## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>ix</td>
</tr>
<tr>
<td>Members of the Pensions Commission</td>
<td>xi</td>
</tr>
<tr>
<td><strong>Executive Summary: Overall conclusions and outline recommendations</strong></td>
<td>1</td>
</tr>
<tr>
<td>1. Present situation and trends: deepening and extending the First Report analysis</td>
<td>2</td>
</tr>
<tr>
<td>2. Objectives and key elements of reform</td>
<td>4</td>
</tr>
<tr>
<td>3. National Pension Savings Scheme: auto-enrolment and cost-efficiency</td>
<td>7</td>
</tr>
<tr>
<td>4. Reforms to the state system to underpin private saving</td>
<td>8</td>
</tr>
<tr>
<td>5. The unavoidable long-term trade-off: public expenditure versus State Pension Age</td>
<td>12</td>
</tr>
<tr>
<td>6. The key recommendations: overall principles and possible details</td>
<td>18</td>
</tr>
<tr>
<td>7. Implications of reform for women and carers</td>
<td>22</td>
</tr>
<tr>
<td>8. Facilitating later working and protecting the position of lower socio-economic groups</td>
<td>23</td>
</tr>
<tr>
<td>9. Related issues: tax relief and the contracted-out rebate</td>
<td>25</td>
</tr>
<tr>
<td>10. Securing long-term sustainability and consensus</td>
<td>27</td>
</tr>
<tr>
<td>11. The timing of reform: challenges and trade-offs; but a new settlement needed soon</td>
<td>31</td>
</tr>
<tr>
<td>12. Summary of additional recommendations</td>
<td>32</td>
</tr>
</tbody>
</table>
### Chapter 1: Assessing the current position: implications of further research

1. Current state and private systems will deliver increasingly inadequate and unequal results

2. Changes to state system and incremental measures to encourage voluntary provision insufficient to fix problems: but attitudes to compulsion ambivalent

3. House purchase and inheritance: implications for required replacement rates but not complete solution

4. Making pension policy robust in the face of demographic change: later retirement and high pension ages essential but not sufficient

5. International analysis; lessons from the UK

### Chapter 2: Stepping back: inherited system not fit for purpose; new settlement needed

1. Pension system evolution in developed countries: the predominant pattern

2. The UK’s unique development

3. Key assumptions for UK system effectiveness

4. Assumptions no longer valid: context changed

5. Realities upon which a new pension settlement must be based

### Chapter 3: Principles and key features of required reform

1. The objectives and key elements of reform

2. A better state pension system: long-term consequences for taxation and State Pension Ages

3. Introducing a National Pension Savings Scheme with auto-enrolment

4. The new settlement: an integrated approach

5. The new settlement: the role of the state
<table>
<thead>
<tr>
<th>Chapter 7: Preserving and encouraging the voluntary system: opt-outs and tax relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alternative provision from the National Pension Savings Scheme</td>
</tr>
<tr>
<td>2. Tax relief as an incentive to employer and individual pension saving</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 8: Facilitating later working and flexible retirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The importance of facilitating later retirement</td>
</tr>
<tr>
<td>2. Flexible retirement: the positive message</td>
</tr>
<tr>
<td>3. Average retirement ages: recent trends and implications</td>
</tr>
<tr>
<td>4. Incentives to retire later: state and private pension system design and the importance of information</td>
</tr>
<tr>
<td>5. Differences in life expectancy between socio-economic classes: possible responses</td>
</tr>
<tr>
<td>6. Age discrimination and demand for labour: barriers and solutions</td>
</tr>
<tr>
<td>7. Skills, training and health: barriers and solutions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 9: Implementing and communicating changes to the system</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Implementation</td>
</tr>
<tr>
<td>2. Communication</td>
</tr>
</tbody>
</table>
Chapter 10: Implementing a National Pension Saving Scheme

1. Contribution rates and covered earnings bands: default minimum, additional and maximum contribution levels

2. Alternative pension arrangements outside the National Pension Savings Scheme

3. The mechanics of auto-enrolment, payroll deduction and individual opt-out

4. The treatment of the self-employed and those not in work

5. Options for reducing the cost impact on small business

6. Investment options: selection process and default funds

7. The decumulation phase: annuity provision and arrangements on death prior to annuitisation

8. Communication with members

9. A scheme-specific tax regime?

10. Indicative operational costs: international experience

11. A feasible implementation timetable

12. Management and governance

Chapter 11: Securing and maintaining long-term consensus

Summary of recommendations and conclusion on data improvements

List of panels

List of figures

Glossary

Abbreviations

Bibliography

The appendices to this Report are available in a separate document.
Contents
This Second Report of the Pensions Commission sets out our conclusions on the likely evolution of the UK pension system if policy is unchanged, and our recommendations for a new policy direction.

Our terms of reference asked us to review the evolution of the UK’s system of pension provision and to advise on whether the existing system of voluntary private pensions would deliver adequate results. We were asked in particular to advise whether a system of compulsory earnings-related savings was appropriate. We have done so given the context of the current state system and current indexation arrangements.

We have now concluded that the current voluntary private funded system, combined with the current state system, is not fit for purpose looking forward. And while our primary focus has been on the overall structure of the system in future, any analysis of the pension system would be incomplete if it ignored the significant problems which exist even today for significant groups of people.

We are therefore proposing a new settlement for UK pension policy in the 21st century which combines two elements:

- A new policy for earnings-related provision which recognises the inherent inadequacy of a purely voluntary approach, but which stops short of full compulsion, relying instead on the automatic enrolment of employees into either a new National Pensions Savings System or into existing company pension schemes, but with the right to opt-out, and with a modest level of compulsion on employers to make matching contributions.

- A reform of state pension provision to make it simpler to understand and less means-tested than it would become if current indexation arrangements continued. This is essential to provide the clear incentives and the understandable base on which individuals and employers can build additional private provision: and it is desirable in order to address the existing problems with the state pension system today.

Our recommendations on the state pension inevitably involve consequences for public expenditure and for the State Pension Age. One of the useful roles of an independent commission is to present society with difficult but unavoidable choices. We do not believe it is possible to design a coherent state pension system for the UK without some increase in public expenditure on pensions as a percentage of GDP over the next 45 years: but we believe that increases in State Pension Ages will be essential to keep that increase within levels which are fair between generations and sustainable over the long term. We present a range of possible combinations of public expenditure and State Pension Ages around which public debate is now required. That debate needs to commence now. While the most important problems in the UK’s pension system relate to future rather than present adequacy, these problems will get
worse unless reforms start soon. The fact that there is no present crisis of average pensioner incomes should be treated as an opportunity to lay the basis for a sound future system without immediate major public expenditure increases, not as a justification for a "muddle through" approach.

Our recommendations on the overall thrust of pension policy reform are therefore clear: the establishment of a National Pension Savings Scheme into which individuals are automatically enrolled but with the right to opt-out, and changes to make the state system less means-tested and simpler than it would be if current indexation arrangements continued. But there are a variety of alternative specific policies compatible with achieving those overall objectives. In particular:

- We have considered several ways in which the objective of a less means-tested and simpler state pension system could be achieved, and we have indicated our preference. But the alternatives also have merits.

- And we have proposed some key features of the National Pension Savings Scheme and analysed the operational challenges in sufficient detail to be confident that there are no insuperable barriers to successful implementation. But a major implementation planning exercise, with consultation, will be needed before final details are decided and the scheme launched.

Our Report covers a wide range of issues. But there are some important problems which it does not address. In particular while we comment extensively on the long-term implications of the closure of private sector Defined Benefit schemes, we do not make recommendations on how companies should manage the very large legacy risk (i.e. pension fund deficits) which the past system has left, nor do we comment on the operation of the Pension Protection Fund.

Chapters 1 and 2 of the Report set out our analysis of the situation, the problems and challenges. They build on the analysis of our First Report, Pensions: Challenges and Choices. Most of the analysis and conclusions of that Report have been confirmed over the last year, and we do not therefore repeat them in this report, focusing only on areas where further analysis has reinforced or amended in detail the conclusions we reached last year. The First and Second Reports should therefore be considered as forming one combined "Report of the Pensions Commission."

Finally all three members of the Commission would like to record our thanks to the Secretariat for the enormous amount of hard work which has been involved in the Commission's analysis and in the production of both of our Reports. They are: Jenny Afflick, Jennifer Bradley, Chris Dobson, Andrea Garman, Ralph Gonsalves, Genevieve Goulden, Louise Goulding, Sam Hainsworth, Trevor Huddleston, Joanna Littlechild, Ellie Lusty, Sarah Meagher, Maria Meyer-Kelly, Andrew Statham, Clare Tempest-Hay.

We would also like to thank the many researchers, associations, think tanks, companies and individual pensions experts who have assisted us greatly by providing ideas and information over the last two years.
Members of the Pensions Commission

Left to right: John Hills, Adair Turner and Jeannie Drake

Adair Turner (Chairman)

Adair Turner is Vice Chairman of Merrill Lynch Europe, a director of United Business Media plc and chair of the UK Low Pay Commission. He has recently been appointed as an independent cross bench peer in the House of Lords.

Jeannie Drake

Jeannie Drake is the Deputy General Secretary for the Communication Workers Union and has recently completed her term as president of the Trades Union Congress.

John Hills

John Hills is Professor of Social Policy and Director of the ERSC Research Centre for Analysis of Social Exclusion (CASE) at the London School of Economics.
This Executive Summary sets out our key findings and recommendations, in 12 sections:

1. Present situation and trends: deepening and extending the First Report analysis
2. Objectives and key elements of required reform
3. A National Pension Savings Scheme: auto-enrolment and cost-efficiency
4. Reforms to the state system to underpin private saving
5. The unavoidable long-term trade off: public expenditure versus State Pension Age
6. The key recommendations: overall principles and possible details
7. The implications of reform for women and carers
8. Facilitating later working and protecting the position of lower socio-economic groups
9. Tax relief and the contracted-out rebate
10. Securing long-term sustainability and consensus
11. The timing of reform: challenges and trade-offs; a new settlement needed soon
12. Summary of additional recommendations
1. Present situation and trends: deepening and extending the First Report analysis

In our First Report, “Pensions: Challenges and Choices,” we set out an analysis of pension provision in the UK and the trends in that provision. Key conclusions of that analysis are outlined in the panel at the end of this Executive Summary. Over the last year we have extended and deepened that analysis. We have now concluded that:

i) The current system of private funded pensions combined with the current state system will deliver increasingly inadequate and unequal results.

- Average pensioner income today compares well with that of previous generations. Many retirees with Defined Benefit (DB) pensions enjoy a historically high level of private pension provision: and many present retirees are receiving state earnings-related pensions more generous than in the past and more generous than planned for the future. But the distribution of current pensioner income is highly unequal, not only because of disparities in lifetime earnings, but also because of the wide dispersion of private pension provision, and because the historic state system has left major gaps in provision for people who have had interrupted paid working lives and caring responsibilities, in particular women.

- Looking forward the state is planning to play a reduced role in pension provision for the average pensioner. Policy has been based on the assumption that private provision will grow to offset this decline.

- But voluntary private pension provision is not growing: rather it is in serious and probably irreversible decline. Employers’ willingness voluntarily to provide pensions is falling and initiatives to stimulate personal pension saving have not worked.

- While particular groups of people, those in the public sector, in still open private DB schemes, and many higher earners, are on target for good pensions, an increasing number of people will, on current trends, face pensions they will consider inadequate.

ii) These problems are not solvable through changes to the state system alone, nor by incremental measures to encourage voluntary provision. But attitudes to compulsion are ambivalent.

- Reforms to the state system are needed not only to address the significant gaps in provision for people with interrupted careers and caring responsibilities, but also to create a more understandable, less means-tested platform on which individuals and employers can build private provision.
But reforms to the state pension system will not be sufficient because of:

- The inherent behavioural barriers to people making rational long-term savings decisions without encouragement;
- The limited impact of providing better information and generic advice;
- The decreasing belief among many employers that there are self-interested reasons to provide good pensions to achieve recruitment and retention objectives; and
- The cost barriers in the currently underprovided market. There is a segment of the market, employees of average and lower earnings working in small and medium companies, plus many self-employed, which the retail financial services industry cannot serve profitably except at Annual Management Charges (AMCs) which are disincentives to saving and which substantially reduce pensions available in retirement.

But attitudes to compulsion are ambivalent. While many people say they want to “have to save”, many respond adversely to the idea of compulsory savings. And there is a danger that compulsory savings contributions may be seen as equivalent to taxation, reducing people’s willingness to support an adequate system of flat-rate state pension provision.

iii) Savings through house purchase and inheritance of housing assets will make a significant contribution to pension adequacy for many people, but housing cannot be considered a sufficient response to pension adequacy problems for all people.

Latest analysis of individual stocks of wealth and flows of saving confirms the finding that for most people non-financial assets are modest but that housing assets are far more important.

The accumulation and decumulation of housing assets can therefore play an important role in providing resources to support consumption in retirement.

Compelling people to make sufficient pension provision so as to achieve average desired replacement rates would therefore force some people to over save.

But analysis of the risks involved in savings through the housing market, and of the distribution of the ownership of housing wealth, shows that housing cannot be a sufficient answer to pension adequacy problems for all people.
iv) Long-term pension policy needs to be robust in the face of rising life expectancy and of major uncertainty about the pace of that increase.

- Over the long-run, fairness between generations suggests that average pension ages should tend to rise proportionately in line with life expectancy, with each generation facing the same proportion of adult life contributing to and receiving a state pension.

- The long-term trend in the old-age dependency ratio (defined on a static retirement age of 65) is a steady rise driven by life expectancy increases [Figure Ex.1]. For the last 30 years however the ratio has diverged increasingly below the long-term trend as a result of the expansion of the working age population which the baby boom of the 1940s to 1960s produced. But looking forward, the retirement of the baby boom generation, (i.e. the delayed effect of the fall in fertility which occurred between the early 1960s and mid-1970s) will produce a rapid return to the trend line, with this effect concentrated in the years 2010 to 2035.

- As a result, over the next 40 years, an increase in average pensionable ages in proportion to rising life expectancy, while essential, is not a sufficient response to the demographic challenge.

v) Analysis of pension systems and pension reforms in other countries suggests two major ideas of potential relevance to the UK.

- The potential to reduce costs via a system of nationally administered individual accounts.

- The potential to apply automatic enrolment to pension saving schemes nationally as well as at individual employer level.

2. Objectives and key elements of reform

Given these conclusions we believe that major reform of the UK pension system is needed to create a new settlement for the 21st century. This settlement needs to:

- Deal with the major gaps which exist in the current state system for people with interrupted careers and caring responsibilities;

- Overcome the barriers of inertia and high cost which deter voluntary private pension provision;
Figure Ex.1 Impact of the 1940s-1960s baby boom on the old-age dependency ratio

Source: Pensions Commission analysis based on a synthetic model of the England and Wales population.
Maintain employer involvement in good quality pension provision;

Prevent the spread of means-testing which would occur if present indexation arrangements continued indefinitely;

Be sustainable in the face of rising longevity and of uncertainty over how fast that rise is occurring;

Be less complex and more understandable;

But maintain the improvements in the relative standard of living of the poorest pensioners which the present means-tested approach has achieved.

And entail a transition from current arrangements which is acceptable in terms of cost, distributional impact, and administrative complexity.

To achieve these objectives we recommend two key elements of reform:

The creation of a low cost, national funded pension savings scheme into which individuals will be automatically enrolled, but with the right to opt-out, with a modest level of compulsory matching employer contributions, and delivering the opportunity to save for a pension at a low Annual Management Charge.

Reforms to make the state system less means-tested and closer to universal than it would be if current indexation arrangements were continued indefinitely. In order to achieve this while maintaining the standard of living of the poorest pensioners it will need to be more generous on average. In the long-term this implies some mix of both an increase in taxes devoted to pensions expenditure and an increase in State Pension Ages.

We describe below the key features of these two elements, and the structure of the overall pension system we are therefore proposing. We then set out other supporting recommendations.
3. A National Pension Savings Scheme: auto-enrolment and cost-efficiency

Reforms of the state pension system (discussed in Section 4 of this Summary) to make it more understandable and less means-tested would improve the effectiveness of voluntary private pension savings. But we are not convinced by the argument that state pension reform can be sufficient in itself to remove barriers to adequate private pension provision.

Compelling all people to aim for "adequate" replacement rates would however fail to allow for the diversity of individual preferences (for instance between saving and working later) and circumstances (for instance the extent of home ownership).

We therefore recommend the creation of a National Pension Savings Scheme (NPSS) applying the principle of automatic enrolment at the national level. We have analysed the options for the operation of this scheme in sufficient depth to be confident that it can be successfully implemented, but the details of its design will need to be decided in the light of further work and consultation. Key objectives which the scheme must achieve are however:

- **Overcoming inertia and greatly increasing participation in pension savings**
  - All employees not covered by other adequate pension arrangements should be automatically enrolled into the scheme but with the right to opt-out. A modest level of matching contribution by employers should be compulsory. The self-employed should be able to participate on a voluntary but cost-effective basis.

- **Aiming for a “base load” of earnings replacement**
  - We recommend that, as a minimum, total default level contributions (arising from employer and employee contributions and from the benefit of tax relief) should be around 8% of earnings above the "Primary Threshold," (the level of income at which Income Tax and National Insurance become payable, currently £4,888). These contributions would be made up of 4% contributions from employees’ post-tax pay, 1% from tax relief/tax credit and 3% from matching compulsory employer contributions. On reasonable assumptions about rates of return and years of contribution this might secure the median earner a pension at the point of retirement of about 15% of median earnings on top of the 30% which state provision will deliver under our proposals. Many will want to secure a higher level of pension replacement. We therefore also recommend that voluntary contributions on top of the default level should be allowed, subject to a cap: for the median earner this would enable the individual and/or their employer to contribute in total about twice the default amount, accumulating a pension pot which would take them to a total combined replacement rate approaching the two-thirds that many say is their target.
Encouraging the maintenance of existing high quality pension provision
Where employers already provide more generous contributions than those defined as the default within the scheme, procedures will be required to allow them to opt-out from the national scheme and automatically to enrol employees into these alternative arrangements.

Ensuring low cost of operations
The scheme should aim to deliver to all employees and the self-employed the opportunity to save for a pension at the Annual Management Charge (e.g. 0.3% per year or less) today enjoyed only by employees of large firms, by public sector employees or by high income individuals. To achieve this, the National Pension Savings Scheme will have to:

- Use a national payment collection system, such as Pay As You Earn (PAYE) or a newly created Pension Payment System, to collect contributions in a cost-effective fashion and in a fashion which imposes minimal administrative burdens on business.

- Provide members with the option of investment in very low cost funds bulk bought from the fund management industry.

We estimate that under reasonable assumptions on participation rates, contribution rates and rates of return, the NPSS will play a significant role in offsetting the decline in private pension income which will otherwise occur, contributing an additional 0.7% of GDP to pensioner incomes by 2050, and about 1.2% by 2070. The success of the NPSS in achieving high participation and adequate contribution rates should however be kept under constant review to identify whether changes are required to achieve the objectives.

4. Reforms to the state system to underpin private saving

The objective of a state pension system which is less means-tested and fairer to women could be pursued through a number of alternative routes. The key choice to be made is between moving to a single unified state pension (referred to below as an Enhanced State Pension (ESP)), or building on the present two-tier system which combines a Basic State Pension (BSP) and the State Second Pension (S2P).

Deciding between these two routes entails a trade-off between different desirable objectives. In particular it requires a trade-off between the benefits of a radically simplified system and the implementation complexities of radical change. While our detailed analysis identifies that both approaches have advantages and disadvantages, the Pensions Commission favours the two-tier approach. The key reasons for this preference are:
A single unified state pension clearly has the huge merit of simplicity.

- But if it was introduced today at a level high enough to ensure that most present and future pensioners were free of pensions means-testing (e.g. at the £109.45 per week Guarantee Credit level) it would require an immediate and significant increase in public expenditure. Much of the benefit of this would flow to better-off pensioners who are already well provided for by historical standards. Younger workers would have to pay higher taxes to finance this at the same time as having to save more for their own retirement.

- In theory, the public expenditure costs of the “unified and immediate” option could be reduced by “offsetting” higher ESP pension rights against accrued gross State Earnings Related Pension Scheme (SERPS)/S2P rights. But our detailed analysis suggests that this introduces major transitional complexities, does not completely deal with the problems of increased cost, and creates some undesirable distributional effects.

- These problems can be limited by an approach which would slowly step-up the level of an ESP over time, for instance, reaching by about 2030 the level required to reduce significantly the role of means-testing. But this step-up approach would sacrifice the ESP’s key benefit of simplicity: and it would be difficult to create certainty around a policy which required a sequence of governments over a long time to implement step increases in the pension level. It also only moderates, rather than removing entirely, some of the adverse cost and distributional effects of an immediate move to a full ESP.

- Abolishing S2P immediately would moreover remove from the system the existing element of earnings-related compulsion at the very time that voluntary provision is in serious decline. It would be likely to speed the closure of remaining private sector DB schemes. We therefore believe that it is risky to abolish S2P before establishing and proving the success of the proposed National Pension Savings Scheme.

The alternative approach is to evolve from the system as it exists today, and to create a system with two flat-rate pensions: the existing BSP (but with its value linked to average earnings growth) and the S2P (which would become over time an entirely flat-rate addition). This gradual and evolutionary approach has three advantages:

- It greatly reduces transitional complexities.

- It allows the flexibility of moving the BSP onto a universal accrual basis, while leaving S2P as a contributory system.

- It allows the flexibility of two different pension ages, higher for the S2P than for the BSP, thus making possible a slower rate of increase in the earliest age at which some state pension can be drawn.
We recognise however that there are trade-offs involved in deciding between our recommended two-tier approach and a gradual step-up to a unified ESP. The latter would undoubtedly, after a long transition period, create a simpler system. But given the starting point, there is no way forward to a simpler, single-tier system which does not introduce more complexity en route or involve high initial costs.

Our preferred way forward would therefore build on the present two-tier system but would:

- Accelerate the evolution of the S2P to a flat-rate system by freezing in nominal cash terms the Upper Earnings Limit for S2P accruals. This would enable us to concentrate the use of constrained tax resources on the provision of as generous and non-means-tested, flat-rate provision as possible.

- Over the long-term, link the value of the BSP to earnings and freeze in real terms the maximum amount of Savings Credit payable. This would stop the spread of means-testing which would occur if present indexation arrangements were continued indefinitely. Figure Ex.2 shows the impact which we estimate that our proposals would have on the proportion of pensioners receiving different categories of means-tested benefits. [See the note below Figure Ex.3 for a description of the assumptions in the “current indexation arrangements” scenario].

- Make future accruals of BSP rights individual and universal. (By individual we mean each person accrues entitlement in their own right rather than through their spouse. By universal we mean based on residency rather than contribution records or eligibility for credits.) This will ensure that all people, including those with interrupted paid work records and caring responsibilities can be certain of a significant floor of non-means-tested state provision. In addition improve the value of carer credits within S2P.

We believe reforms such as these are required in order to create clear incentives and an understandable base on which private pension saving looking forward can build.

In addition it would be desirable to address some of the gaps and inequities which exist among today’s pensioners as a result of the past operation of the contributory system. The best way to do this in a targeted fashion and within tight medium-term public expenditure constraints would be to make the BSP universal in payment above a specific age, such as 75.
Figure Ex.2 Percentage of pensioner benefit units on Pension Credit

If current indexation approaches continue indefinitely: 2005-2050

With proposed state system reforms and introduction of the NPSS

Source: Pensions Commission analysis using Pensim2

Note: Pensioner benefit units are defined as any household with an individual aged over the State Pension Age.
5. The unavoidable long-term trade-off: public expenditure versus State Pension Age

We have proposed that earnings-related pensions should in the long-term be provided via funded private savings, rather than via a state PAYG scheme. This will focus future public expenditure on the objective of ensuring as generous and as non-means-tested a flat-rate, poverty preventing pension as possible. But despite this focus, the inevitable consequence of the state system reforms we propose, or of any alternative way forward which addresses the current system’s problems while coping with changing demography, would in the long-term be either an increase in public expenditure on state pensions as a percentage of GDP, and/or a rise in the State Pension Age (SPA).

The Pensions Commission believes that a combination of these two will be required:

- We do not believe it is possible to design a coherent state pension system for the UK without some increase in public expenditure on pensions as a percentage of GDP between now and 2050.

- But we believe that increases in the SPA will be essential to keep the increase in public expenditure within limits which are fair between generations and sustainable over the long-term.

In Figure Ex.3 we set out the Pensions Commission’s judgement on the range of possible combinations. Key features of that range are that:

- The already planned increase in the SPA for women, to equal the male age of 65 by 2020, creates flexibility for some improvements in the system over the next 15 years without a significant increase in the public expenditure burden as a percentage of GDP and without an additional increase in SPA before 2020. This is because, as Figure Ex.3 shows, expenditure as a percentage of GDP would be likely, on unchanged indexation arrangements, to fall over the next 15 years.

- If the rise in SPA after 2020 was in proportion to rising life expectancy, it would rise to about 66 in 2030 and about 67 by 2050. With this SPA a coherent and less means-tested state pension would probably cost about 8% of GDP, versus today’s expenditure of 6.2%. This would impose the costs of falling fertility on taxpayers rather than pensioners.

- If SPA rises after 2020 were more than in proportion to anticipated life expectancy, reaching 69 in 2050, the cost could be limited to 7.5%. This would impose the costs of the fall in fertility on pensioners rather than taxpayers.
Figure Ex.3 Public expenditure on state pensions and pensioner benefits: range proposed for debate

- **2010-2020:** Increase in female SPA creates scope for improvements within a flat proportion of GDP. And a significant increase is not appropriate.
- **2020-2045:** Increase is unavoidable given combined impact of rising life expectancy and delayed impact of lower fertility.
- **2045 onwards:** Fairness requires stable cost burden in the long-term achieved through further increases in SPA.

Spending on pensioner benefits as a percentage of GDP:

- 5%
- 6%
- 7%
- 8%
- 9%

Source: Pensions Commission analysis using Pensim2

Assumptions in the “current indexation arrangements” scenario

In Figure Ex. 3 we show our best estimate of future state pension and pension benefit expenditure “if current indexation arrangements continued indefinitely”. Figure Ex. 2 shows how the percentage of pensioner households on Pension Credit would grow under the same scenario. This scenario is referred to at several other points in the Report.

As the title suggests it describes what would occur if the approach to uprating key elements of the pension system followed in recent years continued unchanged. In particular it shows the result of the combination of:

- Keeping the BSP linked to prices;
- Maintaining SPA at 65;
- Raising the level of the Guarantee Credit in line with earnings; and
- Raising the lower threshold for the Savings Credit in line with the BSP (and thus in line with prices).

These were the assumptions used in the government’s published long-term expenditure forecasts to which we referred in the First Report. They are not however defined government policy for the long-term since for example the government has only made firm commitments to the Pension Credit indexation regime until 2007/08. Long-term projections of public expenditure and of the extent of means-testing are of course highly sensitive to different assumptions about these indexation regimes.
Between 2020 and 2045, the increase may have to be frontloaded, rather than a straight line. This reflects the fact, illustrated in Figure Ex.1, that the impact of the retirement of the baby boom generation is concentrated in the years before 2035.

Beyond 2045, once the one-off adjustment to a lower rate of fertility has been completed, fairness between generations suggests that public expenditure on pensions as a percentage of GDP should stay roughly constant. If life expectancy goes on rising this will require further rises of SPA in proportion with rising life expectancy, allowing each generation to enjoy the same proportion of life spent contributing to and receiving state pensions.

For the purposes of modelling the cost impact of the options considered, we have assumed that the SPA for both the BSP and the S2P will rise to 66 in 2030, 67 in 2040, and 68 in 2050. The actual policy implemented, however, could at equal cost entail the S2P pension age rising to 69 in 2050, while the BSP rises only to 67 and three months [Figure Ex.4].

Given uncertainties around future projections of life expectancy, changes in SPA required can only be indicative and need to be determined over time in the light of latest life expectancy estimates. But it will still be possible to follow a policy of significant notice (e.g. at least 15 years) of any change in SPA, and we do not believe that a rapid increase over a short period (e.g. to 70 by 2030 as was suggested in some submissions to us) is required. Changes in SPA, moreover, need to be accompanied by measures to facilitate later working, and to protect the position of lower income individuals with lower life expectancy. These are described in Section 8 of this Executive Summary.
### Figure Ex.4  State pension ages assumed in modelling of options for change

<table>
<thead>
<tr>
<th>Assumption modelled in all cases</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSP and S2P</td>
<td>65</td>
<td>66</td>
<td>67</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>Rising gradually over each decade to reach the age shown in the date indicated</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Possible equivalent option in the “two-tier” case</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSP</td>
<td>65</td>
<td>65.5</td>
<td>66.25</td>
<td>67.25</td>
</tr>
<tr>
<td>Rising gradually over each decade to reach the age shown in the date indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2P</td>
<td>65</td>
<td>67</td>
<td>68</td>
<td>69</td>
</tr>
<tr>
<td>Rising gradually over each decade to reach the age shown in the date indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Public debate is now essential over the public expenditure versus pension age trade-off. The specific proposals we make would result in the public expenditure profile shown in Figure Ex.5, which also shows our best estimate of how public expenditure would evolve on a no change scenario (i.e. no increase in SPA after 2020 and present indexation arrangements continued indefinitely). In 2050 our preferred option would not significantly increase public expenditure versus the “current indexation arrangements” scenario. But it would involve a significantly more generous and less means-tested state pension at a higher SPA.

Different proposals could suggest a different balance between retirement age increases and expenditure increases than Figure Ex.5 shows. But in the face of the UK’s changing demography we face the unavoidable choice illustrated in Figure Ex. 6.

- The future spread of means-testing could be prevented by indexing the Guarantee Credit level to less than average earnings.

- But if this is unacceptable because it would cause a decline in the relative income of the poorest pensioners.

- And if the spread of means-testing has to be limited to avoid undermining private pension saving.

- Then some combination of higher public expenditure and a higher State Pension Age in the long-term is unavoidable.
Figure Ex.5 The public expenditure versus State Pension Age trade off: state pension and pensioner benefit expenditure as a percentage of GDP

- Pensions Commission preferred option modelled with SPA increases to 68 by 2050
- Pensions Commission range for debate
- Pensions Commission estimate of spending if current indexation arrangements continue indefinitely and SPA remains at 65 after 2020

Source: Pensions Commission analysis using Pensim 2

Figure Ex.6 State pension provision: the unavoidable trade-off

- Accept decline in relative income position of poorest pensioners
- Accept increase in extent of means-testing
- Accept increase in public expenditure as a percentage of GDP
- Accept increase in State Pension Age

Pensions Commission believes undesirable

Source: Pensions Commission analysis using Pensim 2
6. The key recommendations: overall principles and possible ways forward

Detailed design features of the NPSS will need to be decided during implementation planning and in the light of consultation. The objectives of state system reform could be achieved in a number of ways. And the timing of changes to the state system will need to be decided in the light of other demands on public expenditure. But we believe that the overall structure of the pensions system which needs to be built, and the appropriate roles of individuals and of the state, are clear.

We propose that:

- Earnings-related pension provision should be funded. Individuals in the NPSS should accumulate clearly defined property rights, with accumulated funds directly linked to contribution levels. But the state should play vital roles in:
  - **Strongly encouraging** at least a minimum base load of private provision, via the automatic enrolment of individuals, with a modest level of compulsory matching by employers; and
  - **Enabling** everyone to save their own and their employer’s contributions in a highly cost-efficient fashion.

- State Pay As You Go (PAYG) pension provision should, after a transition phase, become flat-rate. The use of constrained tax/National Insurance resources should be focused on:
  - **Ensuring** that all people are kept out of poverty in retirement;
  - Making the system as non-means-tested as possible; and
  - Reducing present problems in the treatment of those with interrupted paid work records and caring responsibilities.

Figure Ex.7 illustrates how the overall system might look for the median earner with a fairly full working life, and defines the relative roles and responsibilities of the state, individuals and employers in securing adequate replacement rates.

Figure Ex.8 summarises our recommendations, distinguishing between the overall essential principles and our specific proposed way forward. It should be noted that our public expenditure forecast in Figure Ex.5 includes the first 5 measures set out under State Reform, which aim to create a sound base on which private saving can build, but not the immediate introduction of a universal BSP for all pensioners over 75. This latter policy is highly desirable, but in a different category since it addresses problems inherited from the past, rather than the system required to underpin private savings in future.
Figure Ex.7  Target pension income as a percentage of earnings for the median earner: at the point of retirement

<table>
<thead>
<tr>
<th>Pension Type</th>
<th>Pension Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Basic State Pension with 44 years of contributions/credits</td>
<td>60-66%</td>
</tr>
<tr>
<td>State Second Pension with default contributions and reasonable return assumptions</td>
<td>15-18%</td>
</tr>
<tr>
<td>NPSS pension with default contributions and reasonable return assumptions</td>
<td>15-18%</td>
</tr>
<tr>
<td>Impact of possible voluntary contributions to NPSS</td>
<td>15-18%</td>
</tr>
<tr>
<td>Total</td>
<td>15-18%</td>
</tr>
</tbody>
</table>

The role of the state

- **Ensures** minimum income level via compulsory system
- **Strongly encourages** a baseload of earnings replacement through auto-enrolment and a modest compulsory matching employer contribution, and enables saving at low cost
- **Enables** additional saving at low cost
- **Facilitates** purely voluntary pension saving via tax relief

Source: Pensions Commission analysis

Note: The range of 15-18% shown for the impact of default contributions reflects a range of assumptions about number of years of contribution between 25 and SPA.
1. Creation of a National Pension Savings Scheme

The objectives in principle:

- Strongly encourage individuals (and their employers) to provide for a pension which will deliver at least a minimum base load of earnings-replacement.
- Enable all people to have the opportunity to save for a pension at low cost.

Recommended way forward:

1. All employees to be automatically enrolled into funded pension saving but with the right to opt-out, and with a modest compulsory matching employer contribution, into either:
   - High quality employer pension schemes; or
   - A newly created National Pension Savings Scheme.

2. Minimum default contributions set at about 8% of the earnings above the Primary Threshold and below the Upper Earnings Limit:
   - 4% out of individual post-tax earnings;
   - 1% paid for by tax relief; and
   - 3% compulsory matching employer contribution.

3. Contributions collected via PAYE or newly created Pension Payment System.

4. Contributions held in individual accounts and invested at the individual's instructions in a range of funds, including some bulk bought from the wholesale fund management industry, with a default fund for those who make no selection.

5. Additional voluntary contributions above the default level by both employees and employers encouraged; and the self-employed allowed to enter the NPSS on a voluntary basis.

6. Target Annual Management Charge of 0.3% or below.
2. Reforms to the state system to underpin private saving

The objectives in principle:

- Focus constrained tax/NI resources on ensuring as generous and non-means-tested, flat-rate state pension provision as possible (given the creation of an effective NPSS approach to earnings-related provision).
- Improve the treatment of people with interrupted paid work records and caring responsibilities.
- Facing the reality of the long-term public expenditure versus State Pension Age trade-off.

Options and issues:

There is a variety of options to achieve these objectives and difficult issues of timing and affordability which now need to be debated, but the Commission’s preferred way forward is set out below.

Preferred way forward:

1. Build on the current two-tier system and recent reforms, accelerating the evolution of S2P to a flat-rate pension by freezing the Upper Earnings Limit for S2P accruals in nominal terms.

2. Index the BSP to average earnings growth over the long-term: ideally starting in 2010 or 2011 as the public expenditure benefit of the rise in women’s SPA begins to flow through ... making this indexation affordable long-term by raising the SPA gradually, broadly in proportion to the increase in life expectancy, for instance to 66 by 2030, 67 by 2040 and 68 by 2050.

3. Maintain the reductions in pensioner poverty achieved by Pension Credit, but limit the spread of means-testing by freezing the maximum level of Savings Credit payments in real terms (which implies that the lower Savings Credit threshold increases faster than in line with average earnings).

4. Base future accruals to the BSP on an individual and universal (i.e. residency) basis, and improve carer credits within S2P.

5. Accept the consequence that public expenditure on state pensions and pensioner benefits must rise from 6.2% of GDP today to between 7.5% and 8.0% by 2045 (depending where SPA reaches in 2050).

6. Ideally introduce a universal BSP for pensioners aged over 75.
7. Implications of reform for women and carers

The Pensions Commission has been explicitly asked by government to recommend how pension system reform can help address the problems which people with interrupted paid work records and caring responsibilities (in particular women) have faced in the past and still face to a degree today.

We have developed recommendations that are consistent with the principle laid out in our First Report, that all people, men and women alike, should build up pension entitlements in their own right. Several of our proposals will be particularly beneficial for women and carers.

Specifically:

- The NPSS will provide to low and middle earners the opportunity to save at the low costs currently only available to those with higher incomes or working for large private companies or the public sector.

- And the proposed state system reform will be particularly beneficial to lower paid people and carers in three respects:
  - Indexing the BSP over the long-term, thus halting its decline in value relative to average earnings.
  - Making future accruals of BSP rights on a universal (residence before retirement) basis.
  - Improving the system of credits for the S2P for those with caring responsibilities.

Together these reforms will reduce what would otherwise be the growing dependence on means-tested benefits paid on a household basis, rather than pensions based on individual entitlements. They will increase the ability of people to accrue full state pensions through caring responsibilities rather than paid work.

In addition we suggest that in the shorter-term, the most appropriate solution to inherited problems, and in particular to the limited past ability of some people, particularly women, to build up full state pension rights, would be automatically to pay the full amount of the BSP beyond a specific age, for instance 75, using the residence principle already established through "Category D" rights to the BSP.
8. Facilitating later working and protecting the position of lower socio-economic groups

We have set out two equally unpalatable, but in our view unavoidable, propositions:

- That achieving a coherent state pension system will require, beyond 2020, some increase in public expenditure on pensions as a percentage of GDP; and

- That it will require some rise in State Pension Ages beyond 2020.

The policy of raising State Pension Ages needs to be accompanied by:

- Measures to facilitate later working; and

- Measures to ensure that lower socio-economic groups, with lower life expectancy, are not disproportionately disadvantaged.

(i) Measures to facilitate later working

As pensionable ages increase and as the Guarantee Credit age increases from 60 to 65 between 2010 and 2020, it is vital that jobs are available for those who wish to work longer, both up to pensionable ages and, if they want, beyond. It is also essential that the options available to people are as flexible as possible (e.g. a gradual step-down from full-time work to part-time work to full retirement). Achieving these objectives is a major challenge: government policies to facilitate their achievement are a high priority.

Key policy levers to help achieve this include:

- Age discrimination legislation
  
  This comes into force in October 2006, but with a default retirement age of 65, beyond which it will remain possible to dismiss people for age-related reasons. We recommend that there should be no age limit. We also recommend that the government, in its own employment practices in the public sector, should define and pursue best practice in non-discrimination against older workers.

- Ensuring good financial incentives for later retirement
  
  It is already possible to defer both the BSP and the S2P, receiving a higher pension at a later age or from April 2006 a tax free lump sum. But very few people know this, and at present the choice is inflexible: take the whole value of your BSP and S2P entitlement, or defer the whole pension. We recommend that there should be options to defer part of the pension while receiving part, and that a major publicity campaign should be launched to spread awareness of these options.
Considering financial incentives for employers to hire post-SPA workers
At present employees working beyond SPA pay no employees’ National Insurance (NI) contributions: but employers’ NI is still due even though no further rights to state pensions can be accrued. We recommend that government consider whether a reduced rate of employers’ NI, on earnings up to a maximum ceiling, should be applied post-SPA.

A strong policy focus on occupational health
People’s ability to work at older ages, and to enjoy work, is heavily influenced by their health, which in turn is strongly determined by their own lifestyle choices but also by occupational health factors earlier in life (such as the ergonomic design of workplaces and levels of stress). The government should help define and encourage best practice, both through its own role as public employer and in collaboration with business.

A strong focus on the education and training of older workers
At present training expenditure is skewed towards younger workers. Government should ensure that all public programmes which support or encourage training are not age specific, and should work collaboratively with business to encourage best practice in the training of older workers.

(ii) Measures to protect lower life expectancy groups
Latest figures suggest that all socio-economic groups are enjoying life expectancy increases: but they also show a significant gap between socio-economic classes, and that gap is not narrowing. Increases in pension age may therefore affect lower socio-economic groups disproportionately.

The key response should be a strong focus in health service and occupational health policies on measures to reduce the gaps. The long-term aim must be to narrow health inequalities, rather than treating health inequalities as a permanent barrier.

But unless and until those policies are successful, the evolving policy for State Pension Ages should reflect the latest emerging evidence on life expectancies by socio-economic class. Two flexibilities can be exploited:

The Guarantee Credit could be made available at an earlier age than the BSP. At present the Guarantee Credit is available at 60, but this will rise in line with the SPA for women to reach 65 in 2020. Thereafter however it could remain at 65 even if the SPA was raised. This would have the disadvantage of making some people dependent on means-tested benefits until they reached the SPA. But it will enable people with poor health and low life expectancy to leave the workforce earlier than others, while having only a very small effect on savings and work incentives for the vast majority of people, given the other reforms we suggest.
It would be possible to set different pension ages for the BSP and the S2P with the BSP age rising more slowly. Thus while, as Figure Ex.4 showed, we have used for modelling purposes the assumption that both pensionable ages reach 68 in 2050, an alternative equal cost approach would be that pension age for S2P reaches 69 by that time, while the pension age for BSP rose only to 67 years and three months. People with low life expectancy would thus be able to receive at least a basic level of state pension earlier than if one age had to be applied to both pensions.

9. Related issues: tax relief and the contracted-out rebate

(i) Tax relief

Saving via a pension attracts significant tax advantages, not only relative to saving in fully taxed vehicles, but also relative to other tax-advantaged routes, such as ISAs. Most people achieve significantly higher rates of return if they make employee contributions into pension policies rather than save via other mechanisms; and the advantage is greater still if their employer makes a contribution on their behalf, even if cash wages are reduced to keep total cost to the employer constant. HM Revenue and Customs estimate that the total cost of tax relief was about £12.3 billion in 2004/05. In addition employers’ NI relief on pension contributions cost about £6.8 billion in 2004/05.

At present however, the benefits of pension tax and NI relief are poorly focused and poorly understood. Over half the benefits flow to higher-rate taxpayers, among whom the problems of pension under-saving are least important. Most people have limited understanding of the scale of tax relief benefits, and on average they under-estimate them. And for some low earners, the benefits of tax relief are offset by the impact of means-testing.

Not surprisingly therefore the Pensions Commission received several submissions which argued for a reform of the tax relief system. Many suggested that the rate of tax relief on contributions should be equalised (with higher-rate taxpayers receiving less, and basic or lower-rate taxpayers receiving more). Some also suggested that tax relief should be recast as a government up-front matching contribution.

Our analysis has suggested however that it is extremely difficult to apply such approaches on an across the board and fair basis in an environment where a large element of Defined Benefit (DB) provision remains within the overall system. This is because of the difficulties of calculating each year, and for all DB members, the value of new pension rights accrued. We do not therefore recommend a major reform to the overall system of tax relief in the near future, particularly given the major changes already planned for implementation in April 2006, which have entailed significant implementation complexity.
We do however recommend that the option of creating a scheme specific tax relief regime for the National Pension Savings Scheme, based on a single rate of tax relief and a matching up-front contribution approach, should be considered in detail. And we believe that, whether or not a scheme specific regime is created, the tax treatment of NPSS contributions should mirror the attractive features which currently apply to saving via a Stakeholder Pension, i.e. the fact that starting-rate and non-taxpayers, many of whom will be part-time employees, can receive tax relief at the basic rate.

The launch of the NPSS should also be treated as an opportunity to raise awareness, among both individuals and employers, of the significant advantages of saving via pension contributions, and of the fact that these advantages will, for most people, not be offset by means-testing if our state system proposals are accepted.

(ii) Contracting-out rebate

Our preferred option for reform of the state system has implications for the contracted-out rebate. Since we recommend building on the existing two-tier BSP and S2P system, rebates will continue to be paid to employers and employees contracted-out of the S2P. But since we recommend freezing the Upper Earnings Limit for S2P accruals the importance of these rebates will decline over time. We believe this gradual disappearance of the contracted-out/contracted-in system is the most appropriate policy since:

- The contracted-out/contracting-in choice has added complexity to the UK pension system and is poorly understood. Its application to personal pensions helped generate the pension mis-selling problems of the 1990s. And it requires the government to set a “fair” level of rebate: this is likely to turn out in retrospect to be either too high, in which case government has spent money unnecessarily, or too low, in which case people would have been better to stay contracted-in. It is not a feature of the pension system which we would recommend now if it did not already exist.

- But we believe that its immediate abolition would accelerate still further the decline of employer DB pension provision.

- And the Pensions Commission does not believe it prudent to argue that abolition of contracted-out rebates can provide resources to offset the costs of an immediate increase in state pension generosity. Such a policy would reduce national savings by reducing the pre-funding of pensions at precisely the time when demographic change makes some increase in the national savings rate desirable.
We therefore recommend phase-out and simplification of the contracting-out rules rather than immediate abolition.

- For Defined Contribution (DC) occupational schemes (where contracting-in already dominates) and for personal pension schemes (where many industry experts are already advising customers to contract-in), we recommend that the contracting-out option be removed, with all people not in DB schemes becoming members of the S2P.

- For DB schemes, we recommend the continuation of the contracting-out option for the foreseeable future. But we propose that this option be abolished by at the latest about 2030, the date around which, under our proposals, accruals to the S2P become entirely flat-rate.

Additional government cash flow generated from these changes should be used to increase government’s contribution to national saving: this requires either the pay down of debt, the diversion of the money into a national “buffer fund”, or its use to promote individual funded savings (e.g. by measures to ensure the success of the NPSS).1

10. Securing long-term sustainability and consensus

The effectiveness of the UK’s present pension system, both state and private, is undermined by low levels of understanding and trust. Many people do not understand what the state pension system will deliver: many do not believe that the present state promise will be maintained and many do not trust the financial services industry to sell good value products.

These problems have arisen because of:

- Multiple past changes to the state pensions system, in particular to SERPS/S2P, which aimed to reduce the generosity of future promises but in a non-transparent fashion.

---

1 In all of our analysis, we have used the GAD’s central estimate for the level of contracting-out in future. This implies a gradual decline. Our approach ensures all costs presented for different policy scenarios are on a consistent basis. If contracting-out were abolished for some or all pensions (as we suggest in Chapter 5), this would increase government revenue in the short run and expenditure in the long run with a net present value of zero.
The failure to explain openly the challenges and implications of changing demography. Since 1981 the UK’s BSP has been and is still being adjusted to make it affordable in the face of a rising dependency ratio. The “effective” state pension age for the BSP (i.e. the age at which a BSP at an unchanged value relative to earnings can be claimed) is in a sense being increased rapidly; but this increase is being achieved through the indirect and ill-understood mechanism of price indexation, not by the open and direct route of a commitment to increase pension ages [Figure Ex.9]. People intuitively grasp that the state is going to do less for them, but neither understand nor trust the precise plan.

The mis-selling scandals of the 1990s, which in return reflected a misguided attempt to extend personal pensions to segments of the market where the economics only appeared to work in periods of exceptional capital return. This attempt has drawn the government into a series of attempts to influence the cost and integrity of selling via increased regulation, but at the cost of further complexity.

It is therefore essential that the new pension settlement is based on an appropriate division of roles, is communicated clearly to people, and that once implemented it is maintained reasonably stable over time.

We believe that our recommendations create a better basis for potential stability since:

- They clearly define the different appropriate roles of the state and of individuals.
  - The state should: i) **Ensure** that all people are kept out poverty in retirement; ii) **Encourage** people to achieve at least a base load of earnings-related pension provision; iii) **Enable** all people to save for a pension at low cost.
  - But individuals should have significant flexibility to make their own trade-offs between retirement age, savings rate, and level of income in retirement, in the light of their diverse preferences and circumstances.

- They deal explicitly with the challenges of increased life expectancy and as a result make possible an understandable state promise: a BSP which is stable in earnings terms but paid at an age which will rise over time with life expectancy.

- They free the state, after establishing and proving the success of the NPSS, from involvement in PAYG earnings-related pensions, thus reducing the risk that unanticipated changes in life expectancy will require ad-hoc changes to policy in order to control public expenditure.

- They provide a low-cost saving option through the NPSS rather than through more regulation of selling processes and prices.
Figure Ex.9  Effective state pension age for the BSP: given price-indexation and formal SPA remaining at 65. Value of pension receivable at different ages in current earnings terms

<table>
<thead>
<tr>
<th>Age of first claim</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>82</td>
<td>74</td>
<td>67</td>
<td>61</td>
<td>55</td>
<td>50</td>
<td>45</td>
<td>40</td>
<td>37</td>
<td>33</td>
</tr>
<tr>
<td>66</td>
<td>91</td>
<td>82</td>
<td>74</td>
<td>67</td>
<td>60</td>
<td>55</td>
<td>49</td>
<td>45</td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>67</td>
<td>99</td>
<td>90</td>
<td>81</td>
<td>73</td>
<td>66</td>
<td>60</td>
<td>54</td>
<td>49</td>
<td>44</td>
<td>40</td>
</tr>
<tr>
<td>68</td>
<td>108</td>
<td>97</td>
<td>88</td>
<td>80</td>
<td>72</td>
<td>65</td>
<td>59</td>
<td>53</td>
<td>48</td>
<td>43</td>
</tr>
<tr>
<td>69</td>
<td>116</td>
<td>105</td>
<td>95</td>
<td>86</td>
<td>78</td>
<td>70</td>
<td>63</td>
<td>57</td>
<td>52</td>
<td>47</td>
</tr>
<tr>
<td>70</td>
<td>125</td>
<td>113</td>
<td>102</td>
<td>92</td>
<td>83</td>
<td>75</td>
<td>68</td>
<td>61</td>
<td>56</td>
<td>50</td>
</tr>
<tr>
<td>71</td>
<td>133</td>
<td>120</td>
<td>109</td>
<td>98</td>
<td>89</td>
<td>80</td>
<td>73</td>
<td>66</td>
<td>59</td>
<td>54</td>
</tr>
<tr>
<td>72</td>
<td>142</td>
<td>128</td>
<td>116</td>
<td>105</td>
<td>95</td>
<td>86</td>
<td>77</td>
<td>70</td>
<td>63</td>
<td>57</td>
</tr>
<tr>
<td>73</td>
<td>150</td>
<td>136</td>
<td>123</td>
<td>111</td>
<td>100</td>
<td>91</td>
<td>82</td>
<td>74</td>
<td>67</td>
<td>61</td>
</tr>
<tr>
<td>74</td>
<td>159</td>
<td>144</td>
<td>130</td>
<td>117</td>
<td>106</td>
<td>96</td>
<td>87</td>
<td>78</td>
<td>71</td>
<td>64</td>
</tr>
<tr>
<td>75</td>
<td>167</td>
<td>151</td>
<td>137</td>
<td>124</td>
<td>112</td>
<td>101</td>
<td>91</td>
<td>83</td>
<td>75</td>
<td>67</td>
</tr>
<tr>
<td>76</td>
<td>176</td>
<td>159</td>
<td>144</td>
<td>130</td>
<td>117</td>
<td>106</td>
<td>96</td>
<td>87</td>
<td>78</td>
<td>71</td>
</tr>
<tr>
<td>77</td>
<td>184</td>
<td>167</td>
<td>151</td>
<td>136</td>
<td>123</td>
<td>111</td>
<td>101</td>
<td>91</td>
<td>82</td>
<td>74</td>
</tr>
<tr>
<td>78</td>
<td>193</td>
<td>174</td>
<td>158</td>
<td>143</td>
<td>129</td>
<td>116</td>
<td>105</td>
<td>95</td>
<td>86</td>
<td>78</td>
</tr>
<tr>
<td>79</td>
<td>202</td>
<td>182</td>
<td>165</td>
<td>149</td>
<td>135</td>
<td>122</td>
<td>110</td>
<td>99</td>
<td>90</td>
<td>81</td>
</tr>
<tr>
<td>80</td>
<td>210</td>
<td>190</td>
<td>172</td>
<td>155</td>
<td>140</td>
<td>127</td>
<td>115</td>
<td>104</td>
<td>94</td>
<td>85</td>
</tr>
<tr>
<td>81</td>
<td>219</td>
<td>198</td>
<td>179</td>
<td>161</td>
<td>146</td>
<td>132</td>
<td>119</td>
<td>108</td>
<td>97</td>
<td>88</td>
</tr>
<tr>
<td>82</td>
<td>227</td>
<td>205</td>
<td>186</td>
<td>168</td>
<td>152</td>
<td>137</td>
<td>124</td>
<td>112</td>
<td>101</td>
<td>91</td>
</tr>
<tr>
<td>83</td>
<td>236</td>
<td>213</td>
<td>193</td>
<td>174</td>
<td>157</td>
<td>142</td>
<td>129</td>
<td>116</td>
<td>105</td>
<td>95</td>
</tr>
<tr>
<td>84</td>
<td>244</td>
<td>221</td>
<td>200</td>
<td>180</td>
<td>163</td>
<td>147</td>
<td>133</td>
<td>120</td>
<td>109</td>
<td>98</td>
</tr>
<tr>
<td>85</td>
<td>253</td>
<td>228</td>
<td>206</td>
<td>187</td>
<td>169</td>
<td>153</td>
<td>138</td>
<td>125</td>
<td>113</td>
<td>102</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis

Note: Under the present deferral option, pensioners can delay their claim and receive a pension 10.4% higher for each year of delay. The table illustrates the age to which the pension has to be deferred to receive a pension at retirement with the same value as today relative to average earnings.
But while these recommendations provide a potential basis for stability, actually achieving stability over time will also require:

- Full and open debate, in response to this report, about the unavoidable trade-off between increased public expenditure and increased State Pension Age.

- And ideally agreement on two underlying principles:
  - The need for an increase in state pension expenditure as a percentage of GDP between 2020 and 2045.
  - The need, after that gradual but one-off increase, to achieve long-term stability in pension expenditure as a percentage of GDP, secured by the principle of pension ages rising proportionately with life expectancy.

Even agreement on these principles, however, will not remove the need for difficult future decisions about the precise trade-off between state pension generosity, public expenditure and State Pension Age.

Those decisions are likely to be made more effectively if public debate is informed by independent authoritative analysis of the latest demographic and economic facts and latest trends in pension provision, spelling out the unavoidable trade-offs required.

We therefore recommend that a successor body to the Pensions Commission should be established, charged with presenting to Parliament and government every four years a report which spells out the facts and choices required.
11. The timing of reform: challenges and trade-offs; but a new settlement needed soon

The process of debating our recommendations, agreeing a precise way forward, and implementing change will inevitably take some time. We believe that it will be difficult to get the National Pension Savings Scheme fully up and running before about 2010. And there is a trade-off to be struck in deciding the date from which our proposed reforms to the state system should commence. Early implementation would be more costly at a time when public expenditure constraints are tight; later implementation makes it more important that private savings increase to compensate but, by delaying the date from which the spread of means-testing can be halted, may make that increase less likely.

The precise appropriate timing of change can therefore be debated. But it is essential that action is taken as soon as possible. On average, current pensioners are as well provided relative to average earnings as any previous generation, and many will continue to be well provided over the next 15 years. There is therefore no general and immediate crisis. But current trends in voluntary private pension provision, and in state pension provision if current indexation arrangements are continued indefinitely, will result in major and increasing problems after about 2020. To fix these long-term problems requires action now. State pensions paid in 2030 and 2040 will depend on accrual rules now in place. And the private pension income available at that time will depend on the savings behaviour of people now in work, which in turn is influenced by the incentives and the costs which they currently face and by employer engagement in pension provision, which is currently in decline.

The fact that there is not a current crisis for today’s average pensioner, or for many of those approaching retirement, should not therefore be taken as justifying a “muddle through” approach. The problems in our pension system will grow increasingly worse unless a new pensions settlement for the 21st century is now debated, agreed, and put in place.
12. Summary of additional recommendations

The Pensions Commission’s core recommendations are set out in Figure Ex.8, which distinguishes between the essential objectives which reform must pursue, and our recommended or preferred way forward. We set out below additional recommendations, again distinguishing definitive recommendations from those where further analysis and consultation is appropriate before deciding the way forward.

1. Detailed arrangements relating to the NPSS

The precise working arrangements of the NPSS should be decided in the light of further analysis and consultation, but our current judgement is that the arrangements shown in Figure Ex.10 are likely to be appropriate.

2. Tax Relief

- We do not recommend any major changes to the system of pension tax relief over the short to medium-term, but recommend that the option of creating a scheme specific tax regime for the NPSS, with tax relief expressed as a “government matching contribution” of equal percentage value to all members, should be explored further.

- The launch of the NPSS should be accompanied by a communication campaign to remind employees and employers of the major tax and National Insurance advantages which are enjoyed when employees are remunerated via employer pension contributions rather than cash wages.

3. Contracted-out rebate

- We recommend that contracting-out should be phased-out gradually:
  - For Defined Benefit Schemes, the contracted-out option should be maintained, but phased out, at the latest, by about 2030 (the date at which, under our proposals, accruals to S2P will become entirely flat-rate).
  - The contracted-out rebate system for Defined Contribution pensions (occupational or personal) should be abolished, with all employees not covered by Defined Benefit Schemes becoming members of the State Second Pension for future accrual.
– The improved government cash flow resulting from the abolition of the rebate for DC schemes should not be used to fund current expenditure, but for measures that directly or indirectly increase national savings (e.g. for instance improvements to the tax regime within the NPSS, or measures to mitigate the cost of NPSS employer contributions for very small businesses.)

4. Easing capacity strains in the annuity market

We recommend that:

– The ages of first possible and last possible annuitisation should rise over time in line with life expectancy.

– Government should consider where there is a case for a cash limit to the amount which individuals are required to annuitise at any age (with the benefits of tax relief recovered via the appropriate tax treatment of withdrawals during life or of balances remaining at time of death).

– Government should investigate whether there are changes to regulation or tax treatment which can encourage the development of a wider market for drawdown products.

– The government should not be an issuer of longevity bonds on a significant scale. However, if but only if it exits from other inappropriate forms of longevity risk absorption via appropriate changes in pension ages in the state and public employee systems, government should consider the issue of longevity bonds which absorb (at an appropriate price) the risks relating to uncertain future mortality rates among very old people (e.g. over 90 year olds).

– In its debt issuance strategy, government should ensure that there are no artificial constraints on the supply of long-dated and index-linked gilts.
5. The self-employed

- See Figure Ex.10 for recommendation relating to the NPSS.

- In addition we recommend that government investigates the option of allowing the self-employed to join S2P on a voluntary basis, paying age-related contributions on a fair basis.

6. Measures to facilitate later working and flexible retirement

We recommend that:

- There should be no default retirement age beyond which the provisions of the Age Discrimination legislation do not apply.

- The government should consider the option, post 2020, of having a two-tier pension age, higher for the State Second Pension and lower for the BSP.

- The government should more actively publicise the already existing option for people to defer taking the state pensions (both BSP and S2P), receiving a higher pension at a later age, and should increase the flexibility of this option, making it possible for people to take a proportion of the state pensions while deferring receipt of the rest.

- The issue of the appropriate age at which the Guarantee Credit becomes available should be kept under review after its rise to 65 by 2020. The government should consider whether the Guarantee Credit should remain available at 65 even when the SPA rises.

- Government should consider whether there is a case for eliminating or reducing employer’s NI contributions for earnings of people aged above the SPA, subject to a maximum absolute reduction.

- Government should review all public policies relating to training and ensure that they are not biased by age.

- Government should ensure that its employment practices within the public sector set a best practice standard in the training of older workers, and in occupational health.

- The planned development of a Health, Work and Well-being Strategy (jointly by the Department of Health and the Department for Work and Pensions) should include a focus on defining the best practices in middle aged and older worker’s occupational health which will tend to facilitate active labour market participation up to, and if people wish, beyond the SPA.
7. Ensuring an informed debate over the long-term

We recommend that government should establish a successor body to the Pensions Commission charged with presenting every 3-4 years a report which sets out:

(i) Latest trends in life expectancy and implications for the long-term public expenditure/State Pension Age trade-off.

(ii) Latest trends in private pension saving, and in particular evaluation of the success of the NPSS in stimulating increased participation in pension saving.

(iii) Latest trend in average retirement ages and in differences in life expectancy by socio-economic class, and latest information on whether ageing is being associated with increased health at specific ages; implications for polices required to support working later and flexible retirement.

Recommendations relating specifically to improvements in the data available to analyse these issues are summarised in the Annex at the end of the Report.
Figure Ex. 10  Implementation details relating to the National Pension Savings Scheme

Chapter 10 discusses the detailed implementation issues which need to be resolved before establishing the NPSS. These issues should be the subject of further analysis and consultation before final decisions are made. We set out here, however, our preliminary judgements on the appropriate approach.

<table>
<thead>
<tr>
<th>Section</th>
<th>Issue</th>
<th>Preliminary recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution rates and</td>
<td>Minimum default</td>
<td>Combined (employer and employee) default contribution rate of 8% gross earnings between the Primary Threshold and Upper Earnings Limit. Minimum compulsory employer contribution of 3% (if individuals stay enrolled).</td>
</tr>
<tr>
<td>covered earnings</td>
<td>contribution rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Entry age</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Cap on contributions</td>
<td>Cash limit of twice the default contribution for the median earner.</td>
</tr>
<tr>
<td>Alternative pension</td>
<td>Employer opt-out</td>
<td>Employers can opt employees out of the NPSS if;</td>
</tr>
<tr>
<td>arrangements</td>
<td></td>
<td>￭ they offer a pension scheme which operates auto-enrolment</td>
</tr>
<tr>
<td>outside NPSS</td>
<td></td>
<td>￭ the employer contribution is at least the level of the compulsory match in the NPSS.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>￭ the combined employer and employee contribution (taking into account charges) is at least what it would be in the NPSS.</td>
</tr>
<tr>
<td></td>
<td>Transfers between NPSS and other pension</td>
<td>These should be allowed but perhaps subject to a maximum transfer allowed into the NPSS.</td>
</tr>
<tr>
<td>schemes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The mechanics of auto-enrolment</td>
<td>Contributions collection</td>
<td>Contributions should be collected by the employer via payroll deduction and transferred via a newly created Pensions Payment System.</td>
</tr>
<tr>
<td></td>
<td>Individual opt-out</td>
<td>In writing within a month of being auto-enrolled into NPSS. Contributions only taken from earnings after this opt-out window has ended.</td>
</tr>
<tr>
<td>Treatment of those</td>
<td>The self-employed</td>
<td>Able to join on a voluntary basis. Options to allow simple collection of contributions should be explored.</td>
</tr>
<tr>
<td>who are not employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Those not in paid work</td>
<td>Should be able to join the NPSS and receive tax relief at the basic rate.</td>
</tr>
<tr>
<td>Options for reducing the</td>
<td></td>
<td>Explore options to minimise cost of NPSS for small employers without giving exemptions. This is an appropriate use of cash flow created by the phase out of contracted-out rebates since aimed at increasing funded savings.</td>
</tr>
<tr>
<td>cost impact on small</td>
<td></td>
<td></td>
</tr>
<tr>
<td>businesses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Figure Ex.10 Continued

<table>
<thead>
<tr>
<th>Investment options</th>
<th>Number and type of funds</th>
<th>NPSS to bulk negotiate a range of 6-10 funds and to allow access to a wider range of funds.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default fund</td>
<td></td>
<td>Lifestyle smoothed fund with equity exposure at younger ages and with increasing bond allocation as individuals get closer to retirement. Separate government bond fund to provide the only fund which can be described as giving a guaranteed return.</td>
</tr>
<tr>
<td>The decumulation phase</td>
<td>Annuitisation rules</td>
<td>Should be subject to the same rules as other pension schemes.</td>
</tr>
<tr>
<td>Types of annuity</td>
<td>Individuals free to purchase level or index linked annuities, but encouraged to consider implications. Individuals free to purchase single or joint life annuities.</td>
<td></td>
</tr>
<tr>
<td>Method of annuity purchase</td>
<td>Individuals free to purchase annuity from any provider. But the NPSS could have reserve powers to bulk negotiate annuity purchases for specific groups if that would mean a better deal for individuals.</td>
<td></td>
</tr>
<tr>
<td>Treatment of fund in case of death before retirement</td>
<td>Part of the deceased person's estate.</td>
<td></td>
</tr>
<tr>
<td>Communication with members</td>
<td>Frequency of communication</td>
<td>Annual</td>
</tr>
<tr>
<td>Content of statement</td>
<td>Combined statement of state pension accrued and NPSS capital values accumulated. Indications of possible future pensions at a variety of different ages of annuitisation, given indicative assumptions on rates of return.</td>
<td></td>
</tr>
<tr>
<td>The tax regime</td>
<td>Scheme specific tax regime</td>
<td>Government should explore the feasibility of a scheme specific tax regime, with more generous up front match but no tax-free lump sum.</td>
</tr>
<tr>
<td>Tax relief for lower-rate and non-taxpayers</td>
<td>Should at least maintain the current tax relief at basic rate as seen in Stakeholder Pensions.</td>
<td></td>
</tr>
<tr>
<td>Operational costs</td>
<td>Target for Annual Management Charges</td>
<td>Desired AMC of 0.3%</td>
</tr>
<tr>
<td>Implementation timetable</td>
<td>NPSS in operation by 2010</td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td>Non-departmental public body probably most appropriate. The possibility of a role for the National Savings and Investments (NS&amp;I) organisation and brand should be considered.</td>
<td></td>
</tr>
</tbody>
</table>
Executive Summary

Key conclusions of the First Report “Pensions: Challenges and Choices”

Chapter 1: The demographic challenge and unavoidable choices

Life expectancy is increasing rapidly and will continue to do so. This is good news. But combined with a forecast low birth rate this will produce a near doubling in the percentage of the population aged 65 years and over between now and 2050, with further increase thereafter. The baby boom has delayed the effect of underlying long-term trends, but will now produce 30 years of very rapid increase in the dependency ratio. We must now make adjustments to public policy and/or individual behaviour which ideally should have been started in the last 20-30 years.

Faced with the increasing proportion of the population aged over 65, society and individuals must choose between four options. Either:

(i) pensioners will become poorer relative to the rest of society; or
(ii) taxes/National Insurance contributions devoted to pensions must rise; or
(iii) savings must rise; or
(iv) average retirement ages must rise.

But the first option (poorer pensioners) appears unattractive; and there are significant barriers to solving the problem through any one of the other three options alone. Some mix of higher taxes/National Insurance contributions, higher savings and later average retirement is required.

Chapter 2: Average retirement ages: past and possible future trends

Our response to the demographic challenge should include a rise in the average age of retirement. Healthy ageing for many people makes this possible; and an increase in employment rates among older people is now occurring. But the increase needed to make later retirement a sufficient solution alone looks very large; and significant inequalities in life expectancy and health across socio-economic groups may limit the scope for across the board increases. Increases either in taxes/National Insurance contributions and/or in private savings will therefore also be needed to meet the demographic challenge.

Chapter 3: The UK pensions system: position and trends

The UK pensions system appeared in the past to work well because one of the least generous state pension systems in the developed world was complemented by the most developed system of voluntary private funded pensions. This rosy picture always hid multiple inadequacies relating to specific groups of people, but on average the system worked, with the percentage of GDP transferred to pensioners comparable to other countries. But the state plans to provide decreasing support for many people in order to control expenditure in the face of an ageing population and the private system is not developing to offset the state's retreating role. Instead it is in significant decline.

The underlying trend in private sector employer pension contributions has been downwards since the early 1980s, and the total level of funded pension saving is significantly less than official estimates have suggested. But irrational equity markets and delayed appreciation of life expectancy increases enabled many Defined Benefit (DB) schemes to avoid necessary adjustments until the late 1990s. As the fool’s paradise has come to an end, schemes have been closed to new members, and a shift to less generous Defined Contribution (DC) schemes has followed. The underlying level of funded pension saving is falling rather than rising to meet the demographic challenge, pension right accrual is becoming still more unequal, and risk is being shifted to individuals sometimes ill-equipped to deal with it.

Chapter 4: Looking forward: pension adequacy if trends unchanged

Given present trends many people will face “inadequate” pensions in retirement, unless they have large non-pension assets or are intending to retire much later than current retirees.

Current government plans and private savings levels imply that total pension income flowing to normal age retirees will rise from today’s 9.1% of GDP to a mid-point estimate of 10.8% by 2050, and that there will be no significant shift in the balance of provision from state to private sources. This level of transfer in turn implies either poorer pensioners relative to average earnings or significantly higher average retirement ages.
The burden of adjustment will however be very unequally distributed. We estimate that at least 75% of all DC scheme members have contribution rates below the level likely to be required to provide adequate pensions. Our estimates suggest that around 9 million people may be under-saving, some by a small amount, some severely. But the significant minority of people in still open private sector DB schemes will enjoy more than adequate pensions and most public sector employees will be well provided for, as will some higher paid employees in Senior Executive schemes. The present level of pension right accrual is both deficient in total and increasingly unequal.

The implications of this for pensioner income will be more serious in 20-25 years time than in the next 10. And over that long time span many adjustments, for instance to savings rates and retirement ages, may naturally occur. A muddle-through option does therefore exist. But it is highly likely that the muddle-through option will produce outcomes both less socially equitable and less economically efficient than we could achieve with a consciously planned response to the problems we face.

Chapter 5: Non-pension savings and housing

In addition to occupational and personal pension funds worth £1,300 billion and unfunded public sector pension rights worth about £500 billion, the personal sector owns about £1,150 billion of non-pension financial assets, some of which could also provide resources for retirement income. But the ownership of these assets is very unequally distributed, and for the majority of people they can only provide a modest contribution to their standard of living in retirement.

Business assets, meanwhile, are important stores of wealth and potential sources of retirement provision, but for only a small minority of people. The fact that pension saving among the self-employed is not increasing therefore remains concerning.

Chapter 6: Barriers to a voluntarist solution

The present level of pension right accrual, private and state combined, will leave many with inadequate pensions. And there are likely to be limits to solving the problem solely via increased retirement ages. If state system plans are taken as given, a higher level of private saving is required.

There are however big barriers to the success of a voluntary pension saving system, some inherent to any pension system, some specific to the UK. Most people do not make rational decisions about long-term savings without encouragement and advice. But the cost of advice, and of regulating to ensure that it is good advice, in itself significantly reduces the return on saving, particularly for low earners. Reductions in Yield arising from providers’ charges can absorb 20-30% of an individual’s pension saving, even though they have fallen to a level where provision to lower income groups is unprofitable. This poses a fundamental question: in principle can a voluntary market for pensions work for low income, low premium customers?

But both the behavioural barriers to savings and the costs of provision have been made worse by the bewildering complexity of the UK pension system, state and private combined. This complexity reflects the impact of multiple decisions made over the last several decades, each of which appeared to make sense at the time, but the cumulative effect of which has been to create confusion and mistrust. Means-testing within the state system both increases complexity and reduces, and in some cases reverses, the incentives to save via pensions which the tax system creates. The scope of this means-testing would grow over time if current indexation approaches were continued indefinitely.

Unless new government initiatives can make a major difference to behaviours it is unlikely that the present voluntary private system combined with the present state system will solve the problem of inadequate pension savings.
### Chapter 7: Revitalised voluntarism, changes to the state system, or increased compulsion?

To achieve adequacy there are three possible ways forward:

1. a major revitalisation of the voluntary system; and/or
2. significant changes to the state system; and/or
3. an increased level of compulsory private pension saving beyond that already implicit within the UK system.

### Chapter 8: Women and pensions

Women pensioners in the UK today are significantly poorer than men. This reflects both labour market features (lower employment rates, lower average earnings, and more part-time work) and specific features of the UK’s state pension system. These state system features have in the past entailed most women gaining pension income through their husband, and reflected assumptions about family structure which have ceased to be valid. An effective pension system for the future must be one in which the vast majority of women accrue pension entitlements, both state and private, in their own right.

Some progress towards that aim is now occurring, with some labour market trends favourable to women, and some changes in the state system which benefit women. But important issues remain relating to overall equality in the workforce, to state system design, and to low levels of pension provision and take-up in some service sectors in which women’s employment is concentrated.
In our First Report, *Pensions: Challenges and Choices*, we set out our preliminary assessment of current pension provision in the UK and of trends in that provision. The findings of that Report have largely been confirmed by our further analysis over the last year. They are summarised in the panel on the previous pages but many of them are taken as read in this Chapter and in the rest of this Report.

This Chapter therefore focuses on areas of analysis where new research over the last year has led us to reinforce or amend the detail of our conclusions, while Chapters 2 and 3 identify the implications of those conclusions for appropriate policy.

Five key conclusions have emerged from our further research:

1. Current pensioner income levels are on average high by historical standards: and many people approaching retirement in the near future will have good pension provision. But there are significant gaps in the current system, and looking forward the current system of private funded pensions, combined with the current state system, will deliver increasingly inadequate and unequal results.

2. The problems are not solvable through changes to the state system alone, nor by incremental measures to encourage voluntary provision. But attitudes to further compulsion are ambivalent.

3. Savings through house purchase and inheritance of housing assets will make a significant contribution to pension adequacy for many people, but are not sufficient answers to the problems with the current pension system.

4. Long-term pension policy needs to be robust in the face of rising life expectancy and of major uncertainty about the pace of that increase. Longer working lives are an essential but not sufficient element of the response.

5. International analysis suggests two innovative approaches to the provision of earnings-related pensions from which the UK could learn:  
   (i) nationally administered but individually owned accounts; and  
   (ii) automatic enrolment applied at a national level as well as in individual employer schemes.
1. Current state and private systems will deliver increasingly inadequate and unequal results

Our First Report described the severe problems facing the UK’s pension system looking forward. But it is important to recognise that for many current pensioners and many just approaching retirement, the past system has worked well.

The assumption behind public policy has been that this success will continue. Indeed a fundamental proposition of UK pension policy, under both the present and previous government, has been that public expenditure on pensions can be contained in the face of the demographic challenge, because voluntary private pension provision will rise to fill the gap. But this is simply not occurring: public expenditure is likely, even with unchanged policies, to be higher than previously assumed, private pension provision is not growing and the combination of public and private provision will leave many people with inadequate pensions.

Current pensioner income on average at historic high

It is important to recognise that on average current pensioner income is at an historic high relative to average earnings. Since 1979, most categories of pensioner have seen real incomes rise slightly faster than society as a whole, with particularly large increases for higher income pensioners [Figures 1.1 and 1.2].

Many (but not all) pensioners just approaching retirement are also well provided for. Latest results from the English Longitudinal Study of Ageing (ELSA) analysed by the Institute for Fiscal Studies (IFS) suggest that 60% of 50-65 year olds may be on target on the basis of pension wealth alone to enjoy pensions above the ‘adequacy’ benchmarks we proposed in the First Report, many by a significant margin. The number adequately provided would rise higher still if housing wealth were converted into pension income [See Section 3 below].

These facts have major implications for pension policy in the short-term. In particular they suggest that immediate increases in public expenditure on non-means-tested benefits would in many cases flow to well-provided pensioners. They provide a rationale for dealing with some of the problems that the inherited system has left (for instance for many women with interrupted work records and caring responsibilities) in a partially means-tested fashion.
**Figure 1.1** Mean income of pensioners relative to average earnings

![Graph showing mean income of pensioners relative to average earnings from 1979 to 2003.](image)

- Single male, recently retired
- Single female, recently retired
- Single male, aged 75 or over
- Couples, recently retired
- Couples, aged 75 or over

Source: Pensioners’ Income Series 2003/04

Note: Incomes net of taxes, pension contributions and housing costs.

**Figure 1.2** Percentage change in pensioner incomes relative to average earnings: 1979-2003/04

![Bar chart showing percentage change in pensioner incomes from 1979 to 2003/04.](image)

Source: Pensioners’ Income Series 2003/04

Note: Incomes net of taxes, pension contributions and housing costs.
But they should not be the basis for any complacency about the future. Current and soon-to-be pensioners are on average the beneficiaries of three favourable effects which will not apply to future generations:

- Pensioners retiring in 2005 with fully paid-up Basic State Pension (BSP) and State Earnings-Related Pension/State Second Pension (SERPS/S2P) rights will enjoy combined state pensions far more favourable than enjoyed 30 years ago, or will be enjoyed in 30 years’ time [Figure 1.3].

- Pensioners retiring with final salary related pensions today are set to enjoy more valuable pensions than any previous generation has enjoyed. This increased value reflects longer life expectancy not offset by higher pensionable ages, and the statutory requirements for price indexation, leavers’ and spouses’ rights, imposed during the 1980s and 1990s, which did not apply in the 1970s.

But looking forward, as the impact of final salary scheme closures works through, only a very small proportion of private sector workers will enjoy pensions this valuable. Defined Benefit (DB) rights dominate the pension wealth of those approaching retirement [Figure 1.4]. On current trends (described below) this source of wealth will decline significantly.

- Finally as discussed further in Section 3 below, many of those about to retire have enjoyed a uniquely favourable opportunity to accumulate housing wealth prior to retirement.
**Figure 1.3** State pension at point of retirement assuming full contribution record for a person who has been on average full-time earnings throughout their working life: percentage of average earnings

Source: Government Actuary’s Quinquennial Review of the National Insurance Fund as at April 2000, GAD

**Figure 1.4** Mean family pension wealth in each form: by decile of total pension wealth

Source: IFS, 2005

Note: It is not possible to split the ‘past pensions’ between DB and DC, but it is likely that the split is similar to that between current DB and DC wealth.

Individuals aged between 50 and SPA.
Key aspects of current state pension provision and implications if current indexation arrangements continue indefinitely

These were described in the First Report, and they are set out in more detail in Chapter 4. The essential points are:

- At the time of our First Report, published projections showed public expenditure as a percentage of GDP rising from 6.1% in 2004 to 6.9% in 2054, a rise of only 13%, despite a 45% projected rise in the number of people aged over 65 years. This implied a 27% fall in average pensions relative to average earnings [Figure 1.5]. The Pensions Commission’s base case forecast [described later in this Chapter, see Figure 1.19] suggests a slightly higher figure for public expenditure, but the overall strategy of the government remains that state pension expenditure should not rise significantly as a percentage of GDP with the government playing a reduced role in earnings replacement for the average pension. [See Figure 4.1 for details of the Pensions Commission’s base case projection. This base case assumes that “current indexation” arrangements continue indefinitely: future government policies may differ since commitments to indexation regimes are not fixed over the long-term.]

- The Pensions Commission’s projections assume that the position of the poorest pensioners will be protected by linking the Guarantee Credit to average earnings. We believe that this policy is the most effective way to ensure that pensioner poverty does not increase, but the inevitable consequence of this, combined with reduced generosity on average, is that the system would, if other indexation rules also remained unchanged, become more means-tested. Non-means-tested pensions would therefore deliver decreasing replacement rates, but with larger means-tested top-ups for those who do not save to supplement state pensions [Figure 1.6].

- Over the long-term the system will become flat-rate, as the Upper Earnings Limit (UEL), linked to prices, falls in average earnings terms [Figure 1.7]. Compulsory earnings-related provision will slowly disappear from the system, both for those who select the contracted-in Pay As You Go (PAYG) option and for those who contract-out and make compulsory earnings-related contributions to private funded schemes.

- Given this evolution, the rapid development of private provision is essential for two reasons:

  (i) to compensate for the decline in compulsory earnings-related provision.

  (ii) to limit expenditure on means-tested benefits which people can receive if their private saving is low.
Figure 1.5 Projected state spending per pensioner indexed in constant 2003/04 price terms: 2004 projections

Source: Pensions Commission analysis of data from DWP and GAD

Figure 1.6 Gross replacement rate from the state for an employee retiring in 2005 and 2050 assuming no private saving

Source: Pensions Commission analysis

Note: Assumes individual earnings grow in line with average earnings throughout working life. Working life is from 21-65. Assumes current indexation arrangements continue indefinitely.
Voluntary pension saving is not growing

Rather than growing however, voluntary pension saving is in serious decline, and previous government initiatives to stimulate its growth have not succeeded.

- In 2003/04, 46% of those in work were not contributing to a private pension. This reflects an increase in those not contributing of around 400,000 people since 2002/03 [Figures 1.8 and 1.9]. Participation rates in schemes voluntarily provided by employers (a subset of total private provision) have also continued a slow decline [Figure 1.10].

- A primary policy initiative that focused on increasing participation, the Stakeholder Pension, while achieving some reduction in costs, has not achieved any measurable increase in participation. Eighty per cent of all employer designated Stakeholder schemes are “empty shells”: nominated schemes but with no members.

- Where employers do provide pensions, the shift away from Defined Benefit (DB) schemes has continued even more rapidly than we predicted in the First Report. There are now fewer than 2 million active members of open private sector DB schemes [Figure 1.11]. In the First Report we suggested that the number would be unlikely to stabilise above 1.6-1.8 million: a much lower figure now looks likely. It is difficult to see private sector DB provision, certainly final salary in form, playing more than a minimal role in the future UK pension system.
Figure 1.7  State pension income at retirement for an employee retiring in 2005 or 2050: assuming no private saving

Retiring in 2005

Source: Pensions Commission analysis
Note: Assumes individual earnings grow in line with average earnings throughout working life. Working life is from 21-65.

Retiring in 2050

Source: Pensions Commission analysis
Note: Assumes individual earnings grow in line with average earnings throughout working life. Working life is from 21-65. Assumes current indexation arrangement continue indefinitely.
Figure 1.8 Participation in private pension schemes: 2003-04, millions

- **Working age population**: 34.0m
  - **Retired**: 0.7m
  - **Not retired**: 25.7m
    - **Contributes to private pension**: 14.0m
    - **Doesn’t contribute to private pension**: 11.7m
    - **Partner contributes**: 0.2m
    - **Single/Partner doesn’t contribute**: 1.0m
  - **In work**: 6.4m
    - **Partner contributes**: 1.1m
    - **Single/Partner doesn’t contribute**: 5.2m
  - **Unemployed**: 1.2m
    - **Partner contributes**: 0.2m
    - **Single/Partner doesn’t contribute**: 1.0m

- **Inactive**: 7.1m

Source: FRS, 2003-04

Note: Those individuals with personal pensions that are only receiving contracted-out rebates have been counted among non-contributors since they will only accrue pension rights equivalent in value to the SERPS/S2P rights foregone (assuming that GAD calculations of appropriate rebates are fair).

As the numbers of inactive and unemployed individuals contributing to Stakeholder Pensions are small (fewer than 0.1m in FRS) they have been ignored for the purposes of this analysis.

Figures may not sum due to rounding.

Figures are for GB only. Working age is defined as all adults aged 16-59/64. Individuals aged 16-18 who are in full-time education are not included in the analysis.
Figure 1.9 Change in private pension participation: 2002-03 to 2003-04, millions

Source: FRS, 2002-03 and 2003-04

Note: Those individuals with personal pensions that are only receiving contracted-out rebates have been counted among non-contributors since they will only accrue pension rights equivalent in value to the SERPS/S2P rights foregone (assuming that GAD calculations of appropriate rebates are fair).

As the numbers of inactive and unemployed individuals contributing to Stakeholder Pensions in 2002/03 and 2003/04 are small (fewer than 0.1m in FRS) they have been ignored for the purposes of this analysis.

 Figures may not sum due to rounding.

 Figures are for GB only. Working age is defined as all adults aged 16-59/64. Individuals aged 16-18 who are in full-time education are not included in the analysis.
Figure 1.10 Trends in participation in private sector employer-sponsored pension schemes

![Graph showing trends in participation in private sector employer-sponsored pension schemes over the years 1999 to 2004. The graph indicates the percentage of participation for different income bands: < £9,500, £9,500 - £17,499, £17,500 - £24,999, £25,000 - £39,999, £40,000+. The source is Pensions Commission analysis of ASHE, GB.]

Note: Earnings bands are based on annual earnings for all employees who have been in post for 12 months or more. The definition of employer-sponsored pension participation is all individuals currently contributing to either a salary-related, money-purchase, GPP or Stakeholder Pension through their employer. Missing values for the employer-sponsored pension variable where the individual does not have a Stakeholder have been assumed to have no pension.

Figure 1.11 Active members of private sector Defined Benefit pension schemes by scheme status, millions

![Bar chart showing active members of private sector Defined Benefit pension schemes by scheme status from 1995 to 2004. The chart indicates the number of members for open and closed DB schemes. The source is Occupational pension schemes 2004, GAD.]
**Figure 1.12 Employers’ attitudes to pension provision**

<table>
<thead>
<tr>
<th>The Employer Task Force on Pensions (December 2004)</th>
<th>General employer attitudes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“...many (employers) no longer see the short and medium-term benefits” of providing a pension [p.4].</td>
</tr>
<tr>
<td></td>
<td>“…for many companies the business rationale for providing pension provision rests on being ‘average’, in other words, not standing out negatively compared with competitors for recruitment and retention reasons. And, while the benefits are not easily quantifiable, the costs are.” [p.18]</td>
</tr>
<tr>
<td></td>
<td>“…many employees don’t place the same value on pensions that they do on other benefits… Put bluntly, if employees don’t value pensions sufficiently, employers are less likely to provide them.” [p.18]</td>
</tr>
<tr>
<td>Specific smaller company attitudes:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Employees currently show little or no understanding of pensions and demonstrate little demand for them. Based on this, smaller business employers see very little incentive to provide a good pension.” [p.35]</td>
</tr>
<tr>
<td></td>
<td>“The lack of confidence (in the pensions industry) is making some employers wary of promoting pensions to their employees.” [p.20]</td>
</tr>
<tr>
<td></td>
<td>“If smaller businesses are to engage in pensions more actively, additional incentives will be required.” [p.35]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pensions Commission Small and Medium Enterprises Focus Groups</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Virtually none of the participants believed that employers had any significant responsibility for providing pensions.</td>
</tr>
<tr>
<td></td>
<td>Participants were almost unanimous in arguing that there is no significant benefit in terms of recruitment and retention from providing pensions as most employees do not perceive value in having a pension.</td>
</tr>
</tbody>
</table>

**Note:** The Employer Task Force on Pensions, chaired by Sir Peter Davis, was asked to advise the Secretary of State for Work and Pensions on the role of employers in the pensions partnership, and to recommend any steps which might make a voluntary system better. Representatives of 106 small businesses took part in the Pensions Commission’s SME focus groups, with most employing fewer than 50 staff. See Appendix D for further details.
This rapid retreat from DB provision, and slow retreat from any provision, reflects the profound shift in employer attitudes to pension provision which the Employer Task Force and the Pensions Commission’s focus groups of small and medium-sized employers have highlighted [Figure 1.12].

- Increased awareness of the risks now involved in DB schemes, and changes in the accounting rules, have led most companies to believe that the only safe form of pension provision is Defined Contribution (DC). 1 Within the DC arena moreover, there has been a shift from occupational trustee based provision to Group Personal Pension (GPP) provision, with many companies increasingly wary of playing any role other than bulk buyer and contributor.

- But an increasing number of companies also believe that they gain limited labour market advantage from paying people via pensions rather than cash wages, despite the considerable tax and National Insurance (NI) advantages. Focus groups of small companies, conducted by the Pensions Commission, reveal a strong belief that it is simply not companies’ business to provide pensions and that they gain limited benefits in the labour market from doing so, since employees do not value the benefit highly.

One favourable development of the last year is that there are some signs of an increase in average contribution rates to DC schemes [Figure 1.13]. This may not however reflect an increase within specific individual DC schemes, but rather the possibility that DC schemes of reasonable generosity are now being opened by large companies which previously provided still more generous DB schemes. This increase in contribution rates moreover does nothing for the increasing percentage of the workforce not participating in private pension provision at all.

---

1 As Chapter 2 describes, not only have companies become more aware of DB scheme risks, but those risks have been increased over the last several decades by regulations designed to make voluntary employer provision play a surrogate social security role e.g. compulsory indexation, and compulsory survivor benefits. [See also First Report Chapter 3 Annex for a more detailed description.]
**Figure 1.13** Average contribution rates to Defined Contribution schemes

Source: Occupational pension schemes 2004 GAD, UK Pension Trends Survey 2005 ACA

Note: Occupational DC contributions data based on GAD weighted average, based on the number of active members, across all schemes with 12 or more members. GPP contributions data based on ACA data for average contribution levels.
Pension provision to remain state dominated on current trends

The UK pension system will therefore, on present trends, remain dominated by state provision. The government has in the past stated an objective of shifting the balance of pension provision towards the private sector, with an aspiration that 60% of pension income should derive from private sources and only 40% from the state, compared with over 60% from the state today. This will not occur unless trends change radically. Indeed the system could well become more state dominated than at present.

- Private pension contributions increased over the last year [Figure 1.14]. But the growth is concentrated within self-administered occupational pension schemes, primarily DB schemes which are increasing contribution rates and making special contributions to cover existing deficits and promises already made to existing members, while in most cases closing the scheme to new members. With DC contribution rates typically well below DB rates, the long-term trend, as we projected last year, is likely to see a declining percentage of GDP flowing into private funded pension schemes [Figure 1.15]. In terms of income flowing to pensioners, the past growth and past funding of DB schemes together with an increase in the number of pensioners as the baby boom generation retires, will continue to drive an increase in non-state pension income as a percentage of GDP for about the next 30 years, but beyond 2035, both private DB pension income and total private pension income will fall as a percentage of GDP, though public sector employee pensions, on present plans, will continue to rise. Our best estimate drawn from a variety of sources is shown in Figure 1.16.

Figure 1.14 Components of funded pension contributions as a percentage of GDP

![Figure 1.14 Components of funded pension contributions as a percentage of GDP](chart)

- Special employer contributions to self-administered occupational schemes
- Normal employer and employee contributions to self-administered occupational schemes
- Insurance managed occupational schemes
- Personal pensions

Source: Pensions Commission analysis based on ONS, ABI and HMRC data
Figure 1.15 Possible change in pension saving as a percentage of GDP with the maturing of the DB-DC shift

<table>
<thead>
<tr>
<th>Year</th>
<th>Personal</th>
<th>Private occupational funded</th>
<th>Public funded</th>
<th>DB special contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>1.2</td>
<td>2.1</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Following DB-DC shift</td>
<td>1.2</td>
<td>1.5</td>
<td>3.1</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Source: Pensions Commission estimates

Note: Assumes membership of private sector DB schemes will ultimately fall by 60% from 2000 level, that all are replaced with DC, that current DB and DC average contribution rates are unchanged, that DB top-ups fall to zero and that other contributions are unchanged.

Figure 1.16 Private pension income as a percentage of GDP by source 2005-2050

Source: HMT, ONS and Pensions Commission analysis

Note: Pension income based on Pensions Commission estimates from the Family Resources Survey, the Blue Book and Pensim2. Includes income from annuities and lump sum payments. These figures include all pension income whether flowing to people below or above State Pension Age. Other figures (e.g. Figure 1.21) focus solely on the income of those above SPA. About 40% of non-state pension income currently flows to early retirees.
The DB to DC shift will also tend to produce a shift from contracting-out to contracting-in, improving short-term government cash flow but at the expense of higher future liabilities. The percentage of the population contracted-out of the State Second Pension (S2P) continues to decrease [Figure 1.17]. And many insurance companies and financial advisers are now advising individuals with Approved Personal Pensions (APPs), that contracting-in is the better option [Figure 1.18]. If it were not for consumer inertia and confusion it is likely that the trend to contract-in would be even stronger.

**Figure 1.17** Percentage of the population in a second tier pension: age 20-SPA

![Chart showing percentage of the population in a second tier pension from 1978/79 to 2002/03.]

- **Contracted-out**
  - Contracted-Out Salary Related scheme/
    Contracted-Out Mixed Benefit scheme
  - Contracted-Out Money Purchase scheme
  - Approved Personal Pension
- **Contracted-in**
  - Contracted-in to SERPS/S2P

Source: LLMDB, DWP

Note: S2P started in 2002/03 which enabled low earners and carers to accrue pension rights that they could not previously.
### Figure 1.18  Insurance company advice on contracting-in/contracting-out for personal pensions

<table>
<thead>
<tr>
<th>Pension provider</th>
<th>Current opinion</th>
<th>Approach to communication</th>
<th>Response rate</th>
<th>Future policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Almost all customers should be contracted-in to S2P.</td>
<td>Wrote to all contracted-out customers to say that they should only stay contracted-out if an IFA advises.</td>
<td>20% contracted back in.</td>
<td>Writing to all direct customers (i.e. not registered with an IFA) to say they will be automatically contracted-in unless return a form saying they wish to remain contracted-out.</td>
</tr>
<tr>
<td>2</td>
<td>Men over 60 and women over 54 should definitely be contracted back in. In general no clear actuarial gain from contracting-out but may be appropriate for some.</td>
<td>Wrote to all customers over the past two years encouraging review of decision – but information not advice.</td>
<td>3% of IFA customers and 17% of direct customers contracted back in.</td>
<td>Not moving to a system of automatically contracting back in, since some customers may do better contracted-out if investment growth strong.</td>
</tr>
<tr>
<td>3</td>
<td>Current rebates not large enough to compensate for risks of contracting-out.</td>
<td>Up to 2002/03: wrote to customers advising contracting back in above 'pivotal age'. 2003/04: advice on critical yield pivot points. 2004/05: Automatic contract back in for men over 60 and women over 54 unless return form to stay out. Advice to younger age groups that remaining contracted-out could result in smaller pension.</td>
<td>Up to 2003/04: less than 5% of customers contracted back in each year.</td>
<td>For 2005/06 and 2006/07 will provide strong guidance that contracting back in is appropriate for most: but will not use automatic contracting back in since pivotal ages less clear than in 2004/05.</td>
</tr>
<tr>
<td>4</td>
<td>Do not believe in providing general recommendation.</td>
<td>Have only IFA customers not direct. Wrote to all customers with a neutral covering letter.</td>
<td>Around 2% have contracted back in.</td>
<td>Will repeat letter and attach information and encourage customers to seek advice.</td>
</tr>
<tr>
<td>5</td>
<td>Many customers better off contracting back in, though for some contracting-out could remain beneficial.</td>
<td>Until 2002 advised those below pivotal age to stay contracted-out. 2003/04 wrote to all direct customers except men 51-55 to encourage contracting back in.</td>
<td>30% of direct customers per year contracting back in.</td>
<td>Considering automatically contracting back in all direct customers, unless return form to stay out. Alternative is encouragement to contract back in. IFA customers will receive a letter asking them to review options.</td>
</tr>
</tbody>
</table>

Source: Insurance company details provided to Pensions Commission

Note: “Critical yields” are calculated by the insurance industry as being the return required by a personal pension to match expected State Second Pension benefits foregone through contracting-out. The “pivotal age” is the age at which the contracting-out rebate may not be greater than the benefits from State Second Pension from contract-in.
Pensions Commission modelling meanwhile suggests that state pension expenditure, even if current indexation arrangements were continued, would be likely to rise above last year’s published projections, reaching 7.6% of GDP in 2050 rather than the 6.9% previously forecast [Figure 1.19]. This reflects new mortality assumptions, and more realistic modelling of future private pension income flows which, as Figure 1.16 shows are likely to grow for the next 30 years, but fall off thereafter. The most rapidly growing element within the total would be expenditure on the Pension Credit (and specifically on the Savings Credit element within it). If current indexation arrangements were maintained, this would grow rapidly both because the value of the BSP is falling relative to the Guarantee Credit, and in the long-term because of the projected fall in private pension income as a percentage of GDP.

Under current arrangements government expenditure on unfunded pensions for public sector employees, will grow significantly: from 1.5% to at least 2.2% of GDP in 2053/54 [Figure 1.20].

Taken together these trends imply that the percentage of pension income of pensioners aged over SPA which derives from public expenditure will increase, not decrease, over the next 45 years [Figure 1.21].

Increasing inadequacy and inequality

The likely evolution of the pension system, public and private combined, also however implies inadequate pensions for many and an increasingly unequal distribution of pension rights. Last year we estimated that 9.6 million people were on target for pensions they are likely to consider inadequate, unless either they were willing to work significantly longer than most people currently expect to, or unless they have significant other assets, such as housing, on which they could draw during retirement. But three groups of people continue to be on target for attractive pensions. These are:

- Many public sector employees, who account for about 18% of all employees but who we estimated in the First Report account for about 36% of all accrued pension rights and funds.

- Members of private sector DB schemes, who are receiving pension promises twice as valuable as those enjoyed in typical DC schemes. In companies where the scheme is closed to new members but still accruing rights for existing members, this inequality may exist between employees doing identical jobs.
Figure 1.19 Public expenditure on pensioners as a percentage of GDP 2005-2050: Pensions Commission base case projections

Figure 1.20 Forecast public expenditure on unfunded public sector employee pensions under unchanged plans as a percentage of GDP

Source: Long-term public finance report, December 2004
Note: The published figures are given at 10 year intervals; it has been assumed that there are no fluctuations between these points.
And high income members of “top hat” DC schemes which pay far higher contribution rates than members of ordinary schemes enjoy.

In addition, as Chapter 4 will illustrate, the lowest earners would be protected from any pension income erosion if current indexation arrangements continued. Indeed for low earners who do not save privately, if present indexation arrangements were continued indefinitely, replacement rates delivered by total state benefits would increase over time. The losers conversely will be concentrated among people of average and low (but not very low) earnings working for small and medium companies that typically do not provide employer contributions, and among the self-employed.

2. Changes to state system and incremental measures to encourage voluntary provision insufficient to fix problems: but attitudes to compulsion ambivalent

Changes to the state pension system, and to plans for its future evolution, will be essential to provide a sound base for private pension saving, but even significant state system change would not be sufficient to solve the problems, since there are inherent barriers to an effective voluntarist solution. But compulsion also would have disadvantages, and attitudes towards it are ambivalent.
Figure 1.21 The implications of current indexation arrangements and savings behaviour for the percentage of GDP transferred to pensioners: Pensions Commission base case projections

Present transfer to pensioners aged over SPA, 2005:
- 6.2
- 0.9
- 2.3
- 9.4

Transfer to over 65 year old pensioners in 2050 with current state indexation arrangements and private savings behaviour:
- If same percentage of funded pension income flows to normal retirement age pensioners as it does today:
  - 7.6
  - 1.3
  - 2.1
  - 2.6
  - 11.0-11.5
- If all funded pension income flows to normal retirement age pensioners:
  - 7.6
  - 2.0
  - 3.4
  - 4.2
  - 13.0-13.8

Source: Pensions Commission analysis
Reforms to state system as a base for private saving

The UK state pension system suffers from a variety of significant deficiencies. Some of these have always existed and relate to the treatment of people (in particular women) who have had interrupted paid work records. These problems are described in Chapter 4. But focusing on the implications of the state system for the effectiveness of voluntary private saving, there are two major problems – the possible future growth of means-testing, and extreme complexity.

**Means-testing.** If current indexation arrangements were maintained indefinitely, the percentage of pensioner households subject to means-tested withdrawal of state benefits at some point in retirement would rise steadily and would be above 70% in 2050 (though the percentage subject to 100% withdrawal rates would fall) [Figure 1.22]. This spread of means-testing would result both from the fact that the BSP would, under current indexation arrangements, fall steadily in value relative to the Guarantee Credit level, and, after about 2035, from the reduction in private pension income as a percentage of GDP. Means-testing, as Chapter 6 of the First Report described, reduces rational incentives to save for many people. Some financial advisers are therefore wary of selling pensions to low earners for fear of mis-selling; indeed it is possible that IFAs perceive the effects of means-testing as greater than the reality [Figure 1.23]. Significant future growth of means-testing, would therefore, both for rational reasons and for reasons of perception, undermine voluntary private pension saving by the very groups of people, average and lower earners, most in danger of under-provision.

![Figure 1.22 Percentage of pensioner benefit units on Pension Credit: 2005-2050, if present indexation arrangements continued indefinitely](image)

Source: Pensions Commission analysis

---

2 These estimates derive from the Pensions Commission use of the Pensim2 model, described in Appendix F. Projections should be taken as illustrating orders of magnitude, and differences between options, but are subject to margins of error.
Figure 1.23 IFA assessments of attractiveness of different earnings segments: survey results

The design of the state system means that the returns to saving for people in this group are good.

If I advise people in this group, and means-testing reduces their entitlement to future state benefits, I could be accused of mis-selling.

Source: Pensions Commission IFA survey
Note: For survey details see Appendix D. Don’t knows excluded from analysis.
Chapter 1

Complexity and lack of understanding. In our First Report we said that “the UK has the most complex pension system in the world.” Focus groups of individuals which the Commission conducted over the last year have confirmed that this complexity is a barrier to understanding and to rational decision-making about private savings: if people do not understand what they will receive from state compulsory provision, it is difficult for them to make sensible decisions about how much to save on top. Nearly half of respondents to questions the Pensions Commission placed in the National Statistics Omnibus Survey, when asked what changes would most improve their confidence in the pensions system, chose, “A simpler, less complex pensions system” [See Appendix D].

The confusion is greatest in relation to the S2P. For most employees S2P rights will be a major element of their total state pension provision: fully paid-up S2P rights, even for someone earning £6,000 per year, will if current indexation arrangements are continued be worth more than the Basic State Pension (BSP) at retirement from 2036. But no-one in our focus groups appeared to know that S2P even existed, let alone understand the complexity of the contract-in/contract-out choice [Figure 1.24]. And despite widespread press discussion of the desirability of contracting back in, response rates to insurance company letters suggesting that people should contract back in are low [See Figure 1.18].

In general therefore reform needs to create a less complex and more understandable state system. In particular, if the S2P is to remain a part of the system, it needs to become a pension promise which people can understand.

Incremental measures insufficient: inherent barriers to effectiveness of voluntary system

Reducing the future spread of means-testing and creating a simpler, more understandable state system are both essential. Starting from the current position and given people’s accrued rights, there are major difficulties in achieving these objectives, as Chapter 6 explains, and no conceivable system will be as simple as some reformers hope nor will it remove all means-testing. But the direction of required change is clear.

The Pensions Commission does not believe, however, that even major progress towards a simpler and less means-tested state system will be sufficient in itself to ensure a take-off of voluntary pension provision.

This is because there are inherent barriers to voluntarism working in those market segments where pension provision is most inadequate. The way in which people make long-term savings decisions, combined with the cost of serving them on an individual basis, means that a purely free market approach will not deliver optimal results even if built on a simpler and less means-tested state system.
Figure 1.24  Awareness of SERPS/S2P: focus group results

- None of the 71 participants had heard of S2P, but a minority had heard of SERPS.
- Within that minority there was minimal understanding of what SERPS was and how rights accrued.
- Some were under the impression that opting out of SERPS meant opting out of all state pension provision.
- Contract-in/contract-out advice received by some confirmed their impression that pensions were complex, changeable and subject to poor and conflicting advice.

Note: See Appendix D for details of research.
Customer irrationality and behavioural economics

In our First Report we suggested that “most people do not make rational decisions about long-term savings without encouragement and advice”. We justified this assertion on two grounds:

- The fact that the vast majority of all pension saving in the UK derives either from state compulsion, or from people being enrolled in pension schemes as a by-product of an employment contract, or from the active selling efforts of financial advisers and insurance companies. Only about 2% of personal pension policies result from “direct execution”, i.e. individuals making a decision to invest in a pension and directly contacting a provider. If not required by law, or provided by employers, pensions are sold not bought.

- The findings of “behavioural economics” which challenge simple assumptions that individual decision-making is rational in the classical economist’s sense, and which provide explanations of real world phenomena such as procrastination and inertia. People are far more likely to enter a pension scheme if automatically enrolled (“auto-enrolled”) with the right to opt-out, than if required to make a positive decision to join. Many individuals find too much choice confusing: the more fund options are provided, the more people choose default funds. And inertia mechanisms such as auto-enrolment and “Save More Tomorrow” schemes are far more effective at generating higher participation and contribution rates than provision of generic information and advice. The following panel reiterates the relevant findings of behavioural economics already described in the First Report, and refers to new evidence considered over the last year.

Behavioural economics, irrationality and inertia: further insights

In our First Report we set out the insights which “behavioural economics” is providing on how people make long-term saving decisions [see First Report, “Insights from behavioural economics” on page 208].

Key points noted were:

1. Tendency to procrastinate, to put off decisions, with empirical evidence that, for instance, people make commitments to save but put off acting on that decision. This common sense finding challenges a key assumption of classical economics that discount rates are constant over time and instead suggests that they are “hyperbolic”.

2. The power of inertia. People often accept the situation with which they are presented as a given. As a result auto-enrolment increases participation rates, and “Save More Tomorrow” plans over time lead to an increase in saving.

3. Asset allocation decisions are often not optimal, as individuals are influenced by the range of funds offered. Also as the range of choices increases, people are less likely to make an active choice and more likely passively to accept a default fund.

Over the last year, further research of which we have become aware, has reinforced these insights in three ways:
Auto-enrolment: UK company experience

As Figure 1.25 shows participation in UK pension schemes which operate on an auto-enrolment basis is significantly higher than in schemes which require members to make a positive decision to join the scheme. These results are in line with those we reported last year from US studies.

Limited power of information and advice: findings from DWP research

The DWP has conducted a number of research projects within the Informed Choice agenda, exploring the impact of information and advice on pension decisions.

One project looked at the impact of Combined Pension Forecasts (CPF), which provide forecasts of an individual’s State Pension alongside their annual private pension statements. Of the group surveyed, who had all received a CPF in the previous 18 months, 38% could recall receiving the forecast. Of those who recalled receiving the information 42% increased saving to pensions or other forms of investment, compared to 28% who could not recall receiving the information. Of CPF recallers who increased retirement saving, 43% said they were unlikely to have done so without the CPF. Therefore tailored information does appear to increase savings, but only in a limited number of cases (6% of the overall sample said they were prompted by the CPF). This is significantly less than the impact typically produced by inertia mechanisms such as auto-enrolment or Save More Tomorrow.

Another project piloted the provision of financial information in workplaces where employers were not currently making significant pension contributions. As described in Figure 1.26 the pilots encountered difficulty due to the lack of interest of either employers or individual employees. The measured impact on savings level was insignificant.

Behavioural economics, psychology and neurosciences

Behavioural economics research has increasingly sought to incorporate insights from neuro-science. Research on brain activity by Colin Camerer, and Brian Knutson, among others (see The Economist, 13 January 2005), showed that different parts of the brain are used in decision-making depending on the timescales involved. Experiments show that when choices are being made relating to the immediate future then the areas of the brain involved in emotions showed the most activity. By contrast where choices are made relating to longer time periods, then brain activity is concentrated in the “thinking regions” of the brain. This research suggests that the phenomenon of hyperbolic discount rates may be explained by fundamental differences in the way that the brain processes different types of decisions.

Figure 1.25  Percentage of eligible employees who were active members of the scheme

<table>
<thead>
<tr>
<th></th>
<th>Auto-enrolment for all new employees</th>
<th>No auto-enrolment for all new employees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DB</strong></td>
<td>100%</td>
<td>80%</td>
</tr>
<tr>
<td><strong>DC</strong></td>
<td>80%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>0%</strong></td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>20%</strong></td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>40%</strong></td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>60%</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Occupational pension schemes 2004, GAD
Note: Results based on open, private sector schemes with more than 12 members only.
The limited power of information and generic advice has also been illustrated over the last year by the results of Department for Work and Pensions (DWP) sponsored pension advice seminars, piloted within its “Informed Choice” programme. These were designed to test whether pension participation and contribution rates would rise if people better understood the savings levels required to meet target levels of pensions and the options available for pension savings. It proved extremely difficult to secure employer support to hold the seminars and difficult also to secure individual attendance. The measured impact on savings levels has been insignificant [Figure 1.26].

Cost barriers to serving the under-provided market. Given these barriers to individual consumer initiative and rational decision-making, the extent of voluntary pension saving is vitally dependent on the willingness of employers to play a sponsorship role, and on the costs to the financial services industry of selling and administering pension products. But the declining interest of employers in providing pensions for self-interested, competitive reasons in the labour market has already been illustrated [See Figure 1.12 above]. And further analysis of costs over the last year confirms our preliminary conclusion in the First Report, that there is a segment of the market which cannot profitably be served except at Annual Management Charges (AMCs) which are in themselves significant disincentives to rational saving.

As the First Report set out, the cost of providing pension products varies hugely according to the economies of scale available in money collection, administration and fund management and according to whether an individual interview is required to secure enrolment. Well run state PAYG schemes have annual costs as low as 0.1% of the total implicit value of the pension promise, but with the downside that implicit returns are limited to those on government bonds. But large company schemes can achieve costs only slightly higher, e.g. 0.1% to 0.3%, whether providing a range of different asset choices (in DC schemes) or delivering Defined Benefit promises (supported by investment in multiple asset classes). Pensions sold to people of modest means working for small and medium companies, or bought individually, however, are usually sold with an Annual Management Charge of around 1% or higher, and often at the Stakeholder cap price of 1.5% [Figure 1.27].
Figure 1.26  Results of DWP workplace advice pilots

Pilot focus  Employers with fewer than 250 but more than 5 employees, paying either no contribution to Stakeholder Pension or a contribution of less than 3%. (This segment accounts for more than half of all employees.)

Initiatives tested  
1. Distribution of Pensions Information Pack  
2. Distribution of pack plus presentation  
3. Distribution of pack, presentation and one-to-one meetings with the Stakeholder Pension provider  
4. As Option 3, but implemented by an IFA, allowing full regulated advice

Response achieved  Only 100 out of 4,166 employers willing to participate. Less than 10% of employees opted to participate.

Findings and impact  Pilot as implemented had no significant impact on saving during the period of evaluation. Low levels of pre-existing knowledge and dominant lack of interest make information provision alone minimally effective.

Source:  DWP Research Report No. 294

Figure 1.27  Typical Annual Management Charge in alternative forms of pension provision

Source:  Personal pension data from FSA comparative tables; the line shown is the median Occupational pensions from GAD survey 1998 GPP estimates based on discussion with the industry  
Note:  National Insurance Fund estimate is based on the assumed total value of accrued state pension rights and the declared administration charges of the National Insurance Fund.
An AMC of 1.5% represents a significant rational disincentive to voluntary private savings, and undermines the case for providing earnings-related pensions in a funded rather than PAYG form. Such costs (and indeed much higher costs) seemed reasonable against the exceptional equity returns of the 1980s and 1990s, but against reasonable expectations of long-term returns, for instance 2% real for bonds, 6% real for equities, they represent a significant reduction in the incentive to save [see Chapter 7 of First Report]. This is particularly the case for people who prefer low-risk pension investment. If it is impossible to invest privately in bonds except at an AMC of over 1%, such individuals are better served by a government PAYG scheme. And variations in AMC make a big difference to pensions in retirement: the person who can invest through a large company scheme at an AMC of 0.3% per year could, for the same savings level, enjoy a pension nearly 30% higher than that enjoyed by an individual facing an AMC of 1.5%.

Even at 1.5% however, much of the under-provided market remains either uneconomic or marginally economic for insurance companies and financial advisers to serve. Without an employer contribution indeed, the vast majority of individuals on average earnings cannot be served profitably; but only 29% of employees in firms with fewer than 50 employees are in an employer-sponsored pension, a proportion which is falling slowly. The introduction of the new “basic advice” sales force regime in April 2005, meanwhile, has made only a limited difference to the economics and very few insurance companies or financial advisers are making use of this new regime. Our discussions with insurance companies and financial advisers indeed suggest that the product market segment which the Pensions Commission is most concerned about (the sale of regular pension saving products to individuals earning between say £10,000 and £30,000 per year), is a very low priority for them. Attention is focused instead on higher earners, on mortgage and protection products, and on sophisticated decumulation products aimed at people with significant maturing pension pots, lump sums, or capital arising from other sources such as inheritance.
Our analysis has moreover convinced us that these barriers to serving under-provided segments cost-effectively are inherent and cannot be overcome through incremental changes in product or sales regulation nor by voluntary industry initiatives. The panel at the end of this Chapter sets out key points from our analysis of pension provision costs, which is described in more detail in Appendix F. This analysis shows that while economies of scale are important across all steps of the pension sale and provision process, the most severe cost problems are created by the initial costs of customer acquisition and by contract proliferation, with individuals enrolled into new schemes, with further initial set-up costs, on each change of employment. Contract proliferation costs could only be reduced by either a national scheme or a “clearing house” through which employers make payments to different insurance companies. And initial set-up costs cannot be radically reduced unless either:

(i) employers are compelled to make contributions, thus increasing individual participation rates and reducing the average cost of the voluntary set-up process; and/or

(ii) individuals are either compelled or auto-enrolled into making contributions, thus removing the need for individual interviews and advice.

Our clear conclusion is therefore that the inherent barriers to serving the under-provided market segments cost-effectively on a voluntary basis are so severe that they will not be overcome simply by making the state pension system less complex, more understandable and less means-tested. This implies that policies which go beyond pure voluntarism will be required. International analysis considered below in Section 5 makes this conclusion unsurprising. It is the barriers to individual consumer rationality and the cost of serving individuals of modest earnings on an individual basis, which have led governments in almost every other developed country to go beyond pure voluntarism in earnings-related pension policy, whether via a state PAYG scheme or via a compulsory savings requirement.
Attitudes towards compulsion are ambivalent

But attitudes towards compulsion are varied and ambivalent reflecting the diversity of individual circumstances and preferences.

- Different surveys suggest significantly different balances of opinion, perhaps reflecting the precise way in which questions were posed. But most reveal a significant proportion of people who want to be compelled to save, and a significant proportion who are strongly opposed [Figure 1.28].

- Our focus groups indeed suggest that not only do attitudes differ between people, but that individuals are often ambivalent within themselves. Many expressed a desire to "have to" save for retirement, while subsequently reacting strongly against the word "compulsion". This may imply that auto-enrolment schemes, which make pension scheme membership the default option, but which allow the possibility of opt-out for those who positively choose it, may go with the grain of many people's preferences. It is clear from the figures that auto-enrolment schemes strongly influence participation rates but there is no evidence to suggest that this strong influence is resented.

This diversity and ambivalence may in part reflect varying intrinsic attitudes to the importance of individual choice, but it may also be rooted in different preferences and circumstances. For while compulsory earnings-related provision would in many cases serve people's underlying self-interest, in some cases it would not. Individual preferences as between saving and working longer vary; and as Section 3 below describes, some people will achieve adequate resources to support consumption in retirement through home ownership, while others will not. Compulsory pension saving therefore creates the risk that some people are forced to over save. This may also provide a strong argument for preferring auto-enrolment to compulsion.

The appropriate policy response to the shortcomings of a voluntary system therefore needs careful consideration. One possibility which should not be dismissed out of hand is that the government, while noting the inherent limitations of a voluntary approach, should still limit its role to providing a simple, easily understandable, flat-rate state pension generous enough to prevent poverty in old age, and with the role of means-testing sufficiently limited to leave most people with good incentives to save. Such a policy could be justified on the philosophical grounds that governments cannot solve all problems, that tax capacity is finite, and that compulsion will be regarded as equivalent to tax. The pros and cons of that philosophy and the appropriate limits of a government's role can be debated. But the empirical facts of what will happen if the government limits itself to this role are clear. A purely voluntary, free market approach to earnings-related pension provision will leave many people making what they will subsequently perceive to be, and what they should logically perceive to be, inadequate pension provision.
Figure 1.28 Diverse attitudes towards compulsion

The government should make it compulsory to pay into a pension.

Source: Marketing Sciences Retirement Planning Monitor
Note: Fieldwork was conducted in November-December 2004 and the total number of people interviewed was 1,046. Don’t knows excluded from analysis.

Percentage who agree that ‘all employees should be forced to contribute to a pension.’

Source: Occupational Pensions, Finance Intelligence, July 2005 Mintel
Note: Mintel’s survey was conducted by NOP in April 2005 and questioned a nationally representative sample of 2,005 adults aged 18+. Respondents were presented with a list of 12 pensions-related attitudinal statements and asked to specify which, if any, they agreed with. An active pension member is defined as someone who is currently contributing to a pension or where an employer is making the sole contributions.

A compulsory pension is a:

Source: Compulsion – public attitudes, August 2004, ABI
Note: Results from the ABI Pensions & Savings Index, January 2004, sample size 2,479 working adults. Research by YouGov. Don’t knows excluded from analysis.
3. House purchase and inheritance: implications for required replacement rates but not complete solution

In Chapter 5 of our First Report we analysed the total stock and the distribution of household non-pension assets and the implications for the adequacy of pension provision. In response to that Report, several commentators argued that an analysis of overall national savings (incorporating saving by the government and by the corporate sector) might lead to different conclusions: some argued that this would reveal a bigger problem of “inadequate savings”, others a smaller problem. Over the last year we have therefore conducted an analysis of all categories of household and national savings, as well as updating our analysis of household wealth stocks.

This analysis has led us to the following conclusions:

(i) Latest analysis of individual stocks of wealth confirms the finding that for most people non-pension financial assets are modest but that housing assets are far more important.

(ii) Analysis of aggregate household and national savings does not contradict the conclusion that for many people pension provision is inadequate.

(iii) That analysis reveals, however, the growing importance of housing wealth and the potential for housing accumulation and decumulation to play a significant role in the provision of consumption in retirement resources.

(iv) Housing wealth therefore has major implications for appropriate pension system design. But it is not in itself a sufficient solution to problems of pension adequacy.

(i) Individual stocks of wealth: confirmation of First Report findings

In our First Report we concluded that:

- For the majority of people the stock of non-pension financial assets held at the onset of retirement is small relative to the value of pension rights and thus makes only a limited difference to the adequacy of resources available to support consumption during retirement. This reflects the fact that, while total non-pension financial assets amount to about £1 trillion, the ownership of these is very unequally distributed. Median holdings of non-pension financial assets among non-retired 55-59 year olds with median full-time earnings are around £33,000: once annuitised this would deliver an annual income of about £1,700.
Housing assets are more important, both because they are larger in total value and more equally distributed. A 55-59 year old with an income of between £17,500-£24,999 owned housing assets (net of mortgage debt) with a median value of around £150,000 in mid 2002. And while today only a very small proportion of these are used to fund retirement via equity release or trading down, with home ownership now reaching over 60% among those aged over 80, there will be an increasing flow of inheritance of housing assets, often by people who already own one house.

For many people therefore, housing assets (either accumulated or inherited) could play a significant part in the provision of resources for consumption in retirement. But the ownership of these housing assets is not negatively correlated with pension rights: i.e. there is no significant tendency for those with inadequate pension rights to own larger houses. Home ownership therefore, while clearly relevant to pension provision for many people, cannot be seen as providing a total substitute for earnings-related pension provision.

Data that have become available over the last year have confirmed these conclusions confirming in particular the importance of housing wealth to estimates of pension adequacy.

Most surveys of wealth holding continue to suffer from the deficiency that declared individual holdings do not aggregate well to National Accounts estimates and that it is very difficult to develop quantitative measures of pension wealth and thus a comprehensive picture of the total wealth of different groups of people. Analysis by the IFS of data arising from the ELSA survey, however, is now for the first time allowing us to develop that comprehensive quantitative picture, though only for people aged over 50.
This analysis reveals that:

– For the vast majority of people the dominant forms of wealth as they approach retirement are housing wealth and pension wealth (both state and private). Only for the richest 10% of 50-65 year olds are non-pension financial assets a major form of wealth and therefore a major potential resource to support consumption in retirement [Figure 1.29].

– Estimates of the number of people who might have inadequate income in retirement are strongly influenced by whether it is assumed that they can and will liquidate housing assets during retirement. The IFS estimates that about 40% of 50-65 year olds might on the basis of pension rights alone have retirement income below the benchmarks we proposed in the First Report. This is similar to our own estimate in that report.

But if individuals were to liquidate during their retirement all of their non-pension financial assets, all of any inheritance received, and 50% of their housing wealth, this figure could fall to 16% [Figure 1.30]. The assumption that people can and will liquidate 50% of their housing is a very strong one: our analysis in the First Report implied that it would be difficult for many people to achieve this via “trading down”, and the equity release market remains small and relatively high priced. Furthermore, if all housing wealth were liquidated, people would require higher replacement rates to cover the rent they would then have to pay. But the potential importance of housing wealth is clear.

– The IFS analysis has confirmed however the important distributional finding we reported in our First Report. On average pension wealth and non-pension wealth do not act as substitutes for each other. Those with higher levels of non-pension wealth also tend to have higher levels of pension wealth, and vice versa.
Figure 1.29 Composition of wealth holdings by decile group of total wealth: aged 50-SPA

Housing (25.1%)
Other wealth (19.3%)
Private pension (36.0%)
State pension (19.6%)

Source: IFS, 2005
Note: Sample size = 4,687. One observation per individual aged between 50 and the SPA. Because the richest decile contains some very wealthy individuals, the mean levels of each form of wealth (and particularly financial and physical wealth) are inflated by a small number of extremely wealthy individuals (about the top 1% of the whole distribution). However, excluding these individuals does not dramatically alter the overall picture and so we include all individuals.

Figure 1.30 Percentage of 50-65 year olds in danger of having replacement rates below benchmarks of adequacy

First Report estimate based on pension participation alone
Pension income alone
All non-pension financial wealth liquidated in addition
Half of housing wealth liquidated in addition
All anticipated inheritances liquidated in addition

38-43% 39% 29% 18% 16%

IFS Estimates

Source: Pensions Commission analysis and IFS, 2005
Note: Pensions Commission estimate for those aged between 46 and SPA based on group modelling. Full details included in First Report, Appendix G. Analysis based on pension participation and estimated pension contribution rates required to reach benchmark on an individual basis.

IFS uses ELSA data with actual wealth and assets information and is on a household basis. This scenario uses the individual’s assessment of how likely they are to continue working to SPA.
House prices meanwhile continued to rise during 2004 and housing wealth continued to grow as a percentage of GDP [Figure 1.31]. Home ownership rates have continued to grow rapidly for people aged over 65 and particularly for people aged over 75, while falling for those under 45 [Figure 1.32].

For the vast majority of people therefore housing assets dominate non-pension wealth: and as home-ownership grows most rapidly in the oldest age groups, an increasing percentage of the population is likely in the future not only to have accumulated capital in their own house before retirement, but also to inherit housing assets.

(ii) Aggregate national and household savings

Appendix C (“Sectoral and National Savings”) sets out a detailed analysis of national savings aggregates (covering the household, corporate and government sectors), and considers what implications aggregate levels and trends might carry for the adequacy of resources to fund consumption in retirement. As the Appendix explains there are several complex theoretical issues involved in drawing any implications. For instance:

- There is no clear and straightforward relationship between the rate of national savings and the adequacy of pension provision, even “on average”. An adequate pension system in a no-growth economy could exist alongside nil national savings: and the national savings rate compatible with an adequate pension system in a growing economy is a function of several debatable factors.

- And the accumulation of resources for consumption in retirement could appear “adequate” in aggregate even if clearly inadequate for the majority of individuals, if the distribution of accumulated pension rights was highly unequal.

For these reasons the Pensions Commission believes that the only robust way to assess the adequacy of saving for retirement is “bottom-up” looking as best as one can at the current wealth stocks and savings flows, pension and non-pension, of different groups of individuals. Analysis of the national savings rate can however be a useful check on the credibility of such bottom-up analysis. If, for instance, bottom-up analysis suggested widespread inadequacy, but the national savings rate was on a clear upward trend, this would be a useful stimulus to check whether some not immediately apparent form of household saving was growing, since as Appendix C explains, all national savings in some way or other accrue to the benefit of the household sector.
Figure 1.31 Residential housing wealth as a percentage of GDP

![Graph showing residential housing wealth as a percentage of GDP from 1980 to 2004.]

Source: ONS Blue Book

Figure 1.32 Home ownership by age

![Bar chart showing home ownership by age from 1981 to 2003.]

Source: Living in Britain, GHS, GB

Note: Age refers to the age of the Household Reference Person (HRP). The HRP is defined as follows: in households with a sole householder that person is the household reference person; in households with joint householders the person with the highest income is taken as the household reference person; if both householders have exactly the same income, the older is taken as the household reference person.
Analysis of trends in the national savings rate is complex because of the need
to separate cyclical effects from underlying tendency. The analysis does not
however suggest an upward trend but a broadly flat one: over the last 12
years, for instance a fall in the household savings rate has been offset by a rise
in corporate sector savings [Figure 1.33].

Some commentators have suggested that this flat trend is inadequate in the
face of the demographic challenge and that a rise is required: others have
suggested that adjusting for hidden forms of national saving (e.g. research and
development spend) would reveal a more dynamic picture [See Appendix C].
The Pensions Commission’s judgement is a neutral one. We believe there is no
evidence in the available figures to suggest that any apparent deficiency of
pension saving is offset by some other more dynamic category of saving. But
the UK’s national savings rate, unlike that of the US, does not show a clear and
sustained fall. Concerns about the national savings rate should not therefore
play a major role in decisions on appropriate pension strategy, whereas they
are considered central to US debates about social security reform.

Focusing more narrowly on household savings flows meanwhile confirms the
relative unimportance of non-pension long-term financial saving, but also
reveals the large and growing role of both household sector borrowing and of
household sector cash deposits.

- Analysis of the flow of new household savings shows that for the last
  15 years the vast majority of household net financial savings has been
  via occupational pension funds, and that more than 100% of net
  financial saving has been in either pension funds or life policies [Figure
  1.34]. Outside of pension funds and life policies, the household sector
  has been a net dissaver of financial assets. This is despite the growth of
  PEP/ISA accounts.

- When looking at the stock of wealth figures, this effect was, until 2000,
  offset by rapid share price appreciation, with the personal sector’s stock of
  securities held outside pension and life policies growing rapidly as a
  percentage of GDP despite net sales of securities [Figure 1.35]. But realistic
  expectations of equity returns for the future suggest that this effect will
  not be repeated. A combination of past rates of non-pension financial
  saving together with realistic rate of return expectations will not therefore
  result in non-pension financial wealth rising to change our conclusions.
  It is possible of course that savings flows into long-term assets will rise
  automatically in response to a lower expected rate of return and to capital
  losses of existing wealth holdings, and there is some sign of this occurring
  in the last 3 years as Figure 1.34 suggests. 3 But this effect would need to
go far further (and to be widespread across the population rather than
concentrated) for it to make a major difference to the adequacy of
resources for consumption in retirement.

3 The rational relationship between expected rates of return and levels of saving is a complex
theoretical issue. Lower expected returns reduce the benefit gained from saving but increase
the level of saving needed to achieve any given level of pension in retirement. One-off capital
losses should however certainly stimulate saving since only the latter effect applies.
**Figure 1.33** Gross saving by sector as a percentage of gross national disposable income: 1980-2004

![Graph showing gross saving by sector as a percentage of gross national disposable income: 1980-2004.](image)

- National
- Non-financial corporations
- Households + NPISH
- General government

Source: ONS Blue Book

Note: National figures prior to 1987 have been estimated. Financial corporations not shown. NPISH = Non-profit institutions serving households.

**Figure 1.34** Household net acquisition of financial assets as a percentage of GDP

![Graph showing household net acquisition of financial assets as a percentage of GDP.](image)

- Occupational pension
- Personal pension and life policy savings
- Total shares and other equities
- Other

Source: ONS Blue Book

Note: Pension and life policy savings include the impact of reinvested dividends. They also allow for the major changes in National Account estimates of pension savings discussed in our First Report. Total shares and other equities include mutual funds, unit trusts and shares held via PEPs and ISAs. Other is primarily explained by the net balance of increased borrowing and increased accumulation of cash and deposits.
What are, however, growing steadily are cash and deposit assets held by some segments of the household sector, offset by increased borrowing by other segments. Household holdings of cash and deposits are now 60% of GDP versus 55% in 1992 and 37% in 1980 [Figure 1.35]. Household borrowing has increased faster: in net terms the household sector has been a dissaver of financial assets. But if the borrowing occurs early in life, offset by cash accumulation at later ages, resources available for consumption in retirement could still be created.

(iii) Housing wealth and household sector financial flows

The precise drivers of the simultaneous growth of household cash deposits and household borrowing merit further investigation. But it is clearly linked to rising house prices. Appendix C considers the theory in more detail, but in brief:

Aggregate saving by the household sector overall must take the form of the accumulation of household sector claims on other sectors (the corporate sector, government and overseas). But for specific sub-sectors of the household sector it can take the form of the accumulation of claims against other sub-sectors via financial institutions (e.g. some individuals owning deposits at banks and building societies which lend these to other individuals) [Figure 1.36].

The higher the value of houses relative to GDP, the greater is the debt (relative to average earnings) which individuals need to incur in order to accumulate a housing asset: but the larger also are the cash sums (relative to average earnings) which individuals selling houses receive. Depending on the asset preferences of house sellers these cash receipts may be held as cash deposits or used to buy non-deposit assets. There seems at present to be a strong preference to hold cash deposits, driving the simultaneous growth of household sector cash deposits alongside household sector borrowing.

Whatever the asset preferences of those selling houses, however, the higher the value of houses relative to GDP, the greater is the extent of inter-generational resource transfer which occurs not via the pension system but through the accumulation and decumulation of housing assets. The decumulation can be through trading down or equity release during retirement: but it can also increasingly be through the sale of inherited housing assets leaving the individual’s own accumulated housing assets untouched until they in turn are bequeathed.
Figure 1.35  Household non-pension financial assets and non-mortgage debt as a percentage of GDP

![Graph showing household non-pension financial assets and non-mortgage debt as a percentage of GDP from 1980 to 2004.]

- Green line: Sterling M4 individuals (mainly cash deposits and savings accounts)
- Red line: Mortgage debt
- Orange line: Security holdings (direct or via mutual funds)
- Blue dotted line: Consumer credit pre-1987
- Blue line: Consumer credit post-1987

Source: ONS Blue Book, ONS Financial Statistics

Note: Data on consumer credit for individuals (excluding sole proprietor businesses and non-profit making bodies) are only available back to 1987. Data for previous years are not on a comparable basis; data was available for the personal sector, which additionally covered partnerships and sole proprietorships. In addition, the personal sector series of UK bank lending included lending by offshore banks.

Figure 1.36  Wealth holdings in a closed economy in equilibrium

The household sector (directly or indirectly) owns:
- The housing stock
- Corporate capital (bonds + equities)

The household sector (directly and indirectly) saves/invests:
- Via net investment in housing
- Via net investment in corporate capital

The household sector lends and borrows within itself, via banks and building societies with house value as the main security:
(iv) Implications of housing wealth for pensions system

The rise of home ownership over the last several decades and the rising value of houses relative to GDP do therefore have implications for the optimal design of any earnings-related element of public pension policy. But the increased importance of housing is not a sufficient basis on which to reject any earnings-related objective.

Over the last 20 years the value of residential housing relative to GDP has increased [Figure 1.31] and the percentage of the housing stock owned by the household sector has also steadily grown [Figure 1.37].

Many individuals have therefore been accumulating assets through house purchase. And an increasing number are also now inheriting housing assets, enabling them to support consumption in retirement through the sale of one house without losing the benefit of rent-free living in retirement.

This effect has important consequences for the size of pension as a percentage of lifetime earnings for which individuals will rationally aim. The greater is the flow of resources from young workers to retirees occurring through the purchase and sale of houses, the lower the need to transfer resources via either PAYG or funded pensions. Because houses are now more important forms of individual wealth than was the case 40 years ago, therefore target income replacement rates achieved though the pensions system should on average be lower.

But there remain good reasons not to go to the other extreme and argue that housing wealth accumulation entirely removes the need for earnings-related objectives in pension policy. In particular:

Future returns on investment in housing are highly uncertain. Appendix C sets out some reasons why the pattern of the past 25 years (house prices rising faster than average earnings), may have been justified by underlying economic factors. But there is no science on which to determine whether the current level of prices is “reasonable” and thus what the future trend will be. People relying on housing assets to fund retirement are investing in a highly specific non-diversified asset portfolio.

The current generation of people just approaching retirement has accumulated housing wealth in what may turn out to be uniquely favourable circumstances. Not only have prices increased substantially relative to average earnings over the last 35 years, but for some of that period (in particular the 1970s) the combination of inflation rates, nominal interest rates, and tax relief resulted in post-tax real interest rates which were substantially negative. With tax relief removed, and high inflation no longer eroding the real value of mortgage debt, the pace at which an individual’s mortgage debt falls relative to house value may well be much slower in future. Combined with the fall in home ownership among under 45 year olds (which may well continue with e.g. the growth of student debt) this suggests
that an increasing percentage of people may enter retirement still owing substantial mortgage debt. The first claim on an inheritance may be to pay off the mortgage.

- Housing assets may well be used by many people to fund care home expenses in the final years of life, rather than pensions throughout retirement.

- The distribution of housing assets and the lack of correlation between good housing assets and inadequate pension assets (outlined in Chapter 5 of the First Report) means that while housing assets will provide a partial pension substitute for many people, for many others they will not.

The Pensions Commission’s judgement on the implications of increasing housing wealth for pension system design balances these considerations.

- Given the scale of housing assets, and the wide spread of individual circumstances, it is clear that any mandatory earnings-related pension system which compels all people to achieve the income replacement rate which people on average desire would force some people to over save.

- But the risks involved in relying on house ownership and the diversity of individual circumstances, also suggest that abandoning any earnings-related objective would leave many people with inadequate resources.

- An earnings-related objective which aims to secure or strongly encourage a “base-load” of earnings-replacement, without compelling all people to achieve the average desired level, would therefore make sense.

Chapter 5 Section 1 sets out the Pensions Commission's judgement on what this should imply in terms of quantitative targets and the means by which they are pursued.
4. Making pension policy robust in the face of demographic change: later retirement and higher pension ages essential but not sufficient

Since our First Report, the official principal projection of life expectancy has been further increased, and Pensions Commission analysis has illustrated the huge uncertainty involved in any projection. Pension policy must therefore be designed to be equitable and affordable in the face of whatever rise in life expectancy actually occurs. Longer working lives and higher pension ages are an essential but not sufficient part of the response. Deciding the precise balance of responses poses major and difficult issues which must be at the heart of the debate about state pension policy. These points are covered in turn below.

New data on life expectancy: significant rises, wide range of uncertainty

Key developments over the last year are (i) a new and higher principal projection for life expectancy, (ii) a better understanding of the wide range of uncertainty, (iii) confirmation that differences in life expectancy by socio-economic class remain significant and (iv) evidence that individuals systematically tend to underestimate their life expectancy.

(i) Increased principal projection. In Chapter 1 of our First Report we used a base case forecast for future life expectancy in line with the Government Actuary’s Department’s (GAD) “principal projection” from the 2002-based forecast. We illustrated how different the figures would be if we extrapolated past trends or if the GAD constant mortality improvement assumption were used. But we based our overall modelling of pension system adequacy on the principal projection.

GAD has now produced a new set of projections. The principal projection has changed for two reasons. First, because of further rapid decreases in mortality among older age groups over the last few years, which increase estimates of life expectancy for someone aged 65 today. Second, and more significantly, because of a shift away from the previous “limit to life” hypothesis. Whereas previously the pace of mortality rate declines was assumed to halve every 25 years, it now falls to 1% and then stays constant thereafter. Even 1% would be a significant deceleration from the present rate of mortality decline.

The new principal projections are compared with the 2002-based and 2001-based principal projections in Figure 1.38. The average man aged 65 in 2050 is now projected to live a further 23.6 years beyond that date, compared with the 2002-based estimate of 21.7 years. The figure for the average woman has increased from 24.4 to 25.9 years. The expected figures for 2020 have increased from 20.3 to 20.9 for men and 23.1 to 23.4 for women.
Figure 1.38 Cohort life expectancy at age 65

Men

![Graph showing cohort life expectancy for men from 2002 to 2050 for different base years (2001-based, 2002-based, 2004-based).]

Women

![Graph showing cohort life expectancy for women from 2002 to 2050 for different base years (2001-based, 2002-based, 2004-based).]

Source: GAD 2001-based principal population projection, UK
GAD 2002-based principal population projection, UK
GAD 2004-based principal population projection, UK

Note: See First Report Appendix E for the important distinction between “Cohort” and “Period” definitions of life expectancy. “Cohort” is a better measure of true life expectancy. “Period” measures are sometimes the only data available (e.g., in relation to the differences in life expectancy by socio-economic class shown in Figure 1.41). They can be used to judge differences between different groups of people but underestimate the absolute levels for all groups.
Wide range of uncertainty in estimates of future life expectancy.

The significant change in the principal projection illustrates the uncertainty in any projection of life expectancy. In the First Report we showed that previous forecasts had significantly understated subsequent reality: in the early 1980s public pension policy and private pension provision decisions were based on the assumption that average male life expectancy at 65 in 2010 would be 15.1 years: the best estimate is now 20.1 years [Figure 1.39]. Since the First Report we have therefore investigated in detail the issue of uncertainty in life expectancy forecasts in two ways:

- We have looked at the range of points of view among demographers, medical experts and biologists.
- And we have worked with GAD to model how uncertain projections could be if future errors are as large, but no larger, than those which have emerged in the past.

This analysis is set out in detail in Appendix E. It suggests that around the 2003-based GAD principal projection of life expectancy for a man aged 65 in 2050 of 21.7 there was a wide and asymmetric range of uncertainty stretching at least from 20.0 to 29.0, but with small probabilities of still wider divergence [Figure 1.40]. The 2004-based projection is now closer to the middle of our range of uncertainty than the previous projection. It is therefore essential that both state pension policy and occupational pension provision, in both the public and private sectors, is designed to be robust not just in the face of increasing life expectancy but of major uncertainty about how fast that increase will proceed.

Socio-economic differences are not narrowing.

In the First Report we illustrated the major gap in life expectancy between socio-economic classes, which appeared to have widened between 1977 and 1991, but with improvements now being achieved broadly in parallel. Further analysis of the methodology of the Office for National Statistics (ONS) estimates suggests that some of the apparent widening during the 1980s may reflect measurement difficulties. But there is no sign of a sustained narrowing of the gap, either for men or women. All socio-economic classes appear to be enjoying steady increases in life expectancy, but socio-economic classes IV and V trail around three years behind class IIIIN, and four to five years behind socio-economic class I [Figure 1.41].

Individuals underestimate their own life expectancy.

Further evidence analysed by the Pensions Commission over the last year illustrates, however, that individuals on average are unaware of or do not believe the projected increases in life expectancy, or even the best estimates of life expectancy today. On average, as research by a team at

---

4 The GAD 2003-based principal projection was issued just after publication of our First Report. It was not significantly different from the 2002-based projection.
**Figure 1.39** Male cohort life expectancy at 65

Source: GAD, UK

**Figure 1.40** Male cohort life expectancy at 65: range of possible uncertainty around 2004-based principal projection

Source: GAD and Pensions Commission estimates, UK
Figure 1.41 Trends in Period life expectancy at 65: by sex and social class

### Men

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>11</td>
<td>13</td>
<td>15</td>
<td>17</td>
<td>19</td>
</tr>
</tbody>
</table>

### Women

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>11</td>
<td>13</td>
<td>15</td>
<td>17</td>
<td>19</td>
</tr>
</tbody>
</table>

#### Class Description Examples of occupations

- **Social class I**: Professional
  - Doctors, chartered accountants, professionally qualified engineers
- **Social class II**: Managerial & technical/intermediate
  - Managers, school teachers, journalists
- **Social class IIIN**: Skilled non-manual
  - Clerks, cashiers, retail staff
- **Social class IIIM**: Skilled manual
  - Supervisor of manual workers, plumbers, electricians, goods vehicle drivers
- **Social class IV**: Partly skilled
  - Warehousemen, security guards, machine tool operators, care assistants, waiting staff
- **Social class V**: Unskilled
  - Labourers, cleaners and messengers


Note: For women social class I results are very volatile as a result of small sample size and therefore not shown. In 1997-2001 life expectancy for social class I is estimated at 0.5 years behind social class II.

Life expectancy is calculated on a Period basis with social class assigned in 1971 maintained throughout. The use of Period life expectancy underestimates true life expectancy (best measured by the Cohort measure) for all the classes, but the relative positions would be similar if Cohort figures were available.
Figure 1.42 Individual underestimates of life expectancy, by age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>30-39</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>40-49</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>50-59</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>60-69</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: O’Brien, Fenn and Diacon, 2005

Note: People were asked the number of years that they still expected to live. The average self-estimated life expectancy for each age group was compared with the CAD forecast life expectancy for each age group. The data presented show the number of years by which individuals underestimated their life expectancy.
Nottingham University has indicated, 30 to 39 year olds estimate their own life expectancy at about six years below the 2003-based GAD principal projection, which, as suggested above, could itself be an underestimate [Figure 1.42]. Our National Statistics Omnibus survey results confirm these findings [see Appendix D]. And focus groups conducted by the Institute of Public Policy Research revealed that some people disbelieve the official projections even when the evidence is presented to them. This systematic tendency to underestimate may be based on an apparently logical response to the data available to individuals – the ages at which their own parents or grandparents have died. But it creates major problems for the pension system. It undermines the political acceptability of unavoidable rises in state pension ages, and it makes it difficult for people to think rationally about the savings rate/retirement age/pension level trade-off which they face.

Unavoidable choices: higher savings, higher taxes, later retirement

Increasing life expectancy and continued lower fertility will drive a substantial rise in the old-age dependency ratio. Individuals and society must choose between the four possible responses: higher taxes devoted to pensions, later average retirement ages, higher savings, and/or pensioners poorer relative to average earnings.

Latest dependency ratio forecasts. The new projections for increased life expectancy will tend to increase the old-age dependency ratio when it is measured at any given “normal retirement age” such as 65. In fact in the latest GAD projections this effect is offset by a higher assumption for long-term net migration, leaving the forecast dependency ratio similar to that presented in the First Report [Figure 1.43]. The principal projection estimate is that the ratio of people aged over 65 to those aged 20 to 64 will increase from 27% today to 47% in 2050, with the great majority of the increase occurring by 2035. The new principal projection assumption that mortality rate declines continue indefinitely will however imply a steady increase in this ratio after 2050. And given the range of uncertainty in life expectancy forecasts shown in Figure 1.40 a significantly higher ratio by 2050 is possible.

Unavoidable choices: but no single solution. As the First Report stressed, when the old-age dependency ratio (measured at any given retirement age) rises some mix of four responses is unavoidable. Either:

- Pensioners will become poorer relative to average earnings;
  or
- Taxes/National Insurance devoted to state pensions must rise;
  or
- Private funded pension savings must rise;
  or
- Average retirement ages and pension ages must rise.
Figure 1.43  Old-age dependency ratio: all 65+ : 20-64, UK

Source:  GAD 2004-based principal population projection, UK  
GAD 2002-based principal population projection, UK  
ONS Population estimates unit, UK
The First Report also suggested that no single solution is likely to be sensible, given the scale of change required on any one dimension alone [See First Report Chapter 1]. In particular it was argued that while an increase in average retirement age was an essential part of the response, it could not be the sole one. The percentage of the adult life spent in retirement increased relentlessly from 1950 to 1995 for both men and women [Figure 1.44]. It is unsustainable for this increase to continue: it must at least remain stable. But for an increase in retirement age to be the sole response to the demographic challenge, the average age of retirement would have to rise from the current male average of 64.0 to 69.6, in addition to the current female average of 61.9 rising to equal the male level. This would be a rise slightly faster than the projected increase in life expectancy, and therefore would reduce not only the percentage of adult life spent in retirement but the actual number of years spent in retirement. It is therefore highly likely that the desired solution will include some role for the other levers – lower retirement income, higher savings and higher taxes/NI contributions.

Unavoidable choice: individual decisions. The choice between the different levers is partly a decision for individuals and partly for society, collectively. Insofar as the trade-off is between additional savings, longer working life, and the level of income in retirement, different people will wish to make different decisions, and should be free to do so. The challenge is to ensure that the choice is well informed, and that people are empowered to make sensible decisions. This requires overcoming cost efficiency barriers to private savings. It may also require measures to overcome individual inertia and irrationality. The need to enable this individual choice has implications for the design of any funded element of the pension system, whether compulsory, auto-enrolled or voluntary, which will be considered in Chapters 5 and 10.

Unavoidable choice: the social decision. The choice becomes an issue for society, however, in the design of the state system, where a trade-off has to be struck between the generosity of the state pension, the level of taxation, and the age at which pensions can be received. The one adjustment which the Pensions Commission believes that society will not find acceptable, as responses to our First Report overwhelmingly concurred, is a fall in the income (relative to average earnings) of the poorest pensioners: for this reason the Guarantee Credit is currently linked to average earnings. But the inevitable consequence of maintaining this indexation indefinitely would be is that the trade-off for the state pension system becomes one between more means-testing, higher taxes, and higher state pension ages. Since the Pensions Commission believes it is essential to reduce the extent of means-testing which would result over the long-term if existing indexation arrangements were continued indefinitely, this implies that state pension system reform involves some mix of the latter two options: higher taxes devoted to state pensions and higher state pension ages.
**Figure 1.44** Percentage of adult life spent in retirement

<table>
<thead>
<tr>
<th>Year</th>
<th>Average age of exit from workforce</th>
<th>Life expectancy at age of exit from workforce</th>
<th>Percentage of adult life spent in retirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>Men 67.2</td>
<td>10.8</td>
<td>18.0%</td>
</tr>
<tr>
<td></td>
<td>Women 63.9</td>
<td>16.2</td>
<td>26.1%</td>
</tr>
<tr>
<td>1960</td>
<td>Men 66.2</td>
<td>11.5</td>
<td>19.3%</td>
</tr>
<tr>
<td></td>
<td>Women 62.7</td>
<td>18.1</td>
<td>28.8%</td>
</tr>
<tr>
<td>1970</td>
<td>Men 65.4</td>
<td>12.5</td>
<td>20.9%</td>
</tr>
<tr>
<td></td>
<td>Women 62.4</td>
<td>19.4</td>
<td>30.4%</td>
</tr>
<tr>
<td>1980</td>
<td>Men 64.6</td>
<td>14.3</td>
<td>23.5%</td>
</tr>
<tr>
<td></td>
<td>Women 62.0</td>
<td>20.6</td>
<td>31.9%</td>
</tr>
<tr>
<td>1990</td>
<td>Men 63.5</td>
<td>17.2</td>
<td>27.5%</td>
</tr>
<tr>
<td></td>
<td>Women 60.9</td>
<td>23.2</td>
<td>35.1%</td>
</tr>
<tr>
<td>1995</td>
<td>Men 63.1</td>
<td>18.9</td>
<td>29.6%</td>
</tr>
<tr>
<td></td>
<td>Women 60.7</td>
<td>24.7</td>
<td>36.6%</td>
</tr>
<tr>
<td>2000</td>
<td>Men 63.3</td>
<td>20.2</td>
<td>30.8%</td>
</tr>
<tr>
<td></td>
<td>Women 61.1</td>
<td>25.2</td>
<td>36.9%</td>
</tr>
<tr>
<td>2005</td>
<td>Men 64.0</td>
<td>20.4</td>
<td>30.7%</td>
</tr>
<tr>
<td></td>
<td>Women 61.9</td>
<td>25.1</td>
<td>36.4%</td>
</tr>
</tbody>
</table>

Source: Blondal and Scarpetta (1999)
Pensions Commission estimates from 1990 onwards

Note: Percentage of adult life spent in retirement is given by life expectancy at retirement / (retirement age plus life expectancy at retirement minus 18).
The taxation/pension age trade-off

The appropriate balance between increased taxation and increased state pension ages depends on an assessment of the fair allocation between different generations of the adjustment burden created by demographic change. This needs to reflect the reasons why the dependency ratio has increased:

- **Drivers of dependency ratio increase.** The UK’s old-age dependency ratio, measured at any given retirement age, is increasing for two reasons:
  
  - Because of a steady and probably permanently continuing increase in life expectancy of those who reach 65. If this were the only factor at work, the dependency ratio would rise in a steady fashion, and would have been doing so over the past 25 years as well as being forecast to do so in future.
  
  - But also because of the decline in the fertility rate which occurred in the early 1960s and mid 1970s. The GAD’s principal projection assumption is that this decline is a one-off but permanent shift and will neither be reversed nor continued. This produces a one-off increase in the dependency ratio, reversing the one-off decline which the rise in the birth rate after the Second World War (“the baby boom”) would in itself have produced (i.e. would have produced if there had been no rising longevity effect).

The actual pattern of past and future dependency ratios reflects the interaction of these two factors. There is a steady underlying increase driven by life expectancy increases, but with fertility rate fluctuations flattening the pace of increase from about 1980 to 2005, driving a period of above trend increases from about 2005 to 2030 [Figure 1.45]. [See Appendix E of the First Report for a detailed disaggregation of demographic trends].

- **Coping with rising life expectancy: proportional rises in retirement and pension ages.** In respect to that element of the dependency ratio increase which is driven by rising life expectancy, it is a reasonable proposition that each generation should enjoy the same proportions of adult life spent contributing taxes to support state pensions and spent receiving state pensions. There is therefore a strong case that state pension ages should rise over time at least proportionately in line with life expectancy. This would mean, for instance, that if the ratio of working years to retirement years is 2:1 and if life expectancy rises three years, state pension ages should increase by two years.

---

5 Note that the ratio of people paying taxes to people receiving state benefits is also affected by the age of entry into the labour market, and thus by participation rates in 16-19 education and higher education. Trends in these have tended in the past 25 years to reduce labour market participation. The effect of this on public expenditure will however be now offset by increasing private fee payments for higher education.
Figure 1.45 Impact of the 1940s-1960s baby boom on the old-age dependency ratio

Source: Pensions Commission analysis based on a synthetic model of the England and Wales population
Coping with lower fertility: a debatable social choice. In respect to the fertility decline it is more debatable who should bear the burden. A lower fertility rate means even a PAYG scheme in which the pension age is fully adjusted for life expectancy, will become either less generous or more expensive. This is illustrated in Figure 1.46 using the simplified assumption that society would ideally like to ensure that everyone in retirement received a state pension equal to the current minimum set by the state (the Guarantee Credit):

- If this were provided for every individual at 65 from 2020 the cost would then be 5.3% of GDP, with an increase to 7.7% by 2050.

- Even if, after 2020, pension ages rose by the whole of any increase in life expectancy, the cost would still rise as a percentage of GDP (from 5.3% to 6.6%) because of the delayed effect of the fall in fertility between 1960 and the mid-1970s.

- To keep both the cost as a percentage of GDP and generosity of such a state pension stable, the pension age would have to rise from 65 to 72.6 in 2050.

The precise choice to be made on this trade-off entails a political judgement on how the economic costs of lower fertility should be allocated between generations. That choice is considered in Chapter 5, Section 4 which presents a range of possible combinations of increased public expenditure on state pensions and increased State Pension Ages.

Whatever choice is made on that trade-off, however, it is clearly essential to enable people to work later, both to make increases in State Pension Age feasible without cutting incomes, and to make it possible for individuals to make their own trade-offs between savings and retirement age. Measures required to remove barriers to working later are discussed in Chapter 8.
**Figure 1.46** The pension level, pension age and tax trade-off: simplified illustration

Pension equal to Guarantee Credit (£109 in 2005 terms), rising in line with average earnings.

**Case 1: stable pension age**

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension value in 2005 earnings terms</td>
<td>£109</td>
<td>£109</td>
<td>£109</td>
<td>£109</td>
</tr>
<tr>
<td>Pension age</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Number of people over pension age (millions)</td>
<td>12.5</td>
<td>15.0</td>
<td>16.8</td>
<td>17.3</td>
</tr>
<tr>
<td>Cost as percentage of GDP</td>
<td>5.3</td>
<td>6.5</td>
<td>7.5</td>
<td>7.7</td>
</tr>
</tbody>
</table>

**Case 2: pension age rises with life expectancy after 2020**

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension value in 2005 earnings terms</td>
<td>£109</td>
<td>£109</td>
<td>£109</td>
<td>£109</td>
</tr>
<tr>
<td>Pension age</td>
<td>65</td>
<td>66.8</td>
<td>67.6</td>
<td>68.3</td>
</tr>
<tr>
<td>Number of people over pension age (millions)</td>
<td>12.5</td>
<td>13.5</td>
<td>14.9</td>
<td>14.8</td>
</tr>
<tr>
<td>Cost as percentage of GDP</td>
<td>5.3</td>
<td>5.9</td>
<td>6.6</td>
<td>6.6</td>
</tr>
</tbody>
</table>

**Case 3: cost held constant: pension age varied**

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension value in 2005 earnings terms</td>
<td>£109</td>
<td>£109</td>
<td>£109</td>
<td>£109</td>
</tr>
<tr>
<td>Pension age</td>
<td>65</td>
<td>68.3</td>
<td>71.4</td>
<td>72.6</td>
</tr>
<tr>
<td>Number of people over pension age (millions)</td>
<td>12.5</td>
<td>12.2</td>
<td>12.0</td>
<td>11.8</td>
</tr>
<tr>
<td>Cost as percentage of GDP</td>
<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
</tr>
</tbody>
</table>

**Case 4: cost and pension age held constant: pension level varied**

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension value in 2005 earnings terms</td>
<td>£109</td>
<td>£89</td>
<td>£77</td>
<td>£75</td>
</tr>
<tr>
<td>Pension age</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Number of people over pension age (millions)</td>
<td>12.5</td>
<td>15.0</td>
<td>16.8</td>
<td>17.3</td>
</tr>
<tr>
<td>Cost as percentage of GDP</td>
<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis

Note: Does not include costs of Housing and Council Tax Benefit or other benefits including disability benefits which amount to 1.2% of GDP in 2020 or SERPS/S2P which in 2020 amounts to approximately 1% of GDP.
5. International analysis; lessons for the UK

The First Report included a summary of pension system features and reform programmes in several developed countries [See Appendix D of the First Report]. Since the First Report we have focused on understanding recent or now planned reforms which seem likely to carry implications for the UK.

One finding of that analysis is relevant to the question posed at the end of Section 2 above: whether government should play a role in compelling earnings-related pension provision, or instead focus entirely on providing an adequate flat-rate state pension to prevent poverty in retirement. It is noticeable that almost all developed country pension systems do include an element of earnings-related compulsion, and that no reform programme has proposed moving from an earnings-related to a wholly flat-rate system. But several reform programmes aim to pursue earnings-related objectives in innovative ways which may have lessons for the UK.

Figure 1.47 summarises the information presented in the First Report on the extent of earnings-related pension provision resulting from different countries’ mandatory systems, whether the systems be PAYG or compulsory savings in form. It shows that many continental systems are strongly earnings-related: that the US and Australia occupy an intermediate position; and that there are only a few wholly flat-rate systems for example New Zealand (Ireland is also in this category). The UK system today is less earnings-related than the US, but not entirely flat-rate: accruals to it would become fully flat-rate over the next 50 years if present indexation arrangements were continued indefinitely.

All developed countries have either already implemented or are now debating significant pension reform. Often this takes the form of changing the balance between PAYG and funded approaches. But no country which currently has an earnings-related system is considering moving entirely away from it. Thus for instance:

- The Bush administration proposals for Social Security reform would allow American citizens some of the flexibility provided by the UK “contracting-in/contracting-out” system, choosing between membership of the state PAYG scheme and compulsory savings in individual accounts. Some proposals to reduce the degree of earnings-relations in the system have also been tentatively proposed. But the basic concept of a system which includes significant earnings-related compulsion has not been challenged [Figure 1.48].
**Figure 1.47** Gross mandatory pension system values

<table>
<thead>
<tr>
<th>Country</th>
<th>Gross Pension as a Percentage of Average Earnings</th>
<th>Individual’s Earnings as a Multiple of Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td></td>
<td>0.25 0.5 0.75 1.0 1.25 1.5 1.75 2.0 2.25 2.5 2.75</td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Monitoring Pension Policies, Annex: Country Chapters

Note: Netherland’s figures reflect the impact of the quasi-mandatory private savings systems as well as the PAYG pension. The Australian figures reflect the impact of the mandatory private pension savings system as well as the PAYG pension.

**Figure 1.48** US Social Security: President’s Commission on strengthening Social Security and creating wealth for all Americans

**Starting point:**
- All employees and self-employed are members of the state PAYG scheme “Social Security”, which imposes employer and employee contributions (6.2% each) on an income band from $3,680 to $90,000.
- The scheme pays pensions which rise with the level of contributions paid but less than proportionately.

**Commission proposals:**
- Members should be free to “carve out” part of their “Social Security” contributions into nationally administered individual accounts.
- Contributions still collected via Social Security contributions.
- Personal accounts organised in two tiers:
  - First tier: three to five bulk-bought indexed funds similar to those offered by Federal Thrift Savings Plan (see Figure 10.11).
  - Second tier: free market of funds offering greater choice but also higher charges (available to those with more than a minimum amount in their account).
- On claiming “Social Security” pension, the benefit entitlement for those who had chosen to “carve out” would be reduced accordingly using an assumed rate of return.

Source: www.ssa.gov and President’s Commission (2001)

Note: 1 The lower earnings threshold is slightly higher for the self-employed at $4,000 (£2,101).
New Zealand, meanwhile, one of the few countries which previously chose a wholly flat-rate approach, is now concerned about the adequacy of earnings-related provision and the low level of household and national savings. It is therefore now committed to introducing a national auto-enrolment savings scheme ("Kiwisaver") chiefly intended for retirement saving but with an option to use the fund to purchase a first property.

While, however, there has been only limited change in the extent of earnings-related objectives, innovations in the means by which these objectives are pursued may provide lessons from which the UK can learn. In particular we have noted three major policy innovations, two of which we believe are particularly relevant to the UK environment.

(i) Notional Defined Contribution schemes

Section 4 suggested that, as a principle of inter-generational fairness and in order to make public pension expenditure affordable over the long term, effective pension ages within state PAYG schemes should rise at least proportionately with life expectancy. This principle can be implemented by increasing the formal State Pension Age from which pensions become payable. But it can also be implemented by moving to a Notional Defined Contribution (NDC) scheme, in which individual state pension rights are expressed as a capital sum, which at retirement is converted to an annuity in line with life expectancies and annuity rates at that time.

NDC schemes thus shift the life expectancy element of the demographic challenge onto pensioners rather than future workers and tax payers. They may also make high contributions to support PAYG pensions politically more acceptable by giving people an individual account within which their own contributions can be seen accumulating. And they can be designed to ensure that the fertility element of the demographic challenge is shared between pensioners and future workers in a predetermined fashion which keeps contributions and payments in balance over the long term. The panel opposite explains how these objectives are achieved within the Swedish NDC system: Italy and several eastern European countries have also introduced NDC schemes.

This NDC approach has major attractions for any country which starts with a generous and expensive system of PAYG earnings-related provision. For reasons discussed in Chapter 5 Section 3, we believe that the more direct way of dealing with life expectancy changes, through changes in the state pension age, is more likely to be appropriate in the UK. But the NDC approach is a possible alternative.
Notional Defined Contribution (NDC) systems are PAYG systems, in which individual pension accruals are expressed as funds with a defined capital value, earning a defined rate of return. The accumulated capital buys an annuity at the point of retirement.

This achieves three objectives:

- It creates a sense of personal ownership of state pension rights and thereby, its proponents argue, improves work incentives.

- It shifts pre-retirement longevity risk from the state to individuals if life expectancy goes up then annuity rates, at any given age, go down. Individuals need to make their own decision as to how to respond; accepting either later retirement or lower income in retirement.

- The definition of the rate of return paid on the capital balance can be used to ensure sustainable system finances in the face of uncertain national economic performance and uncertain fertility rates.

Countries with NDC schemes now include:
- Sweden (1999)
- Poland (1999)
- Italy (1995)
- Latvia (1996)

The Swedish system

Until the 1990s Sweden had a classic continental style earnings-related PAYG system with explicitly stated pensionable ages. Following the recommendations of the Parliamentary Working Group on Pensions in 1994, the decision was made to switch to a NDC system with a small actual funded DC system (the Premium Pension System) on top.

Key features of the NDC element of the system are:

- Contribution rates of 16% (shared between employers and employees) on all income above SEK16,600 (6% of median earnings) and below SEK317,250 (120% of median earnings).

- Each person’s contributions accumulate in explicitly identified individual accounts.

- The rate of return on the accumulated funds is normally the growth of average earnings but this can be varied subject to the “automatic balancing mechanism” referred to below.

- The system itself is non-redistributive. Each person receives the full benefit of their contributions and each person earns the same rate of return. There is however a separate poverty prevention “Guaranteed Pension” funded out of general taxation and dependent on residence. Credits for years in education and child rearing, funded via general taxation, are paid into the NDC system.

- Individuals receive annually an “Orange Envelope” which sets out their capital sum so far accumulated and an indication of what annuity this might buy them at a variety of different retirement ages.

- The actual annuity rate received depends on the life expectancy tables applying when each individual reaches 65. Individuals are free however to annuitise at any age from age 61, making their own trade-off between income in retirement and age of benefit receipt.

- The shift in pre-retirement longevity risk to the individual makes the system financially sustainable and fair between generations in the face of rising life expectancy. In addition, there is an “Automatic Balancing Mechanism” (ABM), which aims to ensure that the contribution rate as a percentage of earnings can be held stable in the face of fluctuating national economic performance and of a fluctuating fertility rate. This ABM would for instance share the negative impact of a falling working population and a lower growth rate between workers and pensioners by adjusting both the rate of return on accumulating funds and the indexation treatment of annuities. It operates as follows:

  - The system is cushioned by large buffer funds worth approximately a quarter of Sweden’s GDP, which the country established in 1960.

  - The total estimated Net Present Value (NPV) of future contributions flowing into the NDC system plus the value of the buffer funds is compared with the total estimated NPV of the system’s liabilities.

  - If the ratio is less than 1, then the rate of return received by contributors and the value of the pensions in payment is reduced proportionately until the system goes back into balance.
(ii) National administration of individual accounts

Section 2 of this Chapter identified high costs of distribution and administration as one of the inherent barriers to the success of a purely voluntary system of funded pension savings. Insurance companies and banks, whether selling directly or via financial advisers, cannot profitably serve substantial segments of the market except at Annual Management Charges above, and for some segments well above 1%. AMCs this high are a logical disincentive to voluntary saving, and substantially reduce income in retirement.

The drivers of these high costs, compared with the levels of 0.1% to 0.3% attainable by large occupational schemes, include:

- The high cost per successful sale arising from the need for individual advice and persuasion, and from the low success rates achieved.

- The proliferation of separate contracts for the same individual, arising from the existence of separate employer schemes into which the individual must enroll to receive an employer contribution.

- The lack of economy of scale buying power in the purchase of fund management services.

The first of these cost drivers could in theory be overcome by compulsion, which would remove the need for expensive advice on the save/do not save decision. But the experience of Australia indicates that compulsion is not sufficient to achieve a radical reduction in costs. AMCs within compulsory Australian pension accounts, range between 0.4% and 0.8% for “Industry Trusts” (multiple employer schemes achieving some economies of scale and buying power) but are between 0.4-1.8% for “Master Trusts” (individual accounts held directly with a financial institution) [Figure 1.49]. High marketing costs to attract individuals to specific institutions and asset allocation choices have offset the cost saving resulting from compulsion: and significant contract proliferation has remained a problem.

The Swedish and Danish examples illustrate however that significantly lower costs can be achieved through a nationally administered scheme, in which the government collects money through the tax/PAYE system, administers individual accounts centrally, and purchases fund management services in bulk from the wholesale industry. This approach cuts out the costs of contract proliferation and achieves economies of scale while still leaving individuals significant choice in asset allocation.
Figure 1.49 Typical Annual Management Charges within the Australian compulsory savings system

Source: Bateman, Kingston and Piggott, Forced Saving, 2001

Note: Master or retail trusts are schemes run by banks or life insurance companies. Industry trusts are multi-employer schemes which achieve significant economies of scale.
The Swedish system is targeting by 2020 average costs and thus AMCs of about 0.33% for those who choose non-default funds, and of below 0.2% for those who choose the default fund. In the US, the President’s “Commission on Social Security Reform” has set a target of 0.3% AMC for individuals’ “carve out” accounts. This reflects the experience of the Federal Thrift Savings Plan, a compulsory Defined Contribution scheme for all Federal employees, which by restricting choice to only six indexed funds, and by buying from the wholesale fund management industry through a competitive bidding process, achieves fund management costs of about 0.06% and total costs of about 0.1%. The President’s Commission believes that total costs of 0.3% will allow a wider range of asset allocation choices (including some actively managed funds) to be provided.

The Pensions Commission believe that nationally administered but individually owned accounts could and, as Chapter Five argues, should play a role in the UK pension system. Chapter 10 Section 10 considers in more detail the costs that are achieved in other countries and possible target costs in the UK.

(iii) National auto-enrolment

Section 2 above described the behavioural barriers to the success of a purely voluntary system: these might provide a rationale for compulsion. But it also described the diversity and ambivalence of attitudes towards compulsion, which in part reflects differences in individual preferences and individual circumstances. Compulsion may help some individuals by preventing under-saving, but could harm others by requiring over-saving.

Automatic enrolment may be an attractive intermediate option. It has been applied for many years by some employer schemes, where (as Figure 1.25 illustrated) it has achieved significant success in increasing participation rates while leaving those who want to opt-out free to do so. If auto-enrolment were applied more extensively at employer level it would usefully increase participation rates in those cases where the employer already provides a scheme. But it would have no impact in the market segment where the greatest problems lie, among those small and medium companies where there is no employer-supported scheme within which to apply auto-enrolment.

New Zealand is however now planning to introduce auto-enrolment at national level. All employees will be auto-enrolled into a national savings scheme, but with the right to opt-out, with contributions collected through the PAYE tax collection system and then directed to individual accounts [Figure 1.50].

We believe that this principle of national auto-enrolment could and as Chapter 5 argues, should be applied in the UK.
Figure 1.50 New Zealand’s planned “KiwiSaver” scheme

Starting point:
- Savings Product Working Group (August 2004) proposed a national auto-enrolment scheme to address a perceived problem of low individual and aggregate national household savings.
- 2005 budget committed the government to introducing the scheme in April 2007.

Scheme outline:
- All employees aged 18 and over auto-enrolled into KiwiSaver but with the right to opt-out.
- Contributions likely to be 4% as default with option to pay 8%.
- Contributions collected through the PAYE system.
- Money invested with provider of individual’s choice but with default providers for those not making an election.
- Funds not easily accessible until pension age except for permitted withdrawal for first house purchase.

Source: www.securingyourfuture.govt.nz
Reducing the high cost of personal pension provision

As Figure 1.27 showed, the costs involved in providing different types of pensions to different categories of people vary widely. A well-run state PAYG system can be run at costs of less than 0.1% of the accumulated value of the pension rights. Large scale occupational schemes can be run for Annual Management Charges (AMCs) as low as 0.1%-0.3%. But individuals purchasing pensions on an individual basis, or through Group Personal Pensions (GPP) promoted by small companies, typically pay AMCs of 1% or higher. As Chapter 6 of the First Report described, AMCs at this level, along with means-testing, significantly reduce the net rate of return and thus the incentive to save for many individuals. They also significantly reduce pension pots accumulated as a result of any given savings rate. A key aim of public policy should therefore be to create the opportunity for all people to save at the low costs currently enjoyed by higher income individuals, employees in larger companies, and public sector employees.

The Sandler Report (published in July 2002) argued that cost reductions could be achieved if pensions (and other saving products) could be simplified so that they could be sold with less intensive advice. It recommended a price cap of 1% per year as an appropriate starting point. The insurance industry argued, however, that even given a simplified sales and advice process, a 1% price cap would make it impossible to serve much of the market profitably, and persuaded the government that a higher price cap of 1.5% declining to 1.0% after 10 years of a policy (equal to about 1.3% for a policy maintained over 25 years) was required. Even at this price, however, industry cost models suggest that much of the key target market – people of average income and below working in small and medium firms, plus the self-employed - is unprofitable or marginally profitable. They also suggest that profitability, when selling to employees of a small company, depends crucially on the existence of an employer contribution, since only if employers contribute will participation rates be high enough to spread fixed scheme costs across sufficient participants to reduce per person costs to profitable levels.

The Pensions Commission concurs with the conclusion that at the present price cap much of the market segment about which we are most concerned remains unprofitable or marginally profitable. Figure 1.51 sets out our estimates of the combination of income levels and ages required for adequate profitability. The illustration assumes that people work for a small company with 23 employees, that there is an employer contribution of 8% of earnings between the Primary Threshold and the Upper Earnings Limit, and 60% participation. More details in Appendix F.

Figure 1.51  Profitable individuals under present Stakeholder charge cap regime: Group Personal Pension case

- Profitable policies under the Stakeholder charge regime
- Unprofitable policies under the Stakeholder charge regime

A median earner aged 40, marginally unprofitable under the present Stakeholder regime

Source: Pensions Commission analysis
Note: Assumes contributions of 8% of earnings between the Primary Threshold and the Upper Earnings Limit, and 60% participation.
contribution, that 60% of employees participate, and that combined employer and employee contributions amount to 8% of gross earnings above the Primary Threshold. Two cost drivers dominate:

- **Up-front costs** involved in setting up the company scheme, and in conducting advice interviews with individuals. These costs would be significantly reduced if high participation rates were achieved by making either employer or employee contributions compulsory. But they cannot be radically reduced unless the need for regulated advice is eliminated, and the costs of initial scheme set-up reduced.

- **The costs created by lack of persistency.** Assuming present persistency rates published by the Financial Services Authority (FSA) continue, then of the personal pensions started today, only 40% will still be receiving contributions in 10 years time. One of the drivers of this cost is that if people move to a new employer who makes employer’s contributions, individuals can typically only receive those contributions if they join the employers own specific scheme, rather than receiving contributions into an scheme of which they are already a member. This generates a proliferation of account maintenance costs, but more crucially of the account set-up cost.

Radical change to the existing mechanism for providing personal pensions is therefore required to deliver low cost saving opportunities to those at or below median earnings, the key target market segment. The changes required reflect the drivers of today’s high costs of pension provision. Appendix F sets out our analysis of costs, drawing on data provided by different industry participants and considered by the government as part of the stakeholder price cap review. Figure 1.52 shows the estimated costs involved in selling to the “just profitable” person in Figure 1.51, i.e. a 40 year old median earner working for a 23 employee company which makes a contribution, and with combined contributions of 8% of gross earnings above the Primary Threshold.

**Figure 1.52** Sources of costs for the median earner aged 40 in the present Stakeholder Pension system: assuming Group Personal Pension at 23 employee company

<table>
<thead>
<tr>
<th>Source: Pensions Commission analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: More details in Appendix F.</td>
</tr>
</tbody>
</table>
The total costs indicated in Figure 1.52 – equivalent to an AMC of 1.3% – would be even higher for pensions sold individually to people of lower or middle income, or for group schemes where the employer makes no contribution, and where employee participation rates are therefore low. Since costs for these types of sale would be above the regulated price cap, very few are sold.

To reduce costs significantly, a new system therefore needs both radically to cut the up-front distribution and administration costs, and radically reduce non-persistency. We have considered, and have had suggested to us, a number of models by which such cost reduction could be achieved.

These models vary in respect to the locations at which individual accounts would be held, the way in which individuals would select funds in which to invest, and the payment collection mechanism. All the models however involve auto-enrolling individuals into making contributions (but with the right to opt-out) and involve a modest compulsory employer matching contribution. All of them also assume an evolution of the state system which would avoid the spread of means-testing which would occur if current indexation arrangements were continued indefinitely. These common features are essential to the reduction of up-front costs for two reasons: first because they make it possible to dispense with a heavily regulated individual advice process, by making it highly likely that almost all individuals will benefit from saving; second because auto-enrolment and a matching employer contribution will improve participation rates, and thus economies of scale in scheme set-up costs.

These common features could be combined with a large number of different account set-up and holding systems. We have considered 4 options which span the range from minimal to radical change. (See Appendix F for details.)

1. Auto-enrolment into existing Stakeholder accounts.

This approach would produce higher participation rates and would thus spread scheme set-up costs across a larger number of participants. It would thus ensure that a wider range of individuals, in particular in small companies, would have costs as low as the 1.3% AMC illustrated in Figure 1.52, thus becoming profitable within the existing price cap. It would also remove the need for individual advice interviews, which are sometimes currently required when an individual joins a GPP. But initial scheme set-up costs would not be reduced. Nor would non-persistency costs be cut, since people would still need to join a new scheme when they joined a new employer.

We estimate that if this approach increased the participation rate in the case shown in Figure 1.52 from 60% to 80%, and reduced some initial interview costs, then total costs could fall, from 1.3% to about 1.0% for the median earner in the small company illustrated in Figure 1.52.

**Figure 1.53** Sources of costs for the median earner aged 40 in an auto-enrolled nationally administered scheme

<table>
<thead>
<tr>
<th></th>
<th>Up-front costs</th>
<th>Persistency</th>
<th>On-going costs</th>
<th>Start up loan costs</th>
<th>Fund management</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>0.03%</td>
<td>0.02%</td>
<td>0.15%</td>
<td>0.03%</td>
<td>0.08%</td>
<td>0.31%</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis
Note: More details in Appendix F.
2 and 3. Auto-enrolment into personal accounts with a clearing house to reduce non-persistency costs. In the second and third options employers would be required to auto-enrol individuals into making pension contributions and required to make a matching employer contribution but with the contributions then sent via a “clearing house” to the different individual insurance companies at which different individuals hold their accounts. This would help reduce non-persistency costs, since an individual joining a new employer could continue to make contributions to a pre-existing policy, and could have a right to have employer contributions sent to that policy. Two variations of this approach are possible.

2. In the first individuals would still initially join a GPP (or Personal Pension) sold in the current fashion (i.e. via IFAs or insurance company sales forces in direct contact with companies or individuals). But when an individual moved employer, they could continue to make contributions (and to receive employer contributions) into the initial account. The “clearing house” would be essentially an electronic pension payment processing system. This would not radically reduce initial up-front costs, but it would significantly reduce non-persistency. We estimate that this model might cut costs – for the median earner in the small company illustrated in Figure 1.52 – to about 0.7%.

3. In the second, the “clearing house” would play a more important organising role, and the process of initial account set-up would be radically changed. Individuals would be auto-enrolled into making contributions which (together with the employer’s contribution) would be sent to the “clearing house”, which would then contact individuals and ask them to specify the insurance company at which they wished to open an account. Marketing information from each of the providers might be provided through the “clearing house”, and insurance companies would attempt to influence the choice via general advertising. But there would be no sales force or IFA direct contact with the employer or the individual. This model is similar to that which we believe New Zealand is now considering. In theory it should be able to achieve significant cost reductions, perhaps to around 0.5% for the case illustrated in Figure 1.52.

Clearing house mechanisms thus seem likely to be able to reduce costs significantly (though not to the level achieved by option 4 below) while leaving individual accounts still held with individual insurance companies. But to achieve these reductions, price regulation would almost certainly be needed. The experience of Australia suggests that in the absence of a price cap, competition between providers is more likely to take the form of higher marketing costs than low charges. Australia has a fully compulsory pension savings system, thus theoretically eliminating the need for an expensive distribution system to persuade people to save. However average costs for individual accounts are around 1.1% [See Figure 1.49].

4. Auto-enrolment into individual accounts nationally administered. In the fourth model, individuals would be auto-enrolled into making contributions into individual accounts held within a nationally administered system. The national system would then invest the individual’s money, at the individual’s instructions, in funds which had been bulk-bought at low fund management fees from the wholesale fund management industry.

The Swedish Premium Pension Scheme (PPM) is an example of this type of system (though in Sweden membership is compulsory rather than auto-enrolled). And in the US, the President’s Commission on Social Security (2001) recommended that a similar approach should be used to manage the accounts of people who choose to have some of their Social Security contributions invested in funded accounts (so called “carve out” accounts). Our cost model suggests that such a scheme, by radically reducing up-front costs and non-persistency costs, could operate with costs of around 0.3% [Figure 1.53]. The Swedish scheme is aiming for costs of 0.3% or lower once mature: the US President’s Commission advised that a cost target of 0.3% was appropriate.

The Pensions Commission’s conclusion is therefore that a nationally administered system with individual accounts will be the most cost-effective solution.

A crucial driver of the low costs of such a system is the elimination of regulated advice. The success of the system therefore requires a high degree of confidence that the vast majority of people would be better off as a result of saving. As Chapter 5 and Chapter 6 describe this would be achieved by a reduction in the scope of means-testing which would result if present state pension system indexation polices were continued indefinitely, and a modest compulsory matching employer contribution.
Chapter 1 Sections 1 and 2 described a pension system, state and private combined, which is not fit for purpose. It is extremely complex, in some segments cost-inefficient, and for many people it does not provide clear and comprehensible incentives to save. It will produce a highly unequal distribution of pension provision. And it will leave many individuals with pensions they will consider inadequate.

This does not necessarily mean that major change is inevitable. As we commented in our First Report, pension systems, despite lurid press tales of savings gaps, do not reach a sudden crisis. And if we do nothing, some set of adjustments, for instance higher retirement ages, higher savings or poorer pensioners, will occur. But it does mean that a better system could produce results which are more cost-efficient, more in line with people’s underlying desires and more equitable than will be produced by “muddling through”.

It is useful in designing that changed system to step back and understand where we have come from and why a system which once appeared to work adequately well, and indeed which only a decade ago was often lauded as a model for others, is now so deficient. To do that we need to understand the distinctive way in which UK pension policy evolved, compared with the pattern seen in most developed countries.

That analysis reveals that major gaps always existed in British pension provision: the picture was never as rosy as sometimes portrayed. But it also reveals that apparently positive features of the UK system were based on unsustainable foundations.
This Chapter summarises that story and draws implications for how policy must now change. It sets out in turn:

1. Evolution of pension systems in developed countries: the predominant pattern.

2. The UK’s distinctive historic development.

3. The key assumptions on which the effectiveness of the UK system relied.

4. Why these assumptions are no longer valid.

5. Realities upon which a new pension settlement must be built.

1. Pension system evolution in developed countries: the predominant pattern

The details of pension system design vary greatly even between developed countries of roughly equivalent income level. But in the great majority of countries public pension policies have sought to achieve two objectives:

- First, the prevention of poverty in retirement through the redistribution of resources to the less well-off achieved via some sort of guaranteed floor of pension provision. In all developed countries this is achieved in Pay As You Go (PAYG) fashion, financed by current taxes or social insurance contributions.

- Second, ensuring that most people achieve some reasonable level of earnings replacement in retirement. Both the extent of this earnings-related objective and the means by which it is pursued differ significantly between countries:
  - Many continental European countries mandate that the average earner achieves a replacement rate as high as 70%. The US and Australia have mandatory systems which require people to achieve lower replacement rates, e.g. 40-50% for the average earner.
  - And while most countries pursue earnings-related objectives via PAYG schemes, Switzerland and Australia have achieved the same objective by making pension savings compulsory, whilst Denmark and the Netherlands have achieved quasi-compulsory and funded earnings-related systems through collective agreements.

But underlying the diversity of means and precise objectives there is a fundamental common feature. Most developed countries, in some way, make some earnings-related pension provision compulsory.
2. The UK’s unique development

Within this international comparative context, the UK’s historical development was distinctive, and has left the UK with a system of unique complexity.

- While most of Europe and the US developed state earnings-related pension schemes in the early and mid-20th century, the 1942 Beveridge Report and post-war governments established a flat-rate state pension scheme. This reflected the significant prior existence of private pensions provided by insurance companies and of occupational schemes provided by companies and by the government itself as an employer. The decision to keep the state system flat-rate in turn stimulated the further development of these alternative forms of provision. Occupational pension schemes voluntarily provided by companies and by the public sector as employer therefore grew in the 1950s and 1960s to perform some of the role which in other countries was fulfilled by the state system.

- It was clear however that this voluntary system left many gaps, particularly among employees of small and medium-sized firms. It also provided poorly for people with interrupted work records (in particular women) or people who moved between jobs, who were disadvantaged by final salary schemes which provided limited leavers’ rights. A variety of proposals for mandatory earnings-related schemes were therefore put forward, for instance in 1957 and 1969, and a minimal Graduated Retirement Benefit was introduced in 1961.

- In 1978 a comprehensive State Earnings-Related Pension Scheme (SERPS) was finally introduced, but in a unique form. Rather than choosing to introduce either a tax-based PAYG scheme (as in much of Europe and the US), or a compulsory funded scheme (as in Switzerland and, subsequently, Australia), the UK introduced a scheme which could be PAYG for those not already enrolled in occupational schemes but compulsory savings in form for those employees whose employers chose to contract-out. This contracting-out option was subsequently extended, in 1988, to allow individuals to contract-out into personal pensions, i.e. to choose the compulsory savings rather than PAYG route on an individual basis.
The introduction of SERPS was moreover accompanied, from 1981 onwards, by a policy of indexing the Basic State Pension (BSP) to prices, which was also unique in the developed world. These two developments were linked. For while SERPS had passed through Parliament in 1976 with cross party support, there was no consensus in favour of the significant growth in public expenditure which would inevitably follow from the addition of a significant earnings-related element of the system, provided, at least for some employees, in a PAYG form. As the long-term public expenditure implications of SERPS became increasingly apparent, therefore, the Conservative government linked the BSP to prices and subsequently reformed SERPS in a number of steps, for instance in 1986 and 1995, which reduced its generosity. As a result the UK has public expenditure on pensions well below that of most other developed countries which have earnings-related PAYG systems [Figure 2.1]. But the decline in the generosity of the BSP relative to average earnings meant that the anti-poverty element of the system had to become even more means-tested. And the multiple changes to the generosity of SERPS have contributed to the lack of understanding of SERPS (now the State Second Pension (S2P)) to which Chapter 1 Section 2 referred.

The UK system today does therefore include, in common with most other developed countries, a mandatory earnings-related element. But the degree of earnings-related compulsion is now limited and in decline (because the Upper Earnings Limit (UEL) is linked to prices) and the system is distinctive in three unfavourable ways:

- Basic anti-poverty prevention is extensively means-tested, complicating incentives for voluntary private saving.
- The earnings-related element of the system is bewilderingly complex both because of the contracting-in/contracting-out choice and because the terms of the pension promise have been changed so many times.
- There are multiple forms of private pension provision themselves subject to complex (but differing) regulations.
**Figure 2.1** International comparison of long-term public expenditure on pensions

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage of GDP in:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009 or nearest available date</td>
</tr>
<tr>
<td>Austria</td>
<td>14.2</td>
</tr>
<tr>
<td>Belgium</td>
<td>8.8</td>
</tr>
<tr>
<td>Denmark</td>
<td>5.5</td>
</tr>
<tr>
<td>Finland</td>
<td>12.3</td>
</tr>
<tr>
<td>France</td>
<td>12.9</td>
</tr>
<tr>
<td>Germany¹</td>
<td>10.9</td>
</tr>
<tr>
<td>Greece</td>
<td>12.3</td>
</tr>
<tr>
<td>Ireland</td>
<td>4.1 (2008)</td>
</tr>
<tr>
<td>Italy</td>
<td>13.6</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>7.5 (2008)</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5.2 (2008)</td>
</tr>
<tr>
<td>Spain</td>
<td>8.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>8.6 (2008)</td>
</tr>
<tr>
<td>United Kingdom³</td>
<td>6.8</td>
</tr>
</tbody>
</table>

United Kingdom (Pensions Commission base case)⁴

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage of GDP in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>6.2 (2010)</td>
</tr>
</tbody>
</table>

Source: European Commission 2005 Public Finances in the EMU to be published as European Economy n° 3/2005

¹ EU 15 countries. No information relating to Portugal.

² Projections were made by the IFO Institute for Economic Research.

³ These EU published figures use HM Treasury estimates and do not reflect the estimates made by the Pensions Commission. The estimate does not include costs for Housing Benefit, Council Tax Benefit, Disability Living Allowance and Attendance Allowance for those aged over SPA. It does, however, include public sector pension expenditure.

⁴ This estimate does include costs for Housing Benefit, Council Tax Benefit, Disability Living Allowance and Attendance Allowance for those aged over State Pension Age. It does not however, include public sector pension expenditure.
3. Key assumptions for UK system effectiveness

As our First Report suggested, it is important to recognise that the UK’s complex and multi-faceted system has always left significant gaps in pension provision for particular groups of individuals, and has created major inequalities in pension provision between different groups of people of the same lifetime income level. But “on average” and overall the system has delivered a transfer of GDP to pensioners not far below that achieved by more straightforward state or compulsory savings schemes in other countries [Figure 2.2]. At the aggregate “on average” level voluntary provision has significantly offset the low level of state provision.

This “on average” effectiveness of the system has however been vitally dependent on two assumptions:

- First, that large numbers of employers, in pursuit of recruitment and retention objectives, would voluntarily provide private pension schemes, performing for many people the function of earnings-related provider which in most other countries was performed by the state or compulsorily required. UK pension assets, at over 100% of GDP, are among the largest in the world.1 Only Switzerland, Denmark and the Netherlands have larger assets, relative to GDP but their funded assets reflect the impact of compulsion.2 Voluntarily generated pension fund assets are larger in the UK relative to national income than in any other major developed country.

- Second, that individuals working for companies which did not provide occupational schemes, would be able to secure good value personal pension policies, at reasonably low Annual Management Charges (AMCs), provided appropriate regulation helped create an efficient market.

Looking forward the validity of these assumptions will become even more important. This is because the overt objective of both the previous and the current government has been and is that voluntary private pension provision should grow still further to compensate for limited state provision. The aim of the present government has been to increase the percentage of pension income deriving from private pensions to 60% over the next several decades from around a third today. State pension expenditure conversely will increase only slightly as a percentage of GDP despite the scale of the demographic challenge. To achieve this it is assumed that the BSP will remain linked to prices. If this occurs the value of the BSP as a percentage of median earnings would keep declining (from 19% today to 8% in 2050) and average state pension payments to pensioners would fall as a fraction of average earnings by about 27% over the next 45 years.

Voluntary employer pension provision and a cost-efficient personal pension market are therefore more important than ever.

---

1 The Pensions Commission estimated that UK pension assets at end 2003 were approximately 120% of GDP or £1.3 trillion [See Table 5.1, First Report].
4. Assumptions no longer valid: context changed

The increasing problems of the UK pension system result from the fact that the second of these assumptions was never valid, and that the first has ceased to be valid: the context has changed. And while it has changed also in one positive way, as a result of the growth of house ownership, this growth provides only partial compensation for an increasingly inadequate pension system.

Three key changes in context need to be recognised:

(i) Voluntary employer provision is in decline

Far from growing to fill the increasing gap left by a limited state role, voluntary employer pension provision is in decline, as Chapter 1 Sections 1 and 2 have described. The precise timing and pace of this decline may have been influenced by changes in the tax treatment of pension schemes: i.e. the change in the tax treatment of measured Defined Benefit surpluses introduced in 1987 and the reduction and then removal of dividend tax relief in 1993 and 1997. But looking at other countries, and considering the logical drivers of self-interested company behaviour, what is distinctive and surprising about the UK’s voluntary occupational pension provision is not that it is now in decline, but that it became so extensive and remained so extensive for so long. For, as the Annex to Chapter 3 of the First Report set out, the development of final salary pension promises, as they existed by the mid-1990s, was driven more by a series of historical accidents than by sustainable drivers of rational economic behaviour. The panel on the following page summarises the analysis of that Annex.
The rise and decline of the private sector Defined Benefit pension: 
a brief summary

In the Annex to Chapter 3 of the First Report we described and explained the rise and then decline of private sector Defined Benefit (DB) schemes. This panel summarises the key points made in that Annex.

The long-term trends
Both the First Report and Chapter 1 of this Report have described the rapid decline in private sector DB provision (primarily final salary in form) which has occurred in the last 10 years. In 1995 there were 5.2 million members of open private sector DB schemes; today there are fewer than 2 million with numbers falling fast. But it is important to understand that private sector DB provision has been in underlying decline for much longer. Adjusting for the distorting effect of utility privatisation, it is clear that the percentage of the private sector workforce covered by DB provision has been in decline since the 1970s.

This followed a period of explosive growth. In 1953 only 3.1 million people were members of private sector occupational schemes: by 1967, over 8 million, with 55% of them members of final salary schemes and another 15% members of average salary schemes.

Explaining the trends: the affordable rise
In part this growth reflected a society of growing prosperity and tight labour markets with employers competing for workers. But it also reflected specific features of the policy context and of economic conditions:

- High marginal income and corporation tax rates made pension provision highly tax efficient.
- Incomes policies constrained cash wages, but not non-cash pension benefits.
- And final salary schemes, initially opposed by trade unions as favouring senior managers, were subsequently welcomed as imperfect ways of ensuring price indexation, at least up to the point of retirement.

These pension promises however left many gaps: early leavers typically acquired minimal rights; spouse benefits were not assured; women did not enjoy equal access to pensions, for instance, if working part time. Most crucially, price indexation was usually at the discretion of trustees, with no regulatory requirement and in most cases no clear contractual commitment.

These gaps mean that it is wrong to think of the heyday of DB schemes as an unalloyed golden age. But it was precisely these gaps and the discretionary nature of the promise that made the pension promises affordable. Underlying contributions (employer and employee combined) required to support a typical DB promise, when the schemes were put in place, were usually estimated at about 10-14% of salary.

Explaining the trends: survival in the 1970s
From the start UK pension funds invested heavily in equities. Between October 1973 and September 1974 the value of the UK stock market fell by 50%, a far bigger stock fall than between 2000 and 2003. Inflation averaged over 10% for the next decade, and the stock market did not regain its 1973 real value until 1980. But there was no wave of DB scheme closures for two reasons: first the schemes were far less mature than today, with a much higher ratio of workers to pensioners. Second and crucially, the absence of required price indexation meant that the impact of high inflation, and of negative real stock market returns, fell on pensioner incomes not on the viability of the fund.

Explaining the trends: the growth of unplanned and unanticipated costs
By the start of the 1970s, the private sector had voluntarily put in place affordable, but highly unequal and to a degree discretionary, promises. Over the next 30 years, the inequality and discretion were removed by regulation. A series of Social Security Acts from 1973 to 1997 created equal access to pension rights for women, protected early leavers’ rights, defined spousal benefits, and limited discretion over price indexation.
In addition the external context changed in two important ways:

- Inflation fell to low single figures thus limiting the potential to degrade real pension incomes through non-indexation even where discretion still remained.
- And life expectancy increased. Between 1950 and 1980 estimated male life expectancy at 65 rose only very slowly from 11.9 to 13.9 years; between 1981 and 2004 it increased by 5 years to reach 18.9.

The combined effect of these changes in regulation and context was that the underlying cost of a typical final salary pension promise as a percentage of salary rose from 10-14% when most schemes were initially designed, to 22-26% today.

**Explaining the trends: irrational exuberance delays necessary adjustments**

Given this huge increase in underlying cost, what is surprising is not the decline of DB pensions in the 1980s and 1990s, but that this decline was initially very slow and that there was minimal change in scheme design. Faced with increasing cost we might have expected to see some mix of (i) reductions in headline generosity e.g. switches from 60th to 80th accruals; (ii) increases in retirement ages to offset rising life expectancy; and (iii) increases in both employer and employee contributions. On average few of these adjustments occurred.

In part this can be explained by the delayed appreciation of life expectancy increases: only in the late 1990s did estimates start to reflect the assumption that rapid mortality reductions might be maintained well into the future.

But the bigger explanation is the long equity bull market of the 1980s and 1990s. From 1974 to 2000 the average real return on UK equities was 13%, compared with a twentieth century average of about 5.5%. This made increasingly expensive pension provision appear easily affordable to both employers and to government. Employers took contribution holidays, and used pension fund “surpluses” to make early retirement packages look like costless alternatives to cash redundancy payments. And the government tightened the tax treatment of pension funds in 1986, 1993 and 1997. In retrospect the actions of both employers and government were based on irrationally exuberant assumptions about sustainable returns.

**Conclusions and implications**

The exceptional equity returns in the 1980s and 1990s allowed many private sector DB schemes to ignore the rapid rise in the underlying cost of their pension promises. When the fool’s paradise came to an end, companies adjusted rapidly, closing DB schemes to new members.

A reduction in the generosity of the DB pension promises which existed by the mid-1990s was inevitable. That generosity had not resulted from a consciously planned employer approach to labour market competition, and would never have resulted from voluntary employer action well informed by foresight as to the eventual cost, or operating within rational expectations of equity market returns. But the suddenness of the delayed adjustment, and its extremely unequal impact between existing and new members, have severely exacerbated the gaps that always existed in the UK’s pension system.
The key points from the panel are:

- Many of the reasons for the growth of private sector occupational provision in the UK were specific to the economic and social policy context of the 1950s to 1970s.

- These pension promises were also put in place in the period when longevity trends were not well understood, with decisions based on expectations of life expectancy which turned out to be far too low.

- The original promises were subject to a high degree of discretion, and were only affordable at the originally estimated cost precisely because of that discretion. In particular they treated early leavers badly and often increased pensions in payment less than in line with inflation. But this discretion was removed by legislation during the 1970s, 1980s and 1990s as government, slowly retreating from its role in pension provision, aimed to place more of the burden of adequate pension provision on the voluntary occupational system.

Through accident of history, and as result of government policy, UK companies had thus put in place by the 1980s and 1990s pension promises of a generosity which they were unwilling to maintain on the basis of a fuller understanding of the risks they were running.

The inevitable employer retreat from these unintended commitments was delayed by the 1980s and 1990s equity boom, which created the fool’s paradise to which we referred in our First Report. That boom created the illusion of apparently sustainable pension fund surpluses. It led firms to maintain increasingly expensive pension promises while simultaneously cutting contributions. And it enabled government to load more statutory requirements onto pension schemes while simultaneously tightening the tax regime.

UK pension policy has, thus, for at least 25 years, been based on the belief that the declining state role will be compensated for by an increase in voluntary employer provision, unaware that the underlying trend has been since the 1980s and continues to be for employers to exit from the social security role which they had accidentally assumed.
(ii) Mass personal pension market is uneconomic

The end of the fool’s paradise has also undermined the second assumption of the UK system, personal pensions bought by those not enjoying occupational pension provision and either choosing not to join SERPS or seeking additional provision on top. Encouraging contracting-out from SERPS by individuals was seen in the 1980s and 1990s as an additional route by which the state would avoid the long-term fiscal costs which changing demography would otherwise impose. And the sale of personal pensions, even to people of modest means, appeared to be both profitable for the industry and attractive for the individual, at a time when high sales and administration costs (with AMCs often 3% or more) could be swamped by high equity and bond returns. As the end of the boom has brought a return to more rational return expectations, the unsustainable economics of individual pension sales to people of average income and below have become apparent.

(iii) Increasing house ownership

Faced with declining state pension provision, retreating occupational provision, and an increasing awareness of poor value in personal pensions, an increasing number of people look to their housing wealth to provide for retirement income. And for many this will be a possibility, since another major development of the last 25 years has been the spread of home ownership, now reaching over 70% even among 70 to 80 year olds. As Chapter 1 Section 3 explained this development implies that it may no longer be necessary or appropriate to aim for the replacement rates for everyone which once appeared essential when occupational pension schemes were put in place in the 1950s to 1970s.

5. Realities upon which a new pension settlement must be based

We therefore need to build a new pension policy for the 21st century based on the following three realities:

- The freely arising self-interest of well-run companies will not result in an increasing level of voluntarily provided earnings-related pensions. Many large companies will continue to provide good pension schemes, but the shift in employer attitudes towards pension provision, described in Chapter 1 Section 2, will not be voluntarily reversed. Employer provision of pensions to average and lower income people working for small and medium-sized firms will not grow on a voluntary basis.
There exists a segment of the market, people of around and below average earnings, working in small and medium firms or self-employed, to which a freely competitive market cannot now, and will not in future, deliver pensions at AMCs simultaneously high enough to make the segment profitable for the financial services industry, and low enough to deliver good value to savers.

The growth of house ownership has created for many people an alternative means through which to accumulate wealth which can be used (either by themselves or by their inheritors) partly to fund consumption in retirement. This has consequences for the appropriate earnings-related objectives within any pension system. But it is not sufficient in itself to resolve all problems of pension adequacy.

The principles which should guide a pension system based on these realities are described in the next Chapter.
Given the realities outlined in Chapters 1 and 2 the Pensions Commission believes that minor changes in policy, tinkering with the present system, will not create a pension system fit for purpose in the twenty-first century. Major changes are therefore required to create a sustainable pension settlement.

This Chapter describes the objectives and rationale of the reforms we recommend, covering in turn:

1. The objectives and key elements of reform
2. Principles of a future state pension system, and the long-term consequences for public expenditure and the State Pension Age
3. The rationale for introducing a National Pension Savings Scheme with auto-enrolment
4. The new settlement: an integrated approach
5. The new settlement: the role of the state
1. Objectives and key elements of reform

The general principles which should guide this settlement are:

- It must create a less complex and more understandable system.
- It must deal with major gaps which exist in the current system for people with interrupted careers and caring responsibilities.
- It must overcome four barriers which undermine voluntary private pension provision:
  - Inertia and other behavioural barriers to rational decision making;
  - The high cost of provision for many middle and lower income people;
  - The belief that current government indexation arrangements imply a relentless spread of means-testing, generating uncertainty about whether pension saving represents a good deal; and
  - Employer perceptions that there are limited self-interested reasons for providing pensions.
- But it must maintain the improvements in the relative standard of living of the poorest pensioners and the reduction in pensioner poverty which the current means-tested approach has achieved.
- And it must be sustainable in the face of rising longevity and of uncertainty over how fast that rise is occurring.

Achieving all these principles within acceptable public expenditure limits, and from the starting point of today’s complex system and existing accrued rights, will be extremely difficult. Hard trade-offs must be made between different desirable objectives: and the merits of different routes towards those objectives can be debated.

But the Pensions Commission believes that a new settlement which meets these principles as best as possible and which reflects the realities outlined in Chapters 1 and 2, must be based on two key elements:

- A state pension system which is on average more generous, closer to universal and less means-tested than will be possible given the current percentage of GDP devoted to pensions and the current State Pension Age (SPA). In the long-term this system will therefore require some mix of higher public expenditure on state pensions and higher SPA.
The introduction of a National Pension Savings Scheme (NPSS) into which people will be automatically enrolled, but with the right to opt-out, with a modest level of compulsory matching employer contribution, and delivering to all people the opportunity to invest at low cost.

We set out below the rationale for these two elements. We then set out:

- The complementary nature of these proposals.
- The proposed role of government in a new pension settlement for the twenty-first century.

2. A better state pension system: long-term consequences for public expenditure and state pension ages

The UK’s state pension system is already deficient in its treatment of many people with interrupted careers and caring responsibilities, in particular women. And over time, if present indexation rules are continued indefinitely, it would become steadily more means-tested. This would tend to reduce actual or perceived incentives to private saving.

We have concluded that these problems must be overcome if the overall pension system, state and private combined, is to work effectively. There is a variety of ways to achieve this. In Chapter 6 we describe several alternatives and the trade-offs which have to be made. We explain our preference for a way forward which builds on the existing Basic State Pension (BSP) and State Second Pension (S2P) systems, rather than combining them into one unified flat-rate pension. But we acknowledge the merits of an alternative unified approach. We also explicitly discuss the trade-offs involved in deciding how soon changes are possible within public expenditure constraints and how soon they are needed to create a more coherent system.

But the essential features of the state pension reform we are recommending are clear. We believe that:

- State Pay As You Go (PAYG) pension expenditure should in the long-term be concentrated on securing as generous and as non-means-tested flat-rate state pension provision as possible, with the state withdrawing gradually from its role in PAYG earnings-related pension provision as the NPSS provides a proven alternative earnings-related system. Other countries, with different traditions, such as Sweden, have efficient and sustainable earnings-related PAYG systems. But in Britain, the introduction of earnings-related pensions was not accompanied by a willingness to accept the consequences for the overall taxation burden, and led directly to offsetting policies, such as price indexation of the BSP and the extension of contracting-in/contracting-out choices, which have created the complexity and need for means-testing which undermine today’s system.
The value of flat-rate state pension provision must in the long-term rise in line with average earnings. The date at which this policy should commence can be debated, but unless this principle is followed, one of two consequences will inevitably follow:

- Either, if the Guarantee Credit is also linked to prices rather than average earnings, the poorest pensioners will become poorer relative to the rest of society.

- Or, if the Guarantee Credit is linked to earnings and the BSP permanently linked to prices, the role of means-testing will grow.

We believe that the first option is unacceptable in distributional terms since it will produce rising pensioner poverty, and that the second option will undermine incentives to private pension provision and thus the likely success of the NPSS.

Flat-rate state pension provision should become more universal. In our specific recommendation this would be achieved by switching future BSP accruals onto a universal residency basis, while leaving the S2P a contributory system as now. We believe that this would make a major contribution to cutting through the problems which the contributory system creates for those with interrupted careers and caring responsibilities and significantly simplify part of the state system.

State Pension Ages will in the long-term need to rise broadly with increases in life expectancy so that each generation spends a roughly similar proportion of adult life contributing to and receiving a state pension. This principle is fair between generations, and required if a permanently rising percentage of GDP devoted to pensions is to be avoided while maintaining the relative value of the state provided minimum.

The inevitable consequence of the first three of these features is that average expenditure per pensioner will be higher than it would be under current indexation arrangements. And while the fourth feature (a proportionate rise in the SPA) will help to offset some of the public expenditure implications, it will not in itself be sufficient to prevent a rise in public expenditure as a percentage of GDP between now and 2050. As Chapter 1 Section 4 explained, this is because the rise in the dependency ratio over the next 30 years will be driven not only by rising longevity but also by the delayed effect of the fertility decline which occurred between the early 1960s and mid-1970s and was sustained thereafter. Proportional rises in the SPA are therefore insufficient to stabilise this ratio. As a result we believe that it will be impossible to create a more coherent state pension system, even one focused solely on adequate flat-rate provision, without some increase in public pension expenditures as a percentage of GDP, as well as some increase in SPA.
In Chapter 5, Section 4 we propose the range of possible combinations of increased expenditure as a percentage of GDP and increased pension ages likely to be required to create a coherent state system. This range is illustrated in Figure 3.1. The already planned increase in SPA for women, rising between 2010-2020 from 60 to 65, means that neither significant additional expenditure as a percentage of GDP from current levels nor a still higher SPA are required before 2020 to achieve the structural changes needed. But beyond 2020 there is an unavoidable trade-off, which society now needs to debate.
3. Introducing a National Pension Savings Scheme with auto-enrolment

The reforms to the state system proposed above will limit the future spread of means-testing, and will create a simpler and more understandable system. These changes will in themselves create a better basis on which private pension provision (by individuals and/or by their employers) can build.

But we do not believe that reforms to the state system are sufficient in themselves for two reasons:

■ First because such reform would not in itself make a purely voluntary system of earnings-related provision effective. Means-testing will be reduced, but behavioural barriers of inertia and irrationality would remain, as well as cost barriers to selling private pensions to large segments of the market. And employers are in general retreating from their role as voluntary private pension providers.

■ Second because focussing the PAYG resources of the state on flat-rate provision – while logical and likely to make it easier to ensure adequate flat-rate pensions, will gradually remove from the system the element of earnings-related compulsion which already exists. The state will over time cease to compel people to make earnings-related provision either in a PAYG form (through S2P membership) or in a compulsory funded form (via the contracted-out option).

We therefore believe it essential that policy towards private funded pension provision goes beyond a purely voluntary approach. But the wide diversity of people’s preferences and circumstances – particularly in relation to the ownership and inheritance of housing assets – argues against an approach which compels individuals or their employer to make the pension provision which people on average will consider adequate.

Given this balance of considerations we believe that the appropriate policy for earnings-related pensions should be for the state strongly to encourage people to achieve a “minimum base load” of private pension provision, while enabling them (or their employers on their behalf) to save more than this minimum in a cost-efficient way. The target for the minimum base load which we propose is a replacement rate of about 45% for the median earner. A target at this level minimises the danger that the state will encourage people to save inappropriately, since the vast majority of people, even those with housing or other non-pension assets, are likely to desire a pension of at least this level. But it will significantly reduce the danger of severe under-saving if combined with policies to facilitate additional purely voluntary saving on top.
To pursue these objectives, we propose the creation of a National Pension Savings Scheme with the following features:

- **Automatic enrolment (auto-enrolment):** All employees not covered by high quality pension schemes should be auto-enrolled into the scheme, but with the right to opt-out. This will use the power of inertia to encourage saving, while leaving individuals ultimately free to make their own choice in the light of individual preferences and circumstances. The self-employed, for whom it is very difficult to design an effective auto-enrolment process, should be able to join in an easy and cost-effective fashion.

- **A modest compulsory employer matching contribution:** This, along with the impact of tax relief, will ensure that the scheme is highly likely to deliver attractive returns (even for those people still subject to some means-testing). It will create a more level playing field between the many employers who are already making pension contributions and those who are not. And, if at a relatively modest level, it can be introduced without serious adverse implications for total labour costs.

- **Individual accounts:** Contributions would be accumulated in individual accounts, and invested in funds chosen by individuals, but with a default fund for those who do not choose to make an active selection. Individuals will thus accumulate their own identifiable pension wealth.

- **Low Annual Management Charges:** A target of 0.3% or less. This is essential to ensure all people can enjoy the opportunity of cost-efficient pension saving previously enjoyed only by employees of larger firms or of the public sector, and by higher income individuals. It will increase the rational incentives to save. It requires a cost-efficient payroll deduction process, an elimination of the need for regulated advice, and the aggregation of individual funds to allow bulk buying of fund management services.

4. **The new settlement: an integrated approach**

Within both of the policy elements we are recommending there are many detailed alternatives possible. These are considered in later Chapters. Policy choices between these alternatives must however recognise the complementary nature of three key recommendations. Thus:

- We are not convinced that even a radical reduction in the present level of means-testing and the creation of a simpler and more understandable state system would be sufficient in themselves to stimulate voluntary private saving, since the barriers of inertia and high cost would remain. The state should therefore encourage and enable saving via the creation of the NPSS.
But a clear policy to prevent the future spread of means-testing is essential to the success and credibility of the NPSS. The vast majority of members should be able to secure attractive returns (unaffected by significant means-testing) on both their own and their employer default level contributions, and on any voluntary contributions they and their employers choose to make.

Our detailed analysis of options for the state system, in Chapter 6, suggests, however, that it will not be possible to eliminate all pensions means-testing in the state system, without increases in public expenditure or increases in the SPA which are unlikely to be accepted.

If this is true, then a modest compulsory employer matching contribution within the NPSS is essential to ensure that all members can be certain of achieving attractive returns on their own contributions, even if some of them continue to be subject to some means-testing in retirement. This certainty removes the need for regulated advice, and thus makes possible the low costs which the scheme aims to achieve.

5. The new settlement: the role of the state

The new settlement for pension policy we are proposing defines the role of the state in a way which we believe is appropriate for the twenty-first century and sustainable over the long-term given the realities of the UK’s overall political economy. We believe that the state should:

- Ensure a basic level of pension income for all on a flat-rate, PAYG basis, with as little means-testing as possible, recognising and openly explaining to society the consequences of this for long-term public expenditure and for the State Pension Age.

- Encourage earnings-related saving into existing funded pension schemes and into a newly created National Pension Saving Scheme within which members own their own individual funds.

- Enable all citizens to enjoy the opportunity to save for a pension at the low costs enjoyed today by employees of large companies, higher income individuals and public sector employees.
To achieve the principles and objectives set out in Chapter 3, we need to consider the whole pension system, flat-rate and earnings-related, state and private, in an integrated fashion, since we start with a system in which the elements are closely interlinked. For while the core question handed to the Pensions Commission was “Should the UK introduce compulsory private pension savings?”, the UK already has a system in which about a sixth of all private pension saving is in a sense compulsory. All employees have to be covered by some earnings-related pension provision. This provision can be through participation in the State Second Pension (S2P), or through contributions to pension schemes funded in part by the contracted-out rebate. Any recommendations on the appropriate approach to earnings-related pensions therefore entail recommendations on the evolution of the S2P. And the evolution of the S2P cannot be considered in isolation from the Basic State Pension (BSP), since it is the relationship between these two elements of state provision which would drive the spread of means-testing if current indexation arrangements continued indefinitely, a spread which in turn would carry implications for the effectiveness of any earnings-related system, compulsory or voluntary.

The crucial starting point for any policy recommendations is therefore a clear understanding of how the present state and compulsory saving system works and how it will evolve in future if policy does not change.
This chapter therefore sets out:

1. Key features of the current state and compulsory savings system and of its possible evolution if current indexation arrangements were continued indefinitely

2. Problems with the current system and possible evolution: objectives for change

### 1. Key features of state and compulsory savings system and its possible evolution

The UK state pension system for someone retiring today consists of the flat-rate BSP and an earnings-related pension, both payable at 65 for men and 60 for women, plus means-tested additions. But if present indexation arrangements remained unchanged [Figure 4.1] this system would change in three important ways:

i) It would become effectively flat-rate, but with the flat-rate pension delivered in two separate elements;

ii) It would become more means-tested over time;

iii) And it would adjust to limit the impact of rising life expectancy increases on public expenditure, increasing the “effective” pension age for the BSP, but in a way which is complex, sub-optimal and not widely understood.

#### i) The evolution to a flat-rate system

Figures 4.2-4.11 explain key features of the present position and of its evolution if current indexation arrangements were continued.

- Figure 4.2 illustrates the state pension and benefit income which a man retiring in 2005 aged 65, and with a fairly full contributory record but no private pension, would receive at the point of retirement given different levels of income during working life.1 There is a basic flat-rate pension (the BSP) whose value reflects the number of years in which someone has earned above the Lower Earnings Limit (LEL) of £4,264 (in 2005/06); the State Second Pension (S2P) (previously the State Earnings Related Pension (SERPS)) which pays out partly earnings-related benefits in return for earnings-related contributions as earnings rise above the LEL; and there are two categories of means-tested top-ups: the Guarantee Credit to ensure that everyone can receive at least £109.45 per week and a Savings Credit to smooth withdrawal of the means-tested top-up, so that for most people the withdrawal rate is 40%. (The Guarantee Credit and the Savings Credit are together referred to as the Pension Credit).

---

1 In this Chapter we use highly simplified examples to illustrate the key features of the system: Chapter 6 uses more realistic profiles reflecting for example the impact of interrupted work records and of variable income levels during working life.
In this Chapter we show how state pension income received by different individuals would evolve “if current indexation arrangements continued indefinitely”. In Figure 4.6 we show how the income range covered by Savings Credit would grow under the same scenario. This scenario is also reflected in estimates of future public expenditure on state pensions shown in Chapter 1 and in several places in Chapter 6.

As the title suggests this scenario describes what would occur if the indexation arrangements followed in recent years continued unchanged. In particular it shows the result of the combination of:

- Keeping the BSP linked to prices;
- Maintaining SPA at 65;
- Raising the level of the Guarantee Credit in line with earnings; and
- Raising the lower threshold for the Savings Credit in line with the BSP (and thus in line with prices).

These were the assumptions used in the government’s published long-term expenditure forecasts to which we referred in the First Report. They are not however defined government policy for the long-term since, for example, the government has only made firm commitments to the Pension Credit indexation regime till 2007/08. Long-term forecasts of public expenditure and of the extent of means-testing are highly sensitive to different assumptions about these indexation regimes.

Source: Pensions Commission analysis

Note: Assumes individual earnings grow in line with average earnings throughout working life. Working life is from 21-65.
This system was however significantly reformed in 2002, making newly accrued rights flat-rate up to the Lower Earnings Threshold (LET), which at £12,100 (in 2005/06) is significantly above the LEL. This was achieved by changing the accrual rules of S2P so that anyone who earns above the LEL is treated as if they were earning at the LET. (The reforms also doubled the accrual rate achieved at the LET.) Figure 4.3 represents what the system would look like for a hypothetical single person if the current rules, relative to income, stayed in place for the whole of their working life. This system is best understood as a three-tiered system consisting of:

(i) the BSP;

(ii) the flat-rate element of the S2P; and

(iii) an earnings-related system with earnings-related contributions and benefits between the LET and the Upper Earnings Limit (UEL).

Within this three-tiered system, the two flat-rate elements have many similarities but also some important differences:

- They both create contributory flat-rate benefits for anyone earning above the LEL, but not for those earning below.

- They both provide flat-rate credits for some people doing non-remunerated work such as caring (though on slightly different terms with less generous credits in S2P) and for the disabled.

- But the BSP covers the unemployed and self-employed: the S2P does not.

- And the S2P is indexed to earnings during working life and to prices in retirement, while the BSP at present is indexed to prices both before and during retirement.

- Finally the BSP has been in place for many decades, so that people retiring today can be fully paid-up members receiving the full BSP of £82.05 per week: but since the S2P flat-rate element only came into being in 2002, the first fully paid-up beneficiaries with 49 years of contributions will not retire until 2051 (at which date they will receive £67 per week in current earnings terms if they earn above the LEL but below the LET throughout their 49 years).
Figure 4.3 Hypothetical case: future state pension income at the point of retirement if the present accrual structure were maintained indefinitely, and all values and thresholds were linked to average earnings: assuming no private saving.

Source: Pensions Commission analysis

Note: Assumes individual earnings grow in line with average earnings throughout working life. Working life is from 21-65. Assumes all state pension thresholds remain constant in earnings terms from 2005.

This hypothetical case shows what would happen if the present system stayed constant relative to average earnings, i.e. with all relevant thresholds rising in line with average earnings.
The case illustrated in Figure 4.3 is however hypothetical, because it shows what the system would look like if all the parameters in the system moved with average earnings over time. If, instead, present indexation arrangements were continued, the system would change over time in four key respects as illustrated in Figure 4.4:

i) The earnings-related element of the system would gradually disappear. This is because, if the LET is linked to earnings and the UEL to prices (as currently planned) the band of earnings between the LET and the UEL will eventually dwindle to zero. This would occur on unchanged indexation arrangements by around 2055: thereafter no earnings-related rights would be accrued (though already accrued earnings-related benefits would of course go on being paid out well into the late 21st century).

ii) Within the flat-rate element of the system, the S2P will grow in relative importance as accruals slowly build up, while the BSP, linked to prices, will fall in value relative to average earnings.

iii) The LEL and the start point for the Savings Credit, both of which are currently linked to the value of the BSP, will fall relative to average earnings.

iv) With the consequence that the area of the Savings Credit payment and withdrawal expands.

The long-term result of these changes in the system is shown in Figure 4.5.
Figure 4.4 Evolution of state pensions: consequences of current indexation arrangements

- (iii) Start point of BSP and S2P accruals and Savings Credit falls as a percentage of average earnings
- (iv) Area of Savings Credit payment and withdrawal expands as a consequence of other changes
- (i) Earnings related accruals gradually disappear

Source: Pensions Commission analysis
Note: Assumes individual earnings grow in line with average earnings throughout working life. Working life is from 21-65. Assumes all state pension thresholds remain constant in earnings terms from 2005.

Figure 4.5 Evolution of state pensions: the result by 2050 for someone who does no private saving

Source: Pensions Commission analysis
Note: Assumes individual earnings grow in line with average earnings throughout working life. Working life is from 21-65.
ii) Spread of means-testing

The changing balance of the flat-rate system between the BSP and S2P meanwhile drives the spread of means-testing. This is because:

- The level of income at which Savings Credit first becomes payable would fall in relative income terms if, as at present, it is linked to the BSP and the BSP is linked to prices.

- And because the S2P income is treated as “income brought to account” for the purposes of Savings Credit calculations. [See the panel on Pension Credit in Chapter 6 of the First Report for an explanation of why these arrangements drive the spread of means-testing.]

As a result, as Figure 4.6 demonstrates, present indexation rules if continued indefinitely would produce a steady spread of the range of income affected by means-testing. This in turn implies that by 2050 over 70% of all pensioners would be subject to means-tested withdrawal of either S2P or private pension income at some time during their retirement. As a result also, on present arrangements, people in the lowest income groups would not only be protected against any erosion of income relative to average earnings, but would actually enjoy a rising replacement rate from the state, but only if they make little or no private saving on top of the two compulsory elements of the flat-rate pension [Figure 4.7 – see following page].

This effect is an unintended consequence of the present design of the Savings Credit system, and of the changing balance of flat-rate pension provision (i.e. the declining value of the BSP but increasing value of S2P). The Savings Credit was designed to reward voluntary private savings, but as Figure 4.8 shows, the changing balance between the two compulsory tiers of the system automatically drives increasing Savings Credit expenditure even for the person who makes no private saving.

By contrast, for someone who does accumulate private pension rights through their working life, this evolution of the system would imply much lower state pension income than they would receive at present. Figure 4.9 shows pension income for someone retiring in 2050 under this system who had saved 10% of their earnings (over £5,000) from age 30. Figure 4.10 shows the state element of this. As can be seen, except at incomes below about £5,000, the level of state support would be significantly lower than the amounts people with no saving would receive in 2005 under the current arrangements shown in Figure 4.7.
Figure 4.6 Evolution of Pension Credit thresholds

![Graph showing the evolution of Pension Credit thresholds from 2005 to 2050.](graph.png)

Source: Pensions Commission analysis

Figure 4.8 Increasing Savings Credit payments as balance of compulsory system changes

<table>
<thead>
<tr>
<th>Possible combinations of BSP and SERPS/S2P in 2005</th>
<th>2005</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSP</td>
<td>£74.59</td>
<td>£33.62</td>
</tr>
<tr>
<td>SERPS/S2P</td>
<td>£19.71</td>
<td>£61.10</td>
</tr>
<tr>
<td><strong>Total contributory pensions</strong></td>
<td><strong>£94.30</strong></td>
<td><strong>£94.72</strong></td>
</tr>
<tr>
<td>Guarantee Credit</td>
<td>£15.15</td>
<td>£14.77</td>
</tr>
<tr>
<td>Savings Credit</td>
<td>£7.35</td>
<td>£36.66</td>
</tr>
<tr>
<td><strong>Total income</strong></td>
<td><strong>£116.80</strong></td>
<td><strong>£146.15</strong></td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis

Note: This example would apply for someone with a 44 year working life with constant earnings of £8,000 in 2004 earnings terms and no private saving. Assumes BSP continues to be price-linked and Guarantee Credit continues to be earnings-linked.
Chapter 4

**Figure 4.7** State pension income at retirement for someone retiring in 2005 and 2050: assuming no private savings

<table>
<thead>
<tr>
<th>2005</th>
<th>60%</th>
<th>50%</th>
<th>40%</th>
<th>30%</th>
<th>20%</th>
<th>10%</th>
<th>0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>£0</td>
<td>£10,000</td>
<td>£20,000</td>
<td>£30,000</td>
<td>£40,000</td>
<td>£50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pension as percentage of median earnings</td>
<td>Replacement rate at LET: 54%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2050</th>
<th>60%</th>
<th>50%</th>
<th>40%</th>
<th>30%</th>
<th>20%</th>
<th>10%</th>
<th>0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>£0</td>
<td>£10,000</td>
<td>£20,000</td>
<td>£30,000</td>
<td>£40,000</td>
<td>£50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pension as percentage of median earnings</td>
<td>Replacement rate at LET: 60%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis

Note: Assumes individual earnings grow in line with average earnings throughout working life. Working life is from 21-65. Assumes current indexation arrangements continue indefinitely.
**Figure 4.9** Total retirement income at 65 assuming some private saving in 2050

![Diagram showing total retirement income at 65 assuming some private saving in 2050.](image)

Source: Pensions Commission analysis

Note: Assuming saving 10% of earnings above £5,000 (in 2004 earnings terms) 3.5% real rate of return and 0.3% AMC.

---

**Figure 4.10** Income from the state at 65 assuming some private saving in 2050

![Diagram showing income from the state at 65 assuming some private saving in 2050.](image)

Source: Pensions Commission analysis

Note: Assuming saving 10% of earnings above £5,000 (in 2004 earnings terms) 3.5% real rate of return and 0.3% AMC.
iii) Effective state pension age: the complex adjustment

Despite rising life expectancy, government long-term public expenditure projections assume little rise in public expenditure as a percentage of GDP. This is achieved by indexing the BSP to prices. This is equivalent to an increase in the “effective” state pension age for BSP, but in a way which few people understand.

Both elements of the flat-rate system presently pay pensions at a State Pension Age (SPA) of 60 for women and 65 for men today, harmonising to 65 for both men and women by 2020. The present policy assumption is that no change will occur thereafter. But the underlying reality is that there is an important difference between the evolution of the effective pension age under the two systems:

- The BSP under present current indexation arrangements will only pay at the unchanging age of 65 a pension which, because linked to prices not earnings, falls relentlessly relative to the average level of earnings. People will have the option of receiving a higher pension but only if they delay taking it to a later age. We can therefore work out the future evolution of the effective state pension age for BSP, the age at which, at different future dates, people will be able to enjoy a BSP worth the same percentage of average earnings as today. Figure 4.11 illustrates this calculation, showing that the effective state pension age for BSP will rise to 71 by 2030. This rapid rise in the effective state pension age for BSP makes possible the decline in the cost of the BSP relative to GDP.

- For the S2P however there is no difference between the effective and nominal State Pension Age. The S2P promise is to pay a benefit rising in line with earnings up to the age of retirement, with no present plans to increase that age. The inevitable consequence of this over time is a relentless increase in the public expenditure cost of S2P, which will continue even after the recent changes to the accrual system (introduced in 2002) have worked their way through.
### Figure 4.11 Effective state pension age for the BSP: given price indexation and formal SPA remaining at 65: value of pension receivable at different ages in current earnings terms

<table>
<thead>
<tr>
<th>Age of first claim</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>82</td>
<td>74</td>
<td>67</td>
<td>61</td>
<td>55</td>
<td>50</td>
<td>45</td>
<td>40</td>
<td>37</td>
<td>33</td>
</tr>
<tr>
<td>66</td>
<td>91</td>
<td>82</td>
<td>74</td>
<td>67</td>
<td>60</td>
<td>55</td>
<td>49</td>
<td>45</td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>67</td>
<td>99</td>
<td>90</td>
<td>81</td>
<td>73</td>
<td>66</td>
<td>60</td>
<td>54</td>
<td>49</td>
<td>44</td>
<td>40</td>
</tr>
<tr>
<td>68</td>
<td>108</td>
<td>97</td>
<td>88</td>
<td>80</td>
<td>72</td>
<td>65</td>
<td>59</td>
<td>53</td>
<td>48</td>
<td>43</td>
</tr>
<tr>
<td>69</td>
<td>116</td>
<td>105</td>
<td>95</td>
<td>86</td>
<td>78</td>
<td>70</td>
<td>63</td>
<td>57</td>
<td>52</td>
<td>47</td>
</tr>
<tr>
<td>70</td>
<td>125</td>
<td>113</td>
<td>102</td>
<td>92</td>
<td>83</td>
<td>75</td>
<td>68</td>
<td>61</td>
<td>56</td>
<td>50</td>
</tr>
<tr>
<td>71</td>
<td>133</td>
<td>120</td>
<td>109</td>
<td>98</td>
<td>89</td>
<td>80</td>
<td>73</td>
<td>66</td>
<td>59</td>
<td>54</td>
</tr>
<tr>
<td>72</td>
<td>142</td>
<td>128</td>
<td>116</td>
<td>105</td>
<td>95</td>
<td>86</td>
<td>77</td>
<td>70</td>
<td>63</td>
<td>57</td>
</tr>
<tr>
<td>73</td>
<td>150</td>
<td>136</td>
<td>123</td>
<td>111</td>
<td>100</td>
<td>91</td>
<td>82</td>
<td>74</td>
<td>67</td>
<td>61</td>
</tr>
<tr>
<td>74</td>
<td>159</td>
<td>144</td>
<td>130</td>
<td>117</td>
<td>106</td>
<td>96</td>
<td>87</td>
<td>78</td>
<td>71</td>
<td>64</td>
</tr>
<tr>
<td>75</td>
<td>167</td>
<td>151</td>
<td>137</td>
<td>124</td>
<td>112</td>
<td>101</td>
<td>91</td>
<td>83</td>
<td>75</td>
<td>67</td>
</tr>
<tr>
<td>76</td>
<td>176</td>
<td>159</td>
<td>144</td>
<td>130</td>
<td>117</td>
<td>106</td>
<td>96</td>
<td>87</td>
<td>78</td>
<td>71</td>
</tr>
<tr>
<td>77</td>
<td>184</td>
<td>167</td>
<td>151</td>
<td>136</td>
<td>123</td>
<td>111</td>
<td>101</td>
<td>91</td>
<td>82</td>
<td>74</td>
</tr>
<tr>
<td>78</td>
<td>193</td>
<td>174</td>
<td>158</td>
<td>143</td>
<td>129</td>
<td>116</td>
<td>105</td>
<td>95</td>
<td>86</td>
<td>78</td>
</tr>
<tr>
<td>79</td>
<td>202</td>
<td>182</td>
<td>165</td>
<td>149</td>
<td>135</td>
<td>122</td>
<td>110</td>
<td>99</td>
<td>90</td>
<td>81</td>
</tr>
<tr>
<td>80</td>
<td>210</td>
<td>190</td>
<td>172</td>
<td>155</td>
<td>140</td>
<td>127</td>
<td>115</td>
<td>104</td>
<td>94</td>
<td>85</td>
</tr>
<tr>
<td>81</td>
<td>219</td>
<td>198</td>
<td>179</td>
<td>161</td>
<td>146</td>
<td>132</td>
<td>119</td>
<td>108</td>
<td>97</td>
<td>88</td>
</tr>
<tr>
<td>82</td>
<td>227</td>
<td>205</td>
<td>186</td>
<td>168</td>
<td>152</td>
<td>137</td>
<td>124</td>
<td>112</td>
<td>101</td>
<td>91</td>
</tr>
<tr>
<td>83</td>
<td>236</td>
<td>213</td>
<td>193</td>
<td>174</td>
<td>157</td>
<td>142</td>
<td>129</td>
<td>116</td>
<td>105</td>
<td>95</td>
</tr>
<tr>
<td>84</td>
<td>244</td>
<td>221</td>
<td>200</td>
<td>180</td>
<td>163</td>
<td>147</td>
<td>133</td>
<td>120</td>
<td>109</td>
<td>98</td>
</tr>
<tr>
<td>85</td>
<td>253</td>
<td>228</td>
<td>206</td>
<td>187</td>
<td>169</td>
<td>153</td>
<td>138</td>
<td>125</td>
<td>113</td>
<td>102</td>
</tr>
</tbody>
</table>

**Source:** Pensions Commission analysis

**Note:** Under the present deferral option, pensioners can delay their claim and receive a pension 10.4% higher for each year of delay. The table illustrates the age to which the pension has to be deferred to receive a pension at retirement with same value as today relative to average earnings.
2. Problems with present plans and objectives for reform

The present system is bewilderingly complex. It also suffers from four sets of problems, one of which exists today and three which would develop over time if present indexation arrangements were continued indefinitely:

- The key problem which has existed for many years and which affects people retiring today, is that the contributory system disadvantages many people (particularly women) who have interrupted careers, caring responsibilities, or multiple part-time jobs. The system was originally designed around the assumption that most women would gain state pension rights through full-time working husbands. Over the years it has been adjusted ad hoc to cope with the realities of periodic unemployment, female employment, increases in the number of part-time workers and higher divorce rates. Around one third of all rights accrued within the BSP system now arise not from paid NI contributions but from various types of credit (related to unemployment, certain types of training, ill health and Home Responsibilities Protection). Today however, only around a third of newly retired women pensioners are receiving a full BSP [Figure 4.12] and the vast majority of pensioners dependent on means-tested state benefits are women. Over time the percentage of women with full BSP and significant S2P rights will improve, but even in the long-term a small percentage of women (and an increasing percentage of men) will fall short of full BSP rights [Figure 4.13].

- The three problems which would develop over time if current indexation arrangements were maintained indefinitely are:
  
  i) There is a decreasing element of earnings-related compulsion. This is occurring at the same time that voluntary earnings-related provision is declining due to a retreat of employer involvement and a declining propensity to join employer schemes even where these are provided. This is concerning given our finding that there is a segment of the market (middle and lower earners working for small and medium firms) where pure voluntarism does not and will not produce optimal results.

  ii) There is an increasing degree of means-testing over time. This is a major impediment to effective voluntary personal saving, which (as above) is increasingly important if both state and employer provided earnings-related pensions are in decline.

  iii) The way the system will adjust to increasing life expectancy is confusing, has adverse distributional consequences and does not send clear signals to individuals about the choices they must make:

    - The system combines an effective pensionable age for the BSP which is increasing much more rapidly than required to compensate for life expectancy increases, with an effective S2P pensionable age which is not increasing at all. While the combined effect partly protects public
**Figure 4.12** Percentage of BSP received by 65-69 year olds: 2005

![Percentage of BSP received by 65-69 year olds: 2005](image)

Source: Retirement Pension and Widows Benefit Administrative Data, March 2005, DWP

Note: Category A entitlement is based only on the individual’s contributions.

The “all recipients” women is a larger group than women “Category A” recipients as many women will receive 51-75% of BSP as wives of fully paid-up men and some will receive 100% as widows.

**Figure 4.13** Projected average entitlement to BSP

![Projected average entitlement to BSP](image)

Source: Government Actuary’s Department

Note: The average shown in this figure is the weighted average of the entitlements shown in Figure 4.2.

This is the average entitlement for those who are entitled to receive BSP, therefore it excludes cases where individuals are entitled to less than the de minimis amount.
expenditure against the impact of life expectancy increases, there is no logic to this way of doing so, and it disadvantages people with interrupted paid work records and caring responsibilities (since BSP credits are more generous than S2P credits).

And since the long-term impact of price indexation is understood by few people, raising the effective SPA for the BSP in this indirect manner fails to signal clearly to people the increase in retirement age likely to be required to secure an adequate retirement pension. While the system provides options for individuals to defer pension receipt in return for an increased pension, only a small proportion of the population appear to know about this option or use it.

Given these problems reform should be designed to deliver a simpler and more understandable system, and to achieve four specific objectives:

- A fairer and more effective treatment of people with interrupted paid work records and caring responsibilities (in particular women).

- A higher degree of earnings-related pension provision than is likely to emerge from the combination of the present state system and the present voluntary system.

- A limit to the spread of means-testing which would cover if current indexation arrangements continued indefinitely.

- A better approach to the management of life expectancy increases and of uncertainty about how large those increases will be.

Alongside these objectives for change, however, there is one feature of the current system which it is important to preserve. This is that the current system, through means-tested targeting, has delivered over recent years a significant increase in the pension income of some lower income people, ensuring that total income from the state (provided people claim their Pension Credit entitlement) is at least equal to, and in some cases above, the level of the Guarantee Credit. Any reform should therefore ensure that there are no adverse distributional impacts on low income people currently benefiting from these improvements in state provision. As we will see in Chapter 6, this commitment has consequences for the feasibility of some of the radical simplification options often proposed.
The objectives outlined above could be pursued in a number of different ways. To decide between those ways forward we need first to debate and resolve eight key choices:

1. Should earnings-related pension provision be compulsory, and if so, should that mean compulsory on the individual, the employer, or both? And to what level?

2. Should either the earnings-related element or the flat-rate element of the pension system be funded or Pay As You Go (PAYG)?

3. How to manage the costs and risks of increasing life expectancy? What consequences will this have for pension ages and the annuity market?

4. What public expenditure path is required for a coherent system and/or is acceptable in terms of economic efficiency and inter-generational fairness?

5. How should investment return risk be managed in a compulsory or government-encouraged pension saving scheme?

6. Should the flat-rate pension (or pensions) be contributory or universal?

7. Should the two elements of the UK state pension system be unified?

8. Should the existing contracting-out rebate system be maintained or abolished?

These choices overlap: alternative specific policy options, viewed in the light of different key choices, are therefore discussed in several different sections. Figure 5.1 pulls together the conclusions we have reached on each issue and Section 9 sets out the integrated policy options which logically follow.
### Figure 5.1 Summary of conclusions on key issues

<table>
<thead>
<tr>
<th>1. Should earnings-related pension provision be compulsory, on either the individual or the employer?</th>
<th>Long-term model should be that individuals are auto-enrolled into earnings-related provision with compulsory matching employer contributions at a modest level.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Should the mandatory pension system be PAYG or funded?</td>
<td>Flat-rate state provision should be PAYG. Earnings-related provision (via auto-enrolment scheme) should be funded.</td>
</tr>
<tr>
<td>3. How to manage the risks of rising life expectancy:</td>
<td></td>
</tr>
<tr>
<td>– PAYG system</td>
<td>State pensionable ages within the PAYG flat-rate system should rise over time with increasing life expectancy to keep stable the percentage of adult life covered by state pensions.</td>
</tr>
<tr>
<td>– Funded earnings-related provision</td>
<td>Individuals should face pre-retirement longevity risk i.e. the trade-off between retirement age and annuity rate. But post-retirement longevity risk should be absorbed by annuity market.</td>
</tr>
<tr>
<td>– The annuity market</td>
<td>No fundamental barriers to supply rising to meet demand, but government should facilitate supply/demand balance by:</td>
</tr>
<tr>
<td></td>
<td>– Measures to encourage and facilitate later annuitisation;</td>
</tr>
<tr>
<td></td>
<td>– Ensuring debt issuance strategy is as supportive as compatible with cost minimisation.</td>
</tr>
<tr>
<td>4. What public expenditure path is required/acceptable?</td>
<td>It will not be possible to design a coherent state pension system (as a sound base for auto-enrolled and voluntary private saving) without some increase in pension spend as a percentage of GDP after 2020.</td>
</tr>
<tr>
<td></td>
<td>But to contain this rise to acceptable levels, State Pension Ages must rise at least in proportion to life expectancy.</td>
</tr>
<tr>
<td></td>
<td>Compared with pension expenditure of 6.2% of GDP today, a range of 7.5%-8.0% seems likely to be required for a coherent system in 2050; but limiting the rise to that implies SPA rising to 67 or higher by then.</td>
</tr>
</tbody>
</table>
Figure 5.1 Continued

| 5. How to manage investment return risk? | If the government auto-enrols people into funded savings, it must provide:  
– A default fund which partially mitigates investment return risk i.e. a ‘lifestyle’ smoothing fund.  
– A guaranteed real government bond fund. |
| 6. Should the flat-rate pension (or pensions) be contributory or universal? | Moving rapidly to a fully universal flat-rate pension (either unified or two-tier BSP and S2P) would be too expensive and distributionally inefficient.  
But future accruals to the BSP element of the system should move onto a universal residency base. |
| 7. Should the two elements of the UK state system, BSP and S2P, be unified? | Immediate unification into an ‘Enhanced State Pension’ (i.e. a "Citizen’s Pension") equal in value to the Guarantee Credit is too costly and distributionally inefficient.  
If the ESP route were chosen, some combination of (i) introduction at a later age than 65 and, (ii) phased introduction over time, would be required.  
The alternative of maintaining BSP and S2P as a permanent two-tier, flat-rate system has attractions, allowing:  
– Different approach to contributory/universal decision;  
– Different retirement ages; and  
– Different indexation regimes. |
| 8. Should the contracting-out rebate be maintained or abolished? | The contracting-in/contracting-out system has major disadvantages and if designing a system from scratch we would not recommend this feature.  
But:  
– Rapid elimination will further undermine voluntary pension provision;  
– Elimination of the contracting-out rebate should not be seen as providing funds to support current pension expenditure.  
Phase-out is preferable to immediate abolition. |
1. Should earnings-related provision be compulsory, voluntary, or auto-enrolled?

The fundamental issue on which the Pensions Commission was asked to recommend was whether earnings-related pension provision should be compulsory or voluntary. The starting point, already outlined, is that the UK’s present system includes an element of compulsion for earnings-related pensions. But this is in decline and if current indexation arrangements are continued this will disappear over time with compulsory earnings-related accruals ceasing after about 2055.

A case can be made that this future evolution should not only be accepted but accelerated and that public policy should focus solely on ensuring a good flat-rate basic pension, preventing poverty in retirement, and leaving it entirely to individuals to decide what earnings-related provision they choose to make on top (either via their choice of employer or via their individual pension saving). The arguments for this are that:

- People’s preferences and circumstances differ.
- People are quite capable of making rational individual decisions as to earnings-related pension provision.
- Taxable capacity is finite and should be concentrated on achieving the most important objective, which is poverty prevention, particularly in a period when the retirement of the baby boom generation will put the system under strain.
- People will consider compulsory savings contributions as equivalent to tax.

A purely laissez-faire approach to earnings-related pension provision would be appropriate on these arguments.

The Pensions Commission believes however that there are compelling arguments against this purely voluntary approach: these arguments have already been set out in Chapter 1. In brief they are:

- The overwhelming evidence is that many people do not make rational long-term decisions in their own self-interest without encouragement and advice. Most people do not make adequate pension provision unless either: (i) the state compels them; (ii) their employer enrols them in a pension scheme as a by-product of employment; or (iii) a financial adviser persuades them to join a pension policy.
- But the willingness of companies voluntarily to provide pensions for self-interested business reasons (i.e. to gain recruitment and retention benefits in the labour market) has irreversibly declined.
And there is a segment of the market (individuals of middle and lower income working for small and medium sized companies) which cannot be served profitably by the financial services industry except at Annual Management Charges (AMCs) which are in themselves impediments to pension saving.

These problems are inherent and cannot be fixed by a combination of better information, better regulation of the financial services industry, encouragement to good practice, or consumer education.

The inherent nature of these problems explains why almost all developed countries have developed pension policies which either mandate or strongly encourage earnings-related provision.

The reality must therefore be faced that if policy is unchanged many people will end up with what they will regard as inadequate pension provision. Faced with this reality it is still possible to argue that it is not the government’s job to fix this inadequacy; governments cannot solve all problems. But the argument for a flat-rate policy focus can only be based on such philosophical grounds. The empirical fact is that the present voluntary system combined with the present state system will deliver inadequate results for many people.

These arguments have led us to believe that there should continue to be an earnings-related objective within public policy. This could be pursued either by the state compelling individuals or their employers to make pension provision, or strongly encouraging them to do so.

Compulsion or strong encouragement?

Since the UK’s current pension system includes an element of compulsory earnings-related pension provision (the State Second Pension (S2P) with its contracted-in and contracted-out alternatives) the straightforward policy, if we wish to have a compulsory system, would be to keep this in place and build on the current system. This would be achieved by indexing the Upper Earnings Limit (UEL) to earnings rather than prices, maintaining compulsory earnings-related provision across the same range of the income distribution as it applies today. It would be possible, in addition, to add a further layer of compulsory savings (whether compulsory on employers, employees or both) on top.

There are however three strong arguments against this approach:

First, it seems likely that permanently maintaining an earnings-related element within the PAYG system is untenable within acceptable public expenditure limits and will therefore tend (as it did in the 1980s and 1990s) to crowd out adequate flat-rate provision, with means-tested benefits growing to fill the gaps. The alternative approach of a separate compulsory funded saving scheme may be seen by many people as taxation by another name and therefore might have the same effect.
Second, individual preferences differ and should be allowed expression. In particular different people will have different preferences between saving more and retiring later.

Third, individual circumstances differ. In particular an increasing number of people will be able to use housing assets (either accumulated themselves or inherited) to fund at least part of their consumption in retirement, while others will not. These diverse circumstances and preferences imply that straightforward compulsion on a significance scale could be against some people’s interest, forcing them to over save.

Balancing the arguments against a purely laissez-faire approach with these arguments against full and extensive compulsion, our judgment is that:

While it is not an appropriate aim of public policy to ensure that all people achieve the replacement rates to which research suggests people on average will aspire (e.g. two-thirds of earnings during life);

And while the tax resources of the state should be focused on the primary objective of ensuring as generous and as non-means-tested a flat-rate pension as possible, minimising pensioner poverty;

It is an appropriate objective strongly to encourage people to achieve replacement rates of say 40-50% of earnings, and to enable them to do so in a cost-effective fashion, while leaving it to individuals to decide their own trade-off between pension income, retirement age and savings levels once this replacement rate is achieved.

The best way to pursue this objective would, we believe, be through the introduction of a National Pension Savings Scheme (NPSS) into which people would be automatically enrolled but with the right to opt-out. Figure 5.2 sets out the key features and rationale for such a scheme. We believe such a scheme can overcome the barriers to rational decision-making, cost-efficiency and the declining employer provision which undermine a purely voluntary system, while leaving individuals ultimately free to make their own decisions in the light of their own preferences and circumstances. It will therefore be both a better solution in principle than pure compulsion and more capable of generating consensus and lasting support.

**Evolution of S2P to flat-rate system: appropriate pace**

The introduction of this scheme could be combined with one of three approaches to the existing compulsory earnings-related system, i.e. to the S2P and its contracted-out alternatives:

In Option 1, new accruals to S2P would cease immediately, with an earnings-related national auto-enrolment scheme taking its place.
### Figure 5.2 Features of an auto-enrolment scheme

<table>
<thead>
<tr>
<th>Key concept</th>
<th>Rationale</th>
<th>Detailed design options (discussed in Chapter 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees auto-enrolled in scheme but with right to opt-out.</td>
<td>Uses the power of inertia strongly to encourage pensions saving, while leaving individuals free to decide in the light of their preferences and circumstances.</td>
<td>When to auto-enrol:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- At a given age?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- At a given income?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- At regular intervals (e.g. every 5 years)?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- On first and new employment? What contribution rate and over what band of income?</td>
</tr>
<tr>
<td>Modest compulsory matching contributions by employers for those who enrol.</td>
<td>Will greatly increase participation rates. Creates level playing field between companies presently making pension contributions and those who are not. If at modest level, the impact on total wage bill is small and over time may be offset by lower increases in cash wages.</td>
<td>What contribution rate?</td>
</tr>
<tr>
<td>Contribution collection via payroll deductions, with money attributed by individual unique identifier (e.g. National Insurance Number).</td>
<td>Minimises collection costs and administrative burden on business.</td>
<td>PAYE or newly created Pension Payment System?</td>
</tr>
<tr>
<td>Individual accounts invested in specific funds as directed by individuals.</td>
<td>Incentives to save maximised by clear ownership of accounts.</td>
<td>Rules on annuitisation during retirement.</td>
</tr>
<tr>
<td>Central aggregation for investment in specific investment funds.</td>
<td>Minimises fund management charges.</td>
<td>Range of funds and charge setting process e.g.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Bulk buying of small range of funds.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Open access to all fund providers.</td>
</tr>
<tr>
<td>Default fund for those who express no preference (as in many DC schemes).</td>
<td>Essential given that many will not return asset selection forms and many will welcome having the decision made for them.</td>
<td>Design of default fund: appropriate risk/return trade-off.</td>
</tr>
</tbody>
</table>
In Option 2 we would accept the very gradual elimination of earnings-related compulsion which the present indexation of the UEL to prices would imply (as Chapter 4 explained, this would eliminate earnings-related accruals within the S2P system in around 2055).

Option 3 would accelerate this elimination, but still maintain some earnings-related compulsion for a transition period. This would be achieved by freezing the UEL for S2P accruals in cash terms. Under this plan, earnings-related accruals within S2P would cease in around 2030.

Figure 5.3 sets out the details, and the relative merits of these approaches. The choice between these three options is in part determined by considerations discussed in Section 7 and Section 8 of this chapter. Some of the key arguments for our preferred approach will therefore be made in detail in those sections. In brief we believe that Option 3 is the best way forward as:

- It accelerates progress of the state system towards a focus on flat-rate provision, and thus makes possible by 2050 more generous flat-rate provision than would otherwise be possible.
- But it maintains some element of earnings-related compulsion in the system until the National Pension Savings Scheme is well established and proven, preserving freedom to maintain the existing S2P system if auto-enrolment is less successful than we anticipate.
- And it gradually rather than immediately eliminates contracted-out rebates. For reasons discussed in Section 8 we believe this gradual elimination is appropriate, but that immediate abolition would unnecessarily accelerate closure of private sector Defined Benefit (DB) schemes.

Whatever the precise policy followed in relation to the state pension system, however, our clear recommendation is that a National Pension Savings Scheme, working on an auto-enrolment principle, should be introduced.

**Compulsory matching employer contribution?**

Within a national auto-enrolment scheme, however, it would be possible to include an element of compulsion on employers, with employers required to make contributions when an employee accepts auto-enrolment and makes contributions themselves.

- There are three arguments in favour of such compulsion:
  
  - First, employer contributions contingent on employee enrolment, even if relatively small, would be likely to produce a major increase in employee participation rates. Several UK insurance companies have told the Commission that the sale of Group Personal Pensions (GPP) to small and medium-size companies is only economic when the employer makes a contribution, because an employer contribution increases the
### Figure 5.3 Focusing state pension capacity on flat-rate provision: three options

| Option 1: Immediate | Cease current S2P accruals and unify BSP and S2P into one “Enhanced State Pension”. | Attractiveness reflects wider issue of whether flat-rate provision should be unified or two-tier [see Section 7].
| | | More risky than Options 2 and 3; requires certain and immediate success of NPSS auto-enrolment.
| | | Would entail immediate abolition of contracting-out rebate: would probably accelerate closure of DB schemes [see Section 8].

| Option 2: As with current indexation arrangements | Leave the UEL (for S2P accruals) linked to prices, while the Lower Earnings Threshold is linked to earnings.
Earnings-related accruals above the UEL would cease when the LET equals the UEL in around 2055. | Maintains compulsory earnings-related provision until NPSS up and running and proven success; avoids immediate shock to private sector DB schemes.
| | | Public PAYG expenditure includes significant earnings-related element until well into late 21st Century.

| Option 3: Accelerated | Freeze the UEL (for S2P accruals) in cash terms, while the LET is linked to earnings.
Earnings-related accruals above the LET will cease when the LET equals the UEL in around 2030. | As per Option 2, maintains earnings-related compulsion until NPSS a proven success.
| | | Accelerates focus of public expenditure on flat-rate pension, making possible by 2050 less means-testing within any given public expenditure limit.

---

Pensions Commission’s preferred Option

Source: Pensions Commission analysis
participation rate and thus spreads the cost of the plan set-up over a larger number of contributors. Evidence from the US meanwhile illustrates that even relatively small matching contributions produce significant increases in participation rates and in the contribution rates which employees choose [Figure 5.4].

- Second, a compulsory matching contribution may be required to ensure that all members of the scheme can achieve a reasonable return on investment, even if subject to some means-testing. It will thus make it safe to auto-enroll people without the expensive cost of regulated advice. If means-testing could be eliminated entirely from the state system, this argument for compulsory employer contributions would disappear. But as Section 4 of this chapter will argue, while the future spread of means-testing can and should be prevented, total elimination of means-testing would be very expensive or would involve an increase in pensioner poverty.

- Third, it could also be argued that a compulsory employer contribution would be justified as creating a more "level playing field" between those employers who already make pension contributions and those who do not. Some employers, e.g. members of the EEF, have argued in favour of this approach.

The key argument against such compulsion is obviously that compulsory employer contributions would impose additional costs on companies not currently making contributions. Economic theory suggests that over time some or all of these costs would be offset by reductions in cash wages offered to employees. But there would clearly be at least a transitional burden, and this would fall more heavily on smaller businesses, simply because these are less likely already to be making pension contributions. We estimate that with 100% take-up each 1% of compulsory employer contribution above the Primary Threshold and below the UEL could add about 0.24% to private sector labour costs, but 0.37% to the labour costs of companies with less than 50 employees [Figure 5.5]. There may also be some danger that employers faced with this additional burden may attempt to persuade individuals to opt out, perhaps offering increments to cash wages as an inducement.
**Figure 5.4** Effect of employer matching on participant behaviour: evidence from the US

<table>
<thead>
<tr>
<th>Impact of</th>
<th>On employee participation rate</th>
<th>On employee contribution levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introducing a match for first time</td>
<td>+10% to +25%</td>
<td>+10% to +25%</td>
</tr>
<tr>
<td>Increasing the rate of match</td>
<td>0% to +15%</td>
<td>0% to +15%</td>
</tr>
</tbody>
</table>

Source: How America Saves, Vanguard 2004

Note: Figures show the range of effects on different pension plans analysed. The size of the match (or the increase in match) varied by plan.

**Figure 5.5** Impact on total labour costs in the private sector per 1% employer contribution: assuming 100% participation

<table>
<thead>
<tr>
<th>Firm size no. of employees</th>
<th>Percentage of employer labour costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 4</td>
<td>0.41</td>
</tr>
<tr>
<td>5 – 49</td>
<td>0.35</td>
</tr>
<tr>
<td>50 – 249</td>
<td>0.25</td>
</tr>
<tr>
<td>250+</td>
<td>0.16</td>
</tr>
<tr>
<td>All</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis of ASHE 2004

Note: Employer labour costs include total salaries paid and 12.8% National Insurance on earnings above the Primary Threshold. Employer contribution is based on a 1% contribution on gross earnings between the Primary Threshold and UEL for employees aged 21 and over. It has been assumed that there is 100% participation for all employees aged 21 and over with gross earnings above the Primary Threshold. Analysis assumes that all people who are already members of employer-sponsored pensions receive at least a 3% employer contribution, so that the introduction of the NPSS requires no additional employer contributions in these cases. It also assumes that there is no 'levelling down' of existing provision. As a result, figures could be under or over-estimates of costs. Chapter 6 sets out the contribution rate we propose and Chapter 10 sets out reasonable participation assumptions.
Balancing these arguments, we believe that there should be compulsion on employers to make matching contributions when an employee stays enrolled but that:

- These contributions should be relatively modest, to minimise the burden on business and to minimise the dangers of pressure on employees to opt out. In Chapter 6 we have assumed for modelling purposes compulsory matching employer contributions of 3% of earnings between the Primary Threshold and the UEL.

- These contributions could be phased in.

Government should consider whether there are other policies which could ameliorate the cost impact of these additional contributions. These are considered in Chapter 10.

2. Should either the earnings-related element of the system or the flat-rate element be funded or unfunded?

The second issue to resolve is whether future pension provision should be funded or unfunded. This issue is often in practice linked to decisions about who should bear investment return and longevity risk, but it is important to understand that in theory almost any combination of arrangements is possible [Figure 5.6].

- Governments can pre-fund retirement systems through national investment funds ("buffer funds"), while continuing to provide individuals with classic PAYG benefits payable at fixed retirement ages.

- Individuals conversely can be made responsible for individually funded pension savings accounts but they can avoid investment return risk, and gain the close equivalent of a PAYG promise, if they invest their funds in real-indexed government bonds.

- And while governments can shift life expectancy risk to individuals by requiring investment in individual funded accounts, they can achieve exactly the same effects by moving a PAYG system onto a Notional Defined Contribution (NDC) basis system, or by linking pensionable ages to increases in life expectancy. [See the panel “Notional Defined Contributions systems” in Chapter 1 for a description of NDC systems.]
### Figure 5.6 Characteristics of pension systems: possible combinations

<table>
<thead>
<tr>
<th>Individual exposed to:</th>
<th>Pay As You Go</th>
<th>Pre-funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither pre-retirement longevity risk nor investment return risk(^1)</td>
<td>Classical state system with preset retirement ages</td>
<td>State system backed by national investment fund</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private Defined Benefit scheme with preset</td>
</tr>
<tr>
<td></td>
<td></td>
<td>retirement ages(^2)</td>
</tr>
<tr>
<td>Pre-retirement longevity risk but not investment return risk</td>
<td>State system with pension ages formula linked to life expectancy</td>
<td>Private “cash balance” scheme(^3)</td>
</tr>
<tr>
<td></td>
<td>Notional Defined Contribution (NDC) system with preset rate of return(^4)</td>
<td>NDC system backed by national investment fund</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Defined Contribution (DC) system where the individuals invest entirely in real government bonds</td>
</tr>
</tbody>
</table>

Pre-retirement longevity risk and:

- **Economic growth risk**
  - NDC system with rate of return varying in line with growth
  - NDC system backed by national investment fund

- **All investment return risk**
  - Not existing
  - Classical DC system

---

\(^1\) See Figure 5.13 for the definition of “pre-retirement longevity risk”.

\(^2\) If DB schemes are under-funded they are effectively part PAYG for the company sponsor.

\(^3\) See the Chapter 1 Panel “Notional Defined Contribution Systems” for a description of NDC schemes.

\(^4\) Private “cash balance” schemes provide a guaranteed minimum investment return, and thus cash balance accumulated, but with the pension which this balance will buy dependent on annuity rates at retirement. The same risk-sharing could also be achieved through a classic DB salary-related scheme, but with pensionable ages formula linked to life expectancy.
It is, moreover, theoretically possible to obtain the key macroeconomic benefits of pre-funding (an increase in the national savings rate and a reduction in the future level of taxation required to support future PAYG liabilities) simply by using current PAYG surpluses to reduce government borrowing [Figure 5.7]. Conversely it is quite possible to introduce a shift to a funded system without achieving the macroeconomic benefits of pre-funding, e.g. if PAYG contributions are diverted to funded accounts, but the government cash flow shortfall is covered by increased borrowing.

These different ways to achieve the same objectives reflect the fact that the differences between PAYG and funded schemes are less fundamental than often supposed.

- All pension systems, PAYG or funded, entail a transfer of resources from future workers to future pensioners. In a PAYG system workers pay taxes to provide pensions. In a funded scheme future workers buy accumulated assets from retirees.

- As a result all pension systems are exposed to demographic risks. In a PAYG system, if the ratio of workers to pensioners declines, the implicit rate of return within the system (which determines the pensions affordable given any level of contributions) falls and either taxes/contribution rates must rise or pensions relative to average earnings must be reduced. In a funded system, at least within a closed economy, a falling ratio of workers to pensioners must tend to drive a falling rate of return on the assets pensioners have accumulated and/or a fall in the price at which those assets can be sold.\(^1\)

But despite these underlying common features, a funded approach may have four significant advantages:

- Even if the degree of compulsion is the same, a funded system may be more acceptable. People may be more willing to accept compulsory savings into an account which is legally theirs, and the value of which is defined in clear capital value terms, than to accept taxation to support a PAYG system.

- Even if the funding occurs at national level, via a national buffer fund, and even if the government could in theory simply have borrowed less, the creation of a buffer fund may create greater discipline on governments. A buffer fund may be a more effective mechanism than reduced borrowing for ensuring that the government does in fact achieve the smoothing of the taxation cost of PAYG commitments over time.

\(^1\) See Appendix C of the First Report and “The Macro-economics of Pensions,” lecture to the Actuarial Profession, September 2003, available on the Pensions Commission website for further discussion of these issues.
Figure 5.7 The macroeconomics of pre-funding

<table>
<thead>
<tr>
<th>Objective</th>
<th>Means to achieve</th>
<th>National savings increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Pre-funding” of pensions reduces the future PAYG burden on tax payers and can be used to smooth the burden of an increasing dependency ratio across generations.</td>
<td>Reduce future PAYG promises and require/encourage individuals to save in individual funded accounts.</td>
<td>because current workers must save as well as paying taxes to support pensions of retirees today.</td>
</tr>
<tr>
<td>It achieves this effect if and only if the national aggregate savings rate is increased; this requires the sacrifice of current consumption by some individuals.</td>
<td>Leave PAYG promises unchanged, but increase taxation to create national investment fund, which can be drawn on to help pay future pensions.</td>
<td>National savings increase: current consumption cut by increased taxation.</td>
</tr>
<tr>
<td></td>
<td>Leave PAYG promises unchanged but increase taxation and reduce government debt issuance/pay back government debt, thus reducing future debt interest claims on future revenues.</td>
<td></td>
</tr>
</tbody>
</table>
While a PAYG system is equivalent to a forced investment in domestic government bonds, explicit funding allows individual funds to be invested in alternative assets, earning higher expected returns but with higher expected risk. For some but not all individual savers this wider choice will be advantageous [see the panel “Risk and return in pension fund investment” later in this Chapter].

Explicit funding, if invested at least in part overseas, can enable a society in aggregate to build up pension claims on other countries, providing some escape from the otherwise unavoidable challenge of a rising dependency ratio. For this reason national buffer funds have been particularly favoured by small countries and typically invest a significant proportion of their funds overseas [Figure 5.8]. The same effect can be achieved by individual Defined Contribution (DC) funds or private DB funds, investing some of their assets overseas.

Given these theoretical considerations, what should be the balance of funded versus PAYG for:

(i) The flat-rate element of the system?

(ii) The earnings-related element of the system?
**Figure 5.8** Buffer funds of selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Size of Fund UK £bn</th>
<th>Percentage of Country’s GDP</th>
<th>Contribution rates and uses</th>
<th>Investment balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>8.4bn</td>
<td>8.1%</td>
<td>1% of GDP per year Decumulation allowed only after 2025</td>
<td>76% equities primarily invested overseas</td>
</tr>
<tr>
<td>New Zealand</td>
<td>2.6bn</td>
<td>4.6%</td>
<td>1.6% of GDP per year</td>
<td>65% equities, of which 92% overseas</td>
</tr>
<tr>
<td>Norway</td>
<td>91.7bn</td>
<td>64.4%</td>
<td>Contributions vary with oil revenues. Wide range of uses possible not just to support pensions</td>
<td>40% equities, all of which invested overseas</td>
</tr>
<tr>
<td>Sweden</td>
<td>51.5bn</td>
<td>26.1%</td>
<td>Receives surpluses from the Notional Defined Contribution system: Used is as required by Automatic Balancing Mechanism (see panel on Notional Defined Contribution schemes in Chapter 1)</td>
<td>57% equities, of which 65% overseas</td>
</tr>
</tbody>
</table>


2 As at 31st March 2005 €12.3bn.
3 As at 31st December 2004.
4 As at 30th June 2005 NZ$6.6bn.
5 As at 31st March 2005 NOK1091.1 bn. In addition to the general oil fund, Norway is now legislating to establish a dedicated pension buffer fund.
6 As at 31st December 2004 SKR655 bn.
(i) The flat-rate element of the system

All developed countries have significant PAYG pension liabilities, and all deliver at least a basic flat-rate pension via a PAYG rather than funded system. The predominant assumption of British pension policy, reflected in written submissions to the Pensions Commission, has also been that the flat-rate BSP should be PAYG, and that the funded/unfunded choice only arises in respect to the earnings-related element of the system. This predominant consensus in part reflects the fact that since almost all flat-rate pension systems involve redistribution from higher to lower income earners, they are not easily expressible in the form of individually funded accounts.

The alternative point of view has however been presented by the Pension Reform Group, who have argued that the flat-rate element of the system (incorporating the current BSP) should be explicitly pre-funded via a government created, but arm’s-length fund investing in a wide range of assets. The key features of this scheme are set out in Figure 5.9. The proposed advantages of this scheme are that:

- People might be more willing to pay into an explicit fund than to pay taxes (even if the contributions/benefits relationship was to a degree redistributive). A more generous flat-rate state pension could therefore be sustainably afforded if we choose the funded route.

- The arm’s-length governance structure might ensure continuity, reducing the likelihood of the continual changes which have increased the complexity of the British state system and undermined trust in it.
**Figure 5.9** Pension Reform Group proposal: Universal Protected Pension

<table>
<thead>
<tr>
<th><strong>Core objective:</strong></th>
<th>A pension guarantee of 25-30% of national average earnings throughout retirement.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mechanism:</strong></td>
<td>Existing Basic State Pension (BSP) is supplemented by a national funded pension scheme, so that the combined pension will be within a band of 25-30% of national average earnings, depending on fund performance and contribution rates. All individuals compelled to make additional National Insurance payments. Contributions are paid into an aggregate national fund, subject to an independent governance structure, which invests in a wide range of asset classes. The fund pays out a flat-rate pension to all members: it is therefore redistributive.</td>
</tr>
<tr>
<td><strong>Rationale:</strong></td>
<td>Redistributive mechanism essential to deliver adequate non-means-tested flat-rate state pension. Pre-funding and independent governance structure allows a stable pension promise which British history illustrates will not be achieved through a PAYG promise subject to short-term policy changes. The superior return on capital market assets, relative to the implicit return within the PAYG system, can deliver a significant future pension at relatively low current cost.</td>
</tr>
</tbody>
</table>
We believe however that these advantages are not sufficiently compelling to justify such a major change in policy which would carry with it some offsetting disadvantages [See Figure 5.10]. In particular we are unconvinced that it is politically feasible or acceptable to hand over to an arm’s length independent body the huge and inherently political decisions which would need to be made about the appropriate level of the flat-rate BSP in the event that asset values oscillated significantly.

But we believe it is important to ensure that the objectives sought by this scheme, and in particular the benefits of sustainability and trust are achieved by other means. The means by which we believe these objectives can be achieved are discussed in Section 3 and 4 of this chapter, and in Chapter 11. And as we discuss below, the advantages of funding the earnings-related element of the pension system are more compelling.

(ii) The earnings-related element of the system

At present the earnings-related element of the UK’s pension systems is primarily funded, both because there is significant voluntary funded saving, and because of the significant role of compulsory funded saving via the contracted-out rebate. But contracted-in S2P rights also represent a significant PAYG liability and this liability will grow in relative importance if the trend to contracting-in continues, and as the shift from DB to DC provision reduces the scale of voluntary private saving [Figure 5.11].
Figure 5.10 Arguments against a funded approach to flat-rate pension provision

<table>
<thead>
<tr>
<th>Feature of Pension Reform Group proposal</th>
<th>Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate national fund making</td>
<td>May be difficult to avoid politicisation of</td>
</tr>
<tr>
<td>discretionary choices between different</td>
<td>these investment decisions, which would</td>
</tr>
<tr>
<td>asset classes.</td>
<td>have major weight within overall UK</td>
</tr>
<tr>
<td></td>
<td>capital market.</td>
</tr>
<tr>
<td>Value of pension can vary between</td>
<td>Decision on whether to cut benefits or</td>
</tr>
<tr>
<td>25-30% of average earnings, according</td>
<td>increase contributions is inherently</td>
</tr>
<tr>
<td>to performance of the fund, with exact</td>
<td>political, and difficult to hand over to</td>
</tr>
<tr>
<td>level determined by fund board.</td>
<td>independent body.</td>
</tr>
<tr>
<td></td>
<td>If capital market performance is</td>
</tr>
<tr>
<td></td>
<td>exceptionally poor, contributions may</td>
</tr>
<tr>
<td></td>
<td>have to rise to keep pensions above</td>
</tr>
<tr>
<td></td>
<td>25% minimum, or taxes rise to provide</td>
</tr>
<tr>
<td></td>
<td>general government support, at a point in the economic cycle where</td>
</tr>
<tr>
<td></td>
<td>strain on government finances may be most severe.</td>
</tr>
</tbody>
</table>

Figure 5.11 Earnings-related UK pensions – Total size of assets/liabilities at end 2003

<table>
<thead>
<tr>
<th>Occupational pension funds</th>
<th>£ billion (rounded to the nearest £10 billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>£720 billion</td>
</tr>
<tr>
<td>Estimated deficits</td>
<td>£70 billion</td>
</tr>
<tr>
<td>Estimated liabilities</td>
<td>£790 billion</td>
</tr>
<tr>
<td>Personal pension policies</td>
<td>£550 billion</td>
</tr>
<tr>
<td>Unfunded public sector pensions</td>
<td>£500 billion</td>
</tr>
<tr>
<td>Additional Pension rights</td>
<td></td>
</tr>
<tr>
<td>Contracted-in</td>
<td>£290 billion</td>
</tr>
<tr>
<td>Contracted-out</td>
<td>£240 billion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Voluntary</th>
<th>Compulsory</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funded</td>
<td>1,100</td>
<td>170</td>
<td>1,270</td>
</tr>
<tr>
<td>Unfunded</td>
<td>500</td>
<td>360</td>
<td>860</td>
</tr>
<tr>
<td>Total</td>
<td>1,600</td>
<td>530</td>
<td>2,130</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis based on data from ONS, GAD and HMRC

Notes: Voluntary funded assets are funded pension scheme assets excluding the contracted-out element (720 + 550 – 170).

Unfunded voluntary figure is the liability of public sector unfunded schemes excluding the contracted-out element (500 – 70) plus the deficit of occupational pension funds (70) which is an unfunded liability of companies.

The compulsory funded assets are contracted-out assets (estimated by the split between contracted-out rebates between the funded and unfunded sector shown in Figure 5.36).

Compulsory unfunded assets are the total of contracted-in rights plus unfunded contracting-out liabilities for the public sector schemes.
Looking internationally, earnings-related pension provision is far more often funded than is the flat-rate element of provision and there has been a trend to increasingly funded approaches. But the majority of developed countries still run an earnings-related element of the system on a PAYG basis [Figure 5.12]. The major advantage of that PAYG approach is that, for those savers who would in any case choose an investment in government bonds, a PAYG system is the most cost-efficient way to deliver the economic equivalent of that investment. And, while funded schemes have the automatic advantage of transferring the risk of unexpected increases in life expectancy from government to individuals, this risk transfer can be achieved in other ways, either by moving to a Notional Defined Contribution (NDC) system or by linking retirement ages to life expectancy increases [See Section 2(iii) below].

Despite these advantages and possibilities, however, the Commission believes that within the UK context the earnings-related element of the system should ideally become fully funded, and on an individual account basis. This reflects the following judgments:

■ Constrained tax capacity should be focussed on providing as generous a flat-rate benefit as possible, minimising the role of means-testing. While the argument can be made that people will accept higher taxes/NI contributions if an element of the state pension is earnings-related, we believe that devoting PAYG state pension expenditure to earnings-related pensions has resulted in the past and would probably in the future result in less money being available to fund adequate flat-rate pensions.

■ Making the earnings-related tier funded on an individual account basis is the most effective and simple way to ring-fence it against future political changes. The history of the State Earnings Related Pension Scheme (SERPS/now S2P) has been one of continual policy changes reflecting changing points of view on what is fair and what is affordable.

■ The key benefit of a PAYG earnings-related scheme is that it enables people of modest means to invest in a low risk and low-cost fashion. This can be achieved by the appropriate design of a national compulsory savings scheme or a national auto-enrolment scheme.

■ But such schemes can at the same time allow those who wish and for whom it is appropriate to invest in higher return and higher risk asset classes.

Provided therefore that either a national compulsory savings scheme or national auto-enrolment scheme is put in place, our judgement is that the UK should move, over time, to a system in which the earnings-related element is fully funded on an individual account basis.
### Figure 5.12 Country approaches to mandatory pension provision

<table>
<thead>
<tr>
<th>Country</th>
<th>State flat-rate pension</th>
<th>State or compulsory private earnings-related pension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>PAYG</td>
<td>Funded – compulsory private saving</td>
</tr>
<tr>
<td>Denmark</td>
<td>PAYG</td>
<td>Funded – compulsory funds and quasi-compulsory occupational schemes</td>
</tr>
<tr>
<td>France</td>
<td>PAYG</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>PAYG</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>PAYG</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>PAYG</td>
<td>Funded – quasi-compulsory occupational schemes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>PAYG</td>
<td>Introducing an auto-enrolled funded retirement savings scheme from 2007</td>
</tr>
<tr>
<td>Poland</td>
<td>Largely PAYG with significant compulsory funded element</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>PAYG</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>PAYG</td>
<td>Mainly PAYG with small, compulsory funded element</td>
</tr>
<tr>
<td>USA</td>
<td>PAYG</td>
<td></td>
</tr>
</tbody>
</table>
3. How to manage the costs and risks of increasing life expectancy?

As Chapter 1 Section 3 described, further analysis since the First Report has reinforced the conclusion that life expectancy is rising faster than previously anticipated, and that the pace of increase is hugely uncertain 30 to 50 years ahead.

Rising life expectancy at any given retirement age carries implications for any pension system:

- In DB schemes with pre-set retirement ages, whether state or privately provided, it increases the cost to the provider;

- In DC schemes, rates for annuities bought at any given age fall, leaving individuals with the choice between increased savings, a lower pension income, or an increase in the age at which the pension is drawn (the latter usually linked to a later age of exit from the work force).

Different pension systems therefore allocate differently the costs of increasing life expectancy and the risks of unexpected changes in life expectancy. A key issue is therefore who should bear these costs and risks.

The answer should be different for the pre-retirement and post-retirement categories of life expectancy risk [See Figure 5.13 for the definition of these terms].

Pre-retirement longevity risk: adjusting pensionable ages

Pre-retirement life expectancy risk refers to the risk that we do not know today what will be the average life expectancy at retirement of the whole cohort of people who will reach any given retirement age at some future date. The Pensions Commission believes that this risk should ideally be borne by each generation of individuals rather than by the state (i.e. rather than by future generations of taxpayer). This reflects three arguments already set out in Chapter 1 Section 3:

- First, that inter-generational fairness requires that each generation should enjoy a roughly similar proportion of life spent in state supported retirement. A policy which allows each generation to spend an increasing percentage of life in retirement financed by an increased level of public pension expenditure as a percentage of GDP will be unsustainable in the long run and unfair to subsequent generations of taxpayers.
### Figure 5.13 Categories of life expectancy risk

<table>
<thead>
<tr>
<th>Pre-retirement average cohort longevity risk</th>
<th>Uncertainty about what average life expectancies at retirement will be in future e.g. uncertainty today in 2005 about what the average life expectancy of 65 year old men will be in 2050.</th>
</tr>
</thead>
</table>
| Post-retirement average cohort longevity risk | Uncertainty at date of retirement about what average life expectancy will be during retirement:  
  – e.g. uncertainty today in 2005 about the average life expectancy of men now aged 65.  
  – e.g. uncertainty which we will face in 2050 over what the average life expectancy of men aged 65 (or 67 or 69) then is. |
| Post-retirement individual longevity risk | Uncertainty over how long any individual will live during retirement. This uncertainty would exist even if (unrealistically) we could know for certain the average remaining life expectancy of any overall age cohort. |
Second, that individuals may have different preferences between working later, saving more and accepting a lower pension, and should be allowed to express these different preferences.

Third, that if increases in total life expectancy are accompanied by increases in healthy life expectancy, as they appear to be for most people, then people on average will be able, if they wish, to devote more years to productive and remunerative work.

We therefore recommend the principle that the pension system should be designed so that effective pension ages will rise automatically in response to increasing life expectancy. By “effective” pension ages we mean the age at which people can receive the equivalent of today’s pension in earnings term.

In the earnings-related element of the system, this will occur naturally if, as proposed, the system moves on to an individual account funded basis. Individuals faced with changing annuity rates will need to make their own trade-offs between age of pension receipt, pension level and savings rate.

In the flat-rate element, which we propose should continue to be PAYG based, there are two different ways by which the principle of effective pension ages linked to life expectancy can be achieved: (i) redesigning the PAYG system as a “Notional Defined Contribution” system or (ii) raising the “normal” State Pension Age in line with life expectancy. While the former approach has significant theoretical attractions we believe that within the UK context it goes against the clarity of the system and that the latter approach is more appropriate.

Moving to a “Notional Defined Contribution” (NDC) system
The panel in Chapter 1 explained key features of an NDC system. The essence of the approach is that, while the system is in macroeconomic terms PAYG, it is presented to each individual as an account based system, with a capital sum accumulated which is converted into pension income according to the annuity rates applied when the individual reaches retirement. In this system, therefore, the pre-retirement longevity risk is shifted to the individual. In the Swedish version of the system for instance, people do not know definitively what pension income any accumulated capital sum will deliver until they reach 65: a member of the state NDC system is thus in exactly the same position as an individual in a funded DC scheme who retires at 65. NDC systems have significant attractions, and as the panel on “Notional Defined Contribution systems” in Chapter 1 set out several countries have now introduced them. But all these NDC schemes are earnings-related systems in which there is nil or minimal redistribution, with a separate and redistributive flat-rate or income-related pension existing alongside, delivered in the classical DB way. This reflects the fact that the essentially redistributive nature of flat-rate pension provision makes it very difficult to express the system in an “individual account” fashion: there is no simple relationship between money paid in and the capital
ANew Pension Settlement for the Twenty-First Century

Figure 5.14 State Pension Age required to keep stable the proportion of adult life spent in receipt of a state pension: if SPAs had already been equalised at 65

- **Raising "normal" pension age in line with life expectancy.** Under this approach the "normal" pension age for the receipt of the standard level of state pension is increased in line with life expectancy so as to keep stable the proportion of adult life over which people can receive the standard state pension.2

From a starting point of 65 in 2020 (i.e. after the harmonisation of male and female SPA) and if the current GAD projections are accurate, this would imply the SPA rising to 67 by 2050. But if we adjusted the SPA to compensate for the increases in life expectancy that have already occurred since 1980, the SPA would need to reach over 71 by 2050. Starting from 2005, the income would be to 68 by 2050 [Figure 5.14]. The profile chosen for the next 50 years needs to reflect a political judgment on the appropriate balance between taxation and pension age increases, which is discussed in Section 4 below. But the principle that in the long-term effective pensionable ages should rise in line with life expectancy is clear.

2 It is of course possible to combine this increase in the “normal” State Pension Age with systems, such as the UK already has, which allow people to take their state pension at a variety of different ages with the pension received increasing as the age at which it is taken increases [see Chapter 8].
Two concerns are likely to be expressed about this principle of rising pensionable ages:

- The first relates to people’s expectations of pension receipt at a particular age and their desire to know this age in advance. We recommend that this is reflected in an assurance that changes in pensionable age for the flat-rate pension will be announced at least 15 years in advance. Everyone over 50 today would thus be assured that their pensionable age would not exceed the level of 65 planned for 2020.

- The second relates to the significant inequalities in life expectancy by socio-economic class which we described in Chapter 1 Section 3. These inequalities mean that increases in pensionable age can have a disproportionate effect on lower income groups who are likely to live for fewer years in retirement. One way to at least partly reflect this concern might be deliberately to design a flat-rate state pension system with two distinct ages within it: a later age at which the “full” state pension is receivable, and an earlier age at which at least some state pension is provided with means-tested additions to a poverty line also available. The later age could then increase in line with average life expectancy: the earlier age with the life expectancy of the least favoured socio-economic groups. This option is considered in Section 7 of this Chapter and in Chapter 8. It would also be possible (as today) to make the Guarantee Credit available at a slightly earlier age than the SPA. [This option is considered in Chapter 8.]

Post-retirement longevity risk: avoiding capacity strains in the annuity market

Post-retirement longevity risk refers to the risk that, even if in 2005 we believe that the average life expectancy of the cohort of women now aged 65 is 22 years (in line with the GAD principal projection), the subsequent outcome may be higher (or indeed lower). Ideally this risk should not be borne by individuals since there is a social value in being able to give people at retirement a firm promise of future income until death, which can be delivered whatever their own individual age of death and whatever the average age of death of all the people in their cohort.

In order to provide people at retirement with a deliverable promise of certain pension income until death, the post-retirement longevity risk has to be absorbed either:

- By the state which promises DB state pensions until death.

- By a company sponsored DB scheme, similarly promising DB pensions till death.

- Or by insurance companies and capital markets, which provide annuities.
In respect to the state’s PAYG liabilities, the key to making risk absorption post-retirement manageable is simply that state pensionable ages should be adjusted in line with life expectancy in the way already described. The funnel of doubt about future life expectancy narrows the higher the age from which it is measured [Figure 5.15]. Raising pensionable ages in line with life expectancy therefore not only reduces the average expected cost of PAYG pensions, but also increases the predictability of future costs.

Concerns have been raised however with respect to the capacity of the insurance companies and capital markets to meet the increased demand of annuities which will result from the combination of: (i) the shift from DB to DC; and (ii) the long-term increase in funded pensions required to compensate for declining state PAYG pension to the average pensioner. These could produce very large increases in the annual flow of annuities demanded and in the total stock of annuities required to be in place at any given date.
Scenarios produced by the Association of British Insurers for the growth of the annuities market over the next 10 years identify two different possible drivers of increased demand [Figure 5.16]:

- The certain but gradual maturing of DC pension funds (whether DC occupational or personal pension in form) which could drive an increase in annual annuity demand from today’s £7 billion per year to between £16-20 billion in 2012.

- The possible but by no means certain impact of bulk-buyouts by closed DB schemes. For these the estimated range of possible values is extremely large. If bulk buyout becomes a commonly favoured option £128 billion is possible. But it is also possible that DB funds will choose to continue managing longevity risk within the funds.

Looking further ahead, however, as DB funds are replaced by DC funds, the potentially huge increase in the scale of the annuity market becomes clear. In the earnings-related elements of the UK’s pension system today, something like £760 billion of liabilities to people who are already drawing pensions have been created [Figure 5.17]. Of these the vast majority, lie either within the S2P system, or within DB pension funds, or are the liabilities of the public sector as an employer. Only about £70 billion represent annuity liabilities of insurance companies. If in the long-term the role of private sector DB schemes becomes minimal: and if the state’s earnings related PAYG liabilities are eventually replaced by an auto-enrolled DC scheme; but if pensioners are still to receive a legally committed pension from retirement till death; then the total stock of annuities in place would have to rise to approximately 6–8 times the present level.
Figure 5.16: Scenarios for the size of the annuity market, estimated annual flows: £ billion

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual annuities</td>
<td>7.2</td>
<td>16.6</td>
<td>18.1</td>
<td>19.7</td>
</tr>
<tr>
<td>Drawdown</td>
<td>2.3</td>
<td>5.3</td>
<td>5.8</td>
<td>6.3</td>
</tr>
<tr>
<td>Bulk buyout</td>
<td>1.4</td>
<td>1.5</td>
<td>35.4</td>
<td>128.1</td>
</tr>
</tbody>
</table>

Significant growth almost certain with maturing DC pension funds annuities

Huge range of possible results depending on whether DB funds find bulk annuitisation option attractive, and on funding position of DB funds

Source: ABI Watson Wyatt 2003/04

Figure 5.17: Longevity risk in UK pension provision, £ billion of total liabilities – broad estimates: end 2003

<table>
<thead>
<tr>
<th></th>
<th>Pre-retirement?</th>
<th>Post-retirement?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Still in employment</td>
<td>Already in payment</td>
</tr>
<tr>
<td>Insurance companies</td>
<td>10?</td>
<td>70?</td>
</tr>
<tr>
<td>Pension funds</td>
<td>400?</td>
<td>400?</td>
</tr>
<tr>
<td>Unfunded public employee pensions</td>
<td>260</td>
<td>190</td>
</tr>
<tr>
<td>State pensions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earnings-related</td>
<td>190</td>
<td>100</td>
</tr>
<tr>
<td>Total Earnings-related</td>
<td>860</td>
<td>760</td>
</tr>
<tr>
<td>State pensions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>510</td>
<td>390</td>
</tr>
<tr>
<td>Total</td>
<td>1370</td>
<td>1150</td>
</tr>
</tbody>
</table>

Source: GAD and Pensions Commission estimates based on industry discussions

Note: Unfunded public pensions in this Figure sum to £450 billion in line with latest GAD estimate. This is likely to be revised upwards as the impact of recent life expectancy projections are taken into account. In Figure 5.11 we estimate that this might produce a liability of £500 billion.
The panel at the end of this Chapter considers whether there are constraints on the capacity of the annuity market to meet this demand. The overall conclusions are that there are no inherent barriers to the private annuity market playing a greatly enhanced role in the absorption of post-retirement longevity risk, with changes in annuity prices themselves likely to stimulate appropriate adjustments to supply and demand, but that public policy may be able to help offset transitional problems:

- The primary focus of policy should be to encourage and facilitate later annuitisation. Policies could include:
  - Steadily increasing, in line with life expectancy, the ages of earliest possible and last possible annuitisation.
  - Considering whether the requirement for annuitisation, at any age, should be limited to a minimum amount.
  - Minor changes in tax and regulation which may facilitate the use of drawdown products by a wider segment of the market.
  - Increasing awareness of the trade-off between age of annuitisation and size of pension [see Chapter 10 Section 7 “Communication with Members”].

- In addition government debt issuance strategy may be able to facilitate annuity market growth in two ways:
  - By avoiding any artificial constraints on the issue of long-dated bonds and of index-linked bonds;
  - By considering whether government could play a limited pump-priming role in the longevity bond market. The Pensions Commission is not convinced by arguments that the government should be an issuer of longevity bonds on any significant scale. Government is already extensively exposed to longevity risk. However if, but only if, the government takes steps to exit from inappropriate absorption of pre-retirement longevity risk in both the state pension system and in public sector employee pensions, it could consider the issue of bonds which, by absorbing the risk of unanticipated changes in mortality rates of very old people (for instance over 90 year olds) might stimulate a wider private longevity bond market and thus help underpin annuity provision.

Chapter 10 Sections 7 and 8 discuss the implications of this approach for annuity provision and for communication with members of a National Pensions Savings Scheme.
4. What is the required and acceptable path of public expenditure?

The published public expenditure forecasts quoted in our First Report suggested that the UK’s total expenditure on state pensions would rise slowly as a percentage of GDP over the next 45 years, reaching 6.9% in 2050. The Pensions Commission’s base case forecast now suggests that if current indexation arrangements continue, expenditure would rise more than this, reaching 7.6% by 2050: this reflects more realistic forecasts for the growth of expenditure on Pension Credit, given the likely trend in private pension income, and a faster projected increase in life expectancy [Figure 5.18]. But this rise from 6.2% today to 7.6% would still be slight compared with that forecast for most other European countries [Figure 5.19] and would result in a 20% fall in average state pension income relative to average living standards being paid to each pensioner.

Figure 5.18  Public expenditure on pensioners as a percentage of GDP 2005-2050: if current indexation arrangement continue indefinitely

![Graph showing public expenditure on pensioners as a percentage of GDP from 2005 to 2050.](image)

Source: Pensions Commission analysis

Note: Other includes Winter Fuel payments and free TV licences.

See Figure 4.1 for a definition of the "current indexation arrangements" scenario

---

1 The public expenditure projections quoted here and at other places in this report and the estimates of the percentage of pensioners covered by means-testing, reflect the complex interaction of numerous trends. Published official estimates have varied from year to year. Figures should therefore be considered as indicating broad trends and particularly differences between options. Appendix F explains the modelling tool Pensim2 which has been used to generate these projections. Note in particular that the projections use fixed assumptions for flows of private pension income. In reality one might expect options entailing weaker incentives through wider means-testing to imply smaller flows of this kind, which could increase public spending on means-tested benefits further.
Critical issues are therefore:

- Whether it is possible to design a coherent pension system with public expenditure as constrained as this;

- What expenditure is required to deliver a coherent system;

- And what expenditure might be acceptable.

It is essential that these issues are now debated openly, and that as much political consensus on their resolution as is possible is achieved in order to provide a stable basis for pension policy going forward. In this section and in Chapter 6 we aim to make clear the choices that have to be made, and suggest a range of feasible solutions.

There are two closely related factors which make it very difficult to design a coherent system without some increase in public expenditure above current planned levels:

(i) The impact of changing demography, and

(ii) The need to limit the spread of means-testing while also avoiding an increase in pensioner poverty.

These can be offset partially, but only partially, if:

(iii) The state reduces its role in PAYG earnings-related pension provision.

These three factors are considered in turn below. We then set out:

(iv) Our judgemental guidelines on the required and acceptable public expenditure level, which we propose for debate.

(i) The demographic challenge: proposed principles to guide policy decisions

Chapter 1 Section 4 set out latest information on the scale of the demographic challenge, and explained the essential trade-off which we face. Given current plans for the State Pension Age (SPA), and despite the planned increase in the SPA for women (from 60 in 2010 to 65 in 2020) if the SPA remains at 65 after 2020, the ratio of people above SPA to those aged between 20 and SPA will increase from about 28% today to 47% in 2050.

Some mix of three developments is therefore inevitable: either an increase in the percentage of GDP being spent on public pensions of up to 45%; or a decline in the average generosity of state pensions relative to average earnings of up to 30%; or a rise in a pension age from 65 in 2020 to over 72 in 2050.
<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage of GDP in:</th>
<th>2009 or nearest available date</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>14.2</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>8.8</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>5.5</td>
<td>7.8</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>12.3</td>
<td>15.2</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>12.9</td>
<td>14.5</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>10.9</td>
<td>13.8</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>12.3</td>
<td>22.6</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>4.1 (2008)</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>13.6</td>
<td>14.4</td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>7.5 (2008)</td>
<td>9.3</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>5.2 (2008)</td>
<td>8.3</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>8.0</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>8.6 (2008)</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td>United Kingdom (Pensions Commission base case)</td>
<td>6.8</td>
<td>7.7</td>
<td></td>
</tr>
</tbody>
</table>

Source: European Commission 2005 Public Finances in the EMU to be published as European Economy n° 3/2005

1 EU 15 countries. No information relating to Portugal.
2 Projections were made by the IFO Institute for Economic Research.
3 These EU published figures use HM Treasury estimates and do not reflect the estimates made by the Pensions Commission. The estimate does not include costs for Housing Benefit, Council Tax Benefit, Disability Living Allowance and Attendance Allowance for those aged over SPA. It does, however, include public sector pension expenditure.
4 This estimate does include costs for Housing Benefit, Council Tax Benefit, Disability Living Allowance and Attendance Allowance for those aged over State Pension Age. It does not however, include public sector pension expenditure.
The first of these options would impose the burden of demographic adjustment entirely on future generations of taxpayers: the latter two options are alternative ways of making future pensioners bear the burden.

Current policy is based on SPA nominally held constant at 65, but with the value of the BSP falling relentlessly relative to average earnings. Two questions therefore arise:

- Who should bear the burden of demographic adjustment: future pensioners or future taxpayers?

- Second, if future pensioners should bear the burden, is it sensible to impose it on pensioners via a reduction in the benefit level, or via an overt increase in pension age.

**Who should bear the burden of demographic adjustment?** As we have already suggested in Chapter 1 Section 4, the answer to this question should be based on a distinction between the two different drivers of the dependency ratio increase: the rise in life expectancy and the delayed effect of the fall in fertility which occurred between the early 1960s and mid 1970s.

- There is a very strong argument that the economic consequences of rising life expectancy should be faced by each generation of pensioners, and not imposed through increased taxation on future generations of workers. Effective state pension ages should therefore rise over time at least in line with life expectancy, with this objective clearly announced in advance and integrated as far as possible into automatic adjustment rules. This implies that if increased life expectancy were the only demographic challenge we faced there would be no necessary reason why demographic factors should drive an increase in pension expenditure as a percentage of GDP.

- But as Figure 1.46 in Chapter 1 illustrated adjusting pensionable ages in line with life expectancy is not sufficient to stabilise public expenditure as a percentage of GDP. This is because, alongside the continuous increase in life expectancy, we face the one-off impact of the fall in fertility which occurred in the late 20th century, and thus of the retirement of the baby boom generation, whose large numbers have for the last 25 years kept the dependency ratio below its underlying long-term trend. This impact requires either that effective pensionable ages must rise faster than in line with life expectancy or that there must be a one-off increase in public expenditure on pensions as a percentage of GDP even if effective pensionable ages are increasing in line with life expectancy.

Which of these two approaches should be pursued depends upon a point of view about inter-generational fairness and is therefore inherently judgmental. The Pensions Commission’s judgment is that to require future pensioners to absorb the whole of the impact of the one-off fertility decline as well as the whole impact of increased life expectancy would be unreasonable, and would
result in a spread of means-testing which will undermine the effectiveness of the whole pension system (state and private combined).

The Pensions Commission therefore recommends that public pension policy for the flat-rate element of pension system must be based on two hard realities:

- Effective state pension ages will need to rise after 2020 at least in proportion with rising life expectancy, so that there is no persistent tendency for public expenditure on pensions as a percentage of GDP to rise.

- But at least part of the impact of the one-off decline in fertility will need to be reflected in a one-off increase in public expenditure on pensions as a share of GDP between 2020 and 2045.

Should pensionable ages be increased or the value of state pensions be eroded? If effective state pension ages are to rise over time in line with life expectancy, there are two ways to achieve this:

- Overtly, with declared increases in the SPA, but with the pension received at that age rising in line with earnings.

- Or in a hidden fashion, with the SPA nominally held constant but with the value of the pension eroding relative to average earnings, so that only by taking the deferral option, can someone gain a pension of unchanged earnings value, but at a later age.

As Chapter 4 illustrated in Figure 4.10, present indexation arrangements, if continued indefinitely, will produce a significant increase in the effective state pension age but in a hidden and complex fashion. The effective pensionable age for the BSP is increasing more rapidly than needed to compensate for increased life expectancy, while the effective pension age for S2P will on present plans stay constant at 65.

While both the explicit and hidden routes can be effective ways to achieve the objective of constraining public expenditure in the face of rising life expectancy, the Pensions Commission believes that a more explicit policy of raising State Pension Ages (but with benefits rising in line with earnings) will provide clearer signals to individuals of the adjustments which must occur. We also believe that the current planned difference between the evolution of the effective state pension age for the BSP and S2P is neither logical nor optimal. In particular the present policy of increasing very rapidly the effective BSP pensionable age, while not increasing the S2P age at all, is disadvantageous to people with interrupted work records and caring responsibilities, who, because of the greater generosity of the BSP credits system, are more likely to accrue substantial BSP rights than substantial S2P rights.
(ii) Limiting means-testing requires higher public expenditure

If current indexation arrangements were continued indefinitely the role of means-testing within the UK state pension system would grow relentlessly and by 2050 over 70% of pensioners would be subject to means-tested withdrawal of Pension Credit. This growth of means-testing is driven by the way in which the UK is currently dealing with the demographic challenge i.e. by reducing the earnings equivalent value of the BSP. We believe that the resultant spread of means-testing would undermine the effectiveness of any system of earnings-related pension provision (whether auto-enrolled or voluntary) both because it reduces actual incentives to save and because of the widespread perception that this is the case, even if for some categories of people this belief is exaggerated.

One aim of public policy reform should therefore be to limit the future spread of means-testing. There are three ways to achieve this:

- One is to reduce the level of the Guarantee Credit below that implied by current indexation arrangements e.g. by indexing it to prices not earnings. We believe that this is not a desirable policy since it would reduce the standard of living of the poorest pensioners, relative to the rest of society, reversing the reductions in pensioner poverty which recent policy changes have achieved.

- A second is to make the Savings Credit payable above a higher income level relative to average earnings than current indexation arrangements imply. This would shift some people from the 40% withdrawal of the Savings Credit to the 100% withdrawal of the Guarantee Credit.

- The other is to increase non-means-tested benefits. This will require increased public expenditure.

It will thus be impossible to limit the spread or severity of means-testing in the UK system without accepting a somewhat higher level of public expenditure. The expenditure required to eliminate means-testing entirely would however be very large. Thus even in 2010 (i.e. before the impact of the future demographic changes considered above) a non-means-tested universal pension equal in value to the Guarantee Credit would cost an additional 1.6% of GDP compared with current arrangements [Figure 5.20]. And the additional public expenditure required to achieve an immediate abolition of means-testing would to a significant extent benefit better-off pensioners.

This suggests that a complete and immediate cessation of means-testing is unlikely to be either affordable or a best use of constrained resources. Nor is it required. A significant improvement in actual and perceived incentives for the majority of people of current working age can be achieved by limiting the future spread of means-testing: it does not require the immediate elimination of means-testing today. This criterion which we have used to assess state system options considered in Chapter 6 is therefore that they should result in
Figure 5.20 Impact of an immediate move to a universal Enhanced State Pension at the Guarantee Credit level: public expenditure on pensions and pensioners benefits as a percentage of GDP

Source: Pensions Commission analysis

Note: Assuming no increase in SPA in both cases.
See below Section 4 (iii) and Chapter 6 for ways in which the increase in expenditure could be "offset" by reducing the accrual SERPS/S2P rights, payment relating to which is included in these figures.

The higher total cost in this Figure, compared to Figure 1.46, reflects the fact that this figure includes the costs of Housing and Council Tax benefits, disability benefits and other benefits e.g. Winter fuel payments. In addition it includes expenditure on SERP/S2P.
no further increase and ideally some fall in the percentage of pensioners receiving Pension Credit (either Savings Credit or Guarantee Credit), some decrease in the percentage of people who receive any Guarantee Credit and thus are dependent on means-tested benefits to achieve society’s minimum standards, and no increase in the percentage who are subject to 100% withdrawal rate of the Guarantee Credit.

Our proposed approach to means-testing and to the public expenditure consequences of limiting it, is therefore pragmatic. It is important to limit the future spread or severity of means-testing, and assuming that an increase in pensioner poverty is undesirable, it will be impossible to do this without an increase over time in public expenditure as a percentage of GDP. Total elimination of all means-testing or rapid reductions in the current level of means-testing may however be unfeasible and undesirable in distributional terms.

(iii) Reducing public expenditure on earnings-related pensions

Demographic change and the need to prevent the spread of means-testing will require increased public expenditure on flat-rate pensions. This increase could be offset in part if the state reduced its role in the business of PAYG earnings-related pension provision. In Sections 1 and 2 of this chapter we argued that over time it should do so, relying instead on a national auto-enrolment system to pursue earnings-related policy objectives. The public expenditure saving which will result from this policy depends on how rapidly we make the shift and on whether any of the increase in the value of the state flat-rate pension is “offset” by removal of some already accrued gross SERPS/S2P rights.

- Total forecast expenditure on gross SERPS/S2P under current plans is shown in Figure 5.21, distinguishing between that expenditure which relates to already accrued rights and that which will accrue in future. If we follow the option of a gradual shift from the current system to an auto-enrolment system (Option 2 in Figure 5.3) none of this expenditure would disappear.

- If instead we pursue Option 3 in Figure 5.3, freezing the UEL for S2P accruals in cash terms, this would produce the gross SERPS/S2P expenditure profile shown in Figure 5.22.

- While if we decided to make an immediate switch to an auto-enrolment system, immediately ceasing accruals (Option 1 in Figure 5.3), the future accruals element shown on Figure 5.21 would disappear.

- Finally if cessation of S2P accruals was accompanied, as proposals for a “Citizens’ Pension” suggest, by the introduction of a more generous BSP, it would be reasonable to “offset” increased BSP payments against people’s already accrued gross SERPS/S2P rights. This would indeed be essential in order to avoid today’s working generation paying significant additional taxes
Figure 5.21 Planned total SERPS/S2P expenditure as a percentage of GDP

![Graph showing planned total SERPS/S2P expenditure as a percentage of GDP from 2005 to 2050.](image)

- **Total SERPS/S2P expenditure**
- **SERPS/S2P already accrued by 2010**
- **S2P that will accrue from 2010**

Source: GAD and Pensions Commission analysis

Figure 5.22 Public expenditure on SERPS/S2P under current plans and if value of UEL for S2P accruals frozen in cash terms as a percentage of GDP

![Graph showing public expenditure on SERPS/S2P under current plans and if value of UEL for S2P accruals frozen in cash terms from 2005 to 2050.](image)

- **Total (accrued and still to accrue) present system**
- **Total if UEL frozen in cash terms**
- **Still to accrue present system**
- **Still to accrue if UEL is frozen in cash terms**

Source: GAD and Pensions Commission analysis
while also having to save for themselves, with much of the benefit of those extra taxes flowing to better-off pensioners. This “offsetting” approach would not only eliminate a significant proportion of the SERPS/S2P expenditure shown in Figure 5.21, it would also require the level of the Citizen’s Pension paid to individuals who had contracted-out to be “offset” against the assumed value of their contracted-out pension. This and other major complexities in implementing “offset” are explored in Chapter 6.

To different degrees under different options therefore the removal of the state from a direct role in earnings-related pension provision could significantly but not totally offset the increase in public expenditure on flat-rate pensions which will be required to cope with the demographic challenge and to limit the spread of means-testing.

(iv) Judgmental guidelines on public expenditure level

The considerations above lead the Pensions Commission to the following conclusions:

- Some increase in public expenditure as a percentage of GDP is unavoidable in the face of that element of the dependency ratio increase which results from the decline in fertility, given the need to limit the spread of means-testing within the system.

- This increase should however be limited by:

  - Accepting it as a principle that effective state pension ages should rise over time in line with life expectancy.

  - And at some time withdrawing the state from the provision of PAYG earnings-related pensions, focusing constrained tax capacity on the provision of as generous and non-means-tested a basic pension as can be afforded while using auto-enrolment into a NPSS as the key earnings-related policy lever.

In Chapter 6 we explore the specific public expenditure consequences of policies consistent with these principles. Whether or not the total public expenditure levels which would result are acceptable is of course a matter of political judgement rather than technical analysis. The Commission’s role is primarily to set out the possibilities for public debate. But we cannot recommend a way forward for pension policy without proposing a range of public expenditure which we believe could be both required for a coherent system and acceptable. This range has the shape shown in Figure 5.23.
Figure 5.23 Public expenditure and pension age increases: possible combinations

2010-2020: Increase in female SPA creates scope for improvements within a flat proportion of GDP. And a significant increase is not appropriate

2020-2045: Increase is unavoidable given combined impact of rising life expectancy and delayed impact of lower fertility

2045 onwards: Fairness requires stable cost burden in the long term achieved through further increases in SPA

Source: Pension Commission analysis using Pensim2

Note: The upper limit to our indicative range assumes that the SPA would increase in proportion to projected life expectancy increases after 2020, and would therefore reach about 67 by 2050. The lower limit of the indicative range assumes that the SPA would have risen by 2050 by the absolute amount of the projected increase in life expectancy between 2005 and 2050 (as well as the SPA for women increasing to the male level by 2020) and would therefore reach 69 by 2050. The levels of public expenditure indicated are those suggested by the analysis shown in Figure 1.46: i.e. the level required to pay to each individual above these ages a pension equivalent to the level of the Guarantee Credit, together with spending on other benefits such as Disability, Housing and Council Tax benefits.
In the long-term (e.g. in 2050 and thereafter) its lower limit at 7.5% is just below the Pensions Commission’s base case projection (if current indexation arrangements continue) and 0.6% above the Government’s published forecast at the time of the First Report. We do not believe that it is possible to design a system significantly more efficient than the current one without expenditure at this level. Its upper limit, at 8.0%, could be consistent with a significantly simplified and more efficient system, but we suspect would approach the limit of what will be politically acceptable given other pressures on public finance. Limiting the increase to 8.0% will require increases in the State Pension Age broadly in proportion with life expectancy increases after 2020, reaching 67 in 2050. Getting below 7.5% would require an increase in SPA faster than the whole amount of the projected life expectancy increases from 2005 to 2050.

In the short-term (e.g. up til 2015) it seems likely that whatever government is in power, there will be only limited potential for pension expenditure to increase from current levels to solve the structural problems in the current system. And across the board increases in public expenditure on pensions in this period might flow to precisely those pensioners who are benefiting from the past generosity of SERPS/S2P and of DB promises. Some expenditure increase, relative to the expenditure which would result from existing indexation arrangements will however be possible between 2010-2020, since the increase in women’s SPA will on unchanged plans produce a fall in the percentage of GDP devoted to pension expenditure.

A significant increase between 2020 and 2045 is however unavoidable even if pension ages are adjusted in line with life expectancy and even if the state is by then exiting from earnings-related provision.

And this increase may need to be front-loaded, rather than a straight line from 2020 to 2045, given that the impact of the retirement of the baby boom is most severe between 2020 and 2035 [as Figure 1.45 showed].

In the long term, however, intergenerational fairness suggests that public expenditure on pensions as a percentage of GDP should not increase further. The key to achieving it is the automatic adjustment of state pension ages in proportion with increased life expectancy.

5. How should investment return risk be mitigated in a compulsory or encouraged funded pension scheme?

In Sections 1 and 2 of this chapter we proposed a new public policy for earnings-related pensions. This would replace the existing earnings-related element of S2P with a National Pension Saving Scheme (NPSS) which would auto-enrol people into making contributions to individual savings accounts with a modest compulsory matching employer contribution. Since the S2P
system includes the option of contracting-in to the government PAYG DB scheme, this would represent a shift of investment return risk to individuals. That shift is also occurring within the voluntary system, with DB salary related schemes closing and being replaced by DC or Group Personal Pensions (GPP) schemes in which individuals increasingly can make their own asset allocation decisions and in which they are exposed to variability in asset return.

This shift of investment return risk creates the danger that many people may be ill-equipped to make good decisions. It will need to be mitigated by the designation of default funds within a NPSS.

**Investment return risks**

All pension systems either explicitly or implicitly deliver a rate of return. In a state provided PAYG DB scheme the return is implicit and for any individual is affected not only by the overall macroeconomics of public finance and national economic growth but often also by redistribution between different income groups. On average and under some conditions, however, this implicit return tends to be close to the rate of growth of GDP per capita, which in turn is often reasonably close to the real rate of return on government bonds.

In an individual account funded system, individuals can be free to make their own asset allocation decisions, deciding between high risk and high return assets (such as equities) and low risk, lower return assets, such as index-linked government bonds. On average over 20 year holding periods individuals invested in equities would have done significantly better than investing in real bonds, but on some occasions they would have done significantly worse. And while, as the panel on the following pages explains, there are some reasons for believing that the risk of holding equities reduces with the time period of holding, the best judgment is that over all time periods relevant to pension saving equities remain significantly riskier than bonds. Equally while there are financial products, such as guaranteed equity bonds, which can enable people to insure against the extreme downsides of equity market falls in return for giving up some of the up side, there are capital market capacity limits to these being available at reasonable prices over very long time periods and in very large amounts.

The trade-off facing individuals between risk and return is therefore inherent, and the consequences of poor decisions and poor timing very large. An individual heavily invested in equities who retired in March 2002 could spend the whole of their retirement with a pension fund of around one third lower than the equivalent investor retiring in March 2000.

There is moreover extensive evidence that a significant portion of the population is both ill-equipped and recognises itself as ill-equipped to make informed choices between different risk-return combinations.
Risk and return in pension fund investment: Implications for default fund design

In Appendix C of our First Report we set out data relating to the returns which had been achieved over different past holding periods by different asset classes, and used this to inform assumptions on the rate of return which might be achieved on pension saving in future. We did not in that Report consider the issue of what asset classes pension funds should logically invest in, instead taking average actual asset class allocation as a guide to future possible allocations.

A national auto-enrolled savings scheme will however (like most occupational DC schemes), need to include a default fund, into which members’ funds are invested if they do not specify an asset allocation preference. We therefore need to consider what asset allocation is likely to be optimal for the average scheme member. This should reflect an assessment of the risk-return trade-off involved in choosing between asset classes over different periods of time. The theory and empirical evidence on this issue are subject of major debate.

This panel therefore considers:

- Risk–return trade-offs; does the risk of investing in equities reduce as the holding period gets longer?
- Implications for optimal investment strategies in DB and DC funds.
- Implications for default fund design.

Risk-return trade-offs

Finance theory suggests that investment choices involve a trade-off between expected future return and risk (the potential variability of that return). Bonds (if held to maturity rather than actively traded) should be low risk/low return, while equities are higher risk/higher expected return.

In fact for much of the twentieth century holding bonds was a very risky investment, since the only bonds actually available (until the 1980s) were nominal bonds, and since there were huge unanticipated swings in inflation. This combination resulted at times in severely negative real returns on bonds (the 1960s-70s), and at times extremely high real returns (1980s-1990s).

Looking forward, however, the existence of real-indexed bonds creates the possibility of risk-free real returns, and the present yield to maturity for real bonds (today about 1.5% real for UK Government indexed bonds of 20 years maturity) is our best available measure of the expected risk-free return.

Appendix C of the First Report showed histograms of past achieved returns on equities over different holding period (5 years, 10 years, 20 years etc). These showed that past average returns on equities e.g. 5.5% real on average over all 20 year periods in the last 100 years in the UK had exceeded a typical real bond yield of, say, 2% real [Figure 5.24].

Those histograms also showed that equity returns display significant risks. They appear, however, to suggest that the risk declines with the length of holding period. Thus equities held for 5 years performed worse than a real bond benchmark of 2% real in 32% of all 5 year periods; but over 20 year periods, equities beat 2% real in all except 16% of periods. This well known phenomenon lies behind the conventional investment assumption (and much actuarial advice to pension fund trustees) that the attractiveness of holding equities increases the longer the proposed holding period.

This assertion is however hotly contested on both empirical and theoretical grounds (see e.g. Bodie 1995).

Empirically it is argued that while the percentage likelihood of doing worse than a real bond benchmark decreases with the length of the holding period, the severity of the loss (relative to a real bond benchmark) increases. Thus for instance a 1% shortfall per year over 20 years is far more serious than a 1% shortfall over 1 year.

Theoretically it is argued that the idea that equity risk decreases with holding period contravenes efficient market theory, and that if it were true there would be arbitrage opportunities via the options market. It is assumed that any such opportunities would be exploited and therefore cannot usually exist.

Each of these points however is equally hotly contested, again on both empirical and theoretical grounds. Over the last year, the Pensions Commission has therefore reviewed the arguments made on either side of the debate, and has conducted further empirical analysis of...
the past pattern of equity returns. This analysis is set out in a lecture by the Chairman of the Commission available on the Pensions Commission website (Turner, 2005). Key points are:

- Our empirical analysis questions the assertion that the decreasing likelihood of under-performing a bond benchmark as the holding period increases is offset by the increasing size of the shortfall. Figure 5.25 shows the probability of different total shortfalls of return (versus a 2% real bond benchmark) over 20 year holding periods and 5 year periods for equities. It is clear that at least over the historical UK record, holding equities for 20 year periods has been less risky than holding equities for 5 years.

- This finding certainly does contradict strong forms of efficient market theory. But there are good theoretical reasons for it doing so. In the real world there is not a large supply of well capitalised investors who focus on analysis of the long-term fundamental value of the whole stock market. There is therefore no necessary reason for long-term inefficiency to be arbitraged away (as strong form efficient market theory assumes). This market inefficiency is reflected in negative serial correlation in stock market returns i.e. periods of above normal return tending to be followed by periods of below normal return (see e.g. Somers 1980, Shiller 1981).
Figure 5.25 Periods where equity returns were less than the risk-free rate by size of shortfall

5 year periods with returns below the risk-free rate
Proportion of all periods: 32%

[Bar chart showing frequency of cumulative shortfall versus risk-free return over 5 years.]

20 year periods with returns below the risk-free rate
Proportion of all periods: 16%

[Bar chart showing frequency of cumulative shortfall versus risk-free return over 20 years.]

Source: Barclays Equity Gilt Study 2005
Note: Overlapping periods from 1899-2004.
The Pensions Commission’s tentative conclusion is therefore that the risk of holding equities probably does decline with the length of holding period. This conclusion can only be tentative, however, given the extreme theoretical difficulties involved in drawing any inferences about either future expected returns or future risks (on either bonds or equities) from past actual achieved results (see Turner 2005).

And a clear distinction must be drawn between two quite different propositions:

- There may be reasonable empirical and theoretical grounds for believing that risks in holding equities decline with the length of the holding period.

- But this does not imply that there is any holding period, however long, over which equities become less risky than real bonds. The only risk-free investment strategy is to buy real government bonds: anything else will entail accepting higher risk in the pursuit of higher expected return.

Implications for DB and DC investment

The implications of these findings are different for DB scheme sponsors and for DC pension fund investors.

In the case of DB scheme sponsors (i.e. companies with DB schemes) a separate body of financial theory can be used to argue for a strongly bond-focussed investment approach. Key points are:

- Companies with DB schemes are not investors in themselves, but agents investing their shareholders’ money. They therefore only add value if they do things which their shareholders cannot do for themselves. For instance, increasing leverage in itself (absent tax effects – an important qualification) is therefore not value creating (see Modigliani and Miller 1958).

- DB fund liabilities, though originally to a significant extent discretionary, are now closely equivalent to company debt, and recognised as such by accounting standards (FRS17) and, increasingly, by rating agencies. Therefore a company which invests its pension fund in equities, is essentially taking a mismatch position (equity assets versus bond liabilities) unrelated to its core business. This, the argument goes, is clearly of no value to shareholders since shareholders could if they wished take this mismatch position themselves.

Some counter-arguments can be made, but this proposition has significant power, and the general observed trend of DB fund investment has been and is likely to be towards increased bond weights.

This argument is however irrelevant to the optimal investment strategy of an individual with a DC pension fund (whether occupational or personal), since there is no intermediary absorbing risk, and no principal-agent relationship to be considered.

The appropriate asset allocation for the individual DC investor therefore has to reflect his or her underlying preferences – whether he or she wishes to be absolutely certain of a low return or is willing to take some risk in order to gain (on average) higher returns.

Different individuals have different risk/return preferences. There is therefore no ‘right’ asset allocation of DC funds. But a coherent theory of rational preferences can be constructed in which people’s preferences on average will reflect their income level and their already achieved wealth. People should logically be risk-averse in their investment strategies until they are reasonably assured of some minimum level of income in retirement. That minimum income can be defined partly in absolute terms (“I want to be absolutely certain of keeping out of poverty”) and partly in relative terms (“I want to be highly certain of maintaining something like my present standard of living relative to the rest of society”). And reasonable assurance of achieving that minimum income can be achieved either through accumulated wealth or through reasonable expectation of future wealth accruals (e.g. accrual of state pension rights).

This theory has implications for default fund design within any compulsory or auto-enrolled pension scheme.

Implications for default fund design

If an individual’s rational risk/return trade-off should reflect the extent he is already reasonably assured of a minimum adequate income, it follows that optimal asset allocation in funded pensions should reflect the generosity of the state compulsory PAYG system. The less generous the state compulsory PAYG system, the more risk-averse individuals should rationally be in their private pension fund investments. The more generous the compulsory PAYG system, the greater will be the average rational propensity to invest supplementary funded provision in higher risk, higher return assets.
This philosophy is for instance reflected in the default fund of the Swedish PPM system. This fund (AP7), into which has 90.6% of all new members invest, is 82% invested in equities. This may seem a risky choice for a fund into which people are defaulted. But the Swedish PPM system is a relatively small funded supplement to a fairly generous PAYG NDC system. A relatively high risk, high return default fund therefore makes sense.

The UK’s PAYG state pension system is and will remain (even with our proposals) one of the least generous in the developed world: a poverty prevention rather than income replacement system. There is therefore a strong argument that the default fund in the NPSS should be relatively low risk.

The only nil risk fund, and the only fund which the government can ‘guarantee’ is a fund invested in real government bonds. To designate a real bond fund as the default fund would, however, mean that on average those who accepted the default option at any early age would do significantly worse than those invested in funds with an equity element. Over a 40 year holding period investing a stream of contributions in a balanced fund yielding 3.5% real could produce 36% more than investing the same contributions in a fund invested in government bonds yielding 2% real.

And over very long-term holding periods, it is a reasonable judgement on the balance of evidence (as outlined above) that the risk of holding equities reduces (while never becoming nil).

There is therefore a good argument for the following approach to default fund designation.

1. The default fund should be a ‘life-style’ smoothing fund, of the sort familiar in occupational DC schemes, with a relatively high equity weight at early ages, and a gradual shift to bonds as people approach retirement. It should be clear however that returns on this fund are not guaranteed and that there could exist circumstances in which it would perform worse than a real bond benchmark, even over long-term holding periods.

2. There should be a real government bond fund to which the term ‘guaranteed’ could be applied. But it should be made clear that the guaranteed return will on average over time be less than that achieved on the default fund (or on other non-bond funds).

Mitigating investment return risk: default funds

This lack of confidence is reflected in people’s high propensity to invest in “default funds” when these are offered within employer provided pension schemes on within a national savings scheme. In Sweden for instance, 90.6% of all individuals now invest in the default fund [See Figure 10.13 in Chapter 10]. There is therefore a strong case for introducing a default fund within any national auto-enrolment scheme, and such a default fund would indeed be an administrative necessity since it is highly likely that a significant number of scheme members will not return asset allocation forms.

Within employer provided schemes default funds often take the form of “lifestyle” smoothing funds which move people from high equity allocations to high bond allocations as they approach retirement. Within a national auto-enrolment scheme there are we believe two options for a default fund:

1. A “lifestyle” smoothing fund;

2. A fund invested solely in government index-linked bonds.
The panel on the previous pages considers the relative merits of these two approaches. Key points are that:

- The only fund on which the government can guarantee the real rate of return is one invested in government index-linked bonds. And there is a good argument, based on a consideration of logical approaches to risk and return, that investment allocations in funded schemes should reflect the generosity of the state compulsory scheme. Since the UK state pension scheme is and will under any foreseeable set of policies remain one of the least generous in the developed world, low income people with limited other wealth-holdings should logically invest their pension funds in very low risk assets, achieving through the funded route the equivalent of a state earnings-related DB scheme.

- Conversely, for many people a totally risk-free approach to investing may well be excessively cautious, sacrificing a substantial expected increase in return for the exclusion of very low probabilities of adverse performance.

- And there is a danger that if the default fund design encourages substantial purchase of government real indexed bonds, this together with the likely increase in annuity demand described in the panel at the end of this Chapter, will in itself depress returns on these instruments, resulting in even lower returns.

Our recommended approach to default fund design in a NPSS is therefore:

- The default fund should be a “lifestyle” smoothing fund, which automatically shifts members from high equity allocations at earlier ages to high real bond allocations as they approach retirement. But it should be made clear that the government provides no guarantee of a minimum return on this fund, and that it could under certain (however rare) circumstances perform worse than real government bonds.

- The other fund options should include a risk-free fund invested in real government bonds and which holds those to maturity. One possibility which should however be considered is the creation of a new type of real government bond, linked to growth in GDP, which is available within the NPSS, though not existing in wholesale markets.
6. Should the flat-rate element (or elements) of the system be universal or contributory?

Chapter 4 outlined problems with the present UK system of state pension provision and compulsory savings. Three of these relate to problems which will increasingly emerge in future if current indexation arrangements remained unchanged: the decline in earnings-related provision; the spread of means-testing and the failure of the system to adjust to rising life expectancy in a logical fashion which sends coherent signals to people about the need to increase average retirement ages. But one of the problems highlighted has always existed: the poor treatment of people (particularly women) with interrupted paid work records and caring responsibilities. While the main focus of the Pensions Commission’s work has not been on the details of the system as it relates to pensions in payment today, but on how the system will develop in future, an integrated set of policies for the future should also ideally seek to deal with existing problems.

The problems which many women in particular face are largely created by the operation of the contributory principle. That principle has the merit of linking non-means-tested benefits to contributions paid, reinforcing incentives to work, and thus it could be argued, linking rights to responsibilities. The operation of this principle has increasingly over the years been adjusted to compensate non-remunerated work, such as caring, and to ensure that people are not penalised by periods of involuntary unemployment. This has been achieved through development of an extensive “credits” system [Figure 5.26].

A significant proportion of all accrued rights to the BSP and the S2P now arise from these credits [Figures 5.27]. As a result of this, and of increasing female employment rates, the relative position of women has improved, with younger women in particular now as likely as men to be accruing for BSP rights, and more likely to be accruing at least some S2P rights [Figure 5.28]. Looking forward therefore an increasing number of women reaching retirement age are likely to have accrued a full BSP [Figure 5.29].
**Figure 5.26** Non-contribution based accrual of state pension rights

### Basic State Pension

**Credits:** A person with no earnings or with earnings below the LEL is ‘credited’ with a free contribution as if they were earning at the LEL if:

- incapable of work through illness or disability
- receiving Carer’s Allowance
- getting Working Tax Credit
- getting Statutory Maternity Pay
- getting Statutory Adoption Pay
- unemployed and available for, and actively seeking work
- on certain types of training courses
- doing jury service
- serving a prison sentence for a conviction which is subsequently quashed
- 61-65 year olds
- 16-18 year olds

**Home Responsibilities Protection:** The number of years required to accrue a full BSP is reduced by one for each year in which someone is:

- receiving Child Benefit for a child under 16, or is an approved foster parent or foster carer (applies from 2003/04 onwards);
- receiving Income Support on the basis that the person is looking after a disabled person;
- is regularly looking after someone for at least 35 hours a week who has been getting Attendance Allowance, Constant Attendance Allowance or the highest or middle rate of Disability Living Allowance care component throughout the whole of tax years up to 05/04/94 and for at least 48 weeks in respect of each tax year from 06/04/94.

### State Second Pension

**Credits:** A person with no earnings or with earnings below the LEL is ‘credited’ with a free contribution as if they were earning at the LET if they are:

- looking after a child under age 6 and receiving Child Benefit for that child; or
- looking after an ill or disabled person and qualify for HRP; or
- under State Pension Age and are entitled to Carer’s Allowance; or
- receiving Incapacity Benefit or Severe Disablement Allowance and meet the conditions of the labour market attachment test.
Figure 5.27 Numbers of people with accrued BSP and S2P rights derived from credits, 2002/03

![Bar chart showing numbers of people with accrued BSP and S2P rights derived from credits, 2002/03.]

Source: Lifetime Labour Market Database 2002/03, DWP

Note: More men than women gain State Second Pension because their later State Pension Age means there are more men in the working age population.

Figure 5.28 Accrual of state pension rights by age and sex: percentage accruing rights in 2003/04

![Bar chart showing accrual of state pension rights by age and sex, 2003/04.]

Source: FRS 2003/04

Note: This analysis refers to an individual’s accruals during 2003/04 only. It does not consider cumulative rights.
Figure 5.29 Projected average entitlement to BSP

Denotes range of uncertainty in GAD projections

Source: Government Actuary’s Department

Note: The average shown in this figure is the weighted average of the entitlements shown in Figure 4.2. This is the average entitlement for those who are entitled to receive BSP, therefore it excludes cases where individuals are entitled to less than the de minimis amount.
Despite this progress however, women pensioners will for many years be less likely than men to enjoy a full BSP in their own right: Figure 5.28 shows that this is true for women aged over 40. This reflects a number of problems and gaps in the present contributory and credit system [Figure 5.30]. Some of these problems (e.g. those arising from the precise operation of the Home Responsibilities Protection system (HRP)) could be reduced through changes to the current system. One key problem, however, (the fact that some women earn less than the Lower Earnings Limit (LEL)) on any one job, is more difficult to fix without more significant system changes.

A strong case can therefore be made for replacing the existing contributory system with a “universal” pension payable to all individuals who meet a residency test (the term “Citizen’s Pension” is also sometimes used to describe this proposal). This would overcome the problems arising from the operation of the contributory principle, and, if set higher than the current BSP, would free many people, and in particular women, from reliance on means-tested benefits, eliminating this reliance altogether if the pension were set at a level equal to the Guarantee Credit.

Equally, however, important arguments against moving to a universal approach must be recognised. One of these is an objection in principle. Supporters of the contributory approach believe it important for people to receive state pensions only in return for contributions made to society, whether through paid work or unpaid caring, and object to the idea that some people could receive a full BSP, even if they have made no such contribution. At least in theory, a universal approach would reduce incentives to work.
### Figure 5.30 Key problems and gaps in the current system of credits

<table>
<thead>
<tr>
<th>Details</th>
<th>Possible means to overcome</th>
</tr>
</thead>
</table>
| **De minimis rule** | If the total amount of BSP payable is less than 10% of the full rate, then an individual is not eligible to receive any BSP. | Reducing the de minimis limit e.g. to 5%  
Scrapping the de minimis rule;  
Creating a combined de minimis with S2P so that entitlements are paid once the combined total is above a given amount. |
| **Home Responsibilities Protection (HRP) as an annual protection** | HRP is given on an annual basis. If someone works for a part of a year with total earnings less than the LEL and then stops work for eligible caring responsibilities, they cannot receive a part-year of contributions and a part-year of HRP. Therefore that mixed year does not create any BSP entitlements. | Changing HRP from a policy which reduces the number of qualifying years to a weekly credit system. |
| **Limit on number of HRP years taken into account** | HRP can only reduce the number of qualifying years to 20. If an individual has done a range of different caring responsibilities during working life, they cannot get full benefit from them. | Changing HRP from a policy which reduces the number of qualifying years to a weekly credit system. |
| **Multiple jobs with earnings below the LEL** | The National Insurance system only records earnings for those with earnings above the LEL. Therefore if someone has total earnings of more than the LEL through a number of different jobs (each of which pays below the LEL), they are not treated as having a qualifying year for NI purposes. | Requiring employers to record and pass on details of earnings below the LEL and creating a system to enable these to be aggregated. This would significantly increase costs for employers. |
| **People caring for a child age 6-15** | If caring for a child of this age, a person receives HRP towards the BSP, but no credits to S2P. | Enhance S2P credits in line with BSP to make them available to carers of children aged up to 15. |
Other arguments relate to cost, distributional effects, and practicability, and are therefore somewhat dependent on the level at which any universal pension would be set, and whether it was introduced retrospectively or only in respect to new accruals. The following implications of a move to a universal approach need to be considered:

- It would entail significant public expenditure cost, particularly in the short term. Figure 5.31 compares the cost of a universal pension equal to the Guarantee Credit and a contributory pension at that level from 2010 to 2050. These figures include the cost of means-tested top-ups and so capture the offsetting reduction in means-tested expenditure which a higher less means-tested state pension would produce. In 2010 the difference would be 0.6% of GDP. By 2040 the difference would decline to 0.3%. This narrowing reflects the increasing proportion of people (and in particular women) who by 2040 are likely to have accrued a full pension on a contributory basis. The high short-term cost suggests that if the universal pension option is chosen, a gradual phasing over time might be required.

- This high short-term cost would reflect, moreover, increased payments to many relatively well-off pensioners. The poorest pensioners would no longer have to claim means-tested benefits, but their potential income level (provided they do claim these benefits) would not increase. But many people with incomplete work records, but with total household income already above the upper Savings Credit threshold, would gain directly and significantly.

- And there would be significant implementation complexities in introducing a residence based criterion in a country like the UK which, unlike the Nordic countries and the Netherlands, does not have an established population register system, and unlike New Zealand, is part of the European Union, with significant movement of people in and out of the country, and which is subject to reciprocal social security agreements both with other European Economic Area countries and through bilateral agreements [Figure 5.32].

The Pensions Commission’s assessment of the balance of these considerations is that the best way forward would combine:

- Moving future BSP accruals onto a long-term residence basis (e.g. pro rata to a working life of 45 years), while leaving existing accrued BSP rights unchanged.

- Leaving the S2P as a contributory system but improving the generosity of S2P credits, at least bringing them into line with the current BSP approach.
Figure 5.31 Impact of universality on an Enhanced State Pension

<table>
<thead>
<tr>
<th>Year</th>
<th>Contributory ESP</th>
<th>Universal ESP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>2010</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>2015</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2045</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2050</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis using Pensim2
Note: From 2010 BSP is replaced by a contributory or universal ESP at the level of the Guarantee Credit and S2P accruals cease.

Figure 5.32 Complexities in introducing a universal residency based pension

<table>
<thead>
<tr>
<th>Approach</th>
<th>Details</th>
<th>Examples</th>
<th>Implementation issues in UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term residency</td>
<td>Pension is pro-rata to number of years resident as a percentage of full working life e.g. 40–50 years.</td>
<td>Nordic countries</td>
<td>Countries using this approach have had population registers for many years; the UK does not. Therefore new procedure is required to apply this approach looking forward; and very hard if not impossible to apply retrospectively.</td>
</tr>
<tr>
<td>based</td>
<td></td>
<td>Netherlands</td>
<td></td>
</tr>
<tr>
<td>Short-term residency</td>
<td>e.g. Full pension requires 10 years residency which at least 5 after age 50.</td>
<td>New Zealand</td>
<td>Could create anomalies with winners and losers if applied within an EU country with significant movement of labour and reciprocal social security agreements.</td>
</tr>
<tr>
<td>based</td>
<td>e.g. Full pension requires 10 years residency out of 20 before SPA.</td>
<td>NAPF proposal</td>
<td></td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis
Dealing with the most severe inherited problems by making the BSP universal immediately above a certain age, e.g. 75 or 80. This could be achieved in an administratively straightforward way by changing the rules relating to the “Category D” pension which is already paid on a universal residence basis to pensioners aged over 80.

This package would:

- Represent a reasonable balance between the attractions of the universal and contributory approaches, freeing many women in particular from future reliance on means-tested benefits, while still requiring contributions to secure full state pension rights.

- Limit the short-term public expenditure cost and avoid giving significant pension increases to today’s better-off pensioners.

- Avoid the need to attempt a retrospective test of residence. It would however be dependent on putting in place a feasible mechanism for testing residence looking forward.

The cost and feasibility of this package, compared with the public expenditure range we set out in Section 4 above, are considered in Chapter 6.
7. Should the two flat-rate elements of the UK pension system be unified?

Chapter 4 explained that the UK is essentially heading towards a state pension system which has two flat-rate elements (the BSP and the S2P), with earnings-related compulsion above the Lower Earnings Threshold (LET) slowly disappearing between now and 2055. The obvious question which therefore arises is:

- If we accept that Britain will and should head towards state PAYG pension provision which is entirely flat-rate in nature, does it not make sense to combine the two flat-rate elements into one “Enhanced State Pension” (ESP)?

This proposal is frequently made alongside arguments for a universal rather than contributory approach, but it is important to note that it is conceptually separate, and that four potential combinations of approach are possible [Figure 5.33]. We could move the BSP from a contributory to universal approach, while leaving the BSP and the S2P as two separate systems: and we could have a combined ESP to which rights were accrued on a contributory basis.

This Section therefore considers the specific issue of whether a unified or two-tier approach is preferable. It looks in turn at the advantages and disadvantages of:

i) The unified ESP approach

ii) The two-tier, BSP and S2P, approach.

![Figure 5.33 Possible approaches to flat-rate state pension provision](image-url)
(i) The unified ESP approach

The obvious benefit of a unified ESP is that it would be simple and easy to understand. If combined with policies to increase the SPA over time, it would make it possible to promise people a flat-rate state pension equal to or at least close to the Guarantee Credit poverty line, rising in line with earnings over time, but affordable within the range for public expenditure in 2050 (7.5% to 8.0%) suggested as acceptable in Section 4 above. It would eliminate or at least minimise the role of means-testing. People would have a clear understandable promise of what the state will deliver, and clear incentives to save on top.

There are however, significant offsetting disadvantages, particularly if an ESP is rapidly introduced. These are:

- **Short-term public expenditure cost.** Figure 5.20 showed that introducing an ESP, at the level of the Guarantee Credit in 2010 would produce a jump of public expenditure on pensions of 1.6% of GDP. The reason that this jump in public expenditure occurs, despite the fact that in the long term an ESP would be replacing a BSP and an S2P which together give similar combined benefits, is that the S2P flat-rate benefits introduced in 2002 are only slowly accruing over time, whereas an ESP would pay out benefits immediately to existing as well as future pensioners.

- **The distributional impact of this jump in public expenditure would moreover be similar to that produced by the move from a contributory to universal system.** At the lowest earnings levels it would enable people to enjoy benefits as of right rather than on means-tested basis, but would not actually increase their total potential income. Instead many of the benefits would flow to people somewhat higher up the income distribution.

- **Indeed due to a counter-intuitive effect deriving from the complexities of the Savings Credit system, some low-income pensioners could actually be made worse off if an ESP were introduced in place of the existing BSP and S2P system, and if the lower Savings Credit threshold were increased in line with the now unified basic pension.** This effect is illustrated in Figure 5.34. It results from the fact that, while the S2P (or its contracted-out alternative) is compulsory, it is treated as equivalent to voluntary private saving for the purposes of the Savings Credit calculation. This adverse distributional effect could be offset by maintaining a Savings Credit threshold which is below the level of the ESP, but only at the cost of some loss of simplicity and additional public spending.
These public expenditure and distributional considerations suggest that if an ESP is introduced there could be a case for some contribution of:

- Introducing it at a later age than the current 65 (for instance at 70) while maintaining current arrangements for those aged between 65 and 70.
- Phasing in its introduction over time.
- "Offsetting" accrued SERPS/S2P rights against the value of the ESP, e.g. paying people who have accrued rights the higher of either the ESP or the current value of BSP plus accrued SERPS/S2P rights, rather than allowing these rights to be on top of the ESP.

All of these options, however, introduces significant complexities which are explored in Chapter 6.

The case for a unified ESP may therefore be undermined by short-term public expenditure cost and distributional consequences, and by the complexities involved if we attempt to overcome these by a partial or phased introduction, or by "offset".
(ii) The two-tier BSP and S2P approach

The alternative policy would be to accept long-term continuation of the two-tier system, and S2P’s gradual rather than immediate transition to a flat-rate system, while taking more incremental measures to prevent the spread of means-testing. This incremental approach would obviously be simpler in transitional terms. It would also allow three potentially useful forms of flexibility in the overall design of the system:

- It would be possible to make the BSP available on a universal basis, while the S2P continued to accrue on a contributory basis. While the costs and distributional impacts of a universal BSP would still need careful assessment, the flexibility to introduce this differentiated approach would have advantages.

- It would make it possible to have two different retirement ages for the S2P and the BSP, and there could be good arguments for making this distinction. A pensionable age of, for instance, 65 for the BSP and 67 for S2P would ensure that people who need to retire at 65 enjoyed at least a base load of state pension provision, but would constrain public expenditure and signal the need for later retirement, with “full state pension entitlement” only available at the slightly later age. And it would be possible to increase the BSP pensionable age in line with increases in the life expectancy of the lower socio-economic groups, while increasing the S2P pension age in line with average life expectancy. These arrangements might be preferable in principle, as well as more acceptable politically, than movements in pensionable age which applied to the whole of a unified ESP.

- It would allow a flexible approach to the indexation of pension benefits during retirement. At present the BSP and S2P have different effective indexation rules. The BSP is indexed to prices growth both up to and during retirement: not only therefore does each individual pensioner receive an income which falls relative to average earnings during their retirement, but each successive generation of pensioners receives a BSP entitlement which is reducing relative to average earnings. The S2P, in contrast, is effectively indexed to earnings up to the point of retirement but to prices thereafter.
It is impossible to stop the future spread or severity of means-testing unless the declining position of each generation of pensioners relative to average earnings is brought to a halt. This requires the indexation of the BSP to earnings at least up to the point of retirement. Proposals for a universal Citizens Pension (a unified ESP) received by the Pensions Commission also argued that pensions during retirement should move with earnings. This has the huge merit of simplicity, but also increases the cost. Maintaining the two-tier system would however allow the flexibility of two different indexation regimes, e.g. the BSP linked to earnings both before and after retirement, the S2P, as now, linked to earnings up to retirement and prices thereafter. Depending on the level of the combined BSP and S2P at point of retirement, this would still leave the danger that some people would drift on to means-tested benefits in the course of retirement, but it would halt the growth of means-testing which would occur if current indexation arrangements were continued. It might, moreover, be justified in principle given the pattern of required and observed pensioner consumption:

- As Chapter 4 of the First Report discussed, there is a legitimate debate over whether pension income needs to rise in retirement in line with prices or in line with average earnings.

- No definitive resolution of that debate can be determined from observed patterns of pensioner consumption, since it is impossible to distinguish the impact of deliberate choice, versus the impact of income constraints.

- But it could be a reasonable hypothesis, that many pensioners, if rationally allocating total resources across retirement, might choose to spend them in such a way that annual income rose somewhat more than in line with prices but somewhat less than in line with average earnings.

Provided therefore that the resulting reliance on means-testing in later retirement is limited (which implies that the replacement rate achieved by full pension rights at retirement would need to be somewhat above the Guarantee Credit level) a two-tier system with one tier indexed during retirement to prices and the other to average earnings could have some attractions by comparison with a unified regime where one indexation approach would have to be chosen.

In Chapter 6 we therefore assess both an immediate or phased move to a unified ESP, and the alternative of incremental evolution of the existing two-tier system.
8. Should the contracting-out system and its associated rebates be abolished?

As mentioned several times already the UK currently has, for employees, a system of compulsory earnings-related pension provision. Unlike in other countries where a clear choice has been made between introducing either a state based PAYG system or a compulsory saving system, for reasons of historical accident, the UK has ended up with the uniquely complex variant in which provision can either be PAYG (the contracted-in option) or compulsory savings (contracted-out), with the decision between the two arising from a complex combination of employer and employee choice. Forty-seven percent of those with second-tier pension provision are presently contracted-out of S2P, though the percentage is declining as DB schemes diminish in importance [Figure 5.35]. And contracting-out rebates to funded pensions account for about £8 billion out of £45 billion of total annual funded pension saving [Figure 5.36].

Three rationales can be and have been advanced in favour of this system:

- It achieves an element of “pre-funding” of future pension liabilities, and therefore helps to smooth the taxation burden of PAYG pensions over time. By paying out contracted-out rebates today (effectively paying back National Insurance receipts) government foregoes current revenue but reduces future S2P liabilities. If the SERPS/S2P system did not now and had never allowed the contracted-out option, state pension expenditure would now be 0.6% of GDP higher: in 2050 it would be 1.0% higher.

- It allows different people with different preferences and circumstances to choose between the risk-free, low return, low cost option of participation in the state PAYG scheme and the higher risk, higher cost but potentially high return option of contracting-out and investing in a wider spread of assets.

- It has encouraged the preservation of the voluntary private sector pension schemes (in particular the DB schemes) which had developed to play a major role in UK pension provision prior to the creation of SERPS in 1978.
**Figure 5.35** Second tier pension provision: percentage contracted-in and contracted-out

![Diagram showing percentage contracted-in and contracted-out over time](Image)

- **Contracted-out**
  - Contracted-Out Salary Related scheme/Contracted-Out Mixed Benefit scheme
  - Contracted-Out Money Purchase scheme
  - Approved Personal Pension

- **Contracted-in**
  - Contracted-in to SERPS/S2P

Source: LLMDB2, DWP

Note: S2P started in 2002/03, this enabled carers and an increased number of low earners to accrue pension rights.

---

**Figure 5.36** Categories of contracting-out rebate: £ billion 2002

![Bar chart showing categories of contracting-out rebate](Image)

- £7.7 billion out of £45 billion of funded pension contributions (17%)

- **Funded**
  - Contracted-Out Salary Related scheme
  - Contracted-Out Money Purchase scheme
  - Approved Personal Pension

- **Unfunded public sector**

Source: Pensions Commission analysis based on GAD, ONS and DWP data
This system has however a number of significant disadvantages:

- It is complex and understood by very few people. As a result many people are now making decisions between the contracted-in and contracted-out options not on the basis of well-informed choice, but on the basis of simple inertia [as described in Chapter 1 Section 2].

- Its expansion to allow contracting-out into Approved Personal Pensions in 1989, unleashed the mis-selling scandals of the 1990s, which played a major role in eroding trust in the financial services industry.

- It requires the government (through the GAD) to set “fair” rebates. But the fairness of these rebates is crucially dependent on the accuracy of life expectancy forecasts; if these turn out to be under estimates, people would have been better to stay contracted-in. If however life expectancy forecasts prove too high, the government would in retrospect have spent money on unnecessarily high rebates.

The system’s advantages, moreover, could be achieved equally effectively via other routes:

- "Pre-funding" could be achieved by the government itself using current surpluses on the National Insurance Fund to create a nationally managed buffer fund or to pay down debt. Or it could be achieved by creating a national system of compulsory or auto-enrolled individual accounts, with no PAYG option available.

- And provided a national scheme with individual accounts made available a low risk, low return government bond option at low administration cost, it would thereby enable some people to buy the equivalent of a government PAYG promise, while allowing others to choose a higher risk, high return combination.
There are therefore strong arguments that this is not an element of the pension system which we would create today if it did not already exist, particularly in a context where the role of private sector DB schemes (which were the original justification for the creation of the contracting-out option) is in rapid decline. If today we were deciding for the first time to pursue an earnings-related objective through non-voluntary means, there would be a good case for choosing clearly between:

- A universal earnings-related PAYG system, with pre-funding via a national buffer fund or via the repayment of government debt.
- A universal compulsory or auto-enrolled savings scheme, with wide enough choice of asset classes to satisfy diverse preferences and circumstances.

However since the contracted-out system does exist today, a choice has to be made between abolishing it, letting it slowly decline, or maintaining it permanently. In most conceivable scenarios the role of the contracted-out rebate will decline, but the different options for a flat-rate element of the state system, considered in Section 7 above, would have very different consequences for the extent and pace of this decline.

- If the "unified" route was chosen, rolling S2P and BSP together, and providing instead a unified “Enhanced State Pension”, accrual to the separate S2P would cease and so therefore would the payment of contracted-out rebates. Looking forward the state would no longer be providing an earnings-related pension from which to opt out, but only a flat-rate pension from which no contracting-out was allowed.
If however S2P remains as a separate system from BSP, contracting-out would remain an option. Under current indexation plans, which link the UEL to prices, it would gradually diminish in importance, with earnings-related accruals on income above the LET slowly disappearing from the system. But under this gradual path, earnings-related accruals above the LET would not finally cease until around 2055, while under our preferred option of freezing the UEL in cash terms earnings-related accruals would not cease until around 2031. Even beyond that date however there would (unless deliberate decisions were made) be a continued minimal role for contracted-out rebates. This is because, while the S2P system is essentially flat-rate for those whose earnings are below the LET, employees or their employers can still contract out of this flat-rate provision, in most cases only partially but in some cases wholly [Figure 5.37]. Given present trends towards contracting-in, the importance of this partial contract-out from the flat-rate element of S2P, will likely in the long term be very small, and the option could then be removed with minimal disruption. But unless and until that deliberate decision was made, the two-tier option, with the BSP and S2P maintained as separate systems, would allow a continued role for contracting-out of rebates.

In deciding between the unified ESP and the two-tier option, the advantages and disadvantages of the immediate abolition of the contracted-out rebate therefore need to be considered. There are two issues:

- **The potential effects of immediate abolition on voluntary occupational provision**, which, whatever our recommendations on compulsion or auto-enrolment, should continue to play a key role within the system. In written submissions to the Commission, diametrically opposing arguments were made in respect to these effects: some experts argue that the effect of abolition would be neutral or positive, others negative [Figure 5.38]. Any point of view is judgmental. The Pensions Commission believes that immediate abolition is more likely to spur further DB scheme closure than to stimulate new provision.

- **The implications for public finances**. Obviously if contracting-out rebates were abolished, government cash flow would improve (by about £8 billion in 2005/06). Some submissions to the Commission argued that this cash flow benefit can be used to fund a rapid move to a more generous and less means-tested, flat-rate pension. We are however wary of this approach, which would involve accepting a reduction in the national savings rate, and thus a reduction in pension pre-funding. Extra tax revenue would be spent on current expenditure today, at the expense of higher future PAYG liabilities. If an ESP does make sense, and if it therefore makes sense to abolish the contracting-out rebate, there would be a good argument that

---

4 In all of our analysis, we have used the GAD’s central estimate for the level of contracting-out in future. This implies a gradual decline. Our approach ensures all costs presented for different policy scenarios are on a consistent basis. If contracting-out were abolished for some or all pensions (as we suggest in Chapter 5), this would increase government revenue in the short run and expenditure in the long run with a net present value of zero.
**Figure 5.37** S2P accrual between the LEL and the UET

Pension right accrual under SERPS and S2P

<table>
<thead>
<tr>
<th>Annual earnings</th>
<th>£0</th>
<th>£5,000</th>
<th>£10,000</th>
<th>£15,000</th>
<th>£20,000</th>
<th>£25,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>£0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>£20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>£40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>£60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>£80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>£100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>£120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Treatment of contracting-out between the LEL and the UET**

**Occupational DB and DC schemes**
- Rebates are paid to deliver the funded equivalent for SERPS accrual (Area A on the diagram).
- The additional accrual of S2P for people with earnings below the UET is delivered via the state during retirement (Areas B and C).

**Appropriate Personal Pensions**
- Rebates are paid to deliver the funded equivalent of S2P accrual (Areas A and B).
- The additional accrual of S2P for people whose earnings are below the LET (Area C) is provided via the state in retirement.

**Figure 5.38** The impact of eliminating contracting-out rebates: arguments made in submissions

**Neutral or positive effect on Defined Benefit provision**
- Companies will reduce the generosity of future DB accruals to offset loss of contracted-out rebate (and bigger state pension rights accruing).
- Since this reduces the scale of future exposure (with both pension assets and liabilities reduced) companies may be more inclined to maintain DB schemes.

**Negative effect on Defined Benefit provision**
- Removal of contracted-out rebates will be “final straw” for many companies still maintaining DB schemes. Closure to new members and closure to new accruals will accelerate.
the extra tax revenue available should not be used to fund current pensions, but should be used to pay down debt or devoted to a national buffer fund. This is not an argument against an ESP, but an argument that an ESP cannot be made easily affordable at an early date by abolishing the contracting-out rebate.

The Pensions Commission therefore believes that considerations relating to the contracting-out rebate tend to favour the two-tier approach over the unified ESP approach to state pension provision. These arguments need to be balanced with the other factors for and against the two approaches. If the two-tier approach is chosen however, there would still be good arguments for, at some time, eliminating the contracting out system, since:

- If earnings-related compulsion slowly declines (with the UEL indexed to prices) and if voluntary private sector DB provision continues to fall (as we consider likely), it is likely that contracting-out will naturally dwindle in importance.

- A logical and understandable long-term system would combine:
  - Two-tier flat-rate provision by the state on a PAYG basis;
  - Earnings-related funded provision on an auto-enrolled plus voluntary basis.

- In such a system a small residual element of contracting-out from part of one of the two flat-rate tiers, would be an illogical complication, delivering minimal pre-funding benefits at the cost of considerable additional complexity.

Even if the gradual two-tier approach is pursued, therefore, options to accelerate the disappearance of contracting-out should be considered. We recommend [Figure 5.39]:

- Making the flat-rate element of S2P 100% contracted-in, certainly once earnings-related accruals to S2P had ceased if not before.

- Eliminating earlier (e.g. from 2010 onwards) the contracting-out option for occupational DC pensions, where contracting-out plays a minor role, and for Approved Personal Pensions, where many insurance companies are already advising clients to contract back in.
### Figure 5.39 Options for accelerating disappearance of contracting-out rebate

**Remove contracting-out option immediately for occupational DC and personal pensions (ie. switch to 100% contracting-in)**
- 70% of all occupational DC scheme active members are already contracted-in with signs that the percentage is increasing
- Dominant advice to existing APP holders is to contract back in; minimal new contracted-out APP being sold

**Remove option for DB schemes when LET reaches (or approaches) UEL (ie. switch to 100% contracting-in from say 2030)**
- Minimal private sector DB provision likely to exist by that time
- Simplifies system around clear principle:
  - State provides PAYG flat-rate pensions
  - Earnings-related pensions are funded
9. **Alternative policy tools to achieve desired objectives.**

Figure 5.1 summarised the conclusions reached from our analysis of the eight key choices discussed above.

Given these conclusions, we recommend two key elements of pension system reform:

(i) Reforms to achieve a less means-tested system of flat-rate PAYG provision, within acceptable public expenditure constraints.

(ii) The introduction of a National Pension Savings Scheme, into which individuals will be auto-enrolled but with the right to opt-out and with modest compulsory employer contributions for those who do stay enrolled.

Within each of these elements of reform, however, there are a range of possible specific options, and a range of detailed design issues to be determined.

i) **Reforms to achieve less means-tested flat-rate pension provision could be achieved via either:**

- Option A. Introducing a unified ESP paying more than the current BSP and rising over time in line with earnings. This would entail ceasing future S2P accruals.

- Option B. Maintaining the two separate elements of flat-rate pension provision (the BSP and the S2P up to the LET), but halting the spread of means-testing by linking the BSP to earnings rather than prices.

Either of these options could be pursued with or without steps away from the contributory and towards a universal approach.

Under both options state pension expenditure as a percentage of GDP would rise. Under both however State Pension Age would also need to rise in line with life expectancy to keep state pension expenditure within acceptable limits. In Option B this could entail different pensionable ages for the S2P and the BSP.

ii) **Contribution rates (and contribution thresholds) within the National Pension Savings Scheme** need to be decided in the light of the replacement rates which the state system should deliver at different earnings levels.

Chapter 6 assesses the advantages and disadvantages of the alternative state systems, analyses appropriate contribution rates within an NPSS, and identifies the combined impact of the two elements of reform on pensioner income, public expenditure and the extent of means-testing. Chapter 10 discusses more detailed issues relating to the design of the NPSS.
Meeting increasing demand for annuities

Figure 5.17 showed the very large scale of longevity risk currently being absorbed by the state, by private DB schemes and by the insurance industry through annuity provision. About half of this relates to pre-retirement longevity risk deriving from promises to pay pensions at specified future ages which have been given to people below and in many cases well below retirement age.

We have argued that much of this risk should ideally shift to individuals, through linking the State Pension Age over the long-term to future rises in life expectancy, through the shift to DC, and by appropriate adjustments over time in retirement ages within remaining DB schemes (public or private sector). But even if this shift occurs a very large element of post-retirement longevity risk will remain, and there is a social benefit in this being absorbed by society collectively or via capital markets, thus giving people assurance of maintained income until death.

The issue is therefore whether there are any limits to the capacity of the annuity market to play a greatly expanded role in post-retirement longevity risk absorption, as the state exits from PAYG earnings-related pension provision, and as private pension provision shifts from DB to DC.

Concerns are sometimes expressed relating to the supply of capital to support the annuity market, and to the supply of bonds. Our analysis suggests that neither is an inherent block to the expansion of the annuity market, but that government policies could help alleviate transitional problems.

Supply of capital

When an insurance company places an annuity on its books, it needs to allocate capital sufficient to absorb the risk created by uncertain investment returns and uncertain longevity outcomes. Estimates by Mike Wadsworth for the ABI and the Pensions Commission suggest that the capital required amounts to something like 7.5-10% of the total sum invested in the case of an annuity written at typical retirement ages (e.g. 60-65), but can be as high as 20% in the case of bulk-buyouts of DB funds, reflecting the fact that a DB fund will typically include a proportion of far longer term liabilities, e.g. to deferred members.

In theory, however, requirements for capital support will not be a major constraining factor in annuity capacity, since in an annuity (unlike for instance, a term life assurance policy), most of the capital is provided up front as part of the lump sum premium paid. Capital available at least in theory can rise automatically with demand. The key constraint therefore is not the supply of capital, but the confidence of insurance companies that they can correctly assess risk, and thus the price they have to charge to cover inherent uncertainty. This confidence is much lower the longer the period for which the annuity is written. As a result while numerous insurance companies are willing to write annuities at typical retirement age, only a few UK insurance companies are active players in the bulk-buyout market, where some very long-term longevity risks, e.g. for members not yet retired, have to be absorbed.

Figure 5.40 Sterling index linked bonds at November 2005: £ billion

<table>
<thead>
<tr>
<th>Duration in years</th>
<th>1 to 5</th>
<th>5 to 10</th>
<th>10 to 15</th>
<th>15 to 20</th>
<th>20 to 30</th>
<th>30 +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gilts nominal including inflation uplift</td>
<td>13.8</td>
<td>26.4</td>
<td>32.5</td>
<td>12.0</td>
<td>14.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Corporate face value</td>
<td>0.4</td>
<td>0.6</td>
<td>1.1</td>
<td>2.2</td>
<td>3.5</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Source: Gilts: Debt Management Office
Corporates: Merrill Lynch
Looking forward therefore it is unlikely that capital constraints will limit the ability of insurance companies to meet growing demand for annuities at typical retirement ages, and there is therefore no inherent limit to the financial services industry performing the risk absorption role which the increasingly DC earnings-related system will require. But it is likely that the price charged for the absorption of the large legacy risk inherent within existing DB schemes will make the option of bulk buyout appear very expensive.

**Supply of bonds**

Level annuities can only be written at low risk if there is a sufficient supply of nominal bonds of appropriate maturities. Index-linked annuities require an underlying supply of real indexed securities (or an extensive nominal-real swap market of appropriate maturities). A stock of annuities of about £500bn, required to perform the risk-absorption role performed today by DB funds and by the earnings-related element of S2P, would be large relative to the total size of the sterling bond market, and in particular to the sterling index-linked bond market, which is dominated by government bonds, with only minimal corporate issue. The supply of very long bonds, and very long real-indexed bonds, is in particular small relative to the potential demand for long-term annuities [Figure 5.40].

At least in theory, however, the present pattern of sterling bond supply should not imply serious long-term impediments to the growth of the annuity market since:

- Investments in foreign bonds, swapped to create a sterling asset, can also be used to match annuity liabilities.

- The greater the demand for bonds, the more that companies should logically issue bonds, increasing their leverage. Indeed it should be noted that since DB pension liabilities are bond-like in nature, and must be recognised as such by accounting standard FRS17, at the aggregate UK corporate level a switch from DB pension liabilities to bonds which are bought by annuity providers does not increase aggregate leverage.

Demand for bonds by DB pension funds, increasingly aware of the bond-like nature of their liabilities, is indeed already among the factors driving increased bond issuance by the corporate sector [Figure 5.41].

Again however a distinction should be drawn between the provision of annuities at around typical retirement ages, and the absorption of the very long-term longevity risk which resides within existing DB funds. Whether

---

**Figure 5.41** Corporate sterling bonds outstanding: 1996-2005, face value by maturity £ billion

![Graph showing corporate sterling bonds outstanding](image-url)

Source: Merrill Lynch Bond Indices UN0V, UN06, UN07 and UN08
this risk is matched by the purchase of bonds by the DB fund itself, or by the purchase of bonds by an insurance company selling bulk-buyout annuities, absorbing this risk requires the purchase of very long bonds, the supply of which may be limited. The severe difficulties created by the longevity risk in DB funds are again clear.

But the best judgement is that the long-term switch of post-retirement longevity risk from the state and from DB finds to the annuity market should be manageable.

Public policies to facilitate transition

The question remains whether there is a role for public policy in facilitating and smoothing the transition. Three categories of policy should be considered:

- **Policies to support later annuitisation.** The key way in which annuity market demand and supply will balance is through the price mechanism. As life expectancies increase, the annuity rate for early annuities will look increasingly unattractive, and the benefits of delaying annuitisation will become clearer. Government neither can nor should interfere with this market adjustment, which will provide an important incentive for people to delay retirement. Instead government’s focus should be on removing any artificial barriers to these market forces by:
  - Increasing both the earliest possible and latest possible ages of annuitisation which are legally defined for tax-privileged pension schemes and policies. At present these stand at 50 (rising to 55 by 2010) and 75. Over time they should rise in line with life expectancy. While at present most annuities are bought well before the legal maximum of 75, this maximum would become an increasingly important constraint over time if left unchanged [Figure 5.42].
  - Considering the proposal that the requirement for annuitisation at any age should be limited in amount. The Pensions Commission is not convinced by arguments that annuitisation requirements should be waived entirely. Since the whole objective of either compelling or encouraging people to save, and of providing tax relief as an incentive, is to ensure that people make adequate provision, it is reasonable to require that pension savings is turned into regular pension income at some time. But this objective could be pursued via requiring annuitisation up to some defined level of assured income. And tax relief given on contributions can be reclaimed via the tax treatment of pension funds at point of inheritance or drawdown. While only a minority of people would likely use this freedom, anything which removes demand from the annuity market will at the margin improve ease of supply and pricing for others.

**Figure 5.42** Distribution of annuity purchase by age

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage of clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;55</td>
<td>0%</td>
</tr>
<tr>
<td>55</td>
<td>5%</td>
</tr>
<tr>
<td>60</td>
<td>10%</td>
</tr>
<tr>
<td>65</td>
<td>25%</td>
</tr>
<tr>
<td>70</td>
<td>15%</td>
</tr>
<tr>
<td>75</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: Prudential plc

Note: Sample of clients retiring between 2000 and 2004.
– Considering whether there are small changes in tax and regulation which will facilitate the use of "drawdown products (which delay annuitisation) by the mass-market. At present, the use of drawdown products is limited almost entirely to accumulated pensions pots of more than £100,000.

– Increasing awareness, well before retirement, of the trade-off between age of pension annuitisation and the size of pension, so that people can take that trade-off into account in their thinking about appropriate retirement age. The implications of this for communication to members of a National Pensions Savings Scheme are considered in Chapter 10 Section 8.

**Policies to facilitate the supply of index-linked bonds.** State earnings-related pensions rise in line with prices in retirement: so too do most private DB pensions. But the majority of maturing DC funds are currently used to buy level annuities [Figure 5.43]. As a result many pension fund members face declining real income in retirement. The optimal profile of real income across retirement can be debated, as Chapter 4 of the First Report discussed. In particular it can be debated whether pensioner incomes need to rise in line with average earnings or only in line with prices [see Section 7 of this chapter]. But it is unlikely that most well-informed people would plan steadily falling real income, and it seems likely that the strong preference for level annuities reflects failure to understand the consequence of non-indexation for retirement income over a long period of retirement, combined with the fact that, as Chapter 1 discussed, people tend to underestimate life expectancy.

Ideally therefore people should be able to buy index-linked annuities at a fair price relative to level annuities (whether they should be compelled to buy indexed annuities within a National Pension Savings Scheme is considered in Chapter 10 Section 7). There is some evidence however that index-linked annuities have tended to be poor value relative to level annuities, and that this reflects the limited availability of index-linked bonds, the supply of which is dominated by the government, with only very limited corporate supply.

The government’s debt issuance strategy must be designed to fund government borrowing at least long-term cost. The government will obviously not issue more debt in total simply because there is pension fund demand and it should not issue index-linked bonds if these are expected to be more expensive than nominal bonds. Conversely, however, it is important the government debt issuance strategy is not constrained by any conventional assumptions about the proportion of government debt issue which should be index-linked or the proportion of it which should be long maturity, nor by international benchmarks. As the panel “Risk and return in pension fund investment” argued, a country with a less generous state PAYG system should expect to see a higher proportion of DC funds invested in bonds, and therefore a higher demand for long-bonds and index-linked bonds.

**Figure 5.43 Breakdown of annuity type purchased**

![Figure 5.43 Breakdown of annuity type purchased](image)

Source: Annuities: the consumer experience, 2002, ABI  
Note: 17% of respondents answered ‘Don’t know’ and are excluded from these figures.
Government issue of longevity bonds. Several commentators have suggested that the government should ease capacity constraints in the annuity market by issuing longevity bonds, which pay a coupon positively correlated to life expectancy increases. Such bonds would decrease the risks taken by insurance companies when they write annuities and would therefore at least marginally increase the supply of annuities and increase annuity rates paid. A small volume of such bonds have already been issued by private issuers.

The Pensions Commission is however not convinced that there is a good case for the government to be an issuer of longevity bonds on any significant scale. The government is already significantly “long” longevity risk: through its state pension promises, through public sector employee DB promises, and through health service commitments. Its challenge indeed is as far as possible to get out of pre-retirement longevity risk absorption via the difficult decisions on pension ages we have set out in this Chapter. Given that context, it would certainly not be appropriate for government to absorb from the private sector the pre-retirement longevity risk which DB funds have taken on by making promises of defined pensions at ages fixed far in advance.

One possible limited role for the government may, however, be worth consideration: the absorption of the “extreme tail” of longevity risk post-retirement i.e. uncertainty about the mortality experience of the minority of people who live to very old ages, say, beyond 90 or beyond 95. Some industry participants have suggested that this risk has a disproportionate effect on the feasibility of private sector issuance of longevity bonds and on the prices which need to be charged for annuities. If this is the case, and if but only if the government can significantly reduce its exposure to pre-retirement longevity risk, via reform of pension ages in the state system and in public sector employee schemes, a government role in absorbing this very long tail liability may be appropriate.
Chapter 5 Section 9 sets out alternative policy reform options. This chapter evaluates them and presents the Pensions Commission’s judgment on the best way forward. It covers in turn:

1. Twelve criteria for assessment
2. Assessing alternative options: the state system
3. Assessing alternative options: contribution rates within a National Pension Savings Scheme (NPSS)
4. The self-employed within the state system and the NPSS
5. Combined impact of state system reforms and the NPSS: replacement rates
6. Combined impact of state system reforms and NPSS: aggregate effects
7. The Pensions Commission’s recommendations: essential points and issues for further consideration
1. Criteria for assessment

Chapter 4 set out four key problems with the existing state and private pensions saving system:

- The disadvantages that people with interrupted paid work records and carers (in particular women) face as a result of the operation of the contributory system.

- The declining degree of earnings-related compulsion over time, which is concerning because employer voluntary provision is in decline, and because of the inherent barriers to a purely voluntary approach.

- The spread of means-testing which would occur if present indexation arrangements were maintained indefinitely.

- The illogical, confusing and unfair way in which the system will adjust to future life expectancy increases.

Clearly, therefore, plans for reform should address these problems. But they must also recognise realistic constraints on public expenditure, and the trade-offs that these constraints impose. Immediately resolving the problems created by the contributory system, by moving to a universal approach, would be expensive in the short-term with significant additional income flowing to some better-off pensioners. The total elimination of means-testing is very expensive: the challenge is to eliminate as much as possible at an acceptable cost. And earnings-related compulsion within the Pay As You Go (PAYG) system, while helping to achieve good provision, increases total public expenditure: this, as the history of the past 25 years illustrates, may be at the expense of good flat-rate pension provision.

Reform options therefore need to be evaluated in the light of trade-offs between different considerations. In our assessment of alternative options we have therefore considered 12 criteria which, in an ideal world, would all be fully met, but which in the real world can only be met “as best possible.” These are set out in Figure 6.1.

To help evaluate the options for reform against these criteria we have modelled the implications of the different options along four dimensions:

(i) Analysis of the public expenditure consequences;

(ii) Analysis of the distributional consequences;

(iii) Analysis of the impact on means-testing; and

(iv) Analysis of total replacement rates.
### Figure 6.1 Criteria for assessing pension reforms

<table>
<thead>
<tr>
<th>1. Simplicity</th>
<th>Reforms should make the system (either immediately or over time) simpler and more understandable.</th>
</tr>
</thead>
</table>
| 2. Public expenditure cost | Cost should fall within proposed envelope, accepting that some increase in spend as a percentage of GDP is inevitable but:  
  – Ensuring long-term stability of spend as a percentage of GDP after one-off increase.  
  – Avoiding significant increase in the next 10 to 15 years as a percentage of GDP. |
| 3. Distributional impact: Protecting the poorest | Lowest income earners should enjoy the same replacement rate from state pensions as they do today, preserving recent improvements. |
| 4. Distributional impact: Avoiding unnecessary beneficiaries | Reforms should avoid significant increases in public expenditure which benefit those pensioners who are already well provided for. |
| 5. Adequacy | Reforms (to private and state systems) should make it likely that the typical earner will achieve at least a 45% replacement rate on retirement. |
| 6. Cost efficient savings | ...while enabling them to achieve a higher replacement rate at low cost, delivering to all people the potential for low cost saving. |
| 7. Reduced means-testing | The scope of future means-testing should fall significantly below that which would arise if current indexation arrangements were continued indefinitely and preferably from current levels, with:  
  – Major reduction in the percentage of pensioner households potentially subject to 40% withdrawal.  
  – Minimal offsetting increase in the percentage of pensioner households subject to 100% withdrawal.  
  – Reduction in the percentage of pensioner households requiring means-tested benefits to lift them up to the state minimum. |
| 8. Avoiding harm to the existing voluntary system | Reforms should minimise the danger of accelerated closure of private sector Defined Benefit schemes or the levelling down of voluntary employer provision to minimum standards. |
| 9. Improving the position of women: Future pensioners | Looking forward women should be better enabled than at present to build up independent rights, and to secure full state pension rights, despite interrupted careers and caring responsibilities. |
| 10. Improving the position of women: Today’s pensioners | Some improvement should be made to limit the gaps and inequities created by the inherited system. |
| 11. Improving options for the self-employed | Reforms should make it more likely that the self-employed can gain adequate state pensions and access to low cost saving. |
| 12. Robustness in the face of rising longevity | All elements of the pension system (unfunded or funded) must be made affordable in the face of rising longevity and of major uncertainty about the speed of that increase, while putting in place measures which recognise the inequalities created by different life expectancies of socio-economic groups. |
i) Analysis of the public expenditure consequences of proposals for state system reform

We do this against the guidelines we proposed in Chapter 5 Section 4 [Figure 6.2]. At the time of our First Report, public expenditure on state pensions and pensioner benefits was forecast to rise from 6.1% in 2003 to 6.9% in 2050. Our own base case now suggests that a rise to 7.6% by 2050 would occur if current indexation arrangements were continued indefinitely. This faster rise reflects higher estimates of life expectancy, a higher proportion of employees contracting-in, revised assumptions about the accrual of state pensions (especially for women), and an increase in Pension Credit expenditure due to lower estimates of the growth of private pension income. In Chapter 5 we proposed that the required and acceptable range for public expenditure on pensions and pensioners benefits in 2045 might be 7.5–8.0%. It is difficult to envisage a coherent state system which costs less than 7.5% in 2050: but expenditure above 8% would unreasonably impose too much of the burden of demographic adjustment on the next generation. We therefore assume that acceptable solutions must lie in this range in 2045, with no increase above 8% thereafter.

We also assume that there will be tight limits on public expenditure on pensions as a percentage of GDP over the next 15 years. This in part reflects the fact that limitations on public expenditure are inherently greater the shorter the time horizon. But more importantly it appropriately reflects the fact that fairness between generations makes it difficult to justify significant short-term and across-the-board increases in public expenditure on pensions. Average pensioner incomes (relative to average earnings) are high by historic standards: and a significant minority of pensioners (e.g. those retiring now with fully paid-up SERPS rights or with many years of Defined Benefit (DB) pension right accruals) will enjoy a combination of proportion of life spent in retirement and real annual income in retirement more favourable than was enjoyed by previous generations or likely to be enjoyed in future [See Chapter 1 Section 1]. There are significant problems for specific groups of today’s pensioners which need to be addressed; but fairness between generations argues for a targeted approach.

1 The public expenditure projections quoted here and at other places in this report and the estimates of the percentage of pensioners covered by means-testing, reflect the complex interaction of numerous trends. Published official estimates have varied from year to year. Figures should therefore be considered as indicating broad trends and particularly differences between options. Appendix F explains the modelling tool Pensim2 which has been used to generate these projections. Note in particular that the projections use fixed assumptions for flows of private pension income. In reality one might expect options entailing weaker incentives through wider means-testing to imply smaller flows of this kind, which could increase public spending on means-tested benefits further.
Figure 6.2  Public expenditure and pension age increases: Pensions Commission proposed range for debate

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2020:</td>
<td>Increase in female SPA creates scope for improvements within a flat proportion of GDP. And a significant increase is not appropriate</td>
</tr>
<tr>
<td>2020-2045:</td>
<td>Increase is unavoidable given combined impact of rising life expectancy and delayed impact of lower fertility</td>
</tr>
<tr>
<td>2045 onwards:</td>
<td>Fairness requires stable cost burden in the long term achieved through further increases in SPA</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis using Pensim2

Note: Pensioner benefits include BSP, SERPS/S2P, Pension Credit, Housing Benefit, Council Tax Benefit, Disability Living Allowance and Attendance Allowance and other benefits including Winter Fuel Payments.

See Figure 4.1 for a definition of the “Current indexation arrangements” scenario.
ii) Analysis of the distributional consequences

In the description of the current state system in Chapter 4 we used simplified examples to explain the key features of the system. In particular, our examples assumed that people of a particular earnings level had that earnings level throughout life, and that they had fairly full contribution records. In the real world, there are a huge variety of actual experiences, with some people enjoying a rising relative earnings position as their careers progress, while others face significant contribution interruptions through unemployment or as a result of caring responsibilities which are not effectively covered by the credit system.

We have therefore considered the impact of different polices on 14 different “stylised individuals” which capture the variety and complexity of different individual paid work records, income levels and caring responsibilities. Appendix F describes these stylised individuals and illustrates how the different options we have modelled affect them. It illustrates the impact of the different options at age 75, i.e. something like midway through retirement and given different levels of private savings. The main differences in the distributional impact between the options can however be captured by concentrating on three of the stylised individuals, plus the Constant Median Earner case, and by focusing on pension income at age 75. The illustrations in this Chapter therefore focus on these cases.

The panel on the following pages explains the four cases we look at here, and illustrates the distributional impact of continuing indefinitely with current indexation policies. Two noteworthy features are that:

- In the Constant Median Earner case, the replacement rate which the state promises at age 75 is maintained constant from now until 2050 for those who do not save, but falls significantly for those who do save [Figure 6.4]. This reflects the growing impact of means-testing.

- In the Low Pay and Career Break cases, the replacement rate which the state would deliver (on unchanged policies) to those who do not save is increasing quite rapidly (e.g. from 28% to 32% of median earnings for the Low Pay individual, which is equivalent to an increase in their replacement rate from 69% to 81%) [Figure 6.4]. This, as explained in Chapter 4, is the unintended consequence of the fact that the changing balance of state provision under present plans (more State Second Pension (S2P) and less Basic State Pension (BSP)) triggers an increase in Savings Credit payments. The criterion we have proposed for policy reform is that any reform should ensure that lower income individuals achieve at least the replacement rate which they currently receive, (thus maintaining the improvements achieved in recent years) but that it is not necessary to deliver the rising replacement rate which would be the unplanned and unintended consequence of permanently continuing current indexation arrangements.
Stylised individuals

The figures presented in Chapter 4 on the evolution of the pension system if current indexation arrangements continue indefinitely were based on individuals who had constant earnings during working life and who were employed continually from age 21 to 65. In reality working lives are more diverse. We have therefore assessed the impact of different state pension reform options by look at their impact on 14 stylised individuals who have more realistic patterns of employment and earnings progression. These stylised individuals cover most of the range of possible profiles, but they are not intended to be a statistically representative sample. Appendix F describes the 14 individuals and shows results for them.

In this chapter we focus on four stylised individuals since most of the differences in distributional impact can be gauged by looking at them. Figure 6.3 shows the earnings levels of the four individuals. We have a Constant Median Earner, who is in work every year from age 21 earning at full-time median earnings.

A High Earner who also starts work at 21 but has much higher earnings than the constant median case, and has real earnings growth during working life. A Low Pay individual who works from age 16 and has earnings of 40% of the median. And an individual who has a Career Break: she starts work at 16, but leaves the workforce for six years, to care for children, then works part-time for another five years, before working full-time until SPA.

Figure 6.4 shows how their pension income at age 75 would evolve if current indexation arrangements were continued indefinitely, assuming either no saving, medium or high saving.

Figure 6.3 Earnings levels for the stylised individuals

Source: Pensions Commission analysis
Figure 6.4 Pension income for the stylised individuals at 75 according to the year they reach 65, if current indexation arrangements continue indefinitely.
Figure 6.4 Continued

**Low Pay**

<table>
<thead>
<tr>
<th>Year</th>
<th>No Saving</th>
<th>Medium Saving</th>
<th>High Saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2030</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2050</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Career Break**

<table>
<thead>
<tr>
<th>Year</th>
<th>No Saving</th>
<th>Medium Saving</th>
<th>High Saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2030</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2050</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis

Note: Start saving age 30 on earnings above £5000 (in constant earnings terms) medium saving is saving 8% of earnings above this level and 16% in the high case. Real rate of return on savings 3.5%, AMC 0.3%. Annuity rates vary over time to account for increases in life expectancy. However State Pension Age is also rising to 68 by 2050. We assume that private saving is 100% annuitised when someone reaches SPA.
iii) Analysis of the impact of means-testing

For each of the options we estimate the proportion of people likely to be receiving the Savings Credit or the Guarantee Credit and to be subject to means-tested Pension Credit withdrawal which may undermine incentives to save.\(^2\) We estimate that current indexation arrangements, if continued indefinitely, would result in the percentage of pensioner households covered by either the Savings Credit or the Guarantee Credit rising to over 70% by 2050. The percentage receiving the Guarantee Credit only, and thus being subject to a 100% withdrawal rate, would fall significantly, due to the indexation of the lower Savings Credit threshold, but the total proportion receiving any Guarantee Credit and thus dependent on means-tested benefits to achieve the minimum income which the state guarantees would rise from 25% to 40% [Figure 6.5]. Ideally alternative reform options should prevent the increase in the percentage covered by the Savings Credit, and prevent the increase in the percentage receiving any Guarantee Credit, while ensuring that the number of Guarantee Credit only recipients falls below current levels.

iv) Analysis of the total replacement rates

Here we look at the total replacement rates which would be achieved by a combination of state provision, and of NPSS saving, given different contribution rates to an NPSS.

Assumptions on State Pension Age

In all the options modelled we have assumed that the SPA rises after 2020, reaching 66 in 2030, 67 in 2040, and 68 in 2050. This is broadly in line with our principle that the SPA should rise so as to keep stable the proportion of adult life spent paying into and receiving a state pension. Specifically it is midway between the lower and upper limit assumptions that underpinned our indicative range for public spending shown in Figure 6.2 and explained in Chapter 5 Section 4 (i.e. a lower figure of 67, which would keep stable after 2020 the proportion of adult life spent paying into and receiving a state pensions, and an upper figure of 69 which would keep the expected length of time receiving a state pension at its current length for those aged 65.) At the end of the Chapter, we show the impact of these upper and lower limits on the level of spending implied by our preferred option, illustrating the scale of the trade-offs which society faces.

In the case of the “two-tier” option considered – which maintains the separate existence of the BSP and the S2P – this principle could be implemented through the combination of a slightly slower increase in the pension age for the BSP, and slightly faster increase for the S2P [Figure 6.6]. This would benefit people of lower income and lower life expectancy. The implications for public expenditure and the extent of means-testing would be only minimally different from the case we have modelled.

---

\(^2\) Such projections should be taken as indicators of broad trends and particularly of differences between policy options, rather than giving precise predictions.
Figure 6.5 Proportion of pensioner benefit units on Pension Credit assuming present indexation arrangements continue indefinitely: 2005-2050

Guarantee Credit Only
Savings Credit and Guarantee Credit
Savings Credit Only

Source: Pensions Commission analysis using Pensim2
Note: Pensioner benefit units are defined as any household with an individual aged over the State Pension Age.

Figure 6.6 State Pension Ages assumed in modelling

<table>
<thead>
<tr>
<th>Assumption modelled in all cases</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSP and S2P</td>
<td>65</td>
<td>66</td>
<td>67</td>
<td>68</td>
</tr>
<tr>
<td>Rising gradually over each decade to reach the age shown in the date indicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Possible equivalent option in the “two-tier” case</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
</tr>
<tr>
<td>BSP</td>
</tr>
<tr>
<td>Rising gradually over each decade to reach the age shown in the date indicated</td>
</tr>
<tr>
<td>S2P</td>
</tr>
<tr>
<td>Rising gradually over each decade to reach the age shown in the date indicated</td>
</tr>
</tbody>
</table>
2. Implications of alternative state system options

This Section considers the two main options we have considered and a number of variants, before setting out the assumptions which we use as the basis for modelling the impact of an NPSS. It covers in turn:

(i) An Enhanced State Pension (ESP) which unifies BSP and S2P, which at some stage is equal to the present Guarantee Credit of £109 per week, and which rises in line with average earnings.

(ii) The gradual reform path, which accepts the permanent existence of two separate flat-rate pensions, the BSP and the S2P, but changes indexation policies to make the combined pension more generous and less means-tested.

(iii) Choosing between the unified ESP and the “two-tier” approach.

(iv) Choosing between the contributory and universal approach.

(v) When should reform start: the expenditure versus means-testing trade-off.

(vi) Summary assumptions on state system reform.

(i) Unified ESP options

The simplest reform of the state system would be to cease all future accruals to the S2P and to introduce immediately, and on a universal basis (i.e. paying it to all resident individuals aged above SPA), an ESP equal in value to the Guarantee Credit (currently £109 per week) and rising in line with average earnings. This would allow a very simple and attractive message: the state will deliver to everyone a pension worth 25% of median earnings, and private pension saving on top will not be subject to means-testing through Pension Credit. But three problems make this way forward unacceptable:

- There would be an immediate and large increase in public expenditure as a percentage of GDP, taking it well outside the range which we have suggested [Figure 6.7]. And while in cash flow terms, this increase would be partially offset by the abolition of contracted-out rebates (the automatic consequence of ceasing S2P accruals), the Pensions Commission does not consider it reasonable to treat reduced contracting-out rebates as “paying for” increased current pension expenditure. In real economic terms, using reduced contracted-out rebates to pay for increased current expenditure would reduce national savings. And in National Accounts, the abolition of contracted-out rebates would count as an increase in tax revenue, not a reduction in expenditure.
Figure 6.7 Public expenditure on pensioners a percentage of GDP under an immediate move to a Universal Enhanced State Pension at the Guarantee Credit level: with rising SPA

Source: Pensions Commission analysis using Pensim2

Note: State Pension Age is increased to reach 66 by 2030, 67 by 2040 and 68 by 2050 in line with life expectancy. From 2010 BSP is replaced by a universal ESP at the level of the Guarantee Credit and accruals to S2P cease.
The biggest beneficiaries of this increased public expenditure would be higher income individuals, while lower income individuals would gain to a much more limited extent [Figure 6.8]. Indeed if the ESP were still based on a contributory principle rather than a universal principle, low income individuals could in some extreme circumstances lose.

This immediate boost to the income of better-off pensioners derives from the fact there are people who have already accrued SERPS/S2P rights (or the contracted-out equivalent) but who would in addition receive the benefit of the higher ESP. This effect is particularly powerful for pensioners who are recently retired or those just about to retire, since this cohort of pensioners have benefited from the generous accrual rates at which SERPS was originally introduced [as Figure 1.3 showed].

One way to deal with this perverse distributional effect could therefore be to "offset" the higher ESP against accrued Gross SERPS/S2P rights, i.e. people would receive the higher of their rights under the new system and their rights under the old. Our detailed analysis suggests however that this is unlikely to be a sufficient response to the problem since:

- There are major complexities in implementing the offset principle. These derive from the complexity of applying offset to the many different categories of rights which people have accrued under the current system. These complexities, which are explained in the panel on the following pages, are greatest if a contributory approach was still used, but significant even if a purely universal approach is followed.

---

3 Thus for instance in Figure 6.8, if a person started not with £82.05 of BSP, but with 60% of this (on the basis of their contribution record) and if they therefore had a right to 60% of the ESP, but if they also had significant private pension incomes, it would be possible for them to lose from the introduction of an ESP.
**Figure 6.8** ESP benefits those with high pension incomes more than individuals with lower incomes: with no offset of Additional Pension rights

<table>
<thead>
<tr>
<th></th>
<th>Low income</th>
<th>High Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing</strong></td>
<td><strong>ESP</strong></td>
<td><strong>Existing</strong></td>
</tr>
<tr>
<td><strong>BSP/ESP</strong></td>
<td><strong>£82.05</strong></td>
<td><strong>BSP/ESP</strong></td>
</tr>
<tr>
<td><strong>£20</strong></td>
<td><strong>£109.45</strong></td>
<td><strong>£150</strong></td>
</tr>
<tr>
<td><strong>Other income</strong></td>
<td><strong>£20</strong></td>
<td><strong>£20</strong></td>
</tr>
<tr>
<td><strong>Total income</strong></td>
<td><strong>£102.05</strong></td>
<td><strong>£232.05</strong></td>
</tr>
<tr>
<td><strong>Guarantee Credit</strong></td>
<td><strong>£7.40</strong></td>
<td><strong>£0</strong></td>
</tr>
<tr>
<td><strong>Savings Credit</strong></td>
<td><strong>£12</strong></td>
<td><strong>£0</strong></td>
</tr>
<tr>
<td><strong>Total income</strong></td>
<td><strong>£121.45</strong></td>
<td><strong>£232.05</strong></td>
</tr>
</tbody>
</table>
Chapter 6

Difficulties in offsetting Additional Pension rights

Administrative Complexities: ESP on a universal basis

If the ESP was introduced on a universal basis, all individuals would receive, when the system is fully evolved, £109 per week.

Offset requires that the individual is paid the greater of £109 and the sum of:

- All accrued and inherited BSP rights (Category A, B, BL and D plus additions for dependants and age)
- All accrued and inherited SERPS/S2P rights (for those contracted-in)
- All accrued and inherited contracted-out SERPS/S2P rights: i.e. the rights to SERPS/S2P that would have accrued if the individual was contracted-in.

This calculation is complex and administratively burdensome particularly because the different benefits have different indexation regimes (ESP to earnings, SERPS/S2P price-indexed in retirement, BSP to prices) requiring the calculation to be done separately each year for each individual.

Administrative complexities: ESP on a contributory basis.

Even with offset a fully universal ESP is expensive. A lower cost alternative is to calculate ESP rights on a contributory basis. This could be done in a number of different ways with different consequences for different people.

The simplest way is to take an individual’s Category A qualifying years and multiply by the ESP rate. But this would disadvantage those who benefit from the non-contributory elements of the contributory system (Categories B, BL and D and the additions given for dependants and age). The calculation of contributory ESP rights therefore has to allow for these rights.

The required calculation then becomes the greater of:

- An ESP which requires a complex calculation;
- And the calculation of existing rights as described above for the universal ESP model.

Again this would have to be repeated each year due to different indexation policies.

Operating Offset: perception, fairness and political acceptability

The logic of offset is clear: a higher flat-rate state pension is paid, but only if the sum of existing rights (BSP and SERPS/S2P) is less than the ESP level. This logic also has to be applied to people who have contracted-out, calculating what SERPS/S2P they would have accrued if they had been contracted-in, and then “offsetting.” This is essential for fairness between contracted-out and contracted-in people.

But this logical and theoretically fair system may not be thought as such, particularly if, as possible, some people have achieved a lower return on their contracted-out additional pensions than is assumed in GAD calculations. This could be as result of poor investment performance, or a faster rate of life expectancy increase than was assumed in calculating the rebate level.

Figure 6.9 illustrates the two-fold problem which arises. At the pre-means-tested level the contracted-out person actually gets exactly the same total pension under ESP as he did before, £105. But he does so in an environment where the state pension has been described as “£109 for everyone,” and where “offset” will look to him as taking away a notional pension he is not in fact enjoying.

At the total post-means-testing level, meanwhile, he is actually worse off (as indeed can be the contracted-in person) due to the loss of Savings Credit.

1 See Glossary for a description of the present categories of BSP.
The problem derives from the fact that the only straightforward way to calculate an individual’s private additional pension is to assume that GAD’s rebate calculations were at all times fair. The only way to adjust for this perceived and (because the loss of means-tested benefits) actual unfairness is to make the offset calculation dependent not on theoretical additional pension income, but on actual additional private pension income achieved. But this increases still further administrative complexity, and indeed essentially reintroduces means-testing into the system.

In addition the introduction of an ESP with offset would be seen by some as creating unfairness since it would in some circumstances fail to give people a higher pension in return for higher contributions e.g. the self-employed, despite having paid lower past contributions would receive the same as employees. And people who had paid voluntary contributions to top up for missed years could also lose the benefit, unless an additional complexity in the calculations was added.

### Figure 6.9 Possible complications in applying offset to contracted-out rights

<table>
<thead>
<tr>
<th></th>
<th>Existing system</th>
<th>ESP with offset</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pension income</td>
<td>Actual pension</td>
</tr>
<tr>
<td></td>
<td>contracted-in</td>
<td>income achieved</td>
</tr>
<tr>
<td>BSP</td>
<td>£70</td>
<td>£70</td>
</tr>
<tr>
<td>SERPS/S2P/ Contracted-out Pension</td>
<td>£45</td>
<td>£35</td>
</tr>
<tr>
<td>ESP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total income</td>
<td>£115</td>
<td>£105</td>
</tr>
<tr>
<td>pre-Pension Credit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guarantee Credit</td>
<td>£0</td>
<td>£4.45</td>
</tr>
<tr>
<td>Savings Credit</td>
<td>£14.22</td>
<td>£13.77</td>
</tr>
<tr>
<td>Total</td>
<td>£129.22</td>
<td>£123.22</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis
The possible (though complex) offset arrangements which we have modelled would still leave the need for a significant and immediate increase in public expenditure as a percentage of GDP [Figure 6.10]. And the distributional impact would still include significant undesirable effects. Some higher income individuals with large private pension rights but limited SERPS/S2P rights (e.g. higher income older pensioners who retired before significant SERPS right could be built up) would be significant gainers. And, crucially, some low income individuals, for the counter-intuitive reasons explained in Chapter 4 and in Chapter 5 Section 7, would be significant and immediate losers [Figure 6.11]. This could be moderated by keeping the Savings Credit in place (with adjusted thresholds), but this would undermine the simplicity of the ESP approach, and the public spending cost would be higher than shown in Figure 6.10.

Any offset arrangement moreover involves a judgement on the “fair” way of dealing with the fact that different people not only have different accrued rights, but also have made different contributions. For example, since the self-employed are not members of SERPS/S2P, offset has no impact on them. All self-employed people, of whatever earnings level, would therefore receive significantly higher state pensions than today, and would receive the same state pension as employees of the same earnings level who had made significantly higher contributions during working life.

To make the ESP option distributionally fair and affordable, would therefore require some combination of:

(i) Introducing an ESP at a later age than the current SPA while allowing the existing package of benefits to be drawn at 65 (for men) and 60 rising to 65 by 2020 (for women).

(ii) Introducing an ESP at a lower value than £109, and gradually stepping-up the value of the ESP over time.

The first approach (an ESP at a later age than 65) in principle has attractions. But it is difficult to design it while leaving the existing benefit package in place at a lower age without either producing, at the age at which the ESP applies, the perverse immediate distributional effect which Figure 6.11 illustrated, or without introducing complex arrangements to prevent these effects.
Figure 6.10  Public expenditure on pensioners as a percentage of GDP: universal ESP with gross Additional Pension offset

5%  6%  7%  8%  9%

2005 2010 2015 2020 2025 2030 2035 2040 2045 2050

- Universal ESP with offset of gross Additional Pension
- Proposed range for debate

Source: Pensions Commission analysis
Note: Assumes 50% of gross SERPS/S2P is offset in 2010 rising to 100% by 2040.

Figure 6.11 A potential loser from an immediate offset ESP

<table>
<thead>
<tr>
<th></th>
<th>Current system</th>
<th>ESP</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSP/ESP</td>
<td>£82.05</td>
<td>£109.45</td>
</tr>
<tr>
<td>SERPS/S2P</td>
<td>£37.50</td>
<td>£10.10</td>
</tr>
<tr>
<td>Private income</td>
<td>£12.50</td>
<td>£12.50</td>
</tr>
<tr>
<td><strong>Total income pre-Pension Credit</strong></td>
<td><strong>£132.05</strong></td>
<td><strong>£132.05</strong></td>
</tr>
<tr>
<td>Guarantee Credit</td>
<td>£0</td>
<td>£0</td>
</tr>
<tr>
<td>Savings Credit</td>
<td>£7.40</td>
<td>£0</td>
</tr>
<tr>
<td><strong>Total income</strong></td>
<td><strong>£139.45</strong></td>
<td><strong>£132.05</strong></td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis
We have therefore concentrated in our modelling on the “step-up to ESP” option, and have considered in detail the package illustrated in the left hand column Figure 6.12. In this option, S2P accruals cease immediately and an ESP is introduced at an initial value of about £75 (i.e. the level of the BSP in 2010 in today’s earnings terms assuming price indexation from now till 2010), increasing thereafter faster than average earnings to reach an earnings equivalent value of £109 by 2030.

**Figure 6.12** Gradual step-up to an Enhanced State Pension (ESP): variants modelled

<table>
<thead>
<tr>
<th>An ESP at the Guarantee Credit level</th>
<th>An ESP equivalent to £100 by 2045</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BSP/ESP</strong></td>
<td>From 2010, BSP increases faster than earnings to reach the level of the Guarantee Credit by 2030</td>
</tr>
<tr>
<td><strong>SERPS/S2P</strong></td>
<td>Accruals cease immediately, past accruals are paid</td>
</tr>
<tr>
<td><strong>Indexation of payments in retirement</strong></td>
<td>2010-2030 in excess of earnings; with earnings thereafter</td>
</tr>
<tr>
<td><strong>Guarantee Credit</strong></td>
<td>Retained but initially reduces as BSP increases in value</td>
</tr>
<tr>
<td><strong>Savings Credit</strong></td>
<td>Erodes by 2030</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td>BSP credits retained, HRP made weekly credit</td>
</tr>
<tr>
<td><strong>State Pension Age</strong></td>
<td>66 by 2030, 67 by 2040, 68 by 2050</td>
</tr>
<tr>
<td><strong>Contributory versus Universal</strong></td>
<td>Base case contributory, with universal payment or universal accrual as possible variants</td>
</tr>
<tr>
<td><strong>Contracting-out and earnings-related compulsion</strong></td>
<td>Immediately ceases as S2P accruals cease</td>
</tr>
</tbody>
</table>
This package has clear attractions:

- By phasing in the ESP, and ceasing new S2P accruals but honouring already accrued S2P rights, it achieves some of the effects of the S2P “offset” but with fewer transitional complexities.

- The long-term model, and the model which would apply to all workers under 40 years old, would be clear: a non-means-tested state pension equal in value to the current Guarantee Credit.

- As a result it would reverse the spread of future means-testing which current indexation arrangements would produce [Figure 6.13]. Unlike the “immediate full ESP” it would of course not eliminate means-testing today. But since it is the prospect of future means-testing which needs to be reduced to create good incentives to save, this step-up option would deliver a sound base on which to build increased private savings.

- It avoids most of the distributional disadvantages of the “immediate full ESP”, with no significant immediate low income losers nor high income gainers [Figure 6.14]. It might however leave our non-saving Low Pay case at age 75 slightly worse off in 2050 than she would be in 2020 having retired in 2010: if she did not save privately her pension income would be equal to 26% of median earnings in 2050 versus 28% in 2010.
Figure 6.14 Pension income for the stylised individuals at 75 according to year they reached 65 with a gradual ESP reaching Guarantee Credit level

Constant Median Earner

High Earner
A New Pension Settlement for the Twenty-First Century

Low Pay

Pension income as percentage of median earnings

Reach 65 in:

No Saving  Medium Saving  High Saving

2010 no change
2010 ESP
2030 ESP
2050 ESP
2010 no change
2010 ESP
2030 ESP
2050 ESP
2010 no change
2010 ESP
2030 ESP
2050 ESP

BSP  SERPS/S2P  Guarantee Credit  Savings Credit  Private Saving

Career Break

Pension income as percentage of median earnings

Reach 65 in:

No Saving  Medium Saving  High Saving

2010 no change
2010 ESP
2030 ESP
2050 ESP
2010 no change
2010 ESP
2030 ESP
2050 ESP
2010 no change
2010 ESP
2030 ESP
2050 ESP

BSP  SERPS/S2P  Guarantee Credit  Savings Credit  Private Saving

Source: Pensions Commission analysis

Note: Start saving age 30 on earnings above £5000 (in constant earnings terms) medium saving is saving 8% of earnings above this level and 16% in the high case.
Real rate of return on savings 3.5%, AMC 0.3%
Annuity rates vary over time to account for increases in life expectancy. However State Pension Age is also rising to 68 by 2050.
We assume that private saving is 100% annuitised when someone reaches SPA.
The two key problems are that:

- The specific case which we have modelled, with the ESP reaching £109 in 2030, produces a total public expenditure profile above our guideline envelope, not only during transition, but even after 2050 [Figure 6.15]. This is true even if a contributory approach is followed, and is even more the case if the ESP is paid on a universal residency basis. If a lower long-term ESP is set as the target, it is possible to bring the expenditure back towards the envelope. Figure 6.15 illustrates that setting a long-term ESP of £100 would bring the spend in 2045 almost within the envelope. But this would make the mild adverse distributional effect for the Low Pay individual in 2050 much more severe. There is therefore a political choice to be made: if higher public expenditure than our indicative envelope is acceptable, an ESP can be distributionally attractive, and radically reduces means-testing. If it is not, then there remain distributional disadvantages to this approach.

- The “step-up” process means sacrificing the clear simple message of the “immediate full ESP” option, and means that the credibility of the future promise is vitally dependent not just on continuity of an indexation regime, but on future governments following through with the indicated “step-up.” If savers believe that that promise is credible, then they will perceive that means-testing has been reduced in the way Figure 6.13 suggests. But the discretionary nature of the future step-ups is likely to undermine that confidence.

(ii) Gradual two-tier options

The alternative way forward is to accept the existence, at least for the foreseeable future, of two separate state pensions (the BSP and the S2P), but to make changes which both:

(i) Make the combined system less means-tested.

(ii) Accelerate the evolution of the system towards a “two-tier flat-rate” system which could be more easily explained than the current system.

The specific variant of the gradual two-tier option which we have modelled is described in Figure 6.16. As with the “step-up to ESP” option it would be possible to combine this option with either a universal or a contributory approach to the BSP. The key changes from the current system and its evolution under current indexation arrangements are:

- Linking the BSP to earnings after 2010.

- Accelerating the evolution of the S2P towards a flat-rate system, by freezing in nominal terms the Upper Earnings Limit (UEL) for S2P accruals.
Figure 6.15 Public expenditure on pensioners as a percentage of GDP under gradual ESP options

![Graph showing public expenditure on pensioners as a percentage of GDP under gradual ESP options.]

ESP at Guarantee Credit level by 2030
ESP at £100 equivalent by 2045
Proposed range for debate

Source: Pensions Commission analysis using Pensim2
Note: See Figure 6.11 for modelling assumptions.

Figure 6.16 Two-tier flat-rate system: variants modelled

<table>
<thead>
<tr>
<th>Two-tier flat-rate system</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BSP</strong></td>
<td>From 2010 BSP increases with earnings</td>
</tr>
<tr>
<td><strong>SERPS/S2P</strong></td>
<td>UEL for S2P accruals is frozen in nominal terms from 2010. This results in accruals to S2P becoming flat-rate around 2030</td>
</tr>
<tr>
<td><strong>Indexation of payments in retirement</strong></td>
<td>BSP is earnings linked, S2P is price linked in retirement</td>
</tr>
<tr>
<td><strong>Guarantee Credit</strong></td>
<td>Retained but does not grow in importance as in the present system as BSP is earnings linked</td>
</tr>
<tr>
<td><strong>Savings Credit</strong></td>
<td>Maximum Savings Credit frozen in real terms</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td>S2P credits are aligned to the Welfare to Work agenda HRP to become weekly credit</td>
</tr>
<tr>
<td><strong>State Pension Age</strong></td>
<td>Base case 66 by 2030, 67 by 2040, 68 by 2050 Possible to have variant with separate pension ages for BSP and S2P</td>
</tr>
<tr>
<td><strong>Contributory versus universal</strong></td>
<td>S2P would remain contributory Initial case considered leaves BSP contributory Variants with BSP universal in payment or accrual are then considered</td>
</tr>
<tr>
<td><strong>Contracting-out and earnings related compulsion</strong></td>
<td>Gradually erodes</td>
</tr>
</tbody>
</table>
Increasing after 2020 the State Pension Ages of both systems. For modelling purposes we have assumed both ages reach 66 in 2030, 67 in 2040 and 68 in 2050, but the alternative option of slightly different ages for the two pensions, illustrated in Figure 6.6, would produce almost identical public expenditure consequences.

Freezing the maximum amount of Savings Credit payable in real terms, (which requires increasing the lower Savings Credit threshold slightly faster than average earnings). This freeze is required to prevent the future spread of means-testing. It also curtails the relentless increase in the replacement rates of low income non-savers which current indexation arrangements, if continued indefinitely, would unintentionally produce. But by maintaining a role for the Savings Credit, rather than eliminating it entirely as in the ESP option, it minimises the risk that low income non-savers can be worse off than today.

This package produces the following results:

- Its public expenditure profile would, if the contributory approach were followed, in the long run be close to the bottom of the range we have proposed [Figure 6.17]. It would however involve expenditure very slightly above the flat level we have suggested from now to 2020: Section v below discusses whether adjustments can offset this effect. As with the ESP option, a rapid move to a universal payment approach (even if only for the BSP) would have significant short-term public expenditure consequences [Figure 6.18].

- Its distributional impact versus the current system is reasonable, as Figure 6.19 illustrates. For the non-saving Constant Median and Higher Earner cases, individuals would get a lower replacement rate from the state than they do today, but if they saved they would be as well or better-off, due to the reduced impact of means-testing. In the Low Pay and Career Break case, the non-savers are marginally better off (relative to median earnings) than they are today, but appreciably better-off if they save.
Figure 6.17  Public expenditure on pensioners as a percentage of GDP under the two-tier option

Source: Pensions Commission analysis using pensim2
Note: See Figure 6.16 for modelling assumptions.

Figure 6.18  Effect on public expenditure on pensioners as a percentage of GDP of universal payment for BSP under the two-tier option

Source: Pensions Commission analysis using Pensim2
Note: See Figure 6.16 for modelling assumptions.
Figure 6.19 Pension income for the stylised individuals at 75 according to year they reached 65 with the two-tier option

Constant Median Earner

High Earner
Low Pay

Reach 65 in:

- No Saving
- Medium Saving
- High Saving

- 2010 no change
- 2010 two-tier
- 2030 two-tier
- 2050 two-tier

Pension income as a percentage of median earnings:

- BSP
- SERPS/S2P
- Guarantee Credit
- Savings Credit
- Private Saving

Source: Pensions Commission analysis

Note: Start saving age 30 on earnings above £5000 (in constant earnings terms) medium saving is saving 8% of earnings above this level and 16% in the high case.

Real rate of return on savings 3.5%, AMC 0.3%

Annuity rates vary over time to account for increases in life expectancy. However State Pension Age is also rising to 68 by 2050.

We assume that private saving is 100% annuitised when someone reaches SPA.

Career Break

Reach 65 in:

- No Saving
- Medium Saving
- High Saving

- 2010 no change
- 2010 two-tier
- 2030 two-tier
- 2050 two-tier

Pension income as a percentage of median earnings:

- BSP
- SERPS/S2P
- Guarantee Credit
- Savings Credit
- Private Saving

Source: Pensions Commission analysis

Note: Start saving age 30 on earnings above £5000 (in constant earnings terms) medium saving is saving 8% of earnings above this level and 16% in the high case.

Real rate of return on savings 3.5%, AMC 0.3%

Annuity rates vary over time to account for increases in life expectancy. However State Pension Age is also rising to 68 by 2050.

We assume that private saving is 100% annuitised when someone reaches SPA.
Its impact on means-testing is less dramatic than the step-up to ESP option, but it still reduces the scope of means-testing appreciably compared with the no change option [Figure 6.20]. The total percentage of the pensioner population subject to some means-testing of Pension Credit falls below 40% in 2050 rather than increasing to over 70% as it would if current indexation arrangements were continued indefinitely. But this underestimates the extent to which means-testing will be reduced. Since total expenditure on Savings Credit under this option will be dramatically reduced versus the no-change option it is clear that many of those indicated as receiving Savings Credit in Figure 6.20 will only be subject to means-testing on a small proportion of their total private income [Figure 6.21].

It would however be desirable to reduce the spread of means-testing still further. One way to do this would be to move BSP accruals looking forward onto a universal basis. This option is considered in Section iv below within the context of the wider issues involved in deciding between a universal and contributory approach.
**Figure 6.20** Proportion of pensioner benefit units on Pension Credit under two-tier contributory option

Guarantee Credit Only
Savings Credit and Guarantee Credit
Savings Credit Only

Source: Pensions Commission analysis
Note: See Figure 6.16 for modelling assumptions
Pensioner benefit units are defined as any household with an individual aged over the State Pension Age.

**Figure 6.21** Pension Credit costs as a percentage of GDP: two-tier contributory reform option and the current system assuming present indexation continues indefinitely

Source: Pensions Commission analysis
Note: See Figure 6.16 for modelling assumptions.
(iii) Choosing between the alternative state pension options.

The alternative options for the state system reform which we have considered, though quite different in form, are in terms of substantive effects not radically different. The Pensions Commission believes that either route would be a significant improvement on the current system and its likely evolution, and would help achieve the objectives of:

- A less means-tested system than we are currently heading towards, allowing individuals at a variety of different income levels to gain more benefit from their savings [Figure 6.22];

- With reasonable distributional consequences; and

- Within acceptable and sustainable public expenditure levels.

There are however important differences along four dimensions: (i) distributional effects; (ii) the impact on existing private sector provision; (iii) flexibility relating to the universal versus contributory choice and to pension ages and (iv) simplicity. These differences imply arguments for and against either approach [Figure 6.23].

(i) Distributional effects The distributional effects of the two options are not radically different. There are however two significant and two more minor differences:

- The ESP option is more favourable to the self-employed, who not only gain (in both options) the benefit of BSP earnings indexation, but also the benefit of a higher ESP. For the self-employed, who are not members of S2P, this is a free benefit, with no offsetting reduction in future S2P rights. The pros and cons of this effect, and whether it would need in fairness to be accompanied by a higher rate of self-employed National Insurance (NI) contributions, could be debated either way.

- The two-tier option delivers slightly more pension to high earners in 2050 (though the benefit disappears thereafter) because an earnings-related element of the system is preserved for longer. The implication of this for the relative distributional impact of the two options depends on how revenue is raised. If earnings-related benefits are paid for by earnings-related contributions, the net distributional effect is equivalent to flat-rate benefits paid for by flat-rate contributions. Independent of the distributional impact, we believe that the fact that the two-tier option gradually eliminates earnings-related accrual, rather than immediately as in the ESP option, is an advantage, since it means that the NPSS can be up and running and a proven success, before earnings-related compulsion in the PAYG system is removed.
Figure 6.22  Impact of saving on retirement income: increase in pension income achieved as percentage of median earnings: assuming retirement in 2050

The two options differ significantly in their balance of income level at point of retirement and income indexation during retirement. The gradual two-tier route boosts the replacement rate at point of retirement, but links S2P benefits to prices during retirement: pensions as a percentage of average earnings will therefore decline slightly during the course of retirement. The ESP option delivers a lower real pension at the onset of retirement, but maintains this in earnings terms throughout: the incomes of older pensioners (e.g. those above 90) will therefore tend to be higher under the ESP option than under the two-tier option. Arguments can be made for either approach (see Chapter 5 Section 7).

The ESP option will tend to produce, particularly at the start of retirement, but even at 75 years old, a slightly lower replacement rate for the non-saving low earner. This effect is slight if the ESP is £109 (in current earnings terms), but becomes more significant if a lower figure than £109 is needed to make the public expenditure cost acceptable.

(ii) Impact on existing private pension provision. This could be significantly different, particularly for DB provision, between the two options. Under the ESP, since S2P accrual ceases immediately, contracted-out rebates are immediately abolished. Under the gradual two-tier option, the importance of contracted-out rebates will gradually reduce. As set out in Chapter 5 Section 8, we believe that this gradual approach is preferable since it is likely that the immediate abolition of the contracted-out rebate will accelerate the closure of existing private sector DB schemes and since it leaves the flexibility for policy to be adjusted in the light of the proven success of the auto-enrolment system.
### Comparing the “Step up to ESP” and “Two-tier” options

<table>
<thead>
<tr>
<th><strong>1. Simplicity</strong></th>
<th>ESP simpler in the long-term, but to be effective requires confidence that future governments will deliver a series of discretionary increases.</th>
<th>Neither option perfect.</th>
<th>Either is improvement on current evolution.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“Two-tier” simple in transition, and simpler in the long-run than current system (since both state pensions flat-rate) but long transition.</td>
<td>Two-tier transition simplicity attractive.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>2. Public Expenditure</strong></th>
<th>ESP can fit within envelope if step-up made gradual enough (but with distributional consequences).</th>
<th>Not an inherent difference between options.</th>
<th>Two-tier slight preferable.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gradual two-tier can fit within envelope.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improvements for existing pensioners (under either system) require some increase as a percentage of GDP before 2020.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>3. Distributional impact</strong></th>
<th>ESP less favourable to lower earners at retirement in 2050 if step-up slow enough to stay in public expenditure envelope.</th>
<th>Two-tier preferable.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Protecting the poorest</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>4. Distribution Impact</strong></th>
<th>Two-tier makes higher earners slightly better off in 2050, since earnings-related compulsion gradually rather than immediately eliminated – but no unnecessary short-term benefit to better-off pensions.</th>
<th>Two-tier preferable.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Avoiding unnecessary beneficiaries</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **5. Adequacy** | ESP deliveries slightly lower state replacement rate to average earner at retirement ... and thus requires slightly higher contributions to NPSS to achieve 45% target... but ESP is more favourable in general to older pensioners since it is earnings indexed in retirement. | Trade-off dependent on attitude to definition of pension adequacy (see Chapter 5 Section 7). |
## Figure 6.23 Continued

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6. Low cost savings</strong></td>
<td>No difference – delivered by NPSS not by state system</td>
</tr>
<tr>
<td><strong>7. Reducing means-testing</strong></td>
<td>ESP produces more dramatic reduction in means-testing (but therefore higher public spending cost). ESP preferable.</td>
</tr>
<tr>
<td><strong>8. Avoiding harm to existing voluntary system</strong></td>
<td>ESP immediately eliminates contracting-out rebate and will likely speed closure of remaining private DB schemes. Two-tier preferable.</td>
</tr>
<tr>
<td><strong>9. Improving the position of women</strong></td>
<td>Universal accrual can be applied in either option, but with flexibility in the two-tier option to preserve the contributory system for S2P. Either option an improvement on current evolution… two-tier may be a more practical way forwards.</td>
</tr>
<tr>
<td><strong>10. Improving the position of women</strong></td>
<td>Improvements can be delivered equally with either option – both would require spend outside envelope.</td>
</tr>
<tr>
<td><strong>11. Improving options for the self-employed</strong></td>
<td>Either option would prevent the further erosion of the position of the self-employed resulting from price indexation of the BSP. ESP would eliminate all distinction between employed and self-employed state pension rights despite significant differences in NI contributions paid. Two-tier option preferable.</td>
</tr>
<tr>
<td><strong>12. Robustness in the face of rising life expectancy</strong></td>
<td>Either option would deliver this by raising SPA and linking long-term evolution of SPA to unknown future path of life expectancy. “Two-tier” option allows flexibility of higher SPA for S2P and lower for BSP, helping (slightly) to offset concerns about socio-economic equity arising from lower life expectancy in lower social classes. Slight preference for two-tier option.</td>
</tr>
</tbody>
</table>
(iii) Flexibility in respect to the universal versus contributory choice and to pension ages  The gradual two-tier route allows two potentially useful flexibilities:

– The possibility of following a universal approach to the BSP but a contributory approach to the S2P. Section iv below discusses the overall advantages of universal versus contributory approaches, and suggests that this two-tier approach has significant attractions,

– The possibility of having two different pension ages, with the S2P age set slightly higher than the BSP age. This would, by keeping the SPA for BSP as low as possible, moderate the impact of raising pension ages in a way which would be most valuable to lower income people with lower life expectancy. [See Chapter 8 Section 5 for more detailed discussion of this issue.]

(iv) Simplicity  Clearly in the long run the unified ESP system is simpler and easier to explain. But the step-up to the ESP involves a more complex transition, and to be effective as a basis for private saving (i.e. reducing the expected role of means-testing) the step-up to ESP option requires savers to be confident that future steps will in fact be implemented by future governments. There is of course no option which can give total confidence that future policy will continue as presently intended: no government can bind its successors. But the gradual two-tier option, which relies essentially on the indexation of the BSP to earnings, is a much simpler option around which to seek to establish consensus.

It is possible to argue the choice either way. The Pensions Commission’s preference, however, is for the two-tier approach because:

■ The two-tier option only slowly eliminates earnings-related compulsion within the state system. We believe this is an advantage at least until the NPSS is in place and a proven success as it would leave open the options of either:

– Accelerating even faster than we propose the evolution of S2P to a flat-rate system, if the NPSS was rapidly successful.

– Slowing the move of S2P to a flat-rate system, by re-linking the UEL for S2P accruals to prices, if the NPSS was less successful (i.e. had a higher opt-out rate) than hoped.

■ We believe that the flexibility to move the BSP onto a universal basis while keeping the S2P as a contributory system is attractive.

■ The impossibility of moving rapidly to an ESP (without high cost, adverse distributional effects or the complexities of offset) means that the ESP option loses its huge advantage of simplicity. And we are concerned that a promise to “step-up” the ESP gradually to the required level will not be credible, given the impossibility of committing future governments.
One disadvantage of choosing either the two-tier option or a gradual step-up to an ESP option, however, is that they do nothing to fix the problems of the current system for today’s pensioners, or indeed for many pensioners over the next 10-15 years. These include many people who have been disadvantaged by the steady erosion of BSP (in earnings terms) over the last 25 years, but who will not benefit from the creation in 2002 of a flat-rate element of S2P since this only accrues slowly. While reducing means-testing for these people is not important for incentive to save reasons (since they are already retired) it would be attractive to move some existing pensioners off means-testing if this can be done at reasonable cost. One option by which to achieve this would be to make the BSP universal in payment after, for instance, age 75. This option, and other issues relating to the choice between a contributory and universal system, are considered in Section iv below.

(iv) Contributory versus universal approach.

One of the key problems which we identified in Chapter 4 was that the present pension system disadvantages people with interrupted paid work records and carers (in particular women). In Chapter 5 Section 6 we explained the reasons for this and possible solutions, pointing out that:

(i) Improvements to the credit system could address some of the problems but would still leave significant gaps.

(ii) Introducing a universal residency based system involved significant implementation complexities, especially if introduced retrospectively rather than as an accrual system going forward.

Looking forward, either of the two options we have analysed would significantly improve the position for women, since the BSP (or in Option 1 the ESP), which has more favourable “credits” rules than S2P, would be linked to earnings rather than steadily degrading in relative earnings terms. And latest figures from GAD suggest that the gap between men and women in respect to BSP accrual will close significantly over the next 20 years, while women will actually be more likely than men to accrue S2P rights [See Figures 5.28 and 5.29 in Chapter 5 Section 6]. But this still leaves two problems:

- While the gap will close, there will still be many individual women, in particular those whose earnings in particular years fall below the LEL for any one job and those who are caring for older dependents but are not eligible for credits, who will not accrue adequate rights.

- There is a large inherited problem of women pensioners today and in the near future, who did not accrue significant rights in their working and caring life, and who are now reliant on means-tested benefits.
To address the first problem we would have to shift to a universal residence approach for future **accruals** of all or some state pension rights.\(^4\) To address the second problem we would need to shift the present **payment** of state pension onto a universal basis.

Under the ESP option we have modelled, if pension payments were made on an universal residency basis from today, about 0.6% of GDP would be immediately added to public expenditure. Figure 6.18 illustrated that payment of the BSP only on a universal residency basis, (while keeping S2P on a contributory basis) would be slightly less expensive, but would still add 0.5% of GDP immediately to public expenditure.

The alternative approach of moving BSP accruals (but not present payments) onto a universal residency basis, would have the public expenditure consequences shown in Figure 6.24. There is a minimal impact before 2020, and even by 2050 the cost impact would be only 0.3% of GDP, and the total cost would still fall well within our expenditure range, since a higher percentage of women would by then have accrued full rights in any case. But this reform would greatly simplify the system looking forward. It would make it possible to tell younger workers that the state system would in future pay a BSP, rising in line with earnings, to all people irrespective of, for instance, periods of work on earnings below the Lower Earnings Limit (LEL). And while it would do nothing to reduce means-testing for existing pensioners it would further nudge down the percentage of future pensioners subject to means-testing and future expenditure on Pension Credit, taking the total proportion of pensioner units receiving Pension Credit down from the 38% shown in Figure 6.20 to 36%.

Decisions on whether and how fast to move to a universal system therefore require a political judgement on:

(i) The overall pros and cons of maintaining a contributory principle for the BSP.

(ii) Whether and how far there is scope for increase in public expenditure over the next 5-15 years.

(iii) The feasibility and implications of implementing a residency test.

---

\(^4\) Recent indexation arrangements, linking the BSP to prices, could over the long-term reduce the importance of the "earnings below LEL" problem, but would only do so very slowly, would not address the other problems with the contributory approach and would require accepting an increase in the administrative burden on employers.
Figure 6.24: Public expenditure on pensioners as a percentage of GDP of two-tier option with universal accrual for the BSP

Source: Pensions Commission analysis using Pensim2
Note: See Figure 6.16 for modelling assumptions.
The Pensions Commission’s recommendation is that the system should combine:

- Moving BSP accruals looking forward onto a universal basis, with a residency test. This would be relatively inexpensive even in the long-term but would sweep away the complexity of credits in future BSP accrual, and would greatly simplify explanation of the pension system: all people of working age legally resident in Britain would be accruing rights to a BSP worth about 17% of median earnings. The implication of this approach is however that some mechanism is required to register residence. We do not believe the problems in designing such a mechanism are insurmountable but they require more detailed investigation. If universal residency based accrual is on further investigation not feasible, then the alternative is to reform the existing contributory system along the lines suggested in Figure 5.30.

- Making credits to S2P more generous to carers (e.g. accruing carer credits on a weekly basis) but leaving S2P as a contributory system. This would mean that people could not gain full state pension rights unless they had made a contribution (either via paid work and financial contribution or via caring and the receipt of credits).

In addition, to address the inherited problems, it would be desirable to:

- Introduce an effectively universal BSP today for people aged over a certain age, e.g. 75. This can be achieved fairly simply by improving the generosity of the existing Category D pension. This is currently paid to over 80 year olds on a residency basis and tops up existing BSP rights to a maximum of £49.15 (about 60% of the total BSP). If the Category D pension were worth £75 in 2005 earnings terms (from 2010 onwards), on an individual basis and were payable from aged 75, the immediate additional net public expenditure cost would be about 0.15% of GDP, with a significant amount of the additional gross expenditure offset by lower Pension Credit expenditure. In the long run and if introduced alongside universal accrual of the BSP, the net cost would be smaller.

The total public expenditure cost involved in both moving to universal accruals and to a universal BSP payment above 75 is illustrated in Figure 6.25.

The advantages of this approach are that:

- Looking forward, a universal accruals approach to the BSP would make a significant contribution to simplifying the system and would provide an underpin of universal benefits, while maintaining the contributory principle, incentives to work and recognition for caring, for those seeking to achieve maximum state pension rights.
Making the BSP universal in payment over aged 75 (or 80) would make a significant difference to many older pensioners on means-tested benefits today, but at relatively low cost and in a targeted fashion. This change is not required to improve pension saving incentives looking forward but it is desirable in order to address inherited problems. Whether this cost is affordable, however, and above what age, is a political judgement.

(v) When should reform start? The expenditure versus means-testing trade-off

Figure 6.24 showed the public expenditure profile resulting from our preferred option. While overall the profile is close to the envelope we proposed, and falls clearly within the 7.5-8.0% range we suggested from 2045 onwards, it does, when compared with the no change option, produce an increase in public expenditure as percentage of GDP between 2010 and 2020, despite the benefits of lower expenditure which will then be resulting from the rise in the women’s pension age.

An issue which therefore arises is whether it would be possible to delay the start of the reform, and crucially the indexation of the BSP to earnings, later than the 2010 year which we have illustrated in our modelling. To illustrate this option we have modelled what would happen if the start of earnings-indexation of the BSP and of universal accruals of BSP rights were delayed until 2015.
The public expenditure profile would now fall clearly within the range we have suggested, and indeed by 2045 would be below it [Figure 6.26].

But the inevitable consequence would be that the scope of means-testing in future would be significantly greater than in our preferred option and slightly greater than today [Figure 6.27].

And to achieve any given target for overall income replacement by pensioners, default contribution rates within the NPSS would have to be higher than we propose in Section 3 below.

This illustrates the essential and unavoidable dilemma involved in developing a sensible way forward. The more that public expenditure is constrained, the more important private savings are to ensuring pensioner income adequacy; but the more public expenditure is constrained the more means-testing must occur, and therefore the greater the barriers to voluntary private savings, and the less the likely acceptability of strongly encouraged or compelled savings.

The decision on when the BSP should be re-indexed to earnings therefore involves a difficult trade-off both within pension policy and between pension and other public expenditure priorities. The Pensions Commission’s judgement is that while a short delay beyond 2010 would not seriously undermine the overall direction of the proposed reform, a 5 year delay probably would. A start in 2011 rather than 2010, for instance, could be justified on the grounds that increased BSP cost (relative to current plans) should only be incurred as the cost reduction benefits of the rise in women’s SPA are beginning to flow through. But delaying to 2015 would, we believe, put off for too long the point at which we begin to halt the spread of means-testing.

(vi) Summary assumptions for the state system

As a base for our modelling of the impact of an NPSS auto-enrolment system, we assume the following state pension system reforms:

- An evolution of the existing two-tier system as set out in Figure 6.16.
- With future accruals to the BSP moving onto a universal residence basis.

These assumptions define the replacement rates which people of different earnings levels will receive from the state, and the degree to which private pension income will be means-tested. They therefore influence the default contributions rates which are appropriate within the NPSS. We do not in these calculations allow for the desirable additional element of reform (a universal BSP in payment at age 75) but this would make only minimal difference to the appropriate design of the NPSS.
Figure 6.26  Public expenditure on pensioners as a percentage of GDP with earnings indexation of BSP from 2015

Source: Pensions Commission analysis using Pensim2
Note: See Figure 6.16 for modelling assumptions.

Figure 6.27 Proportion of pensioner benefit units on Pension Credit under two-tier if reform starts in 2015

Source: Pensions Commission analysis
Note: See Figure 6.16 for modelling assumptions.
3. Contribution rates within the NPSS

In Chapter 5 Section 1 we argued that it was a reasonable aim of public policy to seek to ensure that the median earner achieves an income replacement rate of at least 45%. We argued that this objective should be pursued via the auto-enrolment of individuals, with a modest compulsory matching contribution by employers. We suggested that decisions on whether to save to achieve a higher replacement rate than 45% should be left to individual choice, reflecting different preferences and circumstances, while recognising that many individuals and employers already contribute at a rate which will result in higher replacement rates and that this should be encouraged and continue to be supported via NI and tax relief. But we also identified the high costs which many individuals currently face in exercising that choice.

Our proposed approach to contribution rates within the NPSS is therefore as follows:

- The minimum default contribution rate, at which people would be auto-enrolled, combined with the compulsory matching employer contribution, should be designed to make it likely, on reasonable rate of return assumptions, that the median earner saving for most of their working life can achieve a total replacement rate (state system and NPSS combined) of about 45%.

- The NPSS should also, however, allow the median earner and/or their employer to make additional contributions sufficient to make a replacement rate of 60-65% possible. Additional contributions would not attract compulsory matching employer contributions (though employers would of course be free to make voluntary additional contributions, which would continue to be encouraged through tax and NI relief).

Figure 6.28 sets out the replacement rates, at retirement, which would arise from our state system proposals in 2050. The median earner with a fairly full contribution record would achieve about a 30% replacement rate (this could arise either from remunerated work or from carer and other credits or in the case of the BSP from residency). To achieve a total replacement rate of at least 45%, a pension of around 15% of median earnings from the NPSS is therefore required.

The contribution rates as a percentage of gross salary required to achieve this, on a variety of assumptions about rates of return, the age at which savings starts, and the age of retirement, are illustrated in Figure 6.29. We believe it is reasonable to design minimum default contribution rates on the assumption of:

- Saving is likely to start on average at age 25, but with some interruptions, so that the continuous saving from 30 assumption is the best guide to required contribution rates.
Figure 6.28  Replacement rate at the point of retirement in 2050 under two-tier option

* Target 45% replacement rate for median earner
* Delivered by state pension proposals

Source: Pensions Commission analysis
Note: Assumes earnings growth in line with average and working life from 21 to SPA.

Figure 6.29  Savings as a percentage of gross earnings required for 15% replacement rate from the NPSS for the median earner

Source: Pensions Commission analysis
Note: Assumes earnings increasing in line with average earnings growth, AMC 0.3%.
Annuitisation of the accumulated fund at the SPA, which rises over time as shown in Figure 6.6.

An average rate of return, before Annual Management Charges, of about 3.5%. To achieve this expected rate of return, a significant equity exposure is required at least at younger ages and the return is therefore not guaranteed. For reasons set out in Chapter 10 Section 6 however we believe it reasonable that the default option within the NPSS is a fund with significant equity exposure (though with an increasing bond/guaranteed element as age increases).

On these assumptions the required contribution rate for the median earner is about 6% of gross earnings. It would not be appropriate however to make the formula for auto-enrolment minimum default contributions “6% of total earnings”, since this would result in many people of very low income being auto-enrolled, generating very small value accounts, and almost certainly a high level of opt-out. A key issue is therefore the income level above which auto-enrolment contribution should be collected. We have considered the merits of two alternative approaches:

- **Auto-enrolled contributions on earnings above the Lower Earnings Threshold** (currently £12,100 per year). A contribution rate of 12% on earnings above this level would be required to ensure that the average earner contributed 6% of total earnings.

- **Auto-enrolled contributions on earnings above the Primary Threshold** (currently £4,888 per year). The contribution rate to achieve the median earner objective would be 8% on earnings above this level.

The Pensions Commission believes that the arguments for a lower threshold, such as the Primary Threshold, are stronger since:

- While a higher than average proportion of low earners may choose not to participate in the scheme (and will achieve reasonable replacement rates from the state pensions) we believe it important to provide them with the opportunity to participate in low-cost savings and to receive the employer matching contribution.

- There will be many people with earnings between the Primary Threshold and the LET at particular times in their life (e.g. during periods of part-time working combined with parental or other care responsibilities) but who have life term earnings high enough that they will wish to make pension provision above the flat-rate which the state will provide. It should be made easy for such people to continue to make contributions to the scheme, and receive the benefit of employer matching.

- For people with earnings around £15,000 per year, who are clearly in the segment where private saving should be encouraged, a threshold set at the LET would result in only low replacement rates being achieved.
A higher threshold implies a higher percentage contribution rate, if our proposed objective for the average earner is to be achieved. This significantly increases the marginal rate of salary deduction which people will face as they achieve salary increases.

The Pensions Commission’s recommendation is therefore that the default rate of contribution should be 8% of gross earnings above the Primary Threshold.

We recommend also that this auto-enrolled contribution rate should apply up to a level of income around the current Upper Earnings Limit (UEL) (£32,850). This reflects the philosophy set out in our First Report (see First Report, Chapter 4) that there is a level of income above which a purely voluntary approach to pension provision is appropriate particularly given the advantages of tax relief. An upper limit of about £33,000 would cover all the earnings of 80% of the workforce and a significant proportion of the income of those with still higher earnings. Whatever the lower and upper earnings levels chosen, these should increase of over time in line with average earnings.5

The proposed 8% contribution rate (above the Primary Threshold) would arise from a combination of: (i) individual contributions out of post-tax earnings; (ii) the benefits of tax relief; and (iii) the matching employer contribution.

The tax relief element could arise from the operation of the current tax relief regime, or it could take the form of a specific “government match”. The pros and cons of these two approaches, and the Pensions Commission’s recommendation, are set out in Chapter 10 Section 9. If the current regime is used, tax relief would pay for about 1% out of the 8% contribution, and there would in addition be the subsequent benefit of the tax-free lump sum. If a “government match” system is used, there would be no tax-free lump sum, but the net contribution would be equivalent.

Our reasons for proposing a compulsory matching employer contribution, and the impact of different levels of matching on wage bills, were discussed in Chapter 5 Section 1. We recommend that employers’ minimum contributions should be 3% of earnings above the Primary Threshold. This will be equivalent to about 2.3% of total gross earnings for the median earner on £22,000. Since, however, pension contributions are not subject to employers’ National Insurance, it will add only about 2% to the cost of employing a median earner, and less for lower paid earners, for those companies not presently making contributions in excess of that level. The impact of this proposal on aggregate labour costs (estimated at about 0.6%), and on costs by size of company, is considered in Chapter 10 Section 5.

5 While up-rating of the thresholds with earnings should be the standard, the trends in earnings amongst lowest earning groups should be monitored to ensure that indexation of the lower NPSS thresholds does not result in an increasing proportion of the workforce falling below the threshold for participating in the auto-enrolment part of the NPSS.
Figure 6.30 illustrates how the 8% default contribution rate would arise from the three different sources. Employees’ contributions would account for 4%, tax relief for 1% and employers’ minimum contributions for 3%. Employees considering whether to accept auto-enrolment would know that their own default level contributions out of post-tax earnings would be 100% matched by the combination of tax relief and employer contributions. We believe that this will provide a very strong incentive to stay enrolled, while keeping employer contributions at a modest level which, particularly if phased in, can be absorbed without significant disruption to product or labour markets.

The 8% default contribution rate would however only be sufficient, when combined with state pensions, to achieve for the average earner a replacement rate of about 45%. Many people will wish to achieve higher pensions, and many will only be able to do so in a cost-effective manner if they can gain the benefits of low cost saving within the NPSS. We therefore propose that people and/or their employers should be able to make additional contributions to the NPSS above the default auto-enrolled level. There are good reasons, however, for limiting those contributions, in order to limit the total size of the NPSS and thus its relative importance within the overall household savings system. One possible approach to setting the maximum contribution cap is explored in Chapter 10 Section 2, where we suggest that the cap might be set so that the median earner’s total contributions (employer and employee combined) can be 16% of earnings above the Primary Threshold, i.e. double the default level.

4. The self-employed within the state system and the NPSS

The UK workforce includes 25.5 million employees but also 3.2 million self-employed. In the analysis reported in our First Report, a disproportionate percentage of the self-employed appeared in danger of inadequate pension income in retirement [Figure 6.31]. This reflects the fact that (i) the self-employed cannot be members of the S2P: the only state pension rights they accrue are to the BSP; and (ii) only 38% of the self-employed are covered by private pensions compared with 56% of employees.

Some of the self-employed identified as “non-savers” in Figure 6.31 may not be causes for concern. While only a small minority of the self-employed have business assets which can be sold to fund retirement, the self-employed include a significant proportion of people who are by nature entrepreneurial, and many of these will have made alternative arrangements e.g. through investment in housing assets. But the self-employed also include many people who move between self-employment and employment, and whose periods of self-employment are determined by the labour market contracts offered to them as much as by any positive entrepreneurial choice. There are some signs that this category of the self-employed may be growing, particularly among young men.
**Figure 6.30** Source of contributions to the NPSS

![Bar chart showing the source of contributions to the NPSS](chart)

- **Employee contribution from net pay**: 5% of pay pre-tax
- **Tax relief/credit**: 2%
- **Employer contribution**: 4%
- **Total**: 10%

Source: Pensions Commission analysis

**Figure 6.31** Percentage of non-savers among men 46-55 earning £17,500 to £24,999

![Bar chart showing the percentage of non-savers among men](chart)

- **Self-employed**: 60%
- **Employed**: 40%

Source: Pensions Commission analysis based on FRS 2002/03, CAD and Inland Revenue data
Under present plans for the state pension system, the adequacy of pension provision for many self-employed will decline still further, as a result of the indexation of the BSP to prices. The state is planning to shift the balance of state provision from BSP to S2P [see Figure 4.4 in Chapter 4]. This will severely disadvantage the self-employed, who will receive a benefit of declining value relative to average earnings as they are not eligible for S2P.

Low income self-employed are now particularly disadvantaged, relative to low income employees, since they do not gain the benefits of the redistribution to lower earners introduced by reforms to the S2P in 2002. Any employee earning between the Lower Earning Limit (LEL) and the LET now accrues S2P rights as if they were earning at the LET. For an employee earning just above the LEL all of their S2P accrual is now effectively paid for by redistribution from other contributors rather than out of their own contributions. The self-employed person earning just above the LEL receives none of this benefit.

If a unified ESP was introduced, the self-employed would be among the biggest beneficiaries. Indeed it can be argued that a universal ESP of £109 today (an immediate Citizens Pension) would be unreasonably favourable to the self-employed given the lower level of contributions which they have in the past made. But it is clearly important to prevent a perpetual decline in the generosity of state pension provision for the self-employed.

The single most important policy to achieve this is to index the value of the BSP to earnings not prices. But the potential for the self-employed to become members of the S2P and of the NPSS should also be considered.

The self-employed and S2P. The inclusion of the self-employed within S2P (on either a compulsory or voluntary basis) has been considered on several occasions, but has always floundered on issues relating to the appropriate contribution rates which the self-employed should make. It seems only reasonable that if the self-employed accrue rights to S2P, they should also pay contributions more in line with those paid for employees (either by the employees themselves or by employers on their behalf). At the average earnings level of £22,000, employee and employer NI contributions amount to about 19% of total gross earnings versus 7% for the self-employed.6

- If therefore membership were compulsory, this would amount to a major additional compulsory “tax” on the self-employed. As well as being politically contentious, it might provide a further stimulus to underdeclare income (for both NI and tax purposes).

- While if membership were voluntary, contribution rates would have to be set on an age specific basis, and would be even higher at older ages. This is because while NI contributions are unchanging by age, the actual value of an extra year of S2P rights accrued is far higher at older ages.

6 Not all NI contributions fund pensions, with money also flowing from the NI Fund to support, for instance, the National Health Service. But this is true for the self-employed as well as the employed. The self-employed pay contributions of 8% on earnings between the Lower and Upper Profits Threshold, plus a fixed amount of £2 per week.
The complexity of age-specific contribution rates and the higher level required later in life might make voluntary membership of S2P unattractive for many self-employed. The Pensions Commission cannot however see a valid argument in principle for denying the self-employed the option of joining the S2P (paying age-specific contribution rates); this would be of particular value for self-employed people earning between the LEL and the LET. We therefore recommend that the implementation complexities of making this option available should be investigated in greater detail.

**The self-employed in the NPSS.** Ideally the self-employed who are not covered by other pension arrangements should become members of the NPSS. There are however major problems in applying the principles of auto-enrolment to the self-employed: these derive from the way in which the self-employed account for and pay taxes (with a greater role for end of year settlement) and are described in Chapter 10 Section 4. We have concluded that these difficulties make an auto-enrolment approach to the self-employed impractical. The self-employed should however be able to gain the benefit of low cost saving via the NPSS, and should therefore be free to make voluntary contributions up to the same limits (for default contributions plus voluntary contributions) which apply to employees. Chapter 10 Section 4 describes possible procedures for making the payment of these contributions as simple as possible.

---

7 The same unfair benefit could be achieved under the present system by individuals who were able to organise their affairs so as to be self-employed early in life and employed later in life.
5. Combined impact of state system reforms and the NPSS: individual replacement rates

The combined impact of the proposed state system and of the NPSS, for the median earner with a reasonably full working life, who starts saving within the NPSS at age 25, is shown in Figure 6.33, which also highlights the role which the state plays:

- The state **ensures**, through a PAYG two-tier flat-rate state pension system, a replacement rate equal to about 30% of median earnings at the point of retirement.

- It strongly **encourages** and **enables** low-cost saving which might on reasonable assumptions deliver to the median earner a further 15% (or slightly more, e.g. 18%, if they maintain continuous saving from 25).

- And it **enables** additional low cost saving which might deliver a still further 15%-18%.

- Many individuals or their employers will of course choose to make pension provision in excess of this: and where employers are making adequate provision already (in excess of the NPSS default contribution rates), the private provision element of Figure 6.33 may occur outside the NPSS.

Figure 6.34 illustrates the replacement rates which the different tiers of the system would deliver at different levels of earnings. At earnings levels below about £8,000 the state system will ensure earnings replacement rates of over 80%, and most people below this level will rely primarily or entirely on state provision. At £35,000, state provision and the maximum allowed NPSS savings will secure a replacement rate of only about 40%: clearly most people at this level of income, either individually, or via their employer, will want to make additional voluntary provision on top.

But in the segments which we have identified as of greatest concern – people around median earnings and below who do not have access to low-cost occupational schemes – the proposals will play a major role in ensuring reasonable replacement rates and in making saving possible at low-cost, while leaving individuals free to decide whether and to what extent they participate in the system.
Figure 6.33 Target pension income as a percentage of earnings for the median earner: at the point of retirement in 2053

The role of the state

Ensures
Strongly encourages
 Enables
Facilitates

Ensures minimum income level via compulsory system
Strongly encourages a baseload of earnings replacement through auto-enrolment and a modest compulsory matching employer contribution, and enables saving at low cost
 Enables additional saving at low cost
Facilitates purely voluntary pension saving via tax relief

Source: Pensions Commission analysis
Note: The range of 15-18% shown for the impact of default contributions reflects a range of assumptions about number of years of contribution between 25 and SPA.
6. Combined impact of state system reforms and the NPSS: aggregate effects

This section considers three issues:

(i) The impact of the NPSS on aggregate national saving and the capital markets.

(ii) Its impact on public expenditure and the extent of means-testing.

(iii) The possible combined impact of our state and NPSS proposals on future pensioner incomes.

(i) Aggregate impact of the NPSS: national savings rates and total funds size

The aim of the NPSS is to encourage and enable many people who do not currently save for a pension, and who receive no employer contribution, to make contributions and to receive a matching employer contribution in addition. If successful it will increase aggregate national savings, thus delivering one of the four possible responses to the demographic challenge which the First Report identified.

The scale of that increase and the resulting implications for the aggregate size of NPSS accounts, and for the subsequent flow of annuity demand, is clearly dependent on a wide range of assumptions: the participation rates achieved; the extent of voluntary contributions made and the average rates of return achieved.
Figure 6.34 Replacement rates at the point of retirement for someone aged 20 today

Source: Pensions Commission analysis
Note: Assumes earnings growth in line with average and working life from 21 to SPA. Default contributions to NPSS equal to above the Primary Threshold from age 30. Real rate of return 3.5% and 0.3% AMC. State pension is the two-tier option. Assumes that voluntary additional contributions to the NPSS are limited to an absolute amount equal to twice the default amount for the median earner. This may be considered too restrictive in relation to people above average earnings.
Figure 6.35 sets out the illustrative assumptions which we have made for the purposes of estimating possible results. We assume an 80% participation rate (i.e. 20% opt-out) for people with earnings above the LET, but 65% between the Primary Threshold and the LET. We also assume that voluntary additional contributions average 30% of the default level. These are of course only assumptions, and actual experience may differ significantly [See Appendix F for sensitivity analysis]. Indeed in Chapter 11 we discuss the importance of the government tracking what results are actually achieved, and considering appropriate adjustments to policy in the light of experience. But these assumptions give us a feel for the order of magnitudes involved, both as regards flows of new savings and new annuity purchase, and as regards the accumulated stocks of NPSS funds and of annuities which result.

- Figure 6.36 shows possible flow effects. Annual flows into the NPSS could be of the order of magnitude of £7.5 billion (in current earnings equivalent terms) or about 0.6% of GDP. Annual flows of new annuity purchase would rise slow over time, but could, dependent on rate of return assumptions, be about £13 billion (in current earnings equivalent terms) i.e. just over 1% of GDP, when the system reaches full maturity.

- Figure 6.37 shows the possible stock effects. The total stock of NPSS funds would build up slowly but could reach about £200 billion (in current earnings terms), or just under 20% of GDP by about 2040. The total stock of annuities would not reach its maximum until much later (i.e. about 2070) but by then could be about £150 billion i.e. just over 1% of GDP, in current earnings terms (i.e. about 13% of GDP) [Figure 6.38].

If successful therefore the NPSS would play a major role in the UK savings system. But it would not be a dominant role: the majority of savings would still occur on an entirely voluntary basis and would flow through other channels. And the rise in the savings rate, while making a positive contribution to the response to the demographic challenge, will not be so large as to raise concerns about negative macroeconomic impacts.

- The rise in the savings rate suggested by Figure 6.36, would offset partly but not entirely the fall we anticipate will occur as a result of the shift from DB to DC schemes [Figure 6.39]. The long-term macroeconomic impact of the NPSS may therefore be simply to keep funded pension savings, as a percentage of GDP, roughly stable at just below 4% (excluding today’s “catch up” contributions to DB schemes that do not create new pension rights). But while current funded pension contributions are heavily concentrated on the minority of employees who are members of private sector DB schemes, the NPSS will increase the savings of many people not currently making or receiving any pension provision.

---

8 Negative macroeconomic effects from a rise in the savings rates could be either (i) short-term if too sudden an increase depressed consumer demand (ii) long-term, if the increase of saving is so large as to effect the rate of return on investment. The latter danger is however significantly mitigated by the fact that UK savings can be invested in a global capital market, rather than solely in the UK [See Appendix C of the First Report].
Figure 6.35 Assumptions for NPSS aggregates

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution rate</td>
<td>8% of earnings above Primary Threshold</td>
</tr>
<tr>
<td>Additional voluntary contributions</td>
<td>2% of earnings above Primary Threshold</td>
</tr>
<tr>
<td>Rate of return</td>
<td>3.5% real</td>
</tr>
<tr>
<td>Earnings growth</td>
<td>2.0%</td>
</tr>
<tr>
<td>Participation rate</td>
<td>65% Primary Threshold to LET</td>
</tr>
<tr>
<td></td>
<td>80% above LET</td>
</tr>
<tr>
<td>Number of people in scheme:</td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>6.6 million</td>
</tr>
<tr>
<td>Self employed</td>
<td>0.4 million</td>
</tr>
<tr>
<td>Total</td>
<td>7.0 million</td>
</tr>
<tr>
<td>Retirement age</td>
<td>Rising in line with SPA (which rises in proportion to life expectancy)</td>
</tr>
<tr>
<td>Annuity rate</td>
<td>Falling slightly as life expectancy in retirement rises</td>
</tr>
<tr>
<td>Life expectancy in retirement</td>
<td>Rising slightly (since SPA increase is only proportional)</td>
</tr>
</tbody>
</table>

Note: 14 million employees are in addition covered by existing occupational and personal pension policies. It is likely that some of these would switch into the NPSS. But this would not result in an increase in aggregate savings flows and stocks, relative to a no policy change base case. The potential effect of switching already existing savings into the NPSS is not therefore included in Figure 6.36 to 6.39.
Figure 6.36 Inflows and outflows from NPSS

Figure 6.37 Aggregate NPSS funds at different rates of return

Source: Pensions Commission analysis

Note: See Figure 6.35 for assumptions.
**Figure 6.38** Stock of annuities arising from the NPSS

- Percentage of GDP over time from 2010 to 2080.
- Stock of annuities in payment.

**Source:** Pensions Commission analysis

**Note:** Assumes 3.5% real rate of return. See Figure 6.35 for other assumptions.

---

**Figure 6.39** Long run effect of NPSS on private pension savings as a percentage of GDP

- Personal savings
- Private occupational funded savings
- Public funded savings
- Defined benefit special contributions
- NPSS

**Source:** Pensions Commission estimates

**Note:** Assumes membership of private sector DB schemes will ultimately fall by 60% from 2000 level, that all are replaced with DC, that current DB and DC average contribution rates are unchanged, that DB top-ups fall to zero and that other contributions are unchanged.
Clearly it is possible that the shift to Defined Contribution (DC) will also be partly offset by further voluntary increases in saving outside the NPSS. The long-term national savings rate may therefore increase. Such a rise would be an appropriate response to the demographic challenge: since it will occur gradually, it is unlikely to pose any problems.

In the short term however, an increase in the pensions savings rate of the scale suggested (0.6% of GDP), while within natural year-to-year variations, is clearly a significant effect, which could, unless offset by other policy (e.g. monetary policy) produce a measurable reduction in household consumption. The macroeconomic issues involved in the introduction of the scheme therefore require further analysis, and may argue for a phased introduction of the default contributions over a two or three year period [See Appendix D].

Aggregate NPSS funds meanwhile, of an order of magnitude of 20% of GDP, would compare with a total stock of UK equities, corporate bonds and government bonds which is currently worth over 200% of GDP, and with total pension funds and life policies currently amounting to around 140% of GDP. While therefore the NPSS would play a significant role in the UK savings systems, it would not be so large as to have adverse effects on the efficiency of the allocation of capital. This is for two reasons:

- First because NPSS funds will themselves be invested in a large variety of asset classes, with individuals free to make their own asset allocation decisions (though with a default fund option) [see Chapter 10 Section 6].

- Second because any danger that the design of the default fund will seriously skew capital markets behaviour (e.g. by concentrating too much investment in an index fund) will be minimised by the limited scale of the NPSS relative to the total UK capital market, let alone relative to the total scale of the global capital market into which funds could be invested.

The scale of the annual annuity demand and of the eventual annuity stock which could result is significant, but for the reasons set out in Chapter 5 Section 3, we believe can be absorbed by the annuity market, provided policy supports later annuitisation and flexible approaches to retirement fund draw down.
(ii) Aggregate impact of the NPSS: public expenditure and the extent of means-testing

The introduction of the NPSS, by increasing private pensions income, will in itself slightly reduce future public expenditure and the coverage of means-testing, since some people who could not otherwise achieve incomes high enough to lift them above the means-testing withdrawal limits will now do so. On the basis of the assumptions made in Figure 6.35, and assuming that the state system changes outlined in Section 2 vi above have been implemented, the order of magnitude impacts will be as follows:

- Total state pension and pensioner benefit expenditure by 2050 could be reduced by 0.1% of GDP, as payments of Pension Credit are reduced [Figure 6.40].

- The proportion of pensioners covered by means-testing, which we illustrated in Figure 6.20 would reduce as a result of our state pension proposals from 40% to 36%, would be trimmed further to about 33%.
The combined impacts of our preferred state system option and of the NPSS, versus the projected no change base case (i.e. the case of current indexation on (i.e. the case of current indexation arrangements were continued) are illustrated in Figures 6.41, 6.42 and 6.43:

- Total state pension expenditure is not dramatically increased, but the balance shifts from means-tested benefits to pensions deriving from accrued rights [Figure 6.41]. In effect increasing the SPA in proportion with life expectancy allows the same public resources to be used to produce a more coherent system.

- The coverage of means-testing reduces in line with the criteria we proposed, with a major reduction in the proportion of pensioners subject to any withdrawal, a fall in those needing to receive Guarantee Credit to secure the minimum income standard, and only a small increase in the proportion of pensioners receiving only the Guarantee Credit and thus subject to 100% withdrawal, and with this proportion below today’s level [Figure 6.42].

- The total impact of means-testing falls even further than these figures suggest however, with the dramatic fall in total Pension Credit expenditure illustrating that many people still subject to means-testing in 2050 will be so only across a small element of their pension income [Figure 6.43].

- These figures do not show the impact of introducing a universal payment of the BSP for people above age 75. This would increase the short term costs by about 0.15%, as Figure 6.25 illustrates, but would have a smaller impact by 2050 assuming that universal accrual had been introduced. It would not significantly change the estimates of the extent of means-testing.

These base case results all assume that SPA increases gradually to reach 68 by 2005. The trade-off between SPA increase and public expenditure increase is one of the key political decisions which now needs to be debated. It is illustrated in Figure 6.44.
Figure 6.41 Public expenditure on pensioner benefits as a percentage of GDP: 2005-2050

Base case if current indexation arrangements continue indefinitely

With proposed state system reforms and introduction of NPSS

Source: DWP, GAD and Pensions Commission analysis
Chapter 6

Figure 6.42 Percentage of pensioner benefit units on Pension Credit: 2005-2050

Assuming present indexation approaches continue indefinitely: 2005-2050

With proposed state system reforms and introduction of the NPSS

Source: Pensions Commission analysis using Pensim2

Note: Pensioner benefit units are defined as any household with an individual aged over the State Pension Age.
Figure 6.43 Pension Credit cost as a proportion of GDP: comparison of Pensions Commission preferred option and current system assuming current indexation arrangements continue indefinitely

Source: Pensions Commission analysis
Note: See Figure 6.16 for modelling assumptions.

Figure 6.44 The public expenditure versus State Pension Age trade off: state pension and pensioner benefit expenditure as a percentage of GDP

Source: Pensions Commission analysis using Pensim 2
(iii) State pension changes and the NPSS: aggregate impact on pensioner income.

As Chapter 1 Section 1 stressed, private pension income as a percentage of GDP is higher now than in the past, and it will continue to grow for some time, with the retirement of the baby boom generation and as a growing minority of pensioners enjoy fully price indexed DB pensions. This is the delayed effect of the growth of DB pension funds in the 1950s-70s, and of the increasing generosity of DB promises (e.g. as a result of price indexation) in the 1980s and 1990s. But if present private pension saving trends remain unchanged, private pension income will eventually fall, as the closure of DB funds produces a fall in private salary related pensions, with DC pension income not growing sufficiently to offset this effect [See Figure 1.16].

The introduction of the NPSS will help to offset this decline. On the basis of our assumptions we estimate that it might add 0.7% of GDP to pensioner income in 2050 [Figure 6.45] (it would rise further to 1.2% by 2070). Total private pension income would however be more evenly distributed than today, with fewer people enjoying the high generosity of existing final salary promises, but fewer people also with no private pension income to supplement state provision.

In our First Report, we illustrated the challenge which demographic change poses by comparing the percentage of national income which would need to be transferred to future pensioners if both average retirement ages and pensioner income relative to average earnings remained unchanged, versus the pensioner income likely to be produced by the combination of present state policies and present trends in private savings [See Figure 1.12 of the First Report]. We pointed out that one of four things was bound to happen. Either:

- Average pensioner incomes would fall relative to average earnings;
- Or taxes/NI contributions would rise to pay for higher state pension expenditures than currently planned;
- Or average retirement ages would have to rise;
- Or the level of savings flowing into funded pensions would have to rise.

It is not for the government centrally to plan the precise balance of these four possible adjustments. The relative contribution of increased savings and higher retirement ages will in part reflect individual decisions on the trade-off between saving more and working later, and indeed between either of these options and the level of income in retirement. And we should not focus too much attention on averages and aggregates. For instance if, as we suggested above, the NPSS simply offsets the fall in the savings rate which the DB to DC

---

9 The analysis in Figure 1.21 and in Figure 6.46 focuses on income flowing to pensioners above SPA, whereas Figure 6.45 looks at total pension income, including to people who retire below SPA. As the First Report pointed out 40% of pension income currently flows to people who have retired prior to SPA.
Figure 6.45 Effect of the NPSS on total private pension income as a proportion of GDP by source: 2005-2050

Source: FRS, Blue Book, and Pension Commission analysis

Note: Pension income based on Pension Commission estimates from the Family Resources Survey, the Blue Book Pensions2 and Pension Commission modelling. Includes income from annuities and lump sum payments.

It is possible that the introduction of the NPSS may produce switching of contributions from existing DC schemes into the NPSS. This effect is not considered here since it does not affect the aggregate level of pension income.

In 2050 income from the NPSS has not yet reached its maximum level. Full maturity is reached around 2070 with income as a percentage of GDP of around 1.2%.
shift would otherwise produce, there will be no change in aggregate national savings, but the creation of the NPSS will beneficially produce additional savings by those individuals least able today to save cost-effectively and most likely to be facing inadequate pensions.

It is nevertheless useful to illustrate how the measures we have proposed might tend to affect the aggregate values suggested by Figure 1.21. Figure 6.46 shows the order of magnitude impacts which are possible:

- Income flowing to pensioners above SPA is currently around 9.4% of GDP, but would already be 9.9% if our proposals for a more universal approach to the BSP had applied in the past. If this level of pension generosity were to be provided in 2050, without any increase in pension or retirement ages, about 14.5% of GDP would have to flow to pensioners aged over SPA.¹⁰

- A rise in average retirement ages should and probably will play a major role in bridging the gap. We have suggested that the SPA should rise broadly in line with life expectancy, reaching 68 in 2050. If this increase is matched by an increase in average retirement age, the proportion of GDP which will need to flow to people above SPA will reduce from 14.5% to 11.8%.

- Our proposals for the state pensions system would produce an increase of 1.6% in total spend as a percentage of GDP compared with today, and an increase of 1.1% versus what expenditure would be today if the problems with the contributory system had already been fixed.

- Unchanged plans for public sector employee pensions would result in an additional 0.4% of GDP flowing to pensioners above SPA (as well as significant pensions to retirees below SPA).

- The NPSS would, on the assumptions we set out above, deliver an increase in pensioner income, equivalent to about 0.7% of GDP by 2050, rising further to around 1.2% by 2070.

The measures proposed would therefore make a major contribution to closing the gap identified. In purely mathematical terms indeed Figure 6.46 illustrates an almost exact solution. This result should not however be misinterpreted. It does not imply that government should seek precisely to define total pension income flowing to pensioners at any time. As the middle “individual choice” bar on Figure 6.46 illustrates, the actual result will reflect individual choices between retirement age, savings rate, and income in retirement.

Our proposals will however ensure that those people who lack the income to make those choices are adequately provided by the state, and that those who do have the income to make those choices are better able to do so because of the encouraging and enabling role which the state will play.

---

¹⁰ As we pointed out in the First Report, a significant proportion of pensioner income actually flows to people below SPA who are not counted as “Pensioner Benefit Units” in the FRS calculation of total pensioner income.
Figure 6.46 The implications of current plans and savings behaviour for the percentage of GDP transferred to pensioners aged above SPA

<table>
<thead>
<tr>
<th>Description</th>
<th>0%</th>
<th>5%</th>
<th>10%</th>
<th>15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present transfer to pensioners aged over SPA</td>
<td>9.4%</td>
<td>9.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required in 2050 to keep pension incomes stable relative to average earnings: if male and female retirement ages equalise but no further increase beyond 2020</td>
<td>11.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required if retirement ages rise in line with proposed SPA increases</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possible transfer in 2050</td>
<td>12.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact of proposed state system reforms plus NPSS*</td>
<td>0.4%</td>
<td>1.1%</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td>Present transfer to pensioners aged over SPA</td>
<td>9.4%</td>
<td>9.9%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Public sector pensions
- State pensions
- NPSS
- Total pension income
- Additional spend to fix existing problems with contributory system

Source: Pensions Commission analysis

Note: * Plus additional flow of income to public sector employees on unchanged plans: this is less than the 0.7% increase illustrated in Figure 1.20, because of the 40% of public sector employee pensions which flows to people below SPA.
7. The Pensions Commission's recommendations: essential points and judgements on the preferred way forward

In this Chapter we have assessed the implications of two alternative ways forward for the state pension system, and of alternative assumptions about NPSS contribution rates. We have indicated the judgements which the Pensions Commission would on balance reach, and the contributions rates we believe should be considered.

In summing up our recommendations it is useful to distinguish between:

(i) Definitive recommendations on the overall thrust of pension policy reform which we believe are essential to deliver a more effective system.

(ii) Our on balance judgements and recommendations on the precise way forward.

(i) Definitive recommendations on the thrust of pension policy reform

The Pensions Commission recommends that there should be a new settlement for UK pension policy based on:

- The creation of a National Pensions Savings Scheme (NPSS) into which individuals will be automatically enrolled, but with the right to opt-out, with a modest minimum compulsory employer contribution when the individual stays enrolled.

- Reforms to make the state system of flat-rate pension provision less means-tested than it would be if current indexation arrangements continued indefinitely and to ameliorate the disadvantages suffered by people with interrupted paid work records and caring responsibilities.

- An acceptance that this implies both:
  - Some increase over the long-term in tax/NI devoted to pensions as a percentage of GDP.
  - A long-term policy of increasing State Pension Ages in line with life expectancy increases.
(ii) Preferred way forward

These eventual objectives could be achieved in a number of different detailed ways. There are for instance many aspects of the design of the NPSS which will need to be agreed following consultation and detailed implementation planning; these are described in Chapter 10. And the objective of a state system which is less means-tested and more favourable to people with interrupted paid work records and caring responsibilities, could in principle be pursued either via the creation of a unified ESP, or building on the existing two-tier system. Our judgement is however that the best way forward entails:

- An NPSS within which total minimum default contributions are set at 8% of earnings above the Primary Threshold and below the current value of the UEL, with compulsory matching employer contributions accounting for 3% out of this 8%, tax relief effectively paying for 1%, and employee contributions out of post tax earnings thus amounting to 4%.

- The gradual evolution of the two-tier state pension system and specifically the following policies:
  - Acceleration of S2P’s evolution to a flat-rate system, achieved by freezing in nominal terms the maximum earnings level for S2P accruals.
  - A halt and reversal of the spread of means-testing, achieved by indexing the BSP to average earnings over the long-term, and by freezing the maximum value of the Savings Credit in real terms.
  - Moving future BSP accruals onto a universal residency basis.
  - An indicative plan to increase the SPA in proportion to life expectancy, such as to 68 by 2050 (or 67 for the BSP and 69 for the S2P), but with the precise path to reflect future life expectancy developments.
  - And ideally, and subject to affordability, the introduction of a universal BSP for pensioners over 75 years old.
In Chapter 6 we recommended two elements of reform:

- The replacement over time of the present limited degree of earnings-related compulsory pension provision, with a more extensive National Pension Savings Scheme (NPSS) into which people will be auto-enrolled but with the right to opt-out.

- Changes over time to the state flat-rate system to make it less means-tested, better designed to cope with increasing life expectancy, and fairer to people (particularly women) with caring responsibilities.

We believe that reforms of this nature are essential given the gaps and deficiencies in present state provision, and given that employers will not voluntarily for reasons of self-interest perform as extensive a role in pension provision as they have in the past.

But there should and will continue to be a significant role for voluntary pension provision, by employers and by individuals. This reflects the facts that:

- The proposed auto-enrolment system is designed strongly to encourage people up to a certain level of income (e.g. £35,000) to achieve at least a base load of income replacement in retirement (e.g. 45% at the median earnings level of £22,000), but it is not designed to ensure that all people achieve the replacement rates they will on average want.

- We start with extensive voluntary pension provision. While we have pointed out in this report that about one-sixth of present private pension saving is compulsory (i.e. deriving from the contracted-out rebate) the converse is that five-sixths is voluntary. And while Defined Benefit (DB) final-salary schemes are in decline, 3.6 million people are still accruing new rights under private-sector DB schemes, and another 5 million in the public sector.

- Looking forward, our base case projections suggest that the NPSS may produce additional pension savings of about 0.6% of GDP. But voluntary private pension saving, even given the decline of DB schemes, is likely to account for a higher percentage. (Our base case estimate is 3.1% [see Figure 6.39].)

It is therefore essential that the changes proposed are introduced in a way which does not undermine existing voluntary pension provision and that we identify any other measures required to maintain and encourage the voluntary system.
This chapter therefore considers:


2. Tax relief as an incentive to employer and individual pension saving.

1. Alternative provision from the National Pension Savings Scheme: opt-out arrangements

We have proposed that there should be a National Pension Savings Scheme (NPSS) into which individuals are auto-enrolled, and while the precise level of contributions will require further detailed consideration by government, we have indicated that a minimum default contribution of about 8% (4% net contribution from the employee, 1% tax relief plus 3% employer minimum contribution) is likely to make sense. For the 9 million employees with earnings above the Primary Threshold who are currently not members of an employer-based pension scheme, this would clearly increase pension saving. But it would represent a lower level of pension saving than that provided voluntarily under many existing schemes.

- It would deliver significantly smaller pensions than those provided by almost all DB schemes, which typically have an underlying cost of around 20% of salary.

- And we estimate that for nearly half of existing Defined Contribution (DC) scheme members combined employer and employee contributions are in excess of this indicated minimum level [Figure 7.1].

It will therefore be important to design detailed arrangements of the NPSS which ensure that:

- We do not disrupt existing attractive pension arrangements.

- We minimise any dangers that there will be "levelling down" to the default contribution level (for employees) or to the minimum compulsory matching contribution (for employers).

Three specific issues need to be resolved:

(i) Individual opt-out into non-saving or into individual pension arrangements

On this issue the way forward is clear. The principle of the auto-enrolment scheme is that while people are strongly encouraged to participate, they can, if they deliberately choose, opt-out. And there is no need for the technicalities of opt-out (discussed in Chapter 10) to make a distinction between those opting-out into no savings, and those opting-out into personal pension arrangements.
Figure 7.1 Estimated distribution of combined employee and employer contribution rates in occupational DC schemes adjusted for contracting-out

Source: Estimates based on data from occupational pension schemes 2004, GAD
Note: Results are not directly comparable to the data presented in the First Report.
GAD have been able to apply the contracting-out rebate adjustment at the respondent level rather than at the aggregate level which was necessary previously.
A better response rate in the 2004 survey will also have affected the results.

(ii) Employer contributions to alternative schemes

We are proposing that there should be a relatively modest level of compulsory employer contributions (e.g. 3%) to the national auto-enrolment scheme whenever an individual contributes. Clearly employers would be completely free and would be encouraged to provide other additional pension benefits. And clearly employees would be free to opt-out of auto-enrolment into the NPSS and join an alternative employer pension scheme (or remain in one of which they were already a member) if this gave better value. The issue is whether employers should be allowed not to apply the NPSS auto-enrolment procedures, instead auto-enrolling individuals into their own schemes without giving employees the option of receiving a matching employer contribution into the NPSS. There are two arguments against:

- The first is administrative complexity. The more “opt-outs” are allowed, the more complex the administration of the NPSS becomes.
The second relates to the problems of individual pension fund proliferation during the course of working life. If an individual becomes a member of the NPSS during employment with a specific company, and receives a matching employer contribution, and then moves to another job, contract proliferation is limited by requiring a new employer to make contributions to the NPSS rather than to a pre-existing scheme.

The counter argument is that we should not interfere with existing good quality pension provision, and in particular should not force companies presently providing DB pensions to switch to a DC system, thus accelerating still further the DB to DC shift. We believe that these arguments for allowing employer opt-out are stronger, and that the arrangement shown in Figure 7.2 will be workable.

Employer opt-out would be possible into DB schemes. Any employer providing DB benefits which, as assessed by the Government Actuary's Department (GAD), are worth more than the expected value of the default contributions to the NPSS, would be free of the requirement to auto-enrol any employees into the NPSS, provided they apply an auto-enrolment mechanism within their DB scheme and provided all employees can join that scheme. (Where auto-enrolment is applied only to a subset of employees, other employees would still have to be auto-enrolled into the NPSS.) Almost all DB schemes would pass the contribution level element of this test. We therefore anticipate that the proposed introduction of an NPSS need have no adverse effect on existing DB provision.

Employer opt-out would also be possible into DC schemes if the employer’s contribution is at least the same level or greater than the minimum compulsory match in the NPSS, if the combined employer and employee contribution exceeds the combined level in the NPSS (taking into account the level of charges), and if auto-enrolment is applied. Contract proliferation could be constrained by allowing anyone leaving such an employer to request a fund transfer into the NPSS (the issue of whether there should be any maximum limit to such transfer is considered in Chapter 10 Section 2). Many but not all DC schemes will pass this “superior contribution” test.

(iii) Contributions above the default level to the NPSS

Our proposal is that there should be a default level of contributions into the NPSS and a minimum level of employer contribution if the employee contributes at the default level. Two issues then arise:

- Whether contributions below this default level should be allowed (this is discussed in Chapter 10).

- Whether contributions above this level should be allowed, whether by employees or employers.
Figure 7.2 How employers could opt-out of the National Pension Savings Scheme

DB, DC or hybrid schemes could be eligible to opt-out of the NPSS if:

1. Overall benefits in/contributions to the scheme equal to or above NPSS levels
   - DB scheme benefits accrued by most members to exceed estimated default level NPSS benefits.
   - For DC scheme contributions:
     - Employer contributions of at least the level of compulsory match in NPSS.
     - Total employer and employer contributions, net of all costs and fees, at least at the level of default contribution in NPSS (net of costs).

2. Auto-enrolment
   - To opt-out the company must either:
     - auto-enroll all employees who would otherwise qualify for NPSS into the occupational scheme;
     - or, if the occupational scheme has restricted access (e.g. a waiting period), the employer must operate two schemes. Employees eligible to join occupational scheme must be auto-enrolled into it. Employees not eligible for the occupational scheme must be auto-enrolled into the NPSS.
Clearly any such “additional contributions” would be voluntary. An argument against could however be made that allowing additional contributions might tend to increase the likelihood of the wind-up of existing pension schemes. We believe however that the arguments in favour are compelling, and that the ability to make contributions above the default or minimum would reduce the dangers of “levelling down”, since it will enable employers as well as employees to maintain generous pension contributions while, if they wish, gaining the simplification benefits of concentrating pension provision within the national scheme.

Given these arrangements, we believe it will be possible to introduce a NPSS without interfering with existing voluntary pension arrangements, and that many employers will continue to provide more extensive voluntary provision than is required by the national minimum, whether via the maintenance of existing schemes or through “above minimum” contributions to the national scheme. One of the reasons why they should logically do so is that remunerating people via pension contributions carries significant tax advantages. The next section therefore considers whether any reforms are appropriate to improve the effectiveness of tax relief, or to improve understanding of its advantages.

2. Tax relief as an incentive to employer and individual pension saving

This section makes four points:

(i) Tax relief and employers’ National Insurance (NI) relief significantly improve employers’ incentives to remunerate most employees through pension contributions.

(ii) But the benefits of tax relief are poorly understood, unevenly distributed, and the cost is significant. Proposals are often therefore made that the system of pension tax relief should be significantly reformed.

(iii) Major reform would however create huge implementation complexities, and it would be extremely difficult to get rid of some existing inequalities without introducing others. We do not therefore recommend any reform of the overall system of tax relief in the short term (e.g. next five years at least). But a specific simplified tax regime to apply only to the NPSS should be considered.

(iv) The primary focus of policy initiatives should be on ensuring that individuals and employers are aware of the significant benefits of tax relief, and on reducing the adverse impact of anticipated future means testing which currently undermines the benefits of tax incentives for some lower and middle income people.
(i) Tax and National Insurance relief improves incentives for pension provision/saving

Pension saving in the UK is significantly favoured by the tax and NI system. The panel at the end of this chapter explains the current system of taxation for pension savings and compares it with that which applies to Individual Savings Accounts (ISAs) and to non-tax-advantaged saving. The overall effect of this treatment for the median earner paying basic rate tax is illustrated in Figure 7.3. Under reasonable assumptions their pension is increased by 8% over that which could be obtained by saving out of post-tax earnings into an ISA, and by 17% over that which could obtained if they saved out of post-tax income into accounts subject to the normal rate of tax on investment income. This 17% advantage versus the “normal” tax treatment arises from three effects: the absence of tax on investment income during the accumulation period; the fact that the lump sum is tax free; and the fact that tax relief on contributions will for the average earner be at a marginal rate of 22%, while the pension received will in the case illustrated be taxed at an average rate of 17% [Figure 7.4].

Such a person would however be even better off if she could persuade her employer to make employer pension contributions on her behalf, reducing cash wages but keeping the total labour cost to the employer unchanged. Figure 7.5 illustrates that in this case she is 30% better off saving through a pension than through an ISA, and 40% better off than saving in a non-tax privileged form. This additional advantage arises because employer pension contributions, unlike cash wages, are not liable to employer NI.

The economic rationale for a company voluntarily to provide pensions is therefore that paying workers via pensions is far more tax-efficient than paying them via cash wages. Figure 7.6 illustrates the very large impact of this on the rate of return which people can receive on consumption foregone. An average earner who could achieve a pre-tax real rate of return on savings of 2.7% (across both the accumulation and decumulation phases) would, if they saved outside an pension scheme, make a total net return of about 1.6% real after taxes and charges and means-testing effect. If their employer instead made a contribution into a pension scheme, and if both the total labour cost to the employer was unchanged and the individual’s net pay after pension contributions, tax and NI was unchanged, the same person could achieve a post-tax real rate of return (across both the accumulation and decumulation phases) of 3.2%. For anybody whose required rate of return on saving was 3.2% or less, this lower cash wage but higher pension package would be more attractive: and the employer would gain more recruitment and retention advantage in the labour market for the same overall cost (if actual and potential employees understood the trade-off).
Figure 7.3  Impact of tax relief on retirement income: basic rate taxpayer

Source: Pensions Commission analysis

Note: Assumes individual saves 15% of salary from age 25. Real rate of return is 3.5% and the Annual Management Charge is 1% during the accumulation phase for all savings products. For more details on the modelling see Appendix F.

Figure 7.4  Breakdown of tax relief on retirement income: basic rate taxpayer

Source: Pensions Commission analysis

Note: Assumes individual saves 15% of salary from age 25. Real rate of return is 3.5% and the Annual Management Charge is 1% during the accumulation phase for all savings products. For more details on the modelling see Appendix F.
**Figure 7.5** Impact of salary sacrifice on retirement income: basic rate taxpayer

<table>
<thead>
<tr>
<th>Taxable savings</th>
<th>ISA</th>
<th>Pension saving out of gross income</th>
<th>Impact of salary sacrifice and lower AMC</th>
<th>Total retirement income if saving via salary sacrifice</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>120</td>
<td>140</td>
<td>160</td>
<td>180</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis

Note: Assumes individual saves 15% of salary from age 25. Real rate of return is 3.5% and the AMC is 1% for all savings other than the employer salary sacrifice pension and 0.5% in employer based pension. Salary sacrifice means that the individual takes a cut in gross pay so that take home pay after tax, NI and pension contributions remains constant and the employer puts that pay and the relevant National Insurance contributions into the pension fund as an employer contribution. For more details on the modelling see Appendix F.

**Figure 7.6** Effective rate of return on non-pension and pension saving: basic rate taxpayer on salary sacrifice scheme

<table>
<thead>
<tr>
<th>Return on own contributions assuming no tax or management charges</th>
<th>Impact of tax and charges</th>
<th>Fully taxed and facing charges (net return on non-pension saving)</th>
<th>Impact of salary sacrifice</th>
<th>Net return on pensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>3%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis

Note: Assumes individual saves 15% of salary from age 25. Real rate of return is 3.5% and the Annual Management Charge is 0.5% during the accumulation phase in other saving products. For more details on the modelling see Appendix F.
(ii) Tax relief benefits costly, unevenly distributed, and poorly understood

These important incentives to pension provision are however expensive. It is therefore concerning that the benefits are not focused on those most in danger of under saving, and are not well understood.

- The total cost of pension tax relief is estimated by the HM Revenue and Customs (HMRC) at £12.3 billion per year. As the panel at the end of the Chapter explains the calculation is complex and it is possible to argue that the figure is an overstatement since it fails to reflect fully the timing differences between tax relief given (on contributions) and tax imposed (on benefits). But it is clear that the cost is significant, as it must be since many people benefit in the fashion illustrated above. The cost of employer NI relief meanwhile is about £6.8 billion given the current level of employer pension contributions.

- The benefits of this significant cost to the Exchequer are however extremely unequally distributed, and do not flow primarily to those most in danger of under-saving. Thus:

  - Figure 7.7 illustrates the increase in pension resulting from the tax relief system given reasonable assumptions about contributions and investment return rates, at different levels of earnings during working life. The precise slope of the overall effect line reflects the combination of the three effects already mentioned: investment return tax relief; the tax free lump sum; and the “tax rate step down effect” (i.e. the fact that people generally pay a lower tax rate on pension income than the rate at which their contributions were received, since their total income is lower in retirement). The latter effect has a complex relationship to rising earnings, first falling and then increasing as Figure 7.7 shows. This pattern derives from the fact that the value of the “tax rate step down effect” is determined by the difference between the marginal rate of tax relief during working life and the marginal tax rate on private pension income during retirement. As Figure 7.8 shows this difference first diminishes with rising income, then rises once working life income goes above the higher rate tax threshold, before then slowly declining again. But the overall message is clear: the beneficial impact of tax relief on the rates of return of savings is much higher for higher-rate taxpayers than for basic rate or lower-rate taxpayers. And this is not simply because tax relief undoes the higher detrimental effect on rates of return which higher tax rates would impose on non-tax privileged saving; higher tax rate payers can achieve through pension savings higher post-tax rates of return than those enjoyed by basic-rate taxpayers [Figure 7.9].
Figure 7.7 Impact of tax advantages across earnings bands

![Impact of tax advantages across earnings bands](image)

Source: Pensions Commission analysis

Note: Assumes individual saves 15% of salary from age 25. Real rate of return is 3.5% and the Annual Management Charge is 1% during the accumulation phase for all savings products. For more details on the modelling see Appendix F.

Figure 7.8 Difference in tax rates during working life and retirement

![Difference in tax rates during working life and retirement](image)

Source: Pensions Commission analysis

Note: Assumes individual saves 15% of salary from age 25. Real rate of return is 3.5% and the Annual Management Charge is 1% during the accumulation phase for all savings products. For more details on the modelling see Appendix F.
Figure 7.9 The impact of tax and of tax relief on returns on investment

Basic rate

<table>
<thead>
<tr>
<th>Return on own contributions assuming no tax or management charges</th>
<th>Impact of tax and charges</th>
<th>Fully taxed and facing charges (net return on non-pension saving)</th>
<th>Impact of tax relief</th>
<th>Net return on pensions</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Real rate of return</th>
<th>0%</th>
<th>1%</th>
<th>2%</th>
<th>3%</th>
<th>4%</th>
</tr>
</thead>
</table>

Higher rate

<table>
<thead>
<tr>
<th>Return on own contributions assuming no tax or management charges</th>
<th>Impact of tax and charges</th>
<th>Fully taxed and facing charges (net return on non-pension saving)</th>
<th>Impact of tax relief</th>
<th>Net return on pensions</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Real rate of return</th>
<th>0%</th>
<th>1%</th>
<th>2%</th>
<th>3%</th>
<th>4%</th>
</tr>
</thead>
</table>

Source: Pensions Commission analysis

Note: Assumes individual saves 15% of salary from age 25. Real rate of return is 3.5% and the annual management charge is 0.5% during the accumulation phase. For more details on the modelling see Appendix F.
Figure 7.10 Effective rates of return on saving for someone who ends up on Pension Credit in retirement

Source: Pensions Commission analysis
Notes: Assumes individual saves 15% of salary from age 25. Real rate of return is 3.5% and the Annual Management Charge is 1% during the accumulation phase for all savings products. For more details on the modelling see Appendix F.
– Inevitably therefore, a large proportion of all tax relief (over 50%) is received by the 12% of employees who pay higher rate tax. This focus of some of the benefits of tax relief on higher-rate taxpayers could be justified if in principle we favour a tax system based on expenditure tax principles (i.e. one in which people are only taxed on consumption and not on saved income or investment return). But if pension tax relief has been introduced in order to achieve the social objective of encouraging people to make adequate provision for retirement, it is clear that the current skew towards higher-rate taxpayers is not optimal. The biggest problems of pension under-saving lie not among higher earners but among average and below average earners.

– It is moreover average and lower earners who are most likely to see the beneficial effects of tax relief on pension saving returns offset by the means-tested withdrawal of the Savings Credit. Thus for instance, as Figure 7.10 demonstrates, it is possible that for a basic rate taxpayer in working life, whose private pension income in retirement fell within the Savings Credit thresholds, the combined effect of the tax relief and means-testing can be negative, reducing the rate of return well below that achievable in a zero tax and zero benefit environment. And while it is true that for some lower income people at some stages of their life, this effect may be in turn offset by the impact of the Working and Child Tax Credit (which make some people effectively subject to a 59% marginal tax rate, and thus able to receive 59% tax relief on pension contributions) this is understood by a very few individuals and very few financial advisers.

More generally indeed the potential benefits of tax relief on pension saving are poorly understood. Surveys reveal that only a minority of either basic rate taxpayers or higher rate taxpayers can correctly identify the tax relief rate which they can receive and in many cases are already receiving. Both categories of taxpayer tend to underestimate the scale of tax relief and many people saving for a pension seem unaware of the benefits of the tax free lump sum [Figure 7.11 and 7.12].
**Figure 7.11** What do you think is the level of tax relief you are personally entitled to receive on your pension contributions?

**Basic rate tax payer**

<table>
<thead>
<tr>
<th>Level of Tax Relief</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>3%</td>
</tr>
<tr>
<td>Less than 22%</td>
<td>26%</td>
</tr>
<tr>
<td>22%</td>
<td>17%</td>
</tr>
<tr>
<td>Between 22 and 40%</td>
<td>7%</td>
</tr>
<tr>
<td>40%</td>
<td>1%</td>
</tr>
<tr>
<td>More than 40%</td>
<td>1%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>44%</td>
</tr>
</tbody>
</table>

**Higher rate tax payer**

<table>
<thead>
<tr>
<th>Level of Tax Relief</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>3%</td>
</tr>
<tr>
<td>Less than 22%</td>
<td>19%</td>
</tr>
<tr>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>Between 22 and 40%</td>
<td>9%</td>
</tr>
<tr>
<td>40%</td>
<td>28%</td>
</tr>
<tr>
<td>More than 40%</td>
<td>3%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: Pensions and Savings Index, Survey 1 (Sept 2003), by YouGov for the ABI  
Notes: Results are percentages of the relevant population.

**Figure 7.12** Was the option of the tax free lump sum an incentive to save into a pension for you?

Source: ABI and YouGov: Second Annual Savings and Pension Index, November 2004
(iii) Implementation complexities make major reform impractical

Pension tax relief is costly, poorly focused and not well understood. Unsurprisingly therefore the Pensions Commission received many submissions suggesting that it should be reformed to make its benefits both better focussed and clearer. A common proposal was that tax relief should be at an equal rate for everyone and therefore higher than at present for basic rate tax payers and lower for higher rate tax payers. Some submissions also suggested it could be recast as a government “matching contribution”. This would mean that for all pension savers, up to some level of contributions, the tax benefit would have the same percentage effect on the rate of return achieved. If the present £12.3 billion spent on tax relief was recast in this fashion, and at current levels of pension contribution, it would be possible to provide a matching contribution of 43%.

This proposal clearly has significant attractions in principle. It would improve rational incentives to save via pensions (individually or via employer contributions) for many lower income people who are currently accruing inadequate pensions. It would also make these incentives much clearer; people would be far more likely to understand the benefit offered. But our analysis has suggested that there would be enormous difficulties in actually implementing this principle.

The difficulties relate primarily to DB schemes. As the panel opposite explains they arise because in a DB environment the true economic cost of the pension rights accrued in any one year as a percentage of salary; (i) varies hugely between individuals, reflecting both their lifetime average earnings, their year-by-year salary progression and their life expectancy; (ii) is not directly related to the level of cash contributions flowing into the pension fund in each year; and (iii) is only currently calculated each year for the fund members who are directors of public companies or who are close to the annual limit. As a result any economically sound and fair implementation of the principle of “an equal rate of tax relief at all earnings levels” would require DB funds to make new calculations each year for all members (about 9 million in total across the public and private sectors). It would also require people who receive significant salary increases (for instance on promotion) to pay in the relevant year additional taxes which could significantly reduce their post-tax cash income.

---

1 A pre-match contribution of £100 would attract a match of £43. This is equivalent to a 30% rate of tax relief.
The complexities of reforming tax relief in DB schemes

DB pension schemes accrue individual rights to future pensions based on formulae linked either to final or average salaries over the whole of working life. Contributions are made by the employer and the employee to keep the pension fund in balance, but the contributions made in any one year do not bear any necessary relationship to the value of the rights accrued that year: for instance in the 1990s, combined employer and employee contributions in many funds were far below the value of the rights accrued. Contributions made cannot, therefore, be used as the basis on which to calculate the increase in value for the purpose of calculating tax relief.

This does not create a problem for the operation of tax relief as long as unlimited tax relief is granted at each person's marginal rate. No tax is payable on the increase in the accrued value of the pension rights in each year (which for most people is not calculated), but even if we did calculate this increase, still no tax would be payable, since all of the increase would be deductible from taxable income. Nor does it create a problem in limiting the total amount of tax relief given, which can be limited in two ways:

(i) By limiting the salaries in respect to which it is possible to accrue pension rights within a tax-privileged pension scheme (this was the approach taken for new members of DB pension schemes under the post 1989 tax regime for pensions).

(ii) By limiting the total value of tax exempt pension rights which can be accumulated. This requires calculations for people later in life who have accumulated significant pension rights and who may be close to or over the limit, but it does not require an accurate calculation for all employees.

It does, however, create a problem in applying a "single rate of tax relief" to people of different marginal tax rates each year. A single relief rate will be higher than the individual’s marginal tax rate for some people, but lower than the marginal tax rate for others. In the DC environment this creates only small operational complexities: employee contributions would effectively be made out of post-tax earnings, with the tax relief then given as a "government match". Employer contributions are, by their nature, paid out of pre-tax earnings and they would either attract additional relief (for people whose marginal tax rate is below the unified matching rate) or attract some tax (for those people whose marginal tax relief is above the single matching rate).

Applying the same principle on a fair and equivalent basis to the DB environment is however very complex. It requires that the increase in the value of pension rights accrued during the year is calculated not just for a few high earners (for the purpose of remuneration reports or to check that people have not exceeded the annual limit on contributions) but in principle for all employees. And it is not easy to design "rules of thumb" which produce accurate approximations to the correct figures. This is because the underlying value of a steadily accruing DB pension right varies hugely according to an individual’s salary progression. Someone who joins an organisation promoting a final salary scheme who starts on £15,000 per annum and remains at that relative earnings level through working life, receives a benefit worth around 15% of annual salary. Someone who progresses steadily to the top of the organisation, ending with a salary of say £150,000, enjoys a benefit worth about 30% of annual salary. Allowing for this in a precise rather than a rule of thumb fashion would however be administratively very complex. And it could require that some individuals who received major salary increases in a particular year would have to pay very high tax rates as a percentage of their cash remuneration.

It is these complexities which led the Inland Revenue (now HMRC) in the course of its recent analysis of tax simplification options to conclude that the only way of unifying and making more equitable the tax treatment of DB and DC pensions, was through a limit that applies to the total aggregate sum accumulated, are increasing significantly the annual limits on contributions. The same logic however suggests that introducing a unified tax relief rate would be extremely complex as long as a significant element of DB provision remains in the system.
The pension tax relief system has developed in ways which respond to these difficulties. Originally, prior to 1989, there were no limits on the salary in respect to which you could accrue DB rights, or out of which you could make DC contributions which enjoyed tax relief. When limits on relevant earnings were introduced in 1989, these took two different forms (though with several sub-variants for different forms of DC schemes). For DC funds, they limited the value of contributions that could receive tax relief in any one year; for DB funds they limited the salary in respect to which future pensions could be accrued on a tax relieved basis. This distinction reflected the fact that while the level of contributions is a known fact in a DC scheme, the value of rights accrued each year is not a known fact in the DB case. And it was a feasible distinction because tax relief was given at each person’s marginal rate. If a single rate of relief had been applied, “implicit contributions” would have had to be calculated for members of DB schemes.

This system however had the disadvantages that it was potentially unfair in its different treatment of DB and DC schemes, and that the existence of multiple different tax regimes increased complexity and made it more difficult for people to aggregate different pension rights earned under different schemes and tax regimes. A major tax simplification is therefore now being introduced which unifies the treatment of DB and DC schemes (and of all the different types of DC scheme) placing the key limit not on contributions nor on relevant salary, but on the capital sum accumulated (which in turn determines the pension likely to arise in retirement). The Pensions Commission’s analysis has led us to agree that focusing on the tax relievable capital accumulated is the simplest approach to limiting tax relief in a way which treats all schemes in an equivalent fashion. While it does require some calculations of the value of DB rights accumulated in any year, it limits the number of those calculations, since they will only be required for people with significant accumulated funds. This new system, moreover, is being introduced at considerable implementation cost in April 2006: very strong arguments in favour of a clearly feasible alternative would be required to justify a further change in the foreseeable future.
No such feasible alternative has been suggested to us which could cover both DB and DC schemes, and it would not be reasonable to introduce a new “unified rate” system for DC schemes alone, since this would disadvantage higher rate taxpayers in DC schemes versus those in DB schemes, at a time when one of the key features of the present environment is the huge advantage that DB scheme members (at all earnings levels) already enjoy over people in DC schemes.

The Pensions Commission has therefore reached the conclusion that major reform of the tax relief system along the “equal rate of tax relief” principle is simply not practical in the near future and as long as DB plays a major role within the system, whether in the private or public sector. The chosen system for constraining the total level of tax relief which people can enjoy is and will be in the near future the final capital sum system, with the cap currently set at £1.6 million (rising to £1.8 million in 2010).

That implies that the only practical way to limit tax relief to higher earners in order to redistribute it to lower earners, would be to reduce the value of the £1.8 million limit, either relative to earnings (by price indexing it rather than earnings indexing it) or in real terms (by leaving it fixed in nominal value).
Present government plans are to review the limit every five years. If the limit is linked to prices this will very slowly over time erode its value relative to average earnings, and thus in the very long term reduce the effective tax relief available to some high earners. The pace at which this occurs will however be extremely slow, and it is possible that tax relief to high earners will increase in the short term, as the new arrangements make it easier for people to utilise to the full the tax reliefs potentially available to them [Figure 7.13]. Over the long term further scope for rebalancing tax relief in favour of lower income earners could be created, if for instance the £1.8 million cap was fixed in nominal terms for a number of years. But any improvements in the pensions tax treatment of lower earners over the medium term (say up to 10 years) would entail net cost to the Exchequer and their effectiveness in stimulating pensions savings would therefore have to be assessed relative to the alternative of higher public expenditure on state pensions.

There may however be scope to introduce a simplified tax regime within the National Pension Savings Scheme, while leaving the tax regime for all other pension saving unchanged. The feasibility of such a scheme specific tax regime is analysed in Chapter 10 Section 9. Whether or not such a scheme specific arrangement is possible, the tax relief required for the NPSS should mirror the approach currently used for Stakeholder Pensions, which ensures that starting rate (i.e. 10%) tax payers, and the economically inactive can attract tax relief on pensions contributions at the basic rate of 22%.

(iv) Improving understanding of existing tax and NI reliefs: reducing the impact of means-testing

Since radical simplification of the tax treatment of pensions is not feasible, the key priorities are instead to ensure that people and companies are more aware of the benefits which already exist.

The launch of the NPSS will in itself create a natural opportunity for that communication. Publicity around the launch and communication with employers and with individual members should make plain the significant impact which the combination of tax relief and the compulsory matching employer contribution will have on the returns achieved on fund investment.

This communication will only be effective, however, if simultaneous steps are being taken, as described in Chapter 6, to ensure that the future evolution of the state system entails less means-testing than would apply if current indexation arrangements continued. Without these steps, the benefits of tax relief (and of the matching employer contribution) will for some people be offset by the impact of means-testing which Figure 7.10 demonstrated.
Figure 7.13 “A” Day tax simplification

From April 2006 the eight existing tax regimes will be unified into one regime with the following key features:

**Two key limits within the system**

- Annual allowance: pension contributions are limited to £215,000 per year (up to 100% of annual earnings). In DB schemes the contribution is measured as the increase in capital value of DB rights (on a simplified basis).

- Lifetime allowance: limits the accumulation of tax advantaged pension saving. The limit is £1.6 million at introduction in 2006 increasing to £1.8 million in 2010. Funds above this limit will be subject to taxation on withdrawal to reclaim the excess tax relief given.

**Greater flexibility in investment**

- Investment allowed in most categories of assets (through Self Invested Personal Pensions), including residential property, although subject to limits on borrowing.

**Single set of rules in payment**

- Allowing scheme members to take a tax-free lump sum of as much as 25% of their pension fund up to the value of the lifetime allowance, subject to the rules of their scheme.

- Flexible retirement: allowing those people in occupational pension schemes, where the scheme rules allow it, to continue working whilst drawing retirement benefits. The minimum pension age is being raised from 50 to 55 years by 2010.

**Impact of the new regime**

- Individuals will be able to save more flexibly for retirement. For instance people will be able to save in ISAs and then transfer relatively large amounts into their pension once they are confident that they no longer need access to it prior to retirement, gaining tax relief at the time of transfer.

- Individuals will also be able to move from work into retirement with greater flexibility. Subject to occupational pension scheme rules, individuals will be able to work for the same employer while drawing some of their pension. This should facilitate and encourage phased retirements.

- The overall impact on pensions contributions is unpredictable. But it is possible that greater flexibility may result in some people being able to increase the proportion of their saving which accrues within a pension scheme and this may increase the total cost of tax relief.
How tax relief on pensions works, compared to other methods of saving

The overall impact of a tax relief regime results from the tax treatment of initial contributions, of investment income during the accumulation stage, and of income in the withdrawal stage. Figure 7.14 shows how pensions are currently treated in the UK compared to other forms of saving.

The overall pattern is that while non-tax advantaged savings are TTE in form (i.e. are made out of taxed income, with the investment return taxed, but with withdrawal of income not subject to tax) ISA’s are TEE and pensions are EEt (the small t representing the fact that withdrawals are not 100% taxed due to the 25% tax free lump sum).

Pension contributions made by individual employees, are effectively paid out of pre-tax (but post-National Insurance) salary. Compared with the non-tax advantaged savings route, or the ISA route, tax relief is therefore received at the individual’s marginal tax rate. There are differences in the administrative mechanisms by which this effect is achieved as between occupational and personal pensions but the net effect is the same.

Employer pension contributions, however, are further advantaged by the fact that National Insurance (NI) (either employer NI or employee NI) is not payable on them. This means that employer contributions are always more tax and NI efficient than employee contributions. This creates the economic rationale for “salary sacrifice” schemes. If the total net cost to the employer is unchanged, paying someone via employer pension contributions can result in the contributions entering the pension fund being 20% higher than they would be if a higher cash salary was paid and the individual made an employee contribution into a pension or 40% if into non-tax advantaged saving.

Investment income within a pension fund, whether it takes the form of interest income, dividend income, or capital gain, is not subject to either Income Tax or Capital Gains Tax. Return on investment, however, subject to taxation at the business level (Corporation Tax). Prior to 1997, this business level taxation was partially offset by the fact the tax treatment of dividend income treated Corporation Tax payments in part as pre-payments of personal Income Tax, with pension funds not only exempt from taxation on dividend income but receiving an Income Tax credit.

**Figure 7.14** Tax treatment of different savings vehicles

<table>
<thead>
<tr>
<th></th>
<th>Pension</th>
<th>ISA</th>
<th>Non-tax advantaged</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contributions</strong></td>
<td>Exempt from Income Tax</td>
<td>Made from taxed income</td>
<td>Made from taxed income</td>
</tr>
<tr>
<td><strong>Investment</strong></td>
<td>Exempt from Income and Capital Gains Tax</td>
<td>Exempt from Income and Capital Gains Tax</td>
<td>Subject to Income Tax and Capital Gains Tax</td>
</tr>
<tr>
<td><strong>Withdrawal</strong></td>
<td>Subject to Income Tax, apart from tax free lump sum of 25% of fund</td>
<td>Exempt from Income and Capital Gains Tax</td>
<td>Exempt from Income and Capital Gains Tax</td>
</tr>
</tbody>
</table>
The post-1997 regime, however, still leaves investment income within pension funds more favourably treated than investment income received in a non-tax advantaged saving vehicle. ISAs also enjoy the equivalent advantage.

Pension income, unlike income from non-tax advantaged saving vehicles, or from ISAs, is primarily taxed at the individual’s marginal tax rate in retirement, except for the benefit of a 25% tax-free lump sum.

If it were not for this tax free lump sum in retirement and if an individual faced the same marginal tax rate in retirement as in working life, the more favourable treatment of pensions contributions and the less favourable treatment of pension income (compared with the non-tax advantaged and ISA routes) would cancel each other out, leaving no net advantage to pension saving.

The advantage of pension savings, therefore derives from three effects in the case of employee contributions and four if employer contributions are made.

- The benefit of the tax-free lump sum. This is a benefit both against non-tax advantaged savings, and against ISAs.

- The benefit of the tax exemption of investment income. This is an advantage which both pension funds and ISAs enjoy against the non-tax advantaged vehicles.

- The benefit of the fact that an individual may have a lower marginal tax rate on pension income in retirement than they paid during working life and therefore received as tax relief on contributions. This is an advantage against both ISAs and non-tax advantaged saving.

- And in the case of employer contributions but not employee contributions, the benefit of relief on the National Insurance payments.

How much does tax relief on pensions cost?

HMRC estimates of the cost of tax relief in 2004/05 are set out in Figure 7.15

The investment income of funds measured is interest and rent payments, the exemption from capital gains tax is not calculated due to difficulties in identifying the counter-factual as the level of Capital Gains Tax depends on the length of time the asset was held and whether people have capital gains in excess of their tax free allowance.

The calculation is done on a cash flow basis, i.e. taxes paid on pensions received this year are deducted from tax relief granted on contributions. This could either under or over estimate the long-term underlying cost of tax relief, depending on the relationship between current contributions and current private pensions, and their long-term average levels.

In addition there is the cost of the National Insurance relief on employers’ contributions; this is estimated to be £6,800 million or 0.6% GDP in 2004/05. Therefore the total cost of the tax relief on pensions on a cash flow basis is 1.6% of GDP in 2004/05.
### Figure 7.15 Costs of tax relief in 2004/05

<table>
<thead>
<tr>
<th></th>
<th>£ million 2004/05</th>
<th>Percentage of GDP 2004/05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee contributions</td>
<td>4,770</td>
<td>0.4%</td>
</tr>
<tr>
<td>Employer contributions</td>
<td>12,160</td>
<td>1.0%</td>
</tr>
<tr>
<td>Contributions by the self-employed</td>
<td>850</td>
<td>0.1%</td>
</tr>
<tr>
<td>NI rebates to Approved Personal Pensions</td>
<td>214</td>
<td>0.0%</td>
</tr>
<tr>
<td>Investment income of funds</td>
<td>2,600</td>
<td>0.2%</td>
</tr>
<tr>
<td>Lump sum payments from unfunded schemes</td>
<td>300</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total relief</td>
<td>20,894</td>
<td>1.8%</td>
</tr>
<tr>
<td>Tax on pension payments</td>
<td>8,600</td>
<td>0.7%</td>
</tr>
<tr>
<td>Tax on refunds to employers from surplus</td>
<td>23</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Net cost of tax relief</strong></td>
<td><strong>12,300</strong></td>
<td><strong>1.0%</strong></td>
</tr>
</tbody>
</table>

Source: HMRC
The UK’s State Pension Age (SPA) for women is already planned to rise from 60 to 65 by 2020, and the Pensions Commission believes that further increases in the SPA will be required thereafter, alongside increases in state pension expenditure as a percentage of GDP. This is to make possible a state pension system which is sufficiently generous to avoid pensioner poverty and sufficiently non-means-tested to be a sound basis on which private pension savings can be built.

Unless, however, increases in the age at which individuals can receive the Basic State Pension (BSP) are accompanied by increases in the average retirement age, they will not provide an adequate solution to long-term public expenditure pressures. And unless individuals are able to make their own trade-offs between retirement age and private pension income, many will end up with inadequate income in retirement. This Chapter therefore considers issues relating not to pension ages, but to average retirement ages, and to flexible approaches to retirement age which reflect individual choice.
It covers in turn:

1. The importance of facilitating later retirement: for the economy and for individuals

2. Flexible later retirement: the positive message

3. Average retirement ages: recent trends and their implications

4. Incentives to retire later: state and private pension system design and the importance of information

5. Differences in life expectancy between socio-economic classes: possible responses

6. Age discrimination and demand for labour: barriers and solutions

7. Skills, training and health: barriers and solutions

1. The importance of facilitating later retirement

In our First Report and throughout this Report we have stressed the unavoidable choices posed by the demographic challenge. We have also stressed that these choices are partly for society to make and partly for individuals.

Society collectively needs to make choices relating to the Pay As You Go (PAYG) state pension system. Given demographic trends, either the average generosity of this system (relative to average earnings) must fall, or pensionable ages must rise, or the tax/National Insurance (NI) contributions devoted to pensions must rise as a percentage of GDP. But unless increases in pensionable age are accompanied also by increases in average retirement age, they will not be effective solutions to public expenditure pressures.

- If pensionable ages rise and average retirement ages rise, state pension expenditure as a percentage of GDP is reduced not only by pension expenditure reduction but also by a rise in GDP. For example, 1.5 million extra older workers could improve the fiscal position by around 0.5% GDP, or over £5 billion a year.

- However, if pensionable ages rise and average retirement ages do not, even the reduction in pension expenditure may be offset by other non-pension benefit expenditure (such as Incapacity Benefit and Jobseeker’s Allowance).
个体（直接或通过雇主）需要在养老金上做出选择，以实现他们希望获得的养老金，除此之外还有国家提供的养老金。在这个选择中，包括增加储蓄、推迟退休年龄以及在退休后降低养老金。理论上，后两种因素之间的权衡应该很强（假设寿命预期不会继续出乎意料地上升）。一名65岁退休并用积累的养老金基金购买年金的人，所获得的养老金比60岁退休的人高出52%，假定相同的储蓄率（图8.1）。

<table>
<thead>
<tr>
<th>年龄</th>
<th>养老金 ('000s)</th>
<th>年金率</th>
<th>个人养老金收入（£/年）</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>176,000</td>
<td>4.2%</td>
<td>7,500</td>
</tr>
<tr>
<td>65</td>
<td>221,000</td>
<td>5.2%</td>
<td>11,400</td>
</tr>
<tr>
<td>70</td>
<td>274,000</td>
<td>6.5%</td>
<td>17,800</td>
</tr>
</tbody>
</table>

来源：养老金委员会的估计

注：假设养老金缴纳8%的薪资，实际回报为2.5%，年金率来自2005年10月20日的年金局的男子，单生活RPI指数推算。

个体（直接或通过雇主）需要在养老金上做出选择，以实现他们希望获得的养老金，除此之外还有国家提供的养老金。在这个选择中，包括增加储蓄、推迟退休年龄以及在退休后降低养老金。理论上，后两种因素之间的权衡应该很强（假设寿命预期不会继续出乎意料地上升）。一名65岁退休并用积累的养老金基金购买年金的人，所获得的养老金比60岁退休的人高出52%，假定相同的储蓄率（图8.1）。
2. Flexible retirement: the positive message

Section 1 above spelt out the economic reality that later average retirement is essential if pensioner living standards, relative to average earnings, are to be maintained. That reality cannot be avoided. But it is important to prevent the misunderstandings and fears which seem to be reflected in current attitudes to later retirement.

The Pensions Commission’s focus groups, like other research studies, revealed strong resistance to the idea that pension ages must rise [Figure 8.2]. The resistance appears to be rooted in concerns that people will have to work later, that the rise in pensionable ages will be dramatic, that a large proportion of healthy early retirement years will be sacrificed to work, and that there will not be attractive jobs available. This resistance to major and enforced increases in retirement ages is balanced however by support for the idea that people should be free to work longer if they wish.

These reactions carry three important implications for the design and communication of public policy:

(i) Exaggerated fears about State Pension Age (SPA) should be dispelled.

We have argued in this Report that the SPA, which will be equalised at 65 for men and women in 2020, will need to rise further in subsequent years, and our results in Chapter 6 illustrated the impact of a gradual rise to 68 by 2050. But three important points about this rise must be stressed:

– We do not believe it is necessary to raise the SPA rapidly to, say, 70 in 2030, as some submissions to the Pensions Commission argued, and as press reports have often suggested.

– The rise we have illustrated, and the general principle we have suggested – that SPA should rise proportionately in line with rising life expectancy – will not result in a reduction of the average number of years spent in retirement. Instead we believe that the aim should be to keep the percentage of adult life spent receiving state pensions roughly stable. This implies that the absolute number of years in spent in receiving a state pension will still rise.

– We have suggested the principle that any announcement of an increase in SPA should be made at least 15 years in advance, thus for instance providing assurance to people aged over 50 today that their SPA is already fixed.

We recommend therefore that government should simultaneously make it clear that a gradual rise in SPA is inevitable but also that a sudden increase which reduces the number of years spent in retirement is not required and not planned.
Figure 8.2 Reactions to suggestion that working longer is required: focus group results

- Strong initial opposition based on the assumption that people will be forced to work until 70.

- But participants felt they should be allowed to continue working if they wished, and some feared they might not be able to afford to retire, but would also find no jobs available.

- People should be able to make their own decisions on retirement age as they approach retirement, rather than far in advance.

- Working longer could be more attractive if people were allowed greater flexibility, such as part-time working or flexible hours.

- Many participants believe keeping busy and active in old age improved the quality of life and could provide a top-up to pension income.

Note: See Appendix D for details of research.
Measures to increase flexible individual choice need to be publicised. People are concerned about “having to work longer” but positively welcome the idea of flexible retirement, e.g. stepping down from full-time to part-time work, while beginning to draw some pension income. State system design, as Section 4 below discusses, should facilitate this flexibility.

Fears about a lack of appropriate jobs need be addressed. This implies that measures to overcome age discrimination, to encourage companies to be positive about the employment of older workers, and to ensure that training and occupational health activities facilitate later working, should be given high priority. These are discussed in Sections 6 and 7 below.

3. Average retirement ages: recent trends and implications

Chapter 2 of the First Report set out the different ways in which the “average retirement age” could be measured, and described in detail the long-term and recent trends in labour force participation at older ages. The key points it made were:

- Over the period from 1950-95 there was a sustained fall in the average age of male and female retirement from the labour force [Figure 8.3], despite a sustained rise in life expectancy, thus producing a steady increase in the percentage of adult life spent in retirement [as shown in Figure 1.44]. This fall in average age of retirement reversed in the late 1990s.

- The average age of retirement is determined both by the percentage of the population which remains in work between, say, 50 and SPA, and the percentage which chooses to work beyond the SPA. Both need to increase if the ratio of workers to people receiving pensions is to be stabilised in the face of the demographic challenge.

- The percentage of men working between 50 and SPA fell significantly between 1975 and 1995, but is now on a steady upward trend. The percentage for women was steady from 1975-95 and is now also gradually rising [Figure 8.4].

As the First Report described, the drivers of this pattern appear to be that:

- Employment rates for men among older age groups were driven down by the major recessions of the early 1980s and 1990s. Major industrial restructuring led to the loss of many traditional manual jobs, and older workers made redundant were unable to re-enter the workforce, moving instead either into permanent unemployment or onto disability benefits. Large scale reductions in white collar jobs were facilitated by early retirement packages funded out of apparent pension fund surpluses.

These trends were exacerbated by policies which, at a time when youth
Figure 8.3  Trends in mean age of retirement

Source: Blöndal and Scarpetta (1999)
Pensions Commission estimates

Figure 8.4  Employment rates for men and women aged 50-SPA

Source: GHS, GB
LFS, UK

Note: Men aged 50-64, women aged 50-59.
unemployment appeared the more serious social problem, encouraged firms to lay off older workers in order to recruit younger ones (e.g. the Job Release scheme).  

Similar factors applied in relation to women, but the offsetting tendency towards higher participation rates for women at all ages resulted in a flat rather than falling trend.

Since the mid-1990s, however, some of the negative factors have eased. The period of most rapid and regionally concentrated de-industrialisation is past: companies are no longer able to use pension fund surpluses to fund redundancy; and sustained growth has driven increased demand for jobs for workers of all ages in most parts of the UK. The conditionality of Incapacity Benefit, meanwhile, has been tightened, and the percentage of men claiming Incapacity Benefit between 50 and SPA has been reduced, while the percentage of women has stabilised [Figure 8.5].

The continuation of these favourable developments is essential to further progress. Macroeconomic stability is particularly important: if older people leave the workforce via enforced redundancy and in conditions of high overall unemployment, re-entry is more difficult than for younger workers.

4. Incentives to retire later: state and private pension system design and the importance of information

People’s behaviour is significantly influenced by the financial incentives which they face. The effectiveness of incentives depends crucially on people understanding them. This section considers actions which could improve both incentives and the public awareness of incentives, looking first at the state system and then at private and public employee pension provision.

(i) Incentives created by the state system

Incentives implicit in the state taxation, benefit and pension system need to be designed to make it financially attractive to work up to SPA, and, for those who wish, to work beyond it.

Financial incentives at ages below SPA  Changes in the Jobseeker’s Allowance regime and in the Incapacity Benefit regime, together with the introduction of the National Minimum Wage and Tax Credits, have over recent years significantly increased incentives to work at all ages below 60, and these measures may well be reflected in increasing labour market participation among 50 to 60 year olds. Beyond the age of 60, however, the availability of the Guarantee Credit to both men and women on an unconditional basis (i.e. not dependent on proof of job search) may reduce

1 The Job Release scheme was a government policy between 1977–1988 which encouraged older workers to retire with an allowance so that they could be replaced by an unemployed person.
Figure 8.5 Percentage of people aged 50-SPA in receipt of incapacity related benefits, by sex

Source: Social Security statistics

Note: Invalidity Benefit or equivalent (Incacity Benefit at the long-term and short-term higher rate). Severe Disablement Allowance and incapacity “Credits Only” claimants. Men aged 50-64, women aged 50-59.
the attractiveness of work at low income levels. The intended increase of
the earliest age for Guarantee Credit receipt from 60 to 65 between 2010
and 2020 (mirroring the increase in SPA for women) will however remove
this effect. We believe that this policy is appropriate at least until 2020
but it does imply a major challenge to government in facilitating and
supporting working between 60 and 65 as this change is phased in. If this
does not occur the change could simply produce a rise in the numbers
claiming Incapacity Benefit. The issue of what should happen to the
Guarantee Credit age beyond 2020 is discussed in Section 5 below.

Financial incentives to work beyond SPA. Rational financial incentives to
work beyond the SPA are already favourable. Individuals gain the benefit
of a higher income tax threshold and do not have to pay NI contributions,
thus reducing their effective marginal taxation rate by 11%. In addition
there already exists flexibility to delay taking BSP and State Second
Pension (S2P), and to receive a higher pension at a later age, and the terms
of this offer now create an incentive to delay retirement (though only to
age 69 for the average person) [Figure 8.6]. However only 20,000 people
defer each year for between 2-2.5 years. We recommend two measures to
encourage take-up of this flexibility:

– Making it possible for people to take the state pensions on a partial
basis; for instance, to take 25%, 50%, or 75% of their state pensions,
while deferring receipt of the rest. At present only 100% deferral is
allowed. This more flexible deferral rule would fit with people’s desire to
have flexible options, e.g. part-time work plus some pension receipt.

– Publicising the option much more aggressively, with publicity focused
not just on people actually reaching SPA but also say five years before,
allowing people to think through in advance the age at which they
would like to retire.

(ii) Incentives in the private pension system and in public sector
employee schemes

Private sector non-state pension provision will be dominated by Defined
Contribution (DC) schemes. Fewer than two million private sector employees
are now members of open Defined Benefit (DB) schemes, and this number is
likely to continue to fall. And the National Pension Savings Scheme (NPSS)
which we have proposed will be a DC system.

One beneficial effect of the shift to DC is that annuity price differentiation by
age and the fact that pension pots tend to grow with further years invested
will create clear incentives to retire later, as Figure 8.1 illustrated.
Government could and should play a role in ensuring that people understand,
well in advance of reaching typical retirement ages, the trade-off that they
will have to make. This can be achieved by:
Figure 8.6  Deferral of the state pension: face value of BSP and net present value of BSP by age at which taken

If someone wishes to defer their entitlement to their pension (both BSP and SERPS/S2P), they are able to do so. There is no requirement for an individual to be in work to defer their claim. In return for delaying a claim, the amount of pension is increased by 10.4% per year of delay, with no maximum.

Source: Pensions Commission estimates

Note: Values are for a man aged 65 in 2005 with a 2% discount rate. The net present value falls after age 69 because beyond this point the falling length of average expected remaining life outweighs the increase in accrued pension which can be secured. The precise point of maximum benefit will vary according to individual reasonable expectations of life expectancy.
- Designing NPSS communications to members so that it makes clear the different levels of pension which they might receive (for any given investment return assumption) according to the age at which an annuity is purchased. Within the Swedish system illustrations are provided for ages 61, 65 and 70 [see Chapter 10 Section 8].

- Encouraging, or perhaps requiring by regulation, private DB and DC pension schemes or policies to provide the same information.

- Publicising information about latest trends in official projections of life expectancy. Chapter 1 Section 4 [Figure 1.42], and evidence from our own survey questions described in Appendix D, illustrated that people continue to underestimate very significantly their life expectancy. The NPSS communication package should include information which could help correct these underestimates.

Within DB schemes, barriers to later retirement have in the past been created by perverse incentives and rigidities, e.g. inflexible final salary determinants of pension income which make it difficult for people to step down to lower paid or part-time work. In the private sector, any such rigidities will be of declining importance as the overall coverage of DB schemes declines. The key priority for DB system reform lies now in the public sector, where all system features which create incentives for early retirement should be removed.

5. Differences in life expectancy between socio-economic classes: possible responses

One frequently expressed objection to raising the SPA, with which we have sympathy, is that it would disproportionately affect people in lower socio-economic groups who, on average, have lower life expectancies. As Figure 1.41 in Chapter 1 illustrated, life expectancy at 65 now appears to be increasing in all socio-economic groups. Period life expectancy of men in socio-economic class V is now probably around 13 years at age 65 and around 17 years for women. Statements that lower socio-economic groups have dramatically lower life expectancy, with figures much lower than 15 years often quoted, are usually based on the mistaken methodology which takes period estimates of life expectancy at birth and then deducts from that figure the SPA. [Figure 8.7 explains the correct and incorrect ways to estimate the relevant figures.]

But it remains the case that men in socio-economic class V face life expectancy in retirement that is about five years lower than socio-economic class I (for women the difference is about three years), and that as a percentage of expected life in retirement, a one year increase in SPA has a bigger impact on people in the lower socio-economic groups than in the highest. This reflects the fact that all DB systems with the same retirement age for all members give a worse deal to groups of people with lower average life expectancy.
**Figure 8.7 Correct and misleading estimates of life expectancy post-SPA**

**Correct calculation for the average man**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best estimate of life expectancy of man aged 65 in 2005</td>
<td>19.4 years</td>
</tr>
<tr>
<td>Cohort life expectancy allowing for anticipated continuation of mortality rate declines.</td>
<td></td>
</tr>
</tbody>
</table>

**Misleading (but frequently used) calculation**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period life expectancy of man at birth in 2005</td>
<td>76.9 years</td>
</tr>
<tr>
<td>Period life expectancy at birth underestimates true cohort measure as it fails to allow for future continuation of mortality rate declines.</td>
<td></td>
</tr>
<tr>
<td>Minus State Pension Age</td>
<td>65 years</td>
</tr>
<tr>
<td>Minus State Pension Age from life expectancy at birth is wrong since it fails to allow for the fact that life expectancy at birth is reduced by deaths that occur before SPA.</td>
<td></td>
</tr>
<tr>
<td>Calculated (but wrong) estimate of life expectancy post-SPA</td>
<td>11.9 years</td>
</tr>
</tbody>
</table>

**Calculation by socio-economic class**

Similar mistaken calculations can be used to suggest that the life expectancy of a man in social class V at age 65, is as low as 6 years. Given that the Period life expectancy for a man aged 65 in social class V is 13, and that overall the Cohort minus Period difference for 65 year olds is 3 years, the best estimate of life expectancy for a man in social class V at 65 is more likely to be about 16 years.

Source: Pensions Commission analysis
One advantage of shifting the earnings-related element of pension provision onto a primarily DC basis (as implied by the creation of the NPSS) is that it makes it possible to offset these disadvantages, since groups of people with predicted lower life expectancy should be able to achieve higher annuity rates. Moves towards greater differentiation of annuity rates by socio-economic indicators should therefore be welcomed.

Since, however, the BSP and S2P will remain DB systems with specified normal pension ages, the issue arises as to whether any mechanisms can be created to mitigate the impact of a rising SPA on lower socio-economic groups. One way to do this would be to reinforce the contributory principle, making pensions payable from the age at which people had achieved a given number of years of paid-up contributions, an age which lower socio-economic groups might be likely to reach earlier than higher groups, due to earlier entry into the workforce. But the impact of earlier entry is sometimes offset by longer periods of unemployment which reduce S2P accruals. In Chapter 5 Section 6, moreover, we concluded that the arguments in favour of moving BSP accruals onto a universal, non-contributory basis, in order to address the problems faced by people with interrupted work records and caring responsibilities (in particular women) were compelling. This would make it impossible to use the contributory system as an indirect way of compensating for differences in life expectancy.

The alternative way forward is to maintain the option of making means-tested benefits available at an earlier age than the SPA, i.e. to make the Guarantee Credit available, not conditional on job search, some time before the SPA is reached. Between 2010 and 2020 the minimum age for Guarantee Credit will rise as planned from 60-65 in line with the increase in SPA for women. Beyond 2020, however, and particularly if there is no sign of the differences in life expectancy by socio-economic class reducing, there is a good case for keeping the earliest age of Guarantee Credit, at least initially, at 65 even as the SPA rises, and for thereafter keeping the earliest age of Guarantee Credit eligibility, say, two years below the SPA. This need not create disincentives to save in the NPSS, if, for those who choose to defer annuitisation of NPSS funds until the SPA, there was assurance that their accrued rights in the NPSS would not be deemed private pension income brought to account for calculating Guarantee Credit entitlements. It would, however, reduce incentives to work in the period between Guarantee Credit availability and SPA. Given, however, that such reduced incentives would only apply for say two years, and would only be applicable at fairly low levels of income, this might be an acceptable price to pay to ensure that the lowest income groups with lower life expectancy would, if they wanted to, be able to access state pension benefits slightly earlier than others. We believe this option should be considered as and when the SPA is increased.

In addition, as we discussed in Chapter 5 and Chapter 6, the option of setting separate pension ages for the BSP and the S2P (the latter higher) would enable the BSP pension age to be lower than it would otherwise need to be within any given public expenditure constraint. This would benefit people with lower incomes and lower life expectancy.
6. Age discrimination and demand for labour: barriers and solutions

Higher participation rates at older ages require good incentives for people to seek work (discussed above) and the absence of skill deficiencies or health barriers to employment [discussed below in Section 7]. They also require that employers offer jobs to older people.

There may be rational reasons for employers to prefer younger workers in some jobs, if the productivity of the younger worker is, due to the nature of the job, inherently higher. But there is a danger that employers will simply assume that productivity declines with age, even where this is not the case, and that cultural biases against older workers are embedded in personnel practices and assumptions.

Age discrimination legislation therefore has a major role to play in overcoming barriers to the employment of older workers. From October 2006 it will be illegal to discriminate against anyone on grounds of age, or to retire someone (before the age of 65) on the grounds of age, whatever the normal pension age specified within a company’s pension scheme. A default age of 65 has, however, been agreed beyond which an individual who does not wish to retire will be able to request the right to stay in work, but with the employer ultimately able to dismiss the employee, without redress to an employment tribunal.

Even with this default age condition, the legislation is likely to play a major role in changing culture and practices. Making discrimination illegal on grounds of age against people well below SPA, e.g. in their fifties, will in itself play an important role in driving further increases in average retirement age, both because participation rates among those aged 50 to 65 still have plenty of potential to rise, and because participation in the labour market beyond the age of 65 (or 60 presently for women) is crucially driven by participation up to the age of 65: once older people exit the workforce they are much less likely to work again.

The Pensions Commission strongly recommends however that there should be no default age beyond which age discrimination does not apply, and believes that removing it will send a powerful signal that increases in SPA will be accompanied by changes in practice and culture towards older workers.

The challenges facing business in adopting these practices will however be real and in some circumstances older workers will have lower productivity, which could impose a cost on business unless mechanisms are created to reduce the cost of employment. One issue which we believe merits consideration is whether employers’ National Insurance contributions should apply at the full rate and on all earnings for employees above SPA. At present employees above SPA pay no employee NI contributions, but employers’ NI contributions are still due despite the fact that no further state pension rights (which are partly funded by an element of employers’ NI contributions) are accrued.
The abolition or tapering down of employers’ NI contributions for employees aged above SPA could significantly improve the economics of employing such workers. The cost could be minimised and the benefit focused on low to medium earners by limiting the reduction to an absolute amount per employee or by making the abolition or reduction apply only up to some level of earnings.

7. Skills, training and health: barriers and solutions

Two barriers which may limit the feasible increase in average retirement ages are inadequate or inappropriate skills among older workers and health problems which, while not making any work impossible, may limit people’s ability or desire to work in their existing jobs or in jobs to which their skills are appropriate. The Government needs to identify measures which could help overcome these barriers.

Skills and training. According to measures of qualifications attained, older workers have lower skills than younger ones. A quarter of over 50 year olds have no qualifications, compared to 6% of those aged 16 to 49 (National Adult Learning Survey, 2002). This statistic is to a degree misleading, reflecting the extent to which skills have been formally recognised via qualifications, as well as actual differences in skill levels. But the steady rise in 16-18 year olds in school education and in higher and further education participation rates over the last 40 years inevitably means that formal education levels, and to a degree some skill levels, will on average be higher at lower ages, and it will be several decades yet before this age cohort effect has worked through the system.

Training during adult life, both to compensate for gaps in school education, and to ensure refreshment of skills, is therefore critical to maintaining the employability of older workers. But there is evidence that employer-provided training is skewed towards younger workers [Figure 8.8] and the low take-up of the New Deal 50 Plus in-work training grant suggests that among both employers and employees there is often an assumption that some workers are “too old to train” (DWP, 2003).

Government has only imperfect levers to address these problems but it should at least:

- Review all its training support expenditure and processes to ensure that any biases against older worker training are removed. For example, government could ensure all Learnings & Skills Councils provide help to older workers.

- Ensure that its own public sector employment practices are a benchmark of quality in the retraining and reskilling of middle-aged and older workers.
Figure 8.8 Participation in job-related training by age

Source: LFS Spring 2005
Note: Participation by employees in any job-related training in the last four weeks.
Consider whether there is a role for voluntary standards which can be developed in collaboration with business, for instance, via the development of the Investors in People standard to include specific measures focused on the employment and retraining of older workers.

Health. Evidence cited in Chapter 2 of our First Report suggested that on average increases in life expectancy are probably being accompanied by increases in health at any given age, and that increases in older worker labour force participation rates, and in average retirement age should therefore be possible. Major occupational sources of ill health which played a large role in previous generations (e.g. arising from coal mining or other jobs involving heavy manual labour and exposure to industrial pollution), and whose impacts can still be seen in the regional incidence of unemployment and Incapacity Benefit receipt, will dwindle in importance over the next few decades. (The extent to which these positive developments may be offset by growth of other factors such as obesity is unknown.)

But self-reported measures of ill health show no signs of decreasing and Incapacity Benefit claims have continued to rise until recently, with stress and musculoskeletal problems (e.g. back pain) major reported causes. In part this may reflect the fact that people are simply less tolerant of ill-health problems than in the past, and less willing to assume that these problems are compatible with continued working. It also however highlights the continued importance of occupational health and of measures to encourage and enable healthier lifestyles. People’s ability to do active work at age 60 or 65, and their general physical well-being and mental alertness, are heavily influenced by factors such as appropriate ergonomic design of office furniture, levels of exercise, and the degree of stimulation provided by their job, 10 or 20 years previously.

As with training and skills, the government’s ability to influence the multiple levers which determine health are imperfect, but it should:

- Ensure that the public sector sets a high standard in the encouragement of healthy working practices and healthy working environments.

- Increase awareness among businesses of the role that they can play in improving the health of their workforces, with benefits accruing to business through reduced absence and higher productivity, as well as retention of human capital built up over many years.

The Department of Health and the Department for Work and Pensions announced recently that they would jointly appoint a National Director to oversee the implementation of a Health, Work and Well-being Strategy. The Pensions Commission welcomes this development and suggests that the strategy should include an element focused on defining the best practices in middle-aged and older workers’ occupational health which will tend to facilitate active labour market participation at older ages.
Chapter 6 set out our key recommendations: the creation of a National Pension Savings Scheme (NPSS) into which people are auto-enrolled; and an evolution of the state pension system to focus limited resources on the key objectives of poverty prevention and ensuring that means-testing does not spread as it would if current indexation arrangements were continued indefinitely.

It is important to start implementing these changes as soon as possible. As Chapter 1 stressed, there is no immediate crisis in average pensioner income levels today. But if policies and saving behaviour continue unchanged, pension provision will become increasingly inadequate and unequal over the medium-term (i.e. 10 to 40 years ahead). State pensions paid to individuals in 2030 or 2040 will reflect the accrual rules in place today. Present expectations of future means-testing, reflecting assumptions about state pension indexation, will influence saving behaviour today, which determine private pension incomes several decades from now. And the NPSS will only deliver private pension income equivalent in 2050 to the 0.7% of GDP, illustrated in Figure 6.45, if it starts receiving contributions within the next five or so years.
The feasible pace of implementation will however be determined by two sets of considerations:

- With respect to the NPSS, there are many details of design which need to be determined, and there are significant operational challenges involved in establishing the system. These are described in Chapter 10, which suggests that a target launch date of 2010 may be a reasonable objective. It is essential however that the system works well from the beginning, and further analysis of the implementation challenges is necessary before deciding the precise timetable.

- With respect to state system reforms, and if our recommendation in favour of the gradual two-tier route is accepted, the key considerations relate to the affordability of the proposals, rather than to implementation complexity. For while we have argued explicitly that public expenditure on pensions should not rise significantly as a percentage of GDP before 2020, our recommendations do imply some increase in public expenditure relative to a base case in which pension expenditure as a percentage of GDP would otherwise fall between 2010 and 2020. And there are of course other pressing demands on public expenditure. An open issue, discussed in Chapter 6, is therefore whether state system reform can be delayed beyond 2010 without undermining the objectives we seek to achieve. Our judgement, explained in Chapter 6, is that while a delay of a year or two beyond 2010 might be possible without serious harm to the overall objectives of reform, a delay of say five years would be too long.

Whatever the timing of state system reform, however, our recommendation in favour of the gradual two-tier approach means that implementation complexities are minimised. A major communication exercise will however be needed to help people understand the system towards which we will evolve.

These two issues, implementation and communication, are dealt with in turn below:

1. Implementation

If we had concluded in favour of radical short-term change, there would be a considerable implementation challenge. In particular, as the panel, “Difficulties in offsetting additional pension rights,” in Chapter 6 sets out, if a unified Enhanced State Pension (ESP) were introduced immediately, but with “offset” of existing additional pension rights, there would be a major operational and IT systems challenge for HM Revenue and Customs. One of the advantages of our proposed gradual two-tier approach is that it avoids these major operational challenges within the state system.
### Figure 9.1 Indexation regimes under present arrangements and Pensions Commission's preferred long-term option

<table>
<thead>
<tr>
<th>Present arrangement</th>
<th>Pensions Commission preferred option for the long-term</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSP indexation</td>
<td>The minimum of 2.5% or the Retail Prices Index (RPI).</td>
</tr>
<tr>
<td></td>
<td>Average Earnings Index (AEI).</td>
</tr>
<tr>
<td>For S2P accrual</td>
<td></td>
</tr>
<tr>
<td>Upper Earnings Limit (UEL)</td>
<td>With RPI</td>
</tr>
<tr>
<td>Lower Earnings Threshold (LET)</td>
<td>With AEI</td>
</tr>
<tr>
<td>Lower Earnings Limit (LEL)</td>
<td>With RPI</td>
</tr>
<tr>
<td>S2P indexation pre-retirement</td>
<td>With AEI</td>
</tr>
<tr>
<td>S2P indexation in retirement</td>
<td>With RPI</td>
</tr>
<tr>
<td>Guarantee Credit indexation</td>
<td>With AEI</td>
</tr>
<tr>
<td>Savings Credit threshold</td>
<td>With the BSP – minimum of 2.5% or RPI</td>
</tr>
</tbody>
</table>

Note: The Primary Threshold is the level at which individuals start paying Income Tax and National Insurance. We have assumed that it is indexed with earnings.

Instead our recommended reforms build on the existing system and on recent changes (e.g. the already planned evolution of the State Second Pension (S2P) to a flat-rate system) but accelerate this evolution. They increase the long-term generosity of the Basic State Pension (BSP) and reverse the spread of means-testing. All of these effects are achieved by changing a variety of indexation regimes [Figure 9.1]. Changing these regimes, and in particular BSP indexation, entails difficult political decisions about affordability and the trade-off with other public expenditure priorities, but does not create any significant implementation complexities.
The greatest operational challenges posed by our recommended evolutionary approach would instead relate to our proposed shift to a universal approach to BSP accrual.

- We recommended that in future, rights to the BSP should be accrued on a universal residency basis, cutting through the complexities of the contributory and credit system. Significant work is now required to identify how precisely such a universal residency test could work, and to decide the number of years of residency required to achieve a full pension, in the light of the complexities spelled out in Chapter 5 Section 6. We believe these complexities can be overcome, and that the universal accrual approach is more desirable than the alternative option of improving the existing contributory system for the BSP along the lines shown in Figure 5.30.

- We have also argued that it is desirable to introduce a BSP which is universal in payment at some age, preferably 75, addressing some of the gaps and inequities which the past contributory system has created for some of today’s pensioners. This should be relatively straightforward, since a residence test is already applied in respect to the “Category D” pension payable at 80 years of age but work should start soon on identifying whether there are any non-obvious complexities involved in extending this approach to those aged between 75 and 80.

2. Communication

While our recommended way forward for the state system (evolving the present two-tier system) is simpler in implementation terms, it leaves considerable complexity in the state system for many years. This is unavoidable. Only an immediate unified ESP worth £109 per week would allow the simple message that the state provides everyone with a minimum of poverty prevention in retirement and that there is no means-testing of private pension provision. But as Chapter 6 showed, this option is either prohibitively expensive, has perverse distributional effects or has substantial complexities of its own.

The challenge therefore is to ensure that people understand as best as possible where the state pension system is heading under our proposals, and the implications for the attractiveness of private savings.
The key message should be that state PAYG provision is heading towards a two-tier, flat-rate system: the first tier based on a universal residency basis; the second tier on the contributory system. For a person entering the workforce today this means that [Figure 9.2]:

- They can be sure, on the basis of residency alone, of accruing a BSP whose value will be held steady (if earnings indexation starts in 2010) at about 17% of median earnings.

- If they earn over the Lower Earnings Limit (£4,264) and if they maintain a full contribution record, either via paid work or via credits for caring responsibilities, they can in addition accrue a State Second Pension worth at least 12% of median earnings (equivalent to £53 per week in current 2005 earnings terms) at the point of retirement and price-indexed thereafter. (If they earn more than the Lower Earnings Threshold (LET) they may in addition gain some limited earnings-related S2P rights, but these will disappear from the system eventually.)

**Figure 9.2  State pension income at the point of retirement in the long-term**

<table>
<thead>
<tr>
<th>Accrual rules</th>
<th>Value at SPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSP</td>
<td>Accrued on a residency basis</td>
</tr>
<tr>
<td>S2P</td>
<td>Accrued on earnings above the LEL and from credits from either caring or long-term disability</td>
</tr>
</tbody>
</table>

* Individuals starting work before 2031 with earnings above the LET will have some additional earnings-related pension until the whole of the working life is after the point where the LET overtakes the UEL. Therefore other Figures show the median earner getting 14% of median earnings in SERPS/S2P in 2050.

Source: Pensions Commission analysis
Note: Assuming working life from age 21 to SPA.
For people already in the workforce and well into their careers, the position is more complex, due to the past evolution of SERPS/S2P accrual rules. These result in the full potential S2P varying by current age [Figure 9.3]. No simple across the board message can therefore be given to people in mid-career. Instead, the challenge is to communicate more clearly, through combined statements of pensions rights, the value of pensions already accrued, and the possible pension at retirement which can be obtained on the basis of full contributions from now on.

For almost all employees, however, it will be possible to provide assurance that saving via the NPSS on top of the state PAYG provision would be beneficial: they will keep the benefit of the savings that they make. This is because:

- The spread and severity of means-testing will tend to fall in future not increase.
- The existence of a compulsory matching employer contribution offsets the effect of the remaining small element of means-testing, ensuring, along with tax relief, that almost all people will be able to enjoy the full benefit of their own individual contributions.

Other issues relating to communication within the NPSS are covered in the next chapter.
Figure 9.3 State pension income at SPA under the Pensions Commission’s preferred option as a percentage of median earnings: assuming 44 years of accrual

BSP
SERPS/S2P for someone earning at the LEL (£4,264 per year)
Additional SERPS/S2P for someone earning at the LET (£12,200 per year)

Source: Pensions Commission analysis

Note: Assumes constant earnings in earnings terms and working life from 21 to SPA
Until the contracted-out rebate system is eliminated the SERPS/S2P element could be partially provided through a contracted-out equivalent.
The Pensions Commission recommends that government should create a National Pension Savings Scheme (NPSS) into which people will be automatically enrolled but with the right to opt-out. Figure 5.2 described the key principles and features of such a scheme, and Chapter 6 set out a range of possible contribution levels and illustrative estimates of fund values and pension incomes which might result from a successful scheme.

This Chapter addresses implementation issues which will need to be resolved before the scheme is launched. Under each topic we aim to identify the major decisions that need to be made, and propose outline answers. There will however need to be a major implementation, planning and consultation exercise before the scheme is launched, and it is likely that detailed work during that planning process will suggest changes to some of the proposed details, and reveal further issues to be resolved.
This Chapter covers in turn:

1. Contribution rates and covered earnings bands: default, minimum, additional and maximum contribution levels
2. Alternative pension arrangements outside the NPSS
3. The mechanics of auto-enrolment, payroll deduction, and individual opt-out: possible roles for HM Revenue and Customs
4. The treatment of the self-employed and those not in work
5. Options for reducing the cost impact on small businesses
6. Investment options: selection process and default funds
7. The decumulation phase: annuity provision and arrangements on death prior to annuitisation
8. Communication with members
9. A scheme-specific tax regime?
10. Indicative costs of operation, drawing on international experience
11. A feasible implementation timescale
12. Management and governance
1. Contribution rates and earnings bands

Chapter 6 has already discussed the issues relating to the appropriate contribution rates and the bands of earnings on which contributions should be paid within the NPSS. The key recommendations set out there were:

- We recommend that the band of earnings across which contributions should be made, should stretch from the Primary Threshold (currently £4,888) up to the Upper Earnings Limit (UEL) (currently £32,760). Both limits should increase over time in line with average earnings, thus keeping stable the range of the earnings distribution covered by the scheme.\(^1\)

The rationale for this range is that:

- There should be an upper limit since there is a point in the earnings distribution above which it is reasonable for society to take a laissez-faire approach to the replacement rate which people achieve, given the adequate absolute standard of living which will be ensured by auto-enrolment up to that level.

- There should be a lower limit, both to limit the proliferation of very small value accounts and because there is a level of earnings below which the state system in itself is likely to deliver an adequate replacement rate. In Chapter 6, we suggested that the lower limit should be the Primary Threshold. We recognised that setting it this low might result in a significant level of opt-out among those only slightly above the Primary Threshold, but we believe it important to allow most people the option of participating in the NPSS and thus of receiving the benefit of the employer matching contribution. This is particularly important given that there will be many people with earnings not far above the Primary Threshold at specific points in their lives but who have lifetime earnings high enough that they will wish to make pension provision above the flat-rate which the state will provide.

\(^1\) While up-rating of the threshold with earnings should be the standard, the trends in earnings amongst lowest earning groups should be monitored to ensure that indexation of the Primary Threshold does not result in an increasing proportion of the workforce falling below the threshold for participating in the auto-enrolment part of the NPSS.
The band of earnings we suggest would be within the range of those used by other countries for the mandatory earnings-related pension system [Figure 10.1].

We recommend that the total default contribution rate should be around 8% of gross earnings between the Primary Threshold and the UEL. This proposed 8% contribution would arise from a combination of (i) individual contributions paid out of post-tax earnings; (ii) the benefits of tax relief; and (iii) the matching employer contribution.

The tax relief element could arise from the operation of the current tax relief regime. The alternative approach, an explicit "government match" payment, is considered in Section 9 of this Chapter. If we use the current tax relief system then the tax relief for contributions is around 1% of the total 8% contribution, but in addition people gain the benefit of the tax-free lump sum. In a matching system the up-front match would be worth 1.5% of the total 8%, but with no tax-free lump sum subsequently enjoyed.

The case for proposing a compulsory matching employer contribution was set out in Chapter 5 Section 1, and Chapter 6 set out our recommendation that the employer contribution should be 3% of earnings above the Primary Threshold and below the UEL. This matching employer contribution would only be payable where the individual remained auto-enrolled and made individual contributions. It would be equivalent to about 2.3% of total gross earnings for the median earner on £22,000 per year. Since however pension contributions are not subject to employers’ National Insurance (NI) contributions, it would add only about 2% to the cost of employing the median earner, and only in the case of those companies not presently making pension contributions of 3% or more. The impact on the cost of employing lower earners would be less than this. Overall, we estimate that the introduction of the NPSS, under reasonable assumptions about participation rates, would add about 0.6% to total labour costs in the private sector [See Section 5].

One issue not discussed in Chapter 6 was the age from which auto-enrolment should commence. There is a strong argument that it should not be 16, the age at which people usually enter the tax and National insurance system. Auto-enrolling young people working part time whilst still in school, higher or further education is likely to result in high levels of opt-out and large numbers of small value accounts, both of which will tend to increase average administration costs, both within the NPSS and for business. It may also tend to create a habit of opting-out which then prevails at later ages.
### Figure 10.1 Earnings bands used for earnings-related pension provision in selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Lower limit</th>
<th>Upper limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Minimum threshold of 15% median full-time earnings (£2,334 per year).</td>
<td>Upper limit of around 300% median earnings (£52,527 per year).</td>
</tr>
<tr>
<td>Sweden</td>
<td>Lower limit is linked to prices. In 2004 it was around 6% of median full-time earnings (£1,221 per year).</td>
<td>The upper limit is linked to earnings and is around 120% of median full-time earnings (£23,332 per year).</td>
</tr>
<tr>
<td>USA</td>
<td>Earnings are credited for social security when they exceed 9% median earnings in a quarter (£2,021 per year). The lower limit is increased in line with prices.</td>
<td>The upper limit is increased in line with earnings and is around 260% of median earnings per year (£47,407 per year).</td>
</tr>
</tbody>
</table>


Note: All figures have been converted to pounds sterling at the current exchange rates (10th October 2005).
In Chapter 6 we modelled likely results of the NPSS on the assumption that people would on average start saving for a pension at 25. Some young people will however wish to begin saving at an earlier age, and ideally should be able to do so, gaining the benefits of low costs and the matching employer contribution. The Pensions Commission, therefore, favours an earlier age, such as 21, for the start of auto-enrolment.

Figures 10.2 and 10.3 set out the replacement rates as a percentage of earnings which the proposed contribution rates might produce given different rates of returns and different retirement ages (assuming that on average saving commences at age 25). Chapter 6 illustrated how these income streams from the NPSS, combined with state pension income, would make it likely that people would achieve the minimum base load of earnings replacement which we believe the state should strongly encourage.

But these default rates will not secure the replacement rates to which many people will aspire. And there will be some people who wish to contribute to the scheme but at a lower level than the default. Two issues therefore arise:

(i) Should it be possible to contribute more than the default contribution and should there be a maximum?

(ii) Should it be possible to contribute less than the default contribution?

(i) Contributions above the default rate up to a maximum

There are very strong arguments for allowing employees and their employers to make contributions, on a voluntary basis, above the default level:

- Many individuals will wish to make pension provision above the minimum default level, and should be able to do so without the complexity of multiple pension arrangements, and enjoying the opportunity to save at low costs which the NPSS will deliver.

- Many companies are already making pension contributions more generous than the modest compulsory level within the NPSS. It should also be possible for employers to make higher contributions when enrolling their employees in the NPSS without the complication of creating a further scheme.
**Figure 10.2** Replacement rate from NPSS for someone age 20 today: earnings level and rates of return scenarios

<table>
<thead>
<tr>
<th>£10,000</th>
<th>£15,000</th>
<th>£20,000</th>
<th>£25,000</th>
<th>£30,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>9%</td>
<td>11%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>3%</td>
<td>11%</td>
<td>14%</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>4%</td>
<td>14%</td>
<td>18%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>5%</td>
<td>17%</td>
<td>22%</td>
<td>25%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Notes: Assumes total contribution of 8% between the Primary Threshold and UEL from 25 retiring at 67. The AMC is 0.3%. Earnings in 2004 terms, increasing in line with average earnings.

**Figure 10.3** Replacement rate from NPSS for someone age 20 today: earnings level and retirement age scenarios

<table>
<thead>
<tr>
<th>£10,000</th>
<th>£15,000</th>
<th>£20,000</th>
<th>£25,000</th>
<th>£30,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>11%</td>
<td>14%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>66</td>
<td>11%</td>
<td>15%</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>67</td>
<td>12%</td>
<td>16%</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>68</td>
<td>13%</td>
<td>17%</td>
<td>19%</td>
<td>20%</td>
</tr>
<tr>
<td>69</td>
<td>14%</td>
<td>18%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>70</td>
<td>15%</td>
<td>20%</td>
<td>22%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Notes: Assumes total contribution of 8% between the Primary Threshold and UEL from 25. The real rate of return is 3.5% and the Annual Management Charge is 0.3%. Earnings in 2004 terms, increasing in line with average earnings. These replacement rates assume continuous saving from 25 to the age shown. In judging the level of contribution required to be reasonably sure of achieving a 15% replacement rate (in Chapter 6 Section 3) we allowed for some interruptions to work between 25 and SPA.
There is, however, a case for limiting the size of these additional contributions. Our macroeconomic analysis in Chapter 6 Section 6 suggested that the total aggregate value in NPSS accounts would not be so large as to raise concerns about the proportion of total national investment flowing through the NPSS and thus, for instance, about the percentage of total investment which might take an indexed form. If, however, contributions to the NPSS were entirely uncapped, and if it was perceived as a highly cost-efficient investment vehicle, the aggregate size might conceivably grow to a level at which such concerns were valid.

We therefore believe that there is a case for a cap on contributions, and recommend that the approach of setting a maximum cash limit to contributions should be considered. This could be set at a level equal to twice the default level contribution (employee and employer combined) for the median earner i.e. about 16% of relevant earnings (this would currently be about £3,000 per year). This approach would mean that lower earners would effectively be free of any cap (since they would be unlikely to be able to use the full freedom) while limiting the extent to which higher earners could use the NPSS as a low-cost alternative for pension saving that is already in many cases occurring [Figure 10.4].

As well as allowing further contributions on top of the default level, however, it will be important for government strongly to encourage such additional contributions. One risk in establishing a default rate of contribution to the NPSS is that it may be seen as a standard, to which some employers may level down even while others level up, and that individuals will wrongly assume that default level contributions are by definition adequate. Evidence from occupational schemes shows that when individuals are auto-enrolled, contribution rates tend to cluster around the default level [Figure 10.5].

To overcome these dangers it is essential that the introduction of the NPSS is accompanied by communication which:

- Stresses that the NPSS default level contributions should be seen as a minimum level, in the same way as the National Minimum Wage is seen as a minimum level of hourly pay, and that most people will want to consider making additional contributions.

- Explains the opportunity to make additional contributions, and indicates the contribution rates which may be needed to achieve a range of different income replacement rates.

- Reminds employers and employees of the fact that, as Chapter 7 outlined, paying people via pension contributions is highly cost-effective given the benefits of tax and National Insurance relief.
**Figure 10.4** Effect of maximum contribution cap at different earnings levels

![Graph showing the effect of maximum contribution cap at different earnings levels.](image)

**Source:** Pensions Commission analysis  
**Notes:** This assumes a default contribution rate of 8% of earnings between the Primary Threshold and the UEL. The maximum contribution is £2,920 in 2005 earnings terms.

---

**Figure 10.5** Contribution rates in US pension plans: impact of default rate and auto-enrolment

![Graph showing contribution rates in US pension plans.](image)

**Source:** Madrian and Shea, 2001  
**Notes:** Default contribution rate equals 3%.
(ii) Contributions below the default level

A case could also be made for allowing individual contributions below the default level. This would for instance enable individuals who felt unable to make the full individual contribution at least to maintain some level of pension saving. But we believe that there are strong counter arguments against allowing regular contributions below the default level, collected via payroll deductions, as it would add significant complexity in company payroll administration, and would fail to send a clear signal that the government believes that almost all people should be encouraged to save at the default level or above. Whether individuals who are members of the NPSS but who are currently temporarily opted-out of regular contributions, should be able to make ad hoc individual contributions direct to the NPSS is an issue for further consideration.

2. Alternative pension arrangements: better provision outside the NPSS

The NPSS is designed to ensure that those people not presently covered by adequate pension arrangements are enabled and strongly encouraged to save for a pension, while their employers are required to make a modest matching contribution. It is not intended, however, to replace existing good pension provision and it is important that the introduction of the scheme allows companies or individuals who currently have good arrangements in place to continue with these.

In respect of individuals who wish to make different arrangements, there is no need to specify what those alternatives might be. Any individual who wishes to opt-out of the NPSS on an individual basis would be free to do so whether this means foregoing the employer matching contribution, or receiving an employer contribution into another scheme. There will therefore be no need for new legislation relating to existing personal pension provision.

Where companies wish to maintain existing arrangements instead of auto-enrolling employees in the NPSS, however, legislation will be required to ensure that the existing pension arrangements are at least as favourable as those which the NPSS would provide. As Chapter 7 Section 1 has already set out, this implies that companies wishing to stay outside the NPSS arrangements, either for all of their employees or for some, will need to meet two sets of conditions [Figure 10.6]:

- Levels of employer contributions, and of combined employer plus employee contributions, which exceed the default level in the NPSS.

- Auto-enrolment procedures which achieve the same strong encouragement as that achieved within the NPSS.
DB, DC or hybrid schemes could be eligible to opt-out of the NPSS if:

1. Overall benefits in/contributions to the scheme equal to or above NPSS levels
   - DB scheme benefits accrued by most members to exceed estimated default level NPSS benefits.
   - For DC scheme contributions:
     - Employer contributions of at least the level of compulsory match in NPSS.
     - Total employee and employer contributions, net of all costs and fees, at least at the level of default contribution in NPSS (net of costs).

2. Auto-enrolment
   - To opt-out the company must either:
     - auto-enrol all employees who would otherwise qualify for NPSS into the occupational scheme;
     - or, if the occupational scheme has restricted access (e.g. a waiting period), the employer must operate two schemes. Employees eligible to join occupational scheme must be auto-enrolled into it. Employees not eligible for the occupational scheme must be auto-enrolled into the NPSS.
But one consequence of encouraging the continuation of existing scheme arrangements, will be that individuals may, at different points in their life, accumulate pension rights within employer schemes outside the NPSS as well as within the NPSS. Current pension transfer regulations allow individuals to demand a transfer of accumulated funds out of occupational schemes and into Stakeholder Pension policies, and recent tax simplification changes have been designed to facilitate such and other transfers, by removing tax treatment distinctions between different types of scheme. There is no reason why similar transfer arrangements should not apply to transfers from occupational schemes to the NPSS, thus allowing individuals if they wish to consolidate their pension saving. There may be a case for limiting the maximum value of such transfers in the same way as we have proposed limiting maximum annual contributions. The pros and cons of this and the appropriate maximum level are issues for consideration and consultation.

3. The mechanics of auto-enrolment, payroll deduction and individual opt-out

The aim of the NPSS is to use the power of inertia strongly to encourage individuals, and their employers through the matching contribution, to make at least minimum pension provision, while leaving individuals ultimately free to opt-out if they wish. It also aims to make low cost saving available to all people, and to minimise the administrative burdens on business. Achieving these objectives requires careful design of the mechanics of contribution collection and individual opt-out.

(i) Collection of NPSS contributions

Key features of the proposed NPSS were described in Chapter 5 Section 1 and summarised in Figure 5.2. The features include [Figure 10.7]:

- Individual accounts are held at the NPSS, which invests the individual’s money in funds as chosen by each individual, and which provides information direct to the individual about the capital value accumulated.

- Contributions are deducted from payroll, and then sent to the NPSS using a unique account number identifier (which should almost certainly be the individual’s National Insurance (NI) number).

---

2 Other schemes (e.g. occupational schemes) may choose to allow a transfer in of rights (in the case of DB schemes) or funds (in the case of a DC scheme) but it is at the discretion of the trustees.
Figure 10.7 National Pension Savings Scheme: Key Flows

- **Employer**: Employer contributions to HMRC or Pension Payment System.
- **Employee**: Employee contributions and payroll deduction of employee contributions.
- **NPSS**: National Pension Savings Scheme.
- **Fund managers**: Additional direct contributions and investment preferences.
- **Account information**: Contributions received, capital value accumulated (by fund), projected pensions.
Issues relating to investment fund choice, to communication with members, and to the governance of the NPSS, are discussed in Sections 6, 8, and 12 below. This section discusses the payroll deduction and contribution processing system.

It is essential to design this process so as to minimise administrative burdens on business and to minimise public administration costs. There are two options for achieving this. One is to use the PAYE system, the other to create a new Pension Payment System, specifically designed to process payments to the NPSS. In both options companies only have to make payments to one entity, and can use the NI number as the unique individual identifier. But there are important trade-offs to be considered in choosing between the two options: the PAYE option may minimise costs and business complexity (though this is not entirely clear); but the dedicated Pension Payment System option has a crucial customer service advantage:

- The PAYE option. All companies already have to make payroll deductions which are expressed as percentage rates over defined bands of earnings for tax and NI purposes. They combine these individual payroll deductions with employer NI contributions and send money to HM Revenue and Customs (HMRC). They use each individual's NI number to identify contributions per individual, and these are then credited to the individual's account within the National Insurance Recording System (NIRS2). This system is already being used for purposes other than tax and NI payments: student loan repayments are collected through this route. There is therefore a strong case in terms of simplicity for using the PAYE system to collect contributions (both employee and employer) to the NPSS. We believe that the costs of collection via the PAYE system would be very small in relation to both total fund size and overall operational costs.

Using the PAYE system, however, would suffer from one major disadvantage. This arises from the time delay between employer payments of aggregate PAYE and the provision of individual specific information. At present companies pay each month to HMRC the aggregate company liability for tax, NI, and other deductions collected via the PAYE system [Figure 10.8]. But only after the end of the tax year do they provide, through the P14 and P35 forms, information specifying the breakdown of the payments to the individuals concerned. Individual accounts within the National Insurance system and within the Student Loans Company are therefore credited up to six months after the end of the financial year in which the deductions from the individual's pay were made.
Figure 10.8 Transfers of contributions and information in the Pay As You Earn system

Monthly: Transfers of contributions

- Aggregate tax and NI contributions
- Student loan deductions
- Construction Industry Scheme payments
- Taking account of recoveries of statutory payments and tax credits

Annually: Transfers of information

- P14 and P35 forms provide information about the individual and are sent at the end of the tax year. Information is provided on:
  - Pay
  - Total tax
  - Total National Insurance
  - Student loan repayments

1 The construction industry scheme is a specific scheme for the construction industry whereby contractors pay their subcontractors net of tax and National Insurance contributions.
Applying this system to the collection of NPSS payments would therefore have two important disadvantages:

- It would be impossible for people’s contributions to be allocated to specific funds in line with each individual’s choice until the individual’s specific information arrived. All contributions would therefore have to be held in, say, a risk-free gilts fund for, on average, about a year after they were made.

- More seriously still, it would be impossible, without adding additional information requirements, to identify when precisely in the year deductions had been made, and thus to give the precise appropriate return on each individual’s funds in the period prior to investment in line with the individual’s choice.

A dedicated Pension Payment System. The way round these problems is to create a new payment system, specifically dedicated to receiving from employers, each month, both the aggregate employee and employer contributions to the NPSS and information which identifies, by use of the NI number, the breakdown of contributions by individual. The operating costs of this system may not be radically different from that involved in adding functionality to the HMRC system, but it would be, at least minimally, more burdensome on business. The calculations involved to determine individual payroll deductions and aggregate payments would be the same as for the PAYE option, but individual data would have to be sent monthly rather than at the end of the year.

The costs, administrative complexities for business, and implications for customer service, of these two options should be investigated further during implementation planning, but the Pensions Commission’s current thinking is that the dedicated Pension Payment System route is likely to be preferable.

(ii) Auto-enrolment and the individual opt-out

The basic concept of the NPSS is that there should be an age at which individuals should be automatically enrolled (auto-enrolled) into making contributions. Section 1 above suggested that that age should be 21. It will also make sense to trigger the auto-enrolment process, for those who initially opt-out, at subsequent dates or events. We suggest that a reasonable approach would be to require auto-enrolment on each new employment, and every three to five years even if someone stays within the same employment. In addition, an opted-out individual could voluntarily opt to join the scheme.

The technical issues, which need to be resolved, are therefore: How would the process for opt-out actually work? And what frequency of “changes of mind” should be allowed?
Mechanics of individual opt-out. There are two different ways in which opt-out could be arranged. One maximises the power of inertia: the other reduces administrative complexity:

- In the first, an employer would auto-enrol an individual at, say, their 21st birthday, or on first joining the company, and would automatically deduct from their first pay packet the default level of contribution. The individual would be notified that, if they did not wish to stay enrolled, they must fill in the opt-out form (in paper or online) and send it to the NPSS who would then instruct the employer to cease deductions. Those who choose to opt-out would then receive a repayment of the first month’s contributions (either from the employer or from the NPSS, depending on which of the two contribution payments approaches discussed above had been implemented).

- In the second model, which New Zealand is proposing to adopt, employees will have to inform the NPSS in their first four weeks after starting employment (or after 21st birthday) if they do not wish to join. Payments would then commence only at the end of the second month.

The Pensions Commission’s judgement is that the second option is preferable. One potential disadvantage of this option is that new employees, who were already members of the NPSS in their previous employment, might unnecessarily miss a month’s contribution. This can be overcome by recording prior membership on the P45 or P46 forms, and deducting contributions from the first month for new employees who are already members.

Subsequent opt-out and opt-in. Clearly there need to be procedures for a member already opted-in to the scheme to opt-out, and to cease contributions, even without a change in employment. Our present recommendation is that individuals should be free after six months, on giving one month’s notice to the NPSS, to exercise opt-out. Similarly it is important that they should be free to change their mind and opt-in. Again, we recommend a six-month delay before this is allowed, with a maximum of two “changes of mind” (in either direction) allowed in any one year. This seems likely to strike a reasonable balance between the need to allow individuals the flexibility to respond to changing circumstances, and the extra administrative burden, for both the NPSS and for employers, if more frequent changes were allowed.

The appropriateness of the rules established initially could and should be reviewed in the light of emerging evidence of actual behaviour.
4. Treatment of the self-employed and those not in work

In our First Report we identified the self-employed as a group among whom the problems of pension under-provision are especially severe. In Chapter 6 we described how the situation would get worse if current state system indexation arrangements continue indefinitely, since the relative value of the Basic State Pension (BSP), the only element of the state pension system to which the self-employed have access, will decline. We also, in Chapter 6, discussed the extreme difficulties in bringing the self-employed compulsorily into the State Second Pension (S2P) system, but argued that they should at least be able to join S2P on a voluntary basis.

Similar issues arise in relation to self-employed membership of the NPSS. The self-employed settle up for tax, most of their NI contributions, and student loan repayments, via self-assessment statements of liability after the end of the tax year (though with “payments on account” during the year).

This makes it very difficult to design a system of auto-enrolment for the self-employed. “Auto-enrolment” for the self-employed can only really mean designing their tax/NI assessment forms in such a way as to present the option of joining the scheme as the most obvious choice. Clearly, however, the self-employed should be able to join the NPSS on a voluntary basis. A process should ideally be created therefore to make it easy for the self-employed to become regular saving members of the NPSS. This might be achieved by allowing the self-employed to make payments to the NPSS alongside their monthly Class 2 National Insurance contributions. We recommend that this option should be investigated.

Voluntary membership of the NPSS should also we believe be open to the currently economically inactive (for instance those not currently doing paid work due to caring responsibilities) and the unemployed. Current rules allow anyone, irrespective of earnings, to make contributions to a Stakeholder Pension scheme up to a maximum of £2,808 per year and to receive in addition tax relief at the basic rate of 22%. We recommend that the same rules should apply within the NPSS.3

5. Options for reducing the cost impact on small business

In Chapter 5 [Figure. 5.5] we illustrated what the impact of each 1% of compulsory employer contributions would be on the wage bill for different sizes of companies, if we assumed 100% participation of those employees not currently in a pension scheme. In Chapter 5 we recommended that the compulsory matching employer contribution should be set at 3%. We also, for the purposes of our modelling, assumed that average participation rates of 80% for those above the LET and 65% for those between the Primary Threshold and the Lower Earnings Threshold (LET) might be achieved.

3 This treatment does not apply at present to occupational schemes, where tax relief is given at each person's marginal tax rate and can thus be 10% or indeed 0% depending on earnings.
Figure 10.9 Possible impact of a National Pension Savings Scheme on private sector total labour costs

<table>
<thead>
<tr>
<th>Firm size</th>
<th>Total labour costs £bn</th>
<th>Additional cost of employer contributions at 3% £bn</th>
<th>Additional cost as a percentage of total labour costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 4</td>
<td>30.9</td>
<td>0.3</td>
<td>1.0%</td>
</tr>
<tr>
<td>5 – 49</td>
<td>96.9</td>
<td>0.8</td>
<td>0.8%</td>
</tr>
<tr>
<td>50 – 249</td>
<td>64.9</td>
<td>0.4</td>
<td>0.6%</td>
</tr>
<tr>
<td>250+</td>
<td>222.2</td>
<td>0.8</td>
<td>0.4%</td>
</tr>
<tr>
<td>Total</td>
<td>414.7</td>
<td>2.3</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Source: Pensions Commission analysis of ASHE 2004

Note: Calculations based on 3% contribution (between the Primary Threshold and the UEL) for eligible employees not already members of employer-sponsored pension schemes. Analysis assumes that all people who are already members of employer-sponsored pensions receive at least a 3% employer contribution, so that the introduction of the NPSS requires no additional employer contributions in these cases. It also assumes that there is no ’levelling down’ of existing provision. As a result, figures could be under or over-estimates of costs. Assuming for all employees aged 21 and over a 65% participation rate for employees with earnings between the Primary Threshold and the LET and 80% for employees with earnings above the LET and below the UEL. Employer labour costs include total salaries paid plus 12.8% National Insurance as earnings above the Primary Threshold. Contributions on earnings above the Primary Threshold.

The possible actual effect of the NPSS on private sector labour costs, combining these two assumptions, is shown in Figure 10.9. The impact on larger firms, for instance with more than 250 employees, would be small, about 0.4% of the total wage bill on average. This reflects the fact that the majority of firms of this size already make employer contributions at or above the default level which we propose. But the average percentage increase in the wage bill would increase as firm size falls, reaching an estimated 1.0% for firms with fewer than five employees. This is the inevitable consequence of the fact that existing pension participation among such firms is very limited. The overall average cost for all firms would be 0.6%.

The argument can be advanced that the actual long-term cost to employers will be considerably less, and indeed in the very long term close to nil. Economic theory suggests that the impact of requiring companies to provide some remuneration in a deferred non-cash form will over time be offset by a lower rate of increase in cash remuneration. When Australia introduced compulsory employer contributions indeed this trade-off between pension contributions instead of cash wage increases was overtly stated and understood by employers, employees and trade unions. But such offset effects will take time to work through, and the initial introduction of the scheme will produce some increase in total labour costs, with a higher percentage increase for smaller companies.
The question therefore arises whether there are any ways in which these effects can and should be mitigated. One option, which could be considered is the phasing-in of the employer contributions over say two to three years. An alternative option which has been suggested to the Commission is that there should be an exemption for very small companies, for instance for businesses with fewer than five employees. The arguments against this are, however, compelling. It would deny the advantages of the scheme to employees in precisely the segment where pension scheme provision is most deficient. And it would create a disincentive for small companies to expand employment above the size threshold and an incentive to split businesses into different legal entities each just below the threshold.

More appropriate options to explore would instead be:

- Offsetting adjustments to the small company corporation tax rate.

- Or a mechanism by which each company received a rebate of employer contributions up to an amount fixed in absolute sterling terms, both to reduce the contribution cost and to compensate for the administrative burden. This would be a similar approach, for instance, to the rule by which companies with fewer than 50 employees receive £250 off their tax bill if they file tax accounts online, a sum of money which is materially beneficial for very small companies but trivial to large companies, and which can thus be withdrawn above the 50 employee threshold without creating any perverse incentive effects.

Spending money on such a mechanism would be an appropriate use of the enhanced government cash flow which would result from the abolition of the contracted-out rebate for DC schemes since it would devote the money to national savings rather than current consumption.

We recommend that government should explore whether these or other options can be afforded.

6. Investment options: selection process and default funds

Within the NPSS members will be auto-enrolled into making payroll deductions (with matching employer contributions) which will accumulate in their own account: they will then choose between different funds into which their money would be invested. The key questions which therefore arise are:

(i) How wide should be the range of funds in which people can choose to invest and what should be the role of the NPSS in selecting these funds, negotiating fees and monitoring performance?

(ii) How often should people be able to change fund allocations?

(iii) Should there be a default fund into which people's money is invested if they fail to make a specific asset allocation?
These issues are considered in turn below.

(i) Range of funds provided and role of the NPSS

As Chapter 5 Section 5 discussed, one of our reasons for proposing an individual account based NPSS is that it will allow people to choose between different risk and return combinations in the light of their own circumstances and preferences. The NPSS will therefore have to make available a reasonably wide spectrum of asset allocation options, ranging from low risk/low return to high risk/high return. Individuals would be able to allocate their funds across a mix of these different asset classes, subject either to a minimum percentage of the individual’s total funds or minimum absolute amounts invested in each fund. The issue is how wide this choice should be and how many funds should be available.

One possible way forward is to follow the Swedish “open system” approach, in which any fund manager can register a fund, as long as basic standards are met and as long as the fund management fees are transparently expressed [Figure 10.10]. Around 700 funds are now registered under the Swedish system. This “open system” maximises theoretically available choice. There are however three strong arguments against it:

- It is not the best way to minimise costs. While fund management charges are not the most important consideration in cost control (see the panel at the end of Chapter 1 and Section 10 of this chapter) their minimisation via economy of scale purchase can still make a significant difference to the Annual Management Charge (AMC). Average fund management charges within the Swedish Premium Pension scheme (PPM), for funds other than the default fund, are currently running at about 0.42%, well above the costs paid by large occupational pension funds (the Swedish default fund however has a fund management charge of 0.15%). An alternative model is therefore that the NPSS bulk negotiates a small number of fund management mandates focusing particularly on major investment categories (e.g. bonds, UK equities, European equities, global equities) and probably on index rather than actively managed funds. This is the model pursued by the US Thrift Savings Plan (a DC plan for Federal employees) which achieves total charges of below 0.1% [Figure 10.11].
### Figure 10.10 Features of the Swedish Premium Pension Scheme

| Information provision and switching frequency | - Information via website plus booklet to all new entrants on: management charges and past performance data for each fund.  
| - Members can allocate account across five different funds.  
| - Switching investment allocation allowed on a daily basis at nil cost. |

| Fund choice | - Free market: fund managers can register up to 25 funds each provided they comply with:  
| - EU unit trust rules (undertakings for collective investment in transferable securities directive);  
| - PPM rules on rebates and fund switching;  
| - Currently 670 funds registered by 80 fund management companies.  
| - Default fund (AP7) is state managed: 82% invested in equities with wide global spread.  
| - Over 90% of new members now make no active selection, instead accepting the default fund. |

| Management and administration costs as proportion of value | - Fund managers charge their market fee but with discounts (rebates) proportional to total value invested.  
| - Average post-rebate charge for all funds 0.43% (arithmetic non-weighted fund management charge average).  
| - Default fund: AMC is 0.15%.  
| - Premium Pension Scheme (PPM) administration charge is 0.22% in addition. |

| Reforms under discussion | - Significant concerns that fund proliferation confuses people and increases costs.  
| - Review of scheme costs and efficiency by Professor Hammarkvist.  
| - Concludes better guidance is necessary for fund choice. Given market concentration, a reduction of number of funds to 100-200 will not adversely affect choice. |

### Figure 10.11 Features of the Thrift Savings Plan for Federal employees in the US

| Information provision and switching frequency | - Online information on daily account balance and fund allocations.  
| - Call centre support.  
| - Fund choice is restricted to 6 funds.  
| - Switching investment allocation allowed on a daily basis at nil cost. |

| Fund choice | - A choice of five investment funds invested in specific asset classes:  
| - G Fund: Government bonds. This is the default fund.  
| - F Fund: Fixed Income Index  
| - C Fund: Common Stock Index  
| - S Fund: Small Capitalization Stock Index  
| - I Fund: International Stock Index  
| - L Fund is a life-styling option; balanced mix of all five funds.  
| - To invest in the non-default fund an individual must acknowledge the investment risk. |

| Management and administration costs as proportion of value | - Investment expenses and administrative expenses together around 0.06% (2004).  
| - Charges have halved since 1993.  
| - Low costs are partly achieved through the bulk purchase of a limited number of funds.  
| - But some administration costs (e.g. contribution collection, some member contact and information provision) is being absorbed within the human resource function. |

Source: www.tsp.gov
There is extensive evidence that too many options make it more difficult for people to make a choice. Research has revealed for instance that participation rates in US company pension schemes decline when asset allocation choice becomes extremely wide [Figure 10.12]. In the Swedish PPM scheme meanwhile expanding choice in the “open system” has been matched by an increasing number of people choosing the default option [Figure 10.13].

A constrained choice within the NPSS does not exclude the possibility of other investment choices, since people who wish to invest in a wider range of assets will be able to opt-out.

Detailed decisions on the range of funds to be provided within the NPSS and the role of the NPSS in negotiating them, should be made after further analysis of other models and after consultation, but the Pensions Commission’s preliminary recommendations are that:

- The NPSS should negotiate fund management mandates covering major asset classes (e.g. 6-10 in number) aiming for very low fees in return for the expectation of large fund volumes. These should include indexed funds.4

- These funds could either form the totality of the NPSS system, or could be combined with the ability to offer other funds at non-negotiated fees. This latter approach would allow members the option of investing in what are sometimes labelled “alternative asset classes” (e.g. private equity funds or hedge funds) or in funds designed to be ethical, environmentally responsible, or appropriate to particular religious groups. This could help avoid what might otherwise be contentious debates about what funds of these types should be included in the core range of bulk negotiated funds.

(ii) Frequency of asset allocation changes

The Swedish PPM scheme allows individuals to change allocations over the internet on a daily basis. While this has the apparent advantage of increasing choice, in fact frequent changes in asset allocations of an individual’s pension fund make little sense. Most people investing in pensions should take a medium-term point of view about their own appropriate balance between risk and return, and make fairly slowly moving asset allocation choices, which reflect that balance. Frequent changes of asset allocation moreover increase administrative costs, which must either be recovered from the individuals concerned (which would involve a more complex charging system) or recovered via an increase in average charges imposed on all members.

---

4 Issues such as the length of mandates and whether there should be one or several mandates for any one asset category will need careful consideration.
Figure 10.12 Participation rate in US company pension plans as fund choice increases

![Graph showing participation rate in US company pension plans as fund choice increases.](image)

Source: Iyengar, 2003

Figure 10.13 Active fund choice versus passive acceptance of default options within Swedish Premium Pension Scheme

![Graph showing active fund choice versus passive acceptance of default options within Swedish Premium Pension Scheme.](image)

Source: Weaver, 2004

Notes: Percentage of members actively choosing non-default fund from PPM administrative data. The split of those in default fund between “deliberately chose” and “passively accepted”, is estimated from survey data.
Final decisions should reflect more detailed consideration and consultation, but the Pensions Commission’s recommendation is that asset allocation choices should be made either on an annual or semi-annual basis.

- This would reflect typical practice within occupational Defined Contribution (DC) schemes which allow individual asset selection [Figure 10.14].

- And would enable asset allocation choices to be informed by the periodic communication of fund values and of integrated pension statements, considered in Section 8 below.

(iii) Should there be a default fund and if so what form should it take?

As already discussed in Chapter 5 Section 5 there are two reasons why the NPSS will need to have a default fund into which individuals are invested if they do not specify a preferred asset allocation:

- Some people simply will not send in asset allocation forms. At the very least therefore compulsory or auto-enrolled DC systems always need to have a "pending fund" (usually cash or bonds) into which funds are put while awaiting instructions.

- Many people do not feel well-equipped to make asset allocation decisions and welcome the "implicit advice" inherent in the designation of a default fund. Most DC occupational funds which allow member fund selection therefore specify a default [Figure 10.15]. These are typically either low risk/low return funds (e.g. in bonds) or "lifestyle" smoothing funds, which move people from equity rich portfolios to bond rich portfolios as they approach retirement.

Chapter 5 Section 5 discussed the considerations which should guide the designation of a default fund within the NPSS. These have led us to conclude that:

- The default fund should be a "lifestyle" smoothing fund, which automatically shifts members from high equity allocations at earlier ages to index bond allocations as they approach retirement. Within the spectrum of specific "lifestyle" fund designs it should probably be towards the cautious end. But it should be made clear that the government provides no guarantee of a minimum return on this fund, and that it could under certain (however rare) circumstances perform worse than real government bonds.

- There will be some individuals, who would prefer to invest with minimum or no risk. The other options should therefore include a fund invested in real government bonds, the return on which, looking forward from any one date, can be guaranteed.
Figure 10.14  Permitted number of fund allocation changes per year for UK occupational Defined Contribution schemes

Source: Occupational pension schemes 2004, GAD
Note: Based on 77 occupational DC schemes.

Figure 10.15  Default funds in occupational Defined Contribution schemes

Source: Annual survey 2004, NAPF
Note: GAD evidence drawn from a larger sample suggests: lifestyle funds 44%; Other types of default fund 31%; No default 16% (GAD 2004).
7. The decumulation phase: annuity provision and arrangements on death prior to annuitisation

The detailed design of the NPSS will need to specify rules and arrangements relating to the decumulation phase of an individual’s account. There are three issues which need to be considered:

- Should accumulated funds have to be annuitised in retirement, and if so at what age, and should the legislation define the precise form of annuity (level or index-linked, single or joint life)?

- How and by whom should annuities be provided? Is there a necessary government role in providing annuities or in supporting the annuity market in other ways?

- What should be the treatment of the assets of people who die before they have annuitised their assets?

(i) Should annuitisation be compulsory?

The NPSS is designed to ensure that people achieve at least a base load of pension income in retirement, thus limiting the danger of any means-tested reliance on the state, or of political pressure for ad hoc rather than pre-planned changes in the generosity of the state system. It is not focussed on increasing the pension savings of people already in good occupational schemes, but on ensuring that people who currently accrue nil or minimal private pension rights at least achieve a basic level of income replacement. There is therefore a strong argument that at some point in retirement the funds accumulated within the NPSS should be subject to the same annuitisation rules that apply to existing pension funds. These rules cover the first and last ages of annuitisation, drawdown before annuitisation and the choice between level and indexed, and single and joint life annuities [Figure 10.16]. (The issue of whether the NPSS should have a tax free lump sum on retirement is considered within Section 9.)

The most straightforward way to set the ages of first allowed and last possible annuitisation within the NPSS would be to align them with the current rules which apply to existing pension schemes, and we do not see any good reasons to divert from this approach. After 2006 the age of the earliest possible annuitisation will move to 55, while the age of last possible annuitisation is currently 75. Both these ages should increase in line with life expectancy, to encourage both later retirement and later annuitisation, which (as the panel on annuities at the end of Chapter 5 argued) is the key development required to offset potential strains in the annuity market. Communication to members should make plain the benefits of enhanced income which individuals might expect via later annuitisation, (provided life expectancy estimates are not subject to further unexpected upward revisions).
**Figure 10.16** UK pension system annuity rules: as from April 2006

| Lump sum | Guaranteed Minimum Pension\(^1\) must be taken in entirety as a taxed income stream.  
For Protected Rights\(^2\) and all other pension saving 25% of the pension fund may be taken as a tax-free lump sum. |
| --- | --- |
| Earliest age at which pension benefits can be accessed | State Pension Age for Guaranteed Minimum Pension.  
55 for Protected Rights and all other pension rights. |
| Forms of income stream before age 75 | No requirement to draw down any income until age 75.  
For those who do choose to access fund there are two alternatives: annuitisation or income drawdown. The rules on type of annuity vary between Protected Rights and other pension funds. |
| Annuities | Protected Rights:  
Must purchase a price-linked or with-profits annuity.  
Those married or in a civil partnership at the point of annuitisation must purchase a joint life annuity with the Protected Rights.  
Non-protected rights:  
There are no restrictions on the type of annuity that can be bought with non-protected rights. |
| Income drawdown | Individuals can draw income equal to 35%-100% of the equivalent annuity, while leaving the fund invested in asset allocation of individual’s choice.  
Survivors can inherit the remaining funds taxed at 35% (before inheritance tax). |
| Trivial commutation | Possible voluntarily to commute small pensions (up to 1% of lifetime allowance) between ages of 60 and 75, within a 12 month period.  
Commuted pension taxed as income. |
| Forms of income stream after age 75 | At age 75 must buy either:  
– annuity;  
– or from April 2006 will be able to choose Alternative Secured Income (ASI). |
| Alternative Secured Income (ASI) | Aimed at individuals unable to buy an annuity for faith reasons.  
Maximum income is 70% of the equivalent level annuity.  
No return of unused funds on death: individuals taking less than the maximum can receive higher pension in later years or provide for dependents’ benefits. |

Notes:  
\(^1\) Guaranteed Minimum pension refers to that element of the Defined Benefit (DB) pension arising from contracted-out rebates before 1997.  
\(^2\) Protected Rights refer to that element of the DC pension arising from contracted-out rebates.
Turning to the form of the annuity – single or joint life, level or index-linked – there are two different approaches currently applied within existing parts of the UK pension system:

For those DC funds (occupational or Approved Personal Pension) which arise from the compulsory savings system (i.e. from contracted-out rebates) regulation requires that annuities mimic the nature of S2P Pay As You Go (PAYG) rights. Under the “protected rights” rules they have to be joint life in form (where there is a spouse) and indexed to price increases (with equivalent rules also for contracted-out Defined Benefit (DB) rights).

For any DC funds not funded by the contracted-out rebate, however, there is no requirement to buy either joint life or index-linked annuities (though, somewhat inconsistently, regulations do limit DB funds in both respects, even on rights above and beyond those funded by the contracted-out rebate). The majority of annuities bought with maturing DC funds (occupational or personal) are in fact single life and non-indexed.

Arguments can be made for either approach, to each of these two issues, in respect to NPSS funds:

Indexation. In general most people would be well-advised to take index-linked annuities in retirement. Many people fail to understand the impact of non-indexation over lengthy periods of retirement, and many pensioners are as a result left with declining real income which they are likely to find inadequate late in retirement. The only argument in principle for level rather than index-linked annuities is that some people may prefer a higher real income early in retirement. The issue of whether higher real consumption early in retirement, declining later, reflects logical preferences rather than an unplanned and unintended result, was considered in Chapter 4 of the First Report. There is also however a pragmatic argument advanced that index-linked annuities can be poorer value than level annuities, if the supply of real-indexed instruments to support annuities is for some reason constrained [see the panel, “Meeting the increased demand for annuities,” Chapter 5 for discussion of the real-indexed securities market].

Balancing these considerations the Pensions Commission’s recommended approach to annuity indexation within the NPSS is as follows:

– Since the NPSS is the planned replacement for a compulsory earnings-related scheme, which in both its PAYG and contracted-out variants requires indexation there should be a preference in principle for price-indexation, in the NPSS. Estimates of what pension income the NPSS will produce, both for the purposes of policy analysis and to be included in communications to members, should assume that index-linked annuities will be purchased.

– The government should, as the panel at the end of Chapter 5 sets out, ensure that there are no artificial barriers to the supply of index-linked government bonds.
Guidance to individuals approaching retirement with NPSS funds should set out the advantages in principle of price-indexed annuities.

- But individuals should be free to decide if they wish to purchase non-index-linked annuities.

**Joint or single life.** The argument in favour of joint life annuities is that many spouses (primarily women) of people taking out single life annuities are often left with inadequate pension income late in retirement, and are often dependent on means-tested benefits. The counter argument is that we should be aiming to create a pensions system in which all individuals should accrue adequate pensions in their own right (rather than through their spouses).

If our recommendations relating to state pensions are accepted, this will make the flat-rate state pension more generous, more favourable to carers and less means-tested. Spouses will also wish to make decisions which reflect their individual circumstances. We therefore recommend that members should be able to choose joint or single life annuities.

To address concerns about dependent spouses, however, one option which should be considered is whether people with spouses buying annuities with NPSS funds should need to provide a form signed by their spouse, acknowledging that they have considered the relative merits of joint and single life annuities.

(iii) Annuity provision: is there a role for government?

The overall issue of whether the government needs to take measures to support the annuity market was considered in Chapter 5 Section 3, in which the following conclusions were suggested:

- The government, which is significantly exposed to post-retirement risk through state pension provision and through health service provision, should be very wary of taking on longevity risks which the insurance industry and capital markets are capable of absorbing through the provision of annuities.

- The most important initiatives required to avoid capacity constraints in the annuities market are to encourage later retirement and later annuitisation by: (i) gradually increasing the legally defined ages of first possible and last possible annuitisation; (ii) facilitating the growth of drawdown products which delay annuitisation; (iii) allowing annuity price differentiation by age to send appropriate signals to individuals about the benefits of later annuitisation. Free market price differentiation should also play an increasingly useful role in enabling some lower income groups to secure the higher annuity rates which should logically arise from their lower life expectancy.

- Given such initiatives, the annuity market should be able to support the significant expansion of demand for annuities arising out of the switch to DC (including the impact of the NPSS).
However there may be a role for government in supporting the annuity market by: (i) considering the issue of longevity bonds which absorb the tail of very late post-retirement longevity risk but only if it is simultaneously taking measures to exit from inappropriate longevity risk absorption, and (ii) ensuring that there are no artificial barriers to the provision of real-indexed rather than nominal government bonds in order to support as best possible the provision of real-indexed annuities.

The implication of this overall approach is that government should not be the actual provider of annuity capacity but should rely on private sector capacity to provide market priced annuities. In operational terms, however, there is still choice to be made between:

- The NPSS bulk buying annuities from the insurance industry, quoting prices to individuals, and administering the actual payment of pensions.
- The NPSS requiring individuals to shop around for pensions in the open market.

The argument in favour of the former approach is that it could deliver better value for customers. The arguments for the latter are that: (i) the annuity market is fairly efficient and transparently priced; (ii) many people will wish to aggregate several different pension pots into one annuity; (iii) people should be able to consider drawdown options as well as straight annuities for NPSS funds; and (iv) the NPSS should limit its operational challenges by keeping out of the annuities payment business.

On balance the Pensions Commission believes that the latter arguments are compelling, and that the NPSS should not in general be a direct provider of annuities. We recommend, however, that it should have the legal powers to play a bulk-buying negotiating role if this seems likely to be able to deliver better value to specific categories of members (e.g. members with smaller accumulations whom the financial services industry will find less economic to serve on an individual basis).

We also recommend that the development of the annuity market and its capacity to absorb the rising demands placed on it, should be one among the issues which a successor body to the Pensions Commission [discussed in Chapter 11] should keep under regular review.

(iv) **Assets of people dying before retirement/annuitisation**

Different pension systems treat the implicit or actual assets of people who die before retirement ages differently [Figure 10.17]:

- Within the UK Basic State Pension (BSP) and State Second Pension (S2P) systems, surviving widows gain benefits (in the form of widow’s pension) from the contributions which their deceased husbands have made. From 2010 this will also be the case for widowers. But in the absence of a surviving spouse, the value of contributions made accrues to the system, not to children or other inheritors.
### Figure 10.17 Inheritance rights for survivors in the event of death before scheme pension age

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Inheritance rights for survivors</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Second Pension and SERPS rights</td>
<td>- Surviving spouse or civil partner entitled to pension equal to half of accrued rights when reaching State Pension Age.</td>
</tr>
<tr>
<td></td>
<td>- Spouses receiving child benefit can receive widowed parent's allowance.</td>
</tr>
<tr>
<td></td>
<td>- Bereavement payment (£2,000) paid to all surviving spouses.</td>
</tr>
<tr>
<td></td>
<td>- If no surviving spouse money does not enter estate.</td>
</tr>
<tr>
<td>Contracted-out rights (Protected Rights or Guaranteed Minimum Pension)</td>
<td>- DB schemes: Immediate pension to surviving spouse equal to half of accrued rights. Can be withdrawn if spouse remarries before State Pension Age.</td>
</tr>
<tr>
<td></td>
<td>- DC schemes: Accrued fund can be used to buy immediate annuity. If no spouse, the fund becomes part of the estate.</td>
</tr>
<tr>
<td></td>
<td>- If the widow(er) dies then the Protected Rights pension can continue to be paid for dependent children.</td>
</tr>
<tr>
<td>Common practice for survivor’s benefits in non-contracted out DB schemes</td>
<td>- No statutory rules.</td>
</tr>
<tr>
<td></td>
<td>- Most schemes provide death-in-service benefit to spouses and civil partners. Few withdraw the pension on re-partnering.</td>
</tr>
<tr>
<td></td>
<td>- Most provide spouses’ pension based on a proportion of either accrued rights or prospective pension at normal pension age.</td>
</tr>
<tr>
<td></td>
<td>- Most also provide a lump sum payment.</td>
</tr>
<tr>
<td>Common practice for DC schemes and personal pensions (non-protected rights)</td>
<td>- Usually the member nominates a person to inherit the pension fund (which may or may not be the surviving spouse).</td>
</tr>
<tr>
<td></td>
<td>- If there is no nominated beneficiary, the value of the fund becomes part of the estate taxed at 35% (before inheritance tax).</td>
</tr>
<tr>
<td>Swedish Premium Pension (compulsory funded scheme)</td>
<td>- The Swedish Premium Pension (like the Swedish PAYG NDC pension) pays no survivors’ benefits in respect of those dying before claiming a pension. Instead the assets are evenly distributed between individuals in the same cohort as a survivor’s bonus.</td>
</tr>
<tr>
<td>Danish ATP (compulsory funded scheme)</td>
<td>- Single capital payment equivalent to 35% of fund paid to spouse.</td>
</tr>
</tbody>
</table>
Within the Swedish earnings-related Notional Defined Contribution system (NDC), an explicit decision has been taken that the balances of people dying before retirement should accrue to the benefit of all survivors (i.e. to the scheme) thus slightly increasing the rate of return earned on balances.

Within most privately funded systems, however, the accumulated balances of people who die before annuitisation accrue either to the individual's estate or, within trust-based schemes, to beneficiaries determined by the trustees (influenced usually by expressions of wish).

Our strong recommendation is that the latter approach should be followed for NPSS assets, since the attractiveness of the scheme will be significantly enhanced if people are confident that their fund assets will pass to their family (or to other specified beneficiaries) if they die before pension payment commences.

8. Communication with members

The NPSS aims, via auto-enrolment, strongly to encourage and to enable people to save adequately for their retirement, while leaving individuals free to decide whether to remain members and at what level to contribute. It is therefore vital that communication with members is designed to enable them, as best as possible, to make intelligent and informed decisions.

Designing the communication package will require careful consideration of:

- The benefits of providing guidance about the consequences of different levels of saving and different asset allocations, versus the dangers of providing implicit advice and false assurance.

- The benefits of providing a totally integrated picture of each person's pension saving (state, NPSS and private) versus the administrative complexities involved.

- The frequency of communication, and the importance of clear branding.
(i) Benefits of information and guidance versus dangers of implicit advice and false assurance

Clearly communication to members will need to inform them on the basic facts of their NPSS account: the capital sum already accumulated, the allocation between different funds, and the rate of return achieved (and thus the increase/decrease in capital accumulated) over the past period.

But there are difficult judgements to be made relating to the description of funds available, and to how much “indicative projection” information should be provided:

- **Fund description.** In many private occupational DC schemes where members can make asset allocations, descriptions of alternative funds are provided, characterising them on a spectrum from low expected return/low risk to higher expected return/high risk and providing details of historic performance. An equivalent approach will be appropriate within the NPSS. The challenge for the NPSS is that any guidance provided by a government agency will be assumed to carry authority, and, unless disclaimers are clear, to be forms of guarantee. The NPSS will need to frame descriptions in a way that makes it clear that indicative returns are no more than indicative. A clear description of the risks and possible returns within the default fund will clearly be essential.

- **Indicative projections.** There would clearly be value in providing members with indications of how already accumulated capital would grow in future under different rate of return assumptions, and of how different rates of savings, combined with different rates of return, would translate into total capital accumulated at point of retirement. Information on what future capital accumulations would mean for annual pensions, given current annuity rates, and at a variety of different ages, should ideally be included, helping people to understand the income benefits of later retirement and later annuitisation. These should reflect the assumption that people should select index-linked annuities, and should illustrate the implications of the joint life versus single life annuity choice.
Indicative projections of this sort are provided in many pension systems. Occupational DC schemes in the UK are required to provide “Statutory Money Purchase Illustrations” indicating how capital might grow and what future pension might result, given a maximum 7% nominal return assumption. Personal pensions when sold have to provide indications of future possible pension using three alternative return assumptions, 5%, 7% and 9% [Figure 10.18]. The Swedish NDC scheme, meanwhile, provides an interesting model of indicative forecasts of future pensions at different retirement ages [Figure 10.19].

Careful consideration will, however, have to be given to the precise design of indicative projections within an NPSS, given, in particular, the potential for very different results from different asset allocations. Thus:

– The Swedish communication package (the “orange envelope”) has two attractive features. It provides a very clear description of the capital value of funds invested in the PPM element of the system [see the left hand side of Figure 10.19]. And it illustrates the different levels of pension which an individual might achieve at different possible retirement ages (61, 65 and 70) thus helping people to understand the retirement age/income in retirement trade-off [see the right hand side of Figure 10.19].

– But it makes these projections on the basis of the unrealistic assumption that the PPM funds will earn the same rate of return as that paid on the much larger Notional Defined Contribution (NDC) funds. This extremely cautious assumption minimises the risk that the state will have provided false assurance about future retirement income, but in the Swedish system, does not result in a dramatic underestimate of future retirement income, since the NDC funds (on which the rate of return can be predicted with reasonable accuracy) dominate the system.

– In the NPSS, however, all of the individual’s funds would be exposed to the performance of the asset classes in which he or she had invested.

– But the more detailed and differentiated the indications provided of potential returns by asset class, the greater the danger that members believe that the government is providing an authoritative forecast.

The appropriate balance of these considerations will be a key issue for implementation planning.
### Figure 10.18 Information to members of private pension schemes: regulatory requirements

<table>
<thead>
<tr>
<th>Scheme Type</th>
<th>Requirements and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DB occupational schemes</strong></td>
<td>Currently no obligation on schemes automatically to send out annual statements, (though many do). Schemes must provide information on request, about member’s own and any survivor’s benefits at normal pension age. DWP is currently consulting on whether annual benefit statements should be automatically issued to active and some deferred scheme members.</td>
</tr>
</tbody>
</table>
| **DC occupational schemes, stakeholder and personal pensions** | With a few exceptions, schemes are required to send a benefit statement to all members annually. This must include information about:  
  - Current capital value of the fund;  
  - Illustration of the pension payable on retirement in today’s prices (assuming normal pension age for the scheme or State Pension Age);  
  The illustration must be calculated in accordance with technical guidance from the actuarial profession (maximum 7% nominal return but must reflect likely returns. Schemes can show a range of returns) |
| **Stakeholder and personal pensions**            | FSA regulations require that at the time of initial sale illustrations of pension payable on retirement (in today’s prices) are provided on the basis of investment returns of 5%, 7% and 9%.                                                  |

1 Also Defined Benefit schemes with money purchase components (e.g. AVCs).  

Source: DWP
### Statement of your premium pension (PPM) account: your investment funds

#### Fund holdings, 31 December 2004

<table>
<thead>
<tr>
<th>Fund number</th>
<th>Name of fund</th>
<th>Distribution chosen (percent)</th>
<th>Number of shares in fund</th>
<th>Price per share (SEK)</th>
<th>Current value of investment (SEK)</th>
<th>Current distribution (percent)</th>
<th>Acquisition value (SEK)</th>
<th>Change in value (SEK)</th>
<th>Change in value (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>111 111</td>
<td>Real Interest Rate Fund</td>
<td>20</td>
<td>73.6526</td>
<td>143.24</td>
<td>10,550</td>
<td>25</td>
<td>9,928</td>
<td>622</td>
<td>6</td>
</tr>
<tr>
<td>222 222</td>
<td>Equity Fund America</td>
<td>20</td>
<td>19.2047</td>
<td>366.89</td>
<td>7,046</td>
<td>16</td>
<td>9,928</td>
<td>-2,882</td>
<td>-29</td>
</tr>
<tr>
<td>333 333</td>
<td>Equity Fund Sweden</td>
<td>20</td>
<td>14.0311</td>
<td>689.14</td>
<td>9,669</td>
<td>22</td>
<td>9,928</td>
<td>-259</td>
<td>-3</td>
</tr>
<tr>
<td>444 444</td>
<td>Equity Fund Europe</td>
<td>20</td>
<td>478.3054</td>
<td>15.99</td>
<td>7,648</td>
<td>18</td>
<td>9,928</td>
<td>-2,380</td>
<td>-23</td>
</tr>
<tr>
<td>555 555</td>
<td>Equity Fund Japan</td>
<td>20</td>
<td>157.2951</td>
<td>52.72</td>
<td>8,293</td>
<td>19</td>
<td>9,928</td>
<td>-1,635</td>
<td>-16</td>
</tr>
<tr>
<td></td>
<td>Total fund investment, 31 December 2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>43,206*</td>
<td></td>
</tr>
</tbody>
</table>

#### Change in value of your premium pension account from the beginning

<table>
<thead>
<tr>
<th>Acquisition value (SEK)</th>
<th>Change in value (SEK)</th>
<th>Change in value (percent)</th>
<th>Current value (SEK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>49,640</td>
<td>-6,434</td>
<td>-13</td>
<td>43,206*</td>
</tr>
</tbody>
</table>

Note that the first contributions were invested in the Swedish scheme in 2000 at the equity market peak. In 2004 values (for those who invested early and in equities) show capital losses.
**Estimate of your public pension**

Provided below is an estimate of the pension that you will receive each month for the rest of your life starting when you retire. The estimate is based on the total credit that you have earned so far toward your public pension. The current amount of your pension credit – or the balance of your pension account – is shown in the box on page 2.

We have assumed that for each year until you retire you will have the same income and therefore earn the same pension credit as in 2003. Your pension credit for 2003 is shown on page 5.

If you begin withdrawing your public pension at the age of

<table>
<thead>
<tr>
<th>Age</th>
<th>0% growth</th>
<th>2% growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>61:</td>
<td>With 0% growth, you will receive SEK 9,500 per month</td>
<td>With 2% growth, you will receive SEK 14,500 per month</td>
</tr>
<tr>
<td>65:</td>
<td>With 0% growth, you will receive SEK 12,000 per month</td>
<td>With 2% growth, you will receive SEK 20,000 per month</td>
</tr>
<tr>
<td>70:</td>
<td>With 0% growth, you will receive SEK 17,000 per month</td>
<td>With 2% growth, you will receive SEK 31,300 per month</td>
</tr>
</tbody>
</table>

Your public pension, before taxes, at age 65 and with economic growth of 0% (SEK 12,000 per month) consists of SEK 9,800 in inkomstpension and SEK 2,200 in premium pension.

Note that the public pension here includes both the PAYG Notional Defined Contribution scheme “inkomstpension” and the pension which might arise from the PPM. Future returns on the PPM are (unrealistically) assumed to be the same as in the NDC scheme.
(ii) Integration of all pension information versus administrative complexity

For people to make well-informed decisions on rates of contribution and on asset allocation, they should ideