs in London and the rest of the UK can be seen by looking at like-for-like pay differentials. Tables 5 and 6 show the London median pay for males and females relative to the national median for the 4-digit occupations introduced in Table 4.²⁹ While even these classifications are probably still too wide to allow for an exact like-for-like comparison, the sample sizes are already often very small, with the result that some of the numbers are not statistically robust. Keeping this in mind, the following picture emerges: mean pay for senior officials in

²⁹ Note that senior officials in national government have been replaced with senior officials in local government as the former are nearly all based in London.

local government is more or less the same in London as in the UK overall, while median pay for directors and chief executives of major organisations in London is a sixth higher than the national average. The median pay differential between London and the UK average is particularly pronounced for legal professionals, and business and statistical professionals. Median pay for public services professionals in London is higher than the UK average too but by a more moderate 10%. Within the administrative occupations, the median pay differential between London and the UK average appears to be in line with the differential recorded in other industries. The above is true for males and females alike.

Table 5: London median pay in public and private sectors, (full time males national average = 100)

Senior level (managers and senior officials)	
Senior officials in local government (1113)	101
Directors and chief executives of major organisations (1112)	116
Medium level (business and public service professionals)	
Legal professionals (241)	140
Business and statistical professionals (242)	120
Architects, town planners, surveyors (243)	116
Public service professionals (244)	111
Librarians and related professionals (245)	101
Lower level (administrative occupations)	
Government and related organisations (411)	122
Finance (412)	122
Records (413)	118
Communications (414)	112
General (415)	121

Source: ONS, ASHE 2008

Table 6: London median pay in public and private sectors, (full time females national average = 100).

Senior level (managers and senior officials)	
Senior officials in local government (1113)	n/a
Directors and chief executives of major organisations (1112)	113
Medium level (business and public service professionals)	
Legal professionals (241)	150
Business and statistical professionals (242)	120
Architects, town planners, surveyors (243)	119
Public service professionals (244)	113
Librarians and related professionals (245)	111
Lower level (administrative occupations)	
Government and related organisations (411)	127
Finance (412)	129
Records (413)	114
Communications (414)	123
General (415)	124

Source: ONS, ASHE 2008

Higher like-for-like income in London than in the UK on average does not mean that individuals are necessarily financially better off than in other regions of the UK though. This is because the cost of living is also substantially higher in London than in other parts of the UK so that a higher income in many cases merely compensates for higher living costs.³⁰ The corollary is that senior public sector officials might in fact be worse off.

PAY DIFFERENTIALS AND LABOUR MARKET IMPLICATIONS

The above findings confirm the conclusions of a substantial body of academic literature on this subject, which has also studied the

30 ONS, "Relative regional consumer price levels in 2004", *Economic Trends* 615 (ONS: 2005).

labour market implications of the spatial wage differentials between the public and private sectors. The main thrust of the literature has been that the distinct pattern of wage variation across the regions in the public and private sectors makes it difficult for the public sector to deliver a similar quality of public services across the UK.

For example, Oswald argued in 2002 that the public sector would find it relatively more difficult in the south east and in particular in London to attract and retain the right talent, and that public sector employees in central London ought to be earning substantially more.³¹ More recent analysis by Blanchflower and Oswald showed that the situation had not changed much since 2002.³²

Ada Ma *et al.* examined the impact of spatial wage variation on recruitment and retention in the NHS.³³ They find that vacancy rates for nurses are affected by differences between local labour markets in private sector pay. While private sector firms pay their staff what is necessary to attract and retain them in a particular area, the NHS does this less so. Given that many NHS employees have transferable skills, which can also be used in the private sector, this makes it more difficult for the NHS to attract and retain nurses in more expensive and/or less attractive areas. This inability to attract and retain staff has measurable implications for the quality of public services provided. Emma Hall *et al.*, for example, show that hospital performance suffers in areas with stronger labour markets across England due to an inability to recruit, retain and motivate high quality staff.³⁴

31 Andrew Oswald, "London's public-sector workers need to be paid 50% more than those in the north", (Warwick: 2002), at <http://www2.warwick.ac.uk/fac/soc/economics/staff/faculty/oswald/regionalpublicpaymarch2002.pdf>.

32 David Blanchflower and Andrew Oswald, "Revealed problems and the future of the area cost adjustment (aca), a report for Worcestershire County Council", (Warwick: 2008).

33 Ada Ma *et al.*, "Spatial wage variation and its impact on public sector recruitment and retention: the case of the NHS", (2008). http://wpeg.group.shef.ac.uk/documents/adama_paper.pdf

34 Emma Hall *et al.*, "Can pay regulation kill? Panel data evidence on the effect of labor markets on hospital performance", *NBER Working paper 13776* (Washington DC: February 2008).

More generally, Bell *et al.* argue that

*... in high-cost low-amenity areas, ..., the public sector underpays relative to the private sector, ... creating problems in recruitment to and provision of public services. Public sector labour markets are around 40 per cent as responsive to area differences in amenities and costs as are private sector labour markets... Reform of public sector pay structures is likely to be costly, and so other non-pay policies need to be considered to increase the attractiveness of public sector jobs.*³⁵

CONCLUDING COMMENTS

This chapter argues that public and private sector median pay could not be used to establish whether pay was more generous in one sector than in the other. Such a comparison can only be made once individual characteristics such as occupation (a proxy for education) or location are taken into account. As such, median pay data also do not provide a reliable foundation on which to base an assessment of the relative generosity of pension arrangements across the sectors.

The chapter showed that relative pay between the public and private sectors varied *inter alia* across occupations and across regions. Regarding the former, it appears that public sector workers further down the income distribution do relatively well (or at least not worse) compared with their private sector counterparts. The further up the relative income distribution, the wider the gap between public sector and private sector pay though.

This implies that similar pension arrangements could have very different meanings for individuals across the income distribution. It also suggests that the compensatory role of “generous” pensions

35 David Bell *et al.*, “The pattern and evolution of geographical wage differentials in the public and private sectors in Great Britain”, *Manchester School*, 75:4 (2007) 386-421.

(if indeed they exist) will be the more pronounced the higher the seniority in the public sector. Singling out high flying public sector workers as benefiting disproportionately from existing public sector pension arrangements could therefore be misleading as they appear to be – if anything – relatively underpaid compared to their private sector peers.

The regional dimension adds another layer of complexity. Relatively high vacancy rates in the education and health sectors in high cost and/or low amenity areas for example suggest that public sector pay is not perceived to be competitive in these areas. Addressing this is likely to be costly and the public sector might consider non-pay policies to make their jobs more attractive.

A relatively generous public sector pension could play this compensatory role but it is either not generous enough or the beneficiaries do not realise how generous it really is. A third possibility is that public sector employees might fully appreciate the true value of their public sector pension but that this is deemed to be of little use when living in a high-cost area such as London or the South East, where today's bills need to be paid today.

Indeed, it is possible that public sector employees realise the full value of the promised pension but that they discount it significantly due to the fact that they will be entitled to it only in the long term. In other words, even in real terms a pound today for certain is worth more than a promised pound by government in the future.

The above suggests that anyone contemplating a reform of public sector pensions ought to take into account the knock-on effects on recruitment and retention of highly skilled staff in all parts of the UK, and in the south east in particular. As an (unintended) consequence, any reform of public sector pensions might demonstrate the need to review the public sector pay setting structure more generally.

PUBLIC SECTOR PENSIONS: THE CASE FOR DEFINED CONTRIBUTIONS

MALCOLM SMALL

THE BACKGROUND TO PUBLIC SECTOR PENSION REFORM

The fundamental issue at stake in public sector pensions remains the unfunded pensions promise made to thousands of public sector workers, with future taxpayers being left to pick up the tab. Estimates vary, but it is generally agreed that total future unfunded pensions liabilities amount to over £1 trillion. It is the dawning realisation that this ever-increasing liability cannot be supported by future tax payers that has sparked the Hutton review.

And yet the directions of travel for reform signalled by Hutton are familiar to observers of the pensions scene. Many public sector schemes still work on the basis of 60 as a normal retirement date, at least for existing employees. While some schemes, such as the teachers' scheme, have increased retirement age to 65, others still offer retirement at an age most would only dream of. At a time when the state retirement age is moving inexorably upwards, raising the retirement age for public sector schemes is clearly on the cards. Whether this will apply for existing members is debatable, but as the state pension age rises for all, including those who expected to be able to retire at 65, it is at least plausible that this should be the case for the public sector, too.

Similarly, the idea that public sector workers need to contribute more personally to their pension schemes has been extensively trailed and a forthcoming consultation from HM Treasury will open the debate on how much this should be in different sectors. Some public servants are making contributions already, of course, but given the actual annual costs of defined benefit pensions in the private sector, sometimes over 30% of salary, there is clearly scope for a lot of upward movement. This would feel very much like a pay

cut to the contributing employee, of course, and might well be the cause of industrial action in its own right.

Part of the issue here is that the true cost of provision of public sector defined benefit schemes has always been rather opaque, with the discount rate used to calculate future liabilities particularly referred to as inappropriate in comparison with the outside world.

Another approach is the possibility of moving from a final salary calculation of pension entitlement to a career average basis. Although widely denied, the practice of giving an employee promotion in the last year or two of employment with a view to increasing the pension outcome based on an increased salary does occur. A career average basis would certainly circumvent this and would limit future accruals and liabilities – at the price, of course, of a reduced pension outcome for the employee in all likelihood.

The recently announced move from a revaluation rate of the RPI to the CPI will also help cut future liabilities, and this has now been extended to the private sector, too. The effect will be to reduce the annual increase in pensions in payment, once again limiting forward liabilities, not only in the public sector this time. Again, the effect will be to reduce the value of prospective pensions, although in mitigation, it must be pointed out that there are circumstances in which CPI can be higher than RPI in any given year, rather than the other way around, which historically has been the case.

DEFINED CONTRIBUTION FOR THE PUBLIC SECTOR?

Nevertheless, it appears that defined benefit pensions will, as an architecture, remain a feature of public sector pension provision. However, this fails to address the growing inequity between public sector workers and their counterparts in the private sector where pensions are concerned, never mind other pay and conditions of service.

The reality is that in the private sector, most employees are not saving into any form of pension and where they are, it will almost certainly be into a defined contribution scheme of some sort, usually contract- rather than trust-based. There are just 1,140 defined benefit pension schemes open to new members in the private sector according to the Pensions Regulator, and this number is declining rapidly. At the peak, in 1967, the private sector could boast almost 12 million people enrolled in pensions, almost all of them defined benefit. At current rates of decline, occupational pensions (as opposed to contract based pensions such as Group Personal pensions) will have disappeared altogether within six years in the private sector. Now, this is not going to happen; it is highly likely that some employers will continue to provide occupational pensions including defined benefit for a range of reasons from pure altruism to competitive advantage in the employment markets. These legacy schemes will continue to cover significant numbers of workers, at least for the time being, but the future of pensions in the private sector is DC-shaped.

This is confirmed by the government's own choice of default pension for auto-enrolment. The National Employment Savings Trust will be a defined contribution scheme.

In seeking to understand why this is happening, it is necessary to understand the driving factors in the move away from defined benefit pensions in the private sector.

Defined benefit pensions place investment risk – the risk that the asset base won't grow fast enough to meet the pension promised, and longevity risk – the risk that the pensioner will live longer than his or her allocated share of the investment cake – firmly on the shoulders of the sponsoring employer. In the first half of the 20th century longevity risk and investment risk were more predictable and easy to manage. In the 1940s, median

male life expectancy was around 58 years, with average male life expectancy of 66. This meant that most men did not survive to collect a pension and those that did, did not claim it for long. Similarly, investment was mainly through government stocks, equities being a 'minority sport' at the time. Additionally, most employees tended to work for one or two employers for most of their working lives, and so could contribute directly or indirectly to their employer's pension fund for a long, consistent, time. So, put crudely, defined benefit as a pension design worked well when most of your workforce stayed with you for a long time, and when most of them either died before retirement age or did not live that long in retirement if they got there.

The average employee today will change employers 11 times in their working life, and average male life expectancy is 80, rising rapidly. This makes the risks of running a defined benefit scheme much, much, higher than 60 years ago, demanding ever increasing funding levels to mitigate them. This creates huge pressures on the sponsoring employer which any sane board will wish to mitigate, or to avoid exposing themselves to in the first place. A defined contribution scheme outsources the investment risk to the employee and the longevity risk to an insurance company in the shape of an annuity. It is absolutely inevitable that this move has taken place, as the environment of employment patterns and ever increasing life spans makes the traditional concept of defined benefit pensions unsustainable from an employer's point of view. And from the employee's point of view, they have increasingly proved not necessarily to be the holy grail as the ever increasing number of schemes in the Pension Protection Fund will testify.

It is against this backdrop that the key strategic decision that defined-benefit schemes will remain central to public sector pension provision is at least questionable. Preservation of an architecture in one employment sector which has all but disappeared from another, for compelling financial reasons, will

leave a legacy of societal division and a liability on future tax payers that is effectively open-ended. Many other countries have moved large parts of their pension provision towards a funded basis through the implementation of notional defined contribution schemes, which start life unfunded, moving to fully funded over a generation. These arrangements are worthy of further study.

I would suggest that, in the world of defined contribution pensions, the real issue is lack of input funding. It is generally accepted that employees will need to see 15% of salary being put into pension saving throughout their working lives to stand a fighting chance of getting a decent replacement rate in retirement. The pan-industry average combined contribution into a defined contribution pension today stands at 9.2%, according to the National Association of Pension Funds.

Public sector pensions could really provide a lead to the private sector if their combined contribution into a pension scheme was at 15% or more. This would provide decent pensions for public sector employees and, over time, encourage better pensions for the private sector, too.

PUBLIC SECTOR PENSION DESIGN: THE RISK SHARING REVOLUTION

GRAEME MUIR

It is now clear that the government no longer sees 'no change' as an option for the future of public sector pensions. Putting to one side the short-term choices for reform – which largely focus on an increase in employee contributions – the landscape for long-term structural reform is also becoming clearer.

On the one hand, the traditional final salary defined benefit scheme, which presently dominates the public sector, is seen as no longer fit for purpose. Such schemes are seen to have been inflexible in coping with changes in demographics, have led to an unfair division of costs between employers and employees, and have delivered disproportionate benefits to high flyers.

On the other hand, the Hutton Commission recognises that a funded, individual account-based defined contribution (DC) model for most public sector employees, "would place a major financing burden on taxpayers and ignore the ability of Government, as a large employer, to manage certain types of risk and increase the uncertainty of post-retirement income for scheme members, which is difficult in particular for the low paid to manage".³⁶ While for the future this does not rule out some aspect of funded defined contribution within the package for the higher paid, it would appear a funded DC model is ruled out for the majority. This is no doubt due in part to the legacy cost of unfunded arrangements which would mean that an en masse move now to funded arrangements would involve taxpayers (and/or members) facing broadly double contributions for many years ahead.

36 Independent Pension Commission, *Interim report*, 125.

Instead, debate on long-term public sector pension reform is now focusing on alternative scheme models that provides a fair sharing of risk between the employer and employee; and adequate pensions for members.

In this chapter, we consider some of the options on pension risk sharing and where those considerations may conclude. The issue of adequacy of benefits is not covered in depth here. In short, adequacy will depend largely upon the levels of combined employer and employee contributions (over and above state arrangements) into either funded or unfunded schemes, allied to length of service. As a rough guide (ignoring legacy issues), today, presently a 12% of earnings employer and 4% employee contribution might be expected to deliver, with the usual caveats, a 40% replacement income (excluding the state pension) in retirement, but including a partner's pension and a 25% tax free lump sum, for an employee starting contributions at age 30 and retiring at age 68.³⁷

HOW DID WE GET WHERE WE ARE?

Final salary pension schemes were born in the public sector some 150 years ago for civil servants and aimed to provide a pension that was linked to income levels at or near retirement and the length of service with the employer. Other parts of the public sector followed suit. In the main, these public sector schemes were set up as unfunded arrangements with current members' contributions meeting the pensioner payroll. No fund has been built up to pay these pensions as they emerge and any shortfall in this PAYG system has to be met by the taxpayer. A few public sector schemes are funded, the most notable being the local government schemes.

37 ACA, "2010: It's time to get positive about workplace pensions", *ACA Biennial Review*, (April 2010) 15.

It was not until perhaps 50 years ago that private sector employers started to offer similar schemes. While funded private sector final salary schemes may not always have been on a par with these (largely) unfunded public sector schemes (see below), between the mid-1960s through to the late 1990s considerably more private sector employees were members of such schemes than public sector employees. The 'pension gap' between the private and public sector was therefore not a political issue until recently, although even in their heyday private sector final salary schemes left many employees outside of the pensions system.

Initially private sector employers were wary of guaranteeing a level of pension increases that was beyond their control. Most private sector final salary schemes initially only promised discretionary pension increases although they did target a certain level of increases via their funding policy. Typically pension increases were awarded every three years following an actuarial valuation when the actuary would advise on what level of increases could be afforded. This was probably the first real type of what is now referred to as risk sharing in that the risks involved in running defined benefit schemes were shared to some extent between the employer and scheme members, or at least pensioner members.

However, buoyed by what appeared to be a favourable economic backcloth, successive governments forced employers with such schemes to turn these discretionary increases into guarantees, gradually reducing the amount of risk sharing to the point we find ourselves in today where the employer carries just about all of the pension risk.

Understandably, private sector employers have shied away from such onerous obligations and this, as well as other factors (rapid mortality improvements, lower investment

returns, changed accounting rules and more regulation), has led to many employers in the private sector ceasing to offer final salary schemes to their employees. As a result, far fewer private sector employees are now in membership of 'open' final salary schemes than public sector employees – this 'pension apartheid' – where private sector pensions fall far short of taxpayer funded public sector pensions is now a regular feature in the media and has become a live political issue. As a result, both parties in the coalition Government made manifesto commitments ahead of the 2010 general election to reform public sector pensions.

To date, the public sector has continued to offer full inflation proofing of final salary pensions to its employees, and public sector employers (in reality, the taxpayer) have continued to bear all of the public sector pension risks.

Recognition of the onerous cost is only starting to come through now as the unfunded schemes mature and as greater transparency 'opens the books' to the true liabilities falling on taxpayers long into the future. Even where public sector schemes are funded there is now a growing appreciation that reforms are needed to their structure if the costs falling on taxpayers are not to balloon or core services be sacrificed to meet pension costs.

SHARING PENSION RISKS

The key risks associated with funded and unfunded pensions are:

For funded and unfunded schemes

- Longevity risk, meaning the risk to the employer of having to pay the pension for longer than expected due to rising life expectancy, and (in funded defined contribution arrangements)

to the individual who is taking on some of the longevity risk when buying an annuity.

For unfunded schemes

- Budget risk, meaning that the PAYG income from the contributions from current scheme members falls short of the cost of paying current pensions, requiring reductions in commitments to other spending plans/programmes or extra contributions from elsewhere (in public sector schemes, from the taxpayer).

For funded schemes

- Investment risk, meaning the underperformance of the assets bought with the pension contributions.
- Annuity rate risk, meaning the risk that annuity rates are low at the time a pension pot is converted into an annuity.

With traditional final salary DB schemes – funded or unfunded – the key problem is that almost all the risks fall on the sponsor. At the other end of the spectrum, members of ‘pure’ funded DC schemes are obliged to shoulder all of the risks themselves. It should be possible to go some way towards bridging the gap between traditional final salary DB and ‘pure’ DC, schemes, so that risks could be shared – to a greater or lesser degree – between employee and employer.

The key issue is that one benefit design is unlikely to deliver the optimum type of benefits for all public sector employees. In terms of risk sharing, we might typically expect some progressive movement along the risk spectrum as employees work their way up the salary ladder.

So those on low incomes and who are likely to stay on low incomes should arguably bear little risk. However those on career paths and who will see their incomes rise in real terms should

arguably see their share of the pension risk increase as their income increases.

It would of course be possible to design quite complex schemes that try to meet such an objective. However, the more complex a scheme design, the less well understood it tends to be and the more expensive it usually is to administer.

An important aspect in any pension scheme design is trying to keep it relatively simple. A design that has a simple core element on a lower tier of earnings with a design that has more risk sharing on an upper tier of earnings may be a reasonable compromise for both the public and private sectors.

For example, in a new design, the lower tier of benefits could be based on a career average formula – for example $1/60^{\text{th}}$ of earnings each year revalued in line with some measure of inflation – CPI is likely to be the rate to use these days. CARE schemes, as they are known, already exist in some parts of the public sector – new employees to the civil service are offered a career average scheme and doctors and local authority elected members are already in career average schemes. The Senior Salaries Review Body has also recently recommended that a new MPs' scheme is established with the core aspect of its benefit design based on a career average formula.

However, if a modified defined benefit scheme of this type is to be more widely adopted in the public sector it will be important that there is a regular and recognised approach to adjusting retirement age in a timely way as mortality improvements unfold alongside changes in the make-up of the public sector workforce (notably reductions in employee numbers/active contributing members). Without such mechanisms, it would be all too easy for a new generation of politicians to allow forward costs to mount up again to be paid for by hapless future generations of taxpayers, many as yet unborn.

SOME OTHER PENSION DESIGN MODELS TO CONSIDER

As well as CARE schemes, notional DC schemes and collective defined contribution schemes have begun receiving the attention of policymakers in the UK. Additionally, risk sharing models that combine DB and DC are also to be looked at. These are already used by some large UK private sector employers, albeit regulatory complexities have severely restricted their take up to date in a funded environment.

Indeed, some of these options are better or are exclusively suited to funded arrangements. As such, some may be worth considering for an upper tier of earnings above, for example, an unfunded CARE scheme covering lower incomes where presently there is just an unfunded final salary arrangement, or they may be appropriate to displace existing funded final salary schemes e.g. in local government.

What then are some of the key potential risk-sharing arrangements that may be worth exploring in the context of UK public sector pension reform? Potential approaches include:

- Notional DC schemes (NDC)
- Cash balance schemes (CB)
- Collective defined contribution schemes (CDC)
- Conditional indexation schemes (CI)
- Nursery schemes, capped DB schemes and combination hybrids

NOTIONAL DC SCHEMES (NDC)

Favoured by the CBI as the model for the future of public sector schemes, NDC schemes are designed to mimic a funded DC plan, where the pension depends on contributions and investment returns.³⁸ Pension contributions are tracked in accounts which

38 CBI, 'Getting a grip: the route to reform of public sector pensions', *CBI Brief*, (April 2010).

earn a rate of return. However, in notional accounts, the return that contributions earn is a notional one, set by the government, not the product of investment returns in the markets.

The pension formula differs somewhat from the 'traditional' earnings-related model, with the benefit based on the accumulation in an individual's account at retirement. There is no pot of pension fund money, just a series of claims on the future public budget (as with the present unfunded final salary arrangements). They are PAYG financed – current contributions pay for pension benefits being paid out today.

When the individual reaches pension age, accumulated contributions and notional returns are converted to an annuity. By adjusting the annuity rate, the government can adjust the pension value to take account of life expectancy changes. Recent reforms in Italy, Poland and Sweden have been based on this model.

Proponents of NDC argue that it offers stability, simplicity and increases incentives to save as employees see their pot automatically increase for every contribution made.

Comment

As an unfunded arrangement, such a scheme could be used widely in the public sector to replace unfunded final salary arrangements, reducing future PAYG liabilities (whilst also reducing future levels of pensions). However, actions would be required by government to ensure that the scheme remains financially sustainable and some as a result might feel such arrangements are too open to manipulation by the politicians of the day. Others would argue that NDC schemes provide inadequate pension benefits to the low-paid as there is no income redistribution involved in such arrangements.

CASH BALANCE PLANS (CB)

Currently, cash balance plans in the private sector are regulated as DB schemes, but the benefit promised by the employer is not a pension calculated as a fraction of earnings (for example 20/60ths after 20 years membership), but a cash sum, which the member then uses to buy an annuity when they retire. The value of the cash sum is expressed as a proportion of the member's final pensionable salary (FPS) for each year of service. Typically, a cash balance scheme might provide 20% of FPS for each year's service. So after 30 years, a member would have a pension pot of 600% of FPS.

Alternatively, the cash balance could be expressed as 20% of each year's pensionable pay (an average salary/cash balance arrangement). As with average salary schemes, to take account of inflation, a revaluation option may be used, for example CPI. The resulting pension pot would then be used to buy an annuity. As the employer is making a promise about the level of the pension pot at retirement, they bear the investment risk of the scheme, but the annuity rate risk is with the employee.

In a public sector PAYG version of such a scheme there would be no investment risk, giving employees the benefit of predictable returns. When a member retires, they would have access to a set amount of money to purchase an annuity or take as income in another way. The taxpayer would not be faced with funding benefits at a particular level or guaranteeing to index those benefits into the future, so reducing the risks imposed on public finances.

Comment

Not a mile away from NDC, but probably better suited to a funded environment as a 'risk sharing' replacement for a final salary arrangement. CB is being used by a number of large private sector employers, such as Barclays Bank. CB could be used as a funded top-tier benefit for higher paid public sector employees.

COLLECTIVE DEFINED CONTRIBUTION SCHEMES (CDC)

Not at present legal under the UK regulatory regime, but increasingly used in the Netherlands. Here, all contributions are placed into one fund that is then managed on behalf of the members. As in a standard DC scheme, members' pensions will vary according to the value of the underlying investments. However, within CDC schemes there is the option to use inter-generational sharing to smooth the effects of market conditions. There are also economies and efficiencies deriving from the pooling of investment that may boost emerging pension benefits.

Comment

Suited to a funded environment as an alternative to a traditional DB or DC scheme. It is difficult to see how such a scheme would apply in an unfunded environment, although a scheme could be used as a second-tier funded arrangement.

CONDITIONAL INDEXATION SCHEMES (CI)

Not at present legal under the UK regulatory regime. Such schemes are typically career average DB schemes and are particularly prevalent in the Netherlands. The pension earned is calculated as a percentage of earnings in each year of service and would be revalued each year to ensure that it maintains its value.

Pensions in payment would also be increased each year to maintain their value. The level of revaluation would be equal to the level of indexation of pensions in payment to ensure fairness between active, deferred and retired members.

The key difference between this and a standard current career average scheme is that increases to pensions in payment and revaluation of accrued benefits are not guaranteed. Instead, they would be

conditional on the funding level of the scheme. However as in the early days of final salary schemes in the private sector schemes, the funding plan would assume some target level of revaluation/pension increases.

This means that if the scheme was fully funded or in surplus, full revaluation and indexation would be paid. If the scheme falls into deficit, it would be able to cut indexation and revaluation to reduce the deficit. When the scheme returns to surplus, indexation and revaluation would be reinstated as a first priority.

Comment

Such a scheme is suited to a funded environment and offers the opportunity to provide a traditional DB pension, but with an additional 'safety valve' not available to current UK schemes. A number of pundits have recommended this type of scheme as the model for the future of local government pensions, which in the UK are run as funded final salary arrangements at present.

NURSERY SCHEMES

These schemes have more than one section where members may earn both DB and DC pensions during their career, but with either DB or DC benefits earned at any one time.

CAPPED DB SCHEMES

Schemes where there is a limit on the amount of salary that counts for DB pension purposes or on pension payments from the scheme.

COMBINATION HYBRIDS

Where members simultaneously earn benefits that are part DB and part DC. For example, a capped DB pension, based on earnings up to a certain level and a DC benefit on earnings above that level.

Comment

These three options offer different approaches to reducing forward liabilities and to sharing risks. They could operate in both a funded and unfunded environment or in a blend of the two environments. Sustainability over the longer-term would however depend on the 'safety valves' considered elsewhere being in place to address longevity changes, structural changes in employment and variations in economic conditions. However, arguably such hybrids do not pass the simplicity test.

SUMMARY AND CONCLUSIONS

Originally designed 150 years ago for career (male) civil servants, the nature of the public sector workforce has changed with many more female employees and many employees working on a part time basis. Final salary schemes were never designed for those with little or no career progression or those who do not stay with the one employer for their entire career. While there are still plenty career civil servants in the public sector, the majority these days are not.

A change to a career average formula looks more than likely but such a structure on all earnings is still a pure defined benefit scheme leaving all pension risks with the sponsoring employer.

The lower paid however are arguably not best placed to accept any pensions risk whilst those on higher incomes are more likely to be able to bear some of the pension risks.

Thus a system that introduces some sharing of pension risks on a progressive basis might just fit the bill alongside the introduction of 'safety valves' so that such arrangements are sustainable long into the future.

Conditional career average: an emerging solution?

One possibility might be what could be loosely called a conditional career average scheme. Scheme members would accrue say 1/60th of their earnings each year under a career average structure.

However the accrual of pension each year would be split into two tiers – some lower tier where revaluation and indexation is at a guaranteed level – for example CPI, and for those on higher earnings, the second tranche would have conditional levels of revaluation and indexation, possibly with some minimum guarantees. Such an arrangement could lend itself to a presently funded or unfunded environment although, for the future, the second tier could be funded, reducing the risk falling on taxpayers in the years ahead.

Other variations are of course possible but, whatever is agreed, the scheme design needs to be relatively simple, protect the lower paid, whilst at the same time including safety valves via some element of risk sharing for those able to bear some of the pensions risk. It must also encompass safety valves that ensure it is a long-term sustainable solution, ensuring taxpayers can be protected from increases in costs as the years go by due to, for example, further improvements in longevity or other changes in economic circumstances.

LOOKING ACROSS TO THE PRIVATE SECTOR

Whatever solution to public sector pension provision is adopted, this will be seen as a failure by the wider public if any risk sharing model so introduced goes beyond what regulation allows private sector employers to comfortably introduce if they so wish. In short, this means that the pension regime applying to UK private sector organisations must be reformed in parallel to allow employers to introduce similar risk sharing approaches with sufficient flexibility to allow pension costs to be capped long into the future. Such joined up government would be a revelation – but there are signs!

THE FUTURE OF THE PUBLIC SECTOR PENSIONS: AN ASSESSMENT OF POSSIBLE REFORM OPTIONS AGAINST A RANGE OF POLICY OBJECTIVES

NIKI CLEAL

INTRODUCTION

The analysis presented in this chapter draws upon research recently undertaken by the Pensions Policy Institute (PPI) and funded by the Nuffield Foundation on the *Future of the public sector pensions*.³⁹ The research considers the policy objectives that the Government may have when considering further reform of the public sector pensions and sets out a range of possible reform options that the Government could consider. Finally, the research assesses the policy options against the set of policy objectives.

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. As a result, at the current time there is an active policy debate about the future of the public sector pensions.

It is important to stress from the outset that neither the PPI nor the Nuffield Foundation are in any way calling for further reform of the public sector pensions. The objective in undertaking and publishing this research has been to provide an evidence base for consideration by policy makers, politicians and others with an interest in pensions policy.

POLICY OBJECTIVES

Public sector pensions have a very long history. The civil service pension scheme was the original public sector pension scheme

39 Pensions Policy Institute, "The future of the public sector pensions" (London: 2010) available to download from www.pensionspolicyinstitute.org.uk.

with its roots linked to the terms of service on offer to civil servants in the 19th and early 20th century.⁴⁰ Occupational pensions were offered to employees in the public sector long before this became more commonplace in the private sector.

The Government may have a range of policy objectives in offering pensions to its employees ranging from the recruitment and retention of its workforce, to enabling public sector workers to save for their own retirement.

In considering any potential further reforms of the public sector pensions it is important to be clear about what the Government is actually trying to achieve. It is not sensible to undertake further reform for its own sake, but the Government may wish to consider reforms that might enable it to meet a particular policy objective.

The PPI, in conjunction with a range of other stakeholders, has identified a range of policy objectives that the Government may have for further reforms of the public sector pension schemes at the current time including:

- 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
- To enable the Government to recruit and retain high quality staff.

40 Independent Pension Commission, *Interim report*.

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

CURRENT POLICY REFORMS

The previous Labour Government introduced a range of reforms to the public sector pensions between 2005 and 2008. As a result of the reforms all of the public sector schemes retained a final salary structure except for the civil service scheme. The Civil Service moved to a career average scheme for new employees who have joined the scheme since 30 July 2007.⁴¹ Other schemes made changes including to increase member contributions or to increase the Normal Pension Age (NPA) for new entrants. The local government scheme introduced reforms for both existing and new members.

The reforms also included cost sharing and cost capping reforms for some of the schemes. Cost sharing allocates unanticipated increases in the costs of the scheme equally between scheme members and the employer. Cost capping limits the employer contributions at a certain level, so unanticipated costs above this level may fall fully on scheme members.

More recently, the coalition announced in its emergency budget in June 2010 that in the future public sector pensioners' benefits will be uprated in line with the CPI rather than the RPI. This change will also apply to the revaluation of the benefits of deferred pensioners.

It is important to recognise that the reforms that have already been announced will impact on the value of the schemes to public sector workers and on the costs to government of

41 The new section of the Career Average Civil Service scheme is called Nuvos.

providing the schemes. 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.⁴² 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, although precisely how individuals are affected by this change will depend on their own specific circumstances and how CPI and RPI evolve in the future.

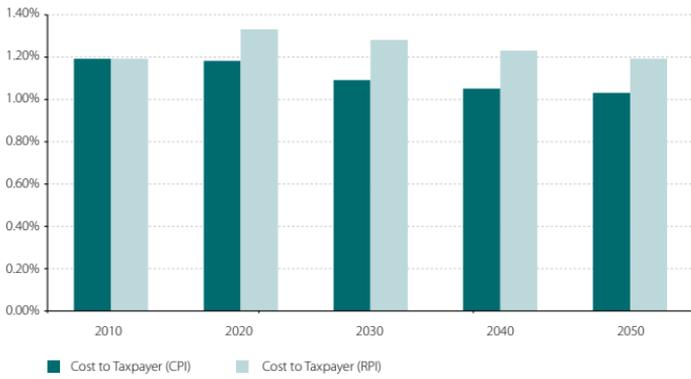
It should also be recognised that public sector pensions remain considerably more valuable than many of the pensions now offered by private sector employers. A typical defined contribution arrangement offered in the private sector might be worth around 10% of salary including the value of the state second pension that such an employee would be entitled to.⁴³

The combined impact of these changes has already reduced the cost to the taxpayer of providing the public sector pensions schemes. In 2010 government spends about 1.2% of GDP on public sector pensions after deducting the contributions made directly by members themselves. After 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 (Chart 1).

42 Pensions Policy Institute, 'An assessment of the Government's reforms to the public sector pensions', (London: 2008)

43 *Ibid.*

Chart 1: Switching from RPI to CPI reduces the long-term cost of unfunded public sector pension schemes⁴⁴



Source: Pensions Policy Institute

REFORM OPTIONS

The PPI research has identified four broad options that the Government could consider for further reforms of the public sector pensions. 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 announcement in June 2010, it would also entail public sector pensions being linked to the CPI rather than to the 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.

44 Ibid. Projections from the PPI's aggregate model.

- **Structural reforms 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. Structural reforms 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.** These 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 first public tier in Sweden since 1998. In a notional defined contribution scheme the Government does not build up a pot of assets to pay future pension promises; 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 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.

The PPI's 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.

METHODOLOGY

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 pensions are all quite different. There are substantial differences between the generosity of the public sector pensions that exist in the uniformed services (armed forces, police and fire) from those that are available in the larger public sector schemes (e.g. NHS, teachers, civil servants and local government.)

Therefore, to model the full range of possible reforms in detail against each of the seven main schemes would have been very cumbersome. As a result, the PPI has modelled a proxy public sector pension scheme that has similar characteristics to the reformed NHS, teachers and local government schemes. These schemes together account for 70% of the active membership of the public sector schemes and the 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.

THE CHARACTERISTICS OF THE MODELLED OPTIONS

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, it has been necessary to choose particular parameters for each reform option. For example, it has been necessary 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 this analysis of the reform options rather than to focus too much on the specific levels of benefit generosity or absolute costs modelled. 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 level of contributions were sufficiently high.

In choosing the parameters to model, the PPI analysis has 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), it has linked the modelled 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 modelled by the PPI include:

Continue current policy

To model a continuation of current policy, a proxy public sector scheme has been constructed. This proxy scheme is a final salary scheme and has similar characteristics to the reformed NHS, teachers and local government schemes, including tiered levels of member contributions, at 5.25% increasing with salary level to 8% of salary for those earning over £100,000.

Reforms within a final salary structure

The reforms modelled here keep the structure of the existing final salary schemes but would amend some of the parameters within the final salary schemes, for example, by offering higher Normal Pension Age, lower accrual rates, increased member contributions, or caps on pensionable salary or caps on the benefits to be paid out from the pension. In the research the PPI modelled the following potential reforms:

- Linking changes to the Normal Pension Age (NPA) to the increases in the State Pension Age (SPA) 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.
- Reducing the accrual rate in the final salary schemes from 1/60^{ths} to 1/80^{ths}. Both accrual rates are commonly used in private sector final salary schemes.
- 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.
- Imposing a cap on the pensionable salary used to calculate benefits at £75,000 per annum. This is consistent with the Conservative party proposal to cap pensions paid out to public sector workers at £50,000 per annum.

Risk sharing reforms

Two different risk sharing reforms have been modelled:

- Moving to a career average scheme with similar levels of benefits to the Nuvo section of the civil service scheme. However, as member contributions are low in the Nuvo scheme compared to other public sector pension schemes, the PPI proxy model has assumed a tiered employee contribution structure, 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.⁴⁵

- Moving to a hybrid scheme – this is based on a career average scheme the same as 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 with contributions of 6.5% of salary from both the employer and the employee.

Defined contribution reforms

Two different types of defined contribution schemes have been modelled in the research:

- Moving to a funded defined contribution scheme. In a funded DC scheme, members' and employers' contributions are invested in private individual accounts and the pension received upon retirement will depend on the total contributions and the performance of the fund.
- Moving to a notional defined contribution scheme. For this option, the PPI model assumes that employees contribute 5% of salary, while employers contribute 10%. Notional defined contribution pots are revalued in line with average earnings, as it is done in Sweden. However, a different index could be used. This option would not be contracted out, so employees are also assumed to accrue rights to the Second State Pension (S2P).

ASSESSMENT OF THE MODELLED REFORM OPTIONS AGAINST THE POLICY OBJECTIVES

This section provides an assessment of four of the modelled options against three of the possible policy objectives that a Government may have for any reforms: to provide an adequate pension for public

⁴⁵ 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.

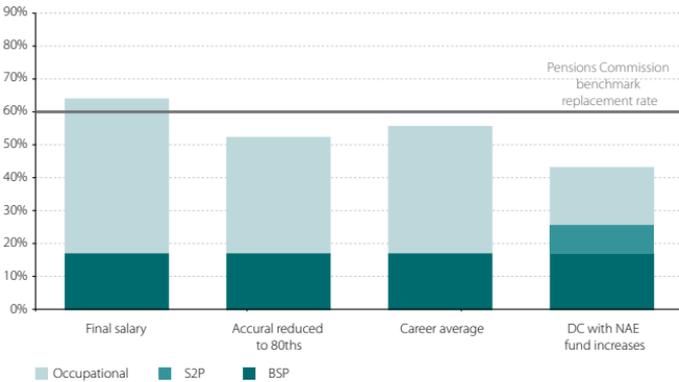
sector workers, to improve the affordability and sustainability of the schemes and to address any unfairness within the schemes.

For the sake of simplicity we have only shown one of the reforms to the final salary schemes – a reduction in the accrual rate from 1/60th to 1/80th. We have also only shown one of the risk-sharing measures – the career average scheme rather than the hybrid scheme that we have modelled. The two risk sharing options are equivalent for low to median earners, but higher earners earning more than £37,000 are likely to have less generous pensions under the hybrid option.

Adequacy

This section shows the effect of four of the modelled reform options on the adequacy of the pensions benefits paid. To measure adequacy, the projected replacement rates for a typical median earner under each reform option is compared to the benchmark replacement rate established by the Pension Commission.⁴⁶

Chart 2: The impact on benefit adequacy of different reforms options⁴⁷



Source: Pensions Policy Institute

⁴⁶ Pensions Commission, "First report" (London: 2004) 143.

⁴⁷ PPI, "Future of the public sector pensions". 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 2 shows that any of the reform options will have a significant impact on the adequacy of the benefits paid for median earners.⁴⁸ A median earner will only reach their benchmark replacement rate of 60% of gross average earnings under the current final salary arrangements.

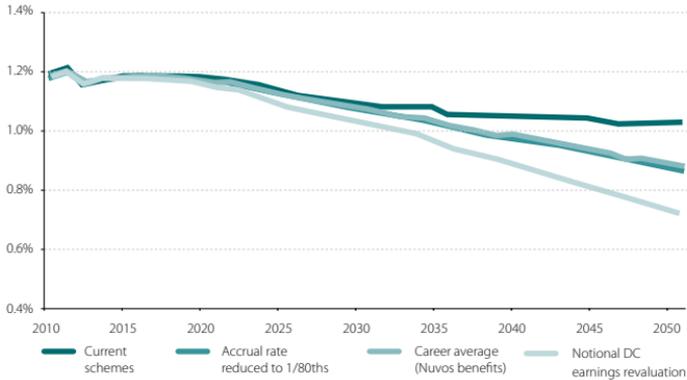
Maintaining the current final salary structure but with a reduction in the accrual rate from 1/60th to 1/80th significantly decreases the projected replacement rate from 64% of gross average earnings under the existing final salary schemes to 52% of pre-retirement income. The career average option offers the replacement rate that is closest to the Pension Commission's benchmark, but at 55% is still below it. The notional DC option offers the least adequate level of benefits, with a total replacement rate of only 43% of pre-retirement income. This is even accounting for the fact that under this option employees accrue rights to the S2P.

The reduced generosity of the public sector pension under many of the reforms 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.

Affordability and sustainability

To assess the affordability and sustainability of the schemes, the PPI has modelled the projected costs to the taxpayer of the schemes under each different option as a percentage of GDP, after taking off the amount funded by members' own contributions. Chart 3 shows the impact on the cost to the Government of providing the public sector pensions under four of the reform options modelled.

⁴⁸ Lower earners are more likely to achieve their benchmark replacement rate under many of the different reform options. See PPI "Future of public sector pensions", 33.

Chart 3: The impacts on costs of the different reform options⁴⁹

Source: Pensions Policy Institute

Under a continuation of current policy, public expenditure on public sector pensions is now projected to fall from 1.2% of GDP in 2010, to 1% of GDP by 2050.

All of the reform options will further reduce the cost to government of providing public sector provisions, especially in the medium to long term. Both the career average option and the reduction in the accrual rate to 1/80ths would lead to projected Government spending of 0.9% of GDP by 2050. The notional DC option with earnings revaluation brings the total cost down to around 0.7% of GDP by 2050, compared to 1% of GDP under the current schemes allowing for the additional NI contributions raised and S2P expenditure arising from the schemes being contracted-in.

Fairness

The Government may wish to address issues of unfairness within the schemes, for example, where scheme members with different characteristics are treated unequally. The Government may also be

49 PPI, "Future of the public sector pensions". PPI Calculations. See Appendix 1 for detailed assumptions. Figures shown are pensions in payment net of member contributions. The notional DC option includes net extra Government expenditure on state second pension.

concerned about the fairness of the value of pensions provision on offer for employees in the private and public sectors.

Retaining a final salary structure would not eliminate the unfairness that exists within members of final salary schemes. In a final salary scheme high flyers and workers who stay longer in the public sector will receive a comparatively higher pension than average workers and those that decide to leave early and receive a deferred pension.⁵⁰ By contrast, a career average option would eliminate the benefit to high-flyers as pension benefits are tied to average, rather than final salaries. A career average option also 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. A notional DC scheme would also perform well on a fairness test – there are no cross subsidies between high and low fliers and no penalties for leaving the scheme early.

OVERALL ASSESSMENT OF THE REFORM OPTIONS

Continuation of current policy

Of the options modelled a continuation of current policy would offer the most generous pension to public sector workers. 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 provides more generous pensions to high flyers than low flyers and long-stayers than short-stayers.

50 PPI, "Future of the public sector pensions", 46-47.

Reforms within the structure of existing final salary schemes

The reforms to final salary schemes modelled here would either reduce the generosity and therefore the adequacy of public sector pension provision or would leave it unchanged, with the exception of increasing the NPA which improves adequacy. For example, reducing the accrual rate in a final salary scheme from $1/60^{\text{th}}$ to $1/80^{\text{th}}$ would reduce the projected replacement rate from 64% to 52% for a median earner, but increasing the NPA in line with changes in the SPA in the Pensions Act 2007 would increase the replacement rate from 64% to 70%.

A reduction in adequacy 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 reforms

The career average and hybrid pension schemes analysed in the research 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. PPI 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.

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.

CONCLUSIONS

This chapter has summarised the PPI's research on the future of the public sector pensions and has shown that none of the reform options will meet all of the potential government objectives of

ensuring the adequacy of pension benefits, enabling the public sector to recruit and retain staff, improving the affordability and sustainability of the schemes and removing unfairness to the same extent. There are significant trade-offs implied in each reform option that should be considered by the Government when implementing any further reforms.

The continuation of current policy and existing final salary schemes is the most beneficial option for employees in terms of adequacy and will also potentially allow the Government to attract and retain staff as the average pension benefit paid would be higher than the one in the private sector.⁵¹ However, this option is also the most expensive to the taxpayer and it does not address the unfairness between high flyers and low flyers, and early leavers and long stayers.

A reform to the current final salary schemes that entails a reduction of the accrual rate from 1/60th to 1/80th will reduce costs in the long term, but this will be at the expense of providing a benefit that is significantly below the benchmark replacement rate established by the Pension Commission. This option also does not address unfairness as benefits remain based on final salary.

A move to career average, similar to the Nuvos scheme in the civil service but with higher levels of contributions as modelled here, could help to reduce costs, eliminate unfairness among members of the same schemes and reduce the risk to employers as benefits will be based on average and not final salary levels. However, benefit adequacy would still be below the Pensions Commission's benchmark.

Finally, a move to a notional DC schemes as modelled here with a combined contribution rate of 15% of salary, represents the least

51 PPI, "Future of the public sector pensions", 39.

advantageous option modelled for employees as the replacement rate for median workers would be almost 17 percentage points below the Pension Commission's benchmark. However, this option will ensure a significant reduction of the cost of maintaining the schemes to about 0.7% of GDP by 2050. 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.

It is clear that none of the reform options that the PPI has modelled in this research offers a silver bullet solution to the future of the public sector pensions. The Government will need to consider carefully what it is trying to achieve and trade-off the different policy objectives in order to come up with a sensible way forward if it wishes to undertake further reform of the public sector pensions.

SOME LESSONS FROM THE PRIVATE SECTOR

JOHN MORET

There is growing consensus that maintaining the status quo on public sector pensions is not tenable and, as Hutton's interim report notes, that the current system "has been unable to respond flexibly to changes in demographics over the past few decades and the need for greater mobility between the public and other sectors."⁵² Instead, there is growing acceptance of the need for a fairer sharing of risk between employer and employee.

The issue of risk sharing has of course been very much to the fore in the recent development of private sector schemes. There is a plethora of risks that can be considered such as market risk, interest rate risk, inflation risk, liquidity risk, mortality risk, longevity risk, behavioural risk and so on. However, the two main risks receiving consideration in debate on public sector pensions are investment risk and demographic risk. Although these risks are not new they have grown in importance as the development of private sector pensions has moved away from defined benefit structures to the alternative defined contribution model. With this model the risk liability is largely transferred to the individual scheme member and away from the employer, as is increasingly the case in private sector pension schemes.

Although there are some serious issues with the whole pensions brand in the private sector – fuelled at least in part by misconception and misinformation – there are also some success stories in both the occupational (largely trust based) and personal (largely contract based) pensions sectors. What lessons can be learnt from these experiences that might help in framing an alternative risk-sharing model in such a way that it will appear attractive to public sector employees?

This is a big subject and in this article I will limit myself to focussing on two related areas: communication and education. But first I should

52 Independent Pension Commission, *Interim report*.

explain that I firmly believe that the two topics that will have the most impact on our pensions system in the coming decades will be the use of technology and increasing longevity.

I consider myself to be a technophobe but despite this I have become a keen exponent of online banking. I am not alone. From responses to a recent survey that I was involved in over 80% of financial advisers confirmed that they always or regularly used internet banking. While they may not be representative of the population as a whole given that Internet banking only entered the UK just over ten years ago, its impact and penetration is clear. Of course there is a long way to go before coverage is universal and indeed that may never be achieved. However there are two more general points related to the use of technology by pension scheme members:

- We should not ignore the issue of digital exclusion. From the latest ONS survey on internet access published in August 2010, 30.1 million adults used the internet every day whereas 9.2 million adults had never used it. Significantly 22% of those aged 55-64 had never used it – the figure for those over 65 was 60%. Moreover 91% of those employed in managerial or professional occupations stated they had used the internet compared with just 67% of those employed in semi-routine and routine occupations – which may be a high proportion of those in some public sector schemes.
- A leading commentator, Andrew Sheen, recently said that: “for now, pensions communications has remained steadfastly stuck in the last century. Despite some efforts to bring elements of pensions communications online, with portals and information provided on the web there has not been the same push by pension providers to embrace digital media and the opportunities this can bring.”⁵³ It is hard to argue with this view although there have been some encouraging new initiatives – for example the life and pensions company Aviva has recently launched an iPhone application for pension planning – and

53 Andrew Sheen, “Ready for revolution?”, *Pensions Insight*, October 28th 2010

some of the recent developments with platforms in the workplace pensions arena are more forward-thinking. Another good example is the website www.timeformoney.co.uk, set up by the Daily Mail and General Trust for its pension scheme members.

My conclusion is that the pensions industry – both private and, it seems, public sectors – has a lot of room for improvement in embracing new technologies and harnessing social media in order to communicate more effectively with pension scheme members. It will be interesting to see the influence that NEST – which is a technology driven proposition – exerts over the rest of the industry but the life and pensions industry certainly has no room for complacency in this crucial area.

An area of risk where there is a big need for better communication and education is longevity. The implications of increasing life expectancy are profound. In the private sector the issues are increasingly significant particularly in the area of annuitisation.

In a recent paper from the Pensions Institute, Professor David Blake and Tom Boardman look in some depth at this area and examine how behavioural economics can be used to improve the expenditure decisions of retirees.⁵⁴ While primarily addressing the issues in the context of defined contribution plans they consider the changing needs, risks and financial resources in retirement and advocate a holistic approach embracing both defined benefit and defined contribution scheme accumulated wealth along with other assets.

In their paper they include some compelling findings from a study in 2005 by O'Brien and others of how people in different age groups in the UK underestimate how long they will live compared with how long they are expected to live according to the Government Actuary's

54 David Blake and Tom Boardman, "Spend more today: using behavioural economics to improve retirement expenditure decisions", (London: Pensions Institute, 2010).

Department.⁵⁵ The research found most men in their 60s underestimate their life expectancy by around five years at retirement, while for women it is around three years. Even more important individuals find it difficult to appreciate the variability around expectation of life. For example, the paper shows that for typical 65 year old males in the UK today, life expectancy is 87.8, but 25% will reach 94 and 8% will reach 100.

The impact of winning the longevity lottery can be huge and currently is largely ignored. The need for large-scale education is clear and to date the surface has hardly been scratched. Organisations such as Inmyprime, Life Academy and Holistic Retirement Solutions are making some headway in the workplace in introducing new ideas along with one or two of the specialist annuity and retirement option providers. However there is a long way to go to improve the general level of knowledge around these subjects – which is crucial to members of all pension schemes.

One can argue that the need for better technology and longevity education are not really issues for public sector pension schemes but are part of a much wider social debate. That may be true, but providing good quality pensions – in both the public and private sectors – is becoming a much more challenging task. It is agreed that transparency and simplicity must be characteristics of any new model for public sector pension schemes; however, these are subjective outcomes and proportionate to good communication and improved education among members.

The private sector pensions industry may indeed fall well short of being at the leading edge in these important areas. Nevertheless I suggest that there are valuable lessons to be learnt from the private sector in the way in which it is approaching the issues of technology and longevity and that sharing these could be helpful in shaping the key design features of a reformed public sector pensions model.

55 Chris O'Brien et al, "How long do people expect to live? Results and implications", Centre for Risk and Insurance Studies, Nottingham University Business School (2005).

CONCLUSION

JAMES LLOYD

Public sector pensions represent an enormously complex topic. There is no single public sector scheme and multiple models abound. Nevertheless, reform is inevitable.

Opposition to the perceived generosity and protection afforded to public sector pensions has been growing for years. However, the fiscal crisis and the election of a new coalition government has provided the political momentum and space for both a root-and-branch review and implementation to follow. Reforms are likely to coincide with job and pay cuts in the public sector, as the Government attempts to regain control of public spending. Protests at any reform of public sector pensions may ultimately be subsumed into wider disquiet across the public sector at the range of cuts and reform that are imminent.

This collection has attempted to shed light on many of the thorniest issues in this debate, as well as to evaluate even-handedly differences between the public and private sector, and the role of pensions in the employer-relationship. As several authors have noted, the switch from RPI to CPI – a change presented as nothing to do with public sector pension reform – has already drained much of the sting from critics regarding sustainability and generosity.

An important lesson from the private sector is that evolution, adaptation and development is a continuous process. It remains to be seen how the arrival of the National Employee Savings Trust affects private sector pensions: the comparison between the public and private sectors could look very different ten years from now.

Ultimately, the round of public sector pension reform that appears imminent may have to be revisited again in future years in

light of population change, further increases in longevity, changes to employment patterns and the state. Consequently, however successful the reform agenda underway, the future of public sector pensions will remain a subject for debate in the years ahead.



As the UK government contemplates root and branch reform of public sector pensions, this edited collection brings together a range of expert contributions to explore the arguments behind the debate and the options facing ministers. The collection examines employee views on public sector pensions, and whether their generosity reflects lower salaries. The authors also examine the complex ways in which the public and private sector treat the various risks inherent in delivering pension schemes, and how these can be reconfigured in the public sector while learning the lessons of the private sector's experience.

Kindly supported by



ISBN: 1-904899-72-2
£10.00

SOCIAL MARKET FOUNDATION
11 Tufton Street | Westminster | London SW1P 3QB
Phone: 020 7222 7060 | Fax: 020 7222 0310
www.smf.co.uk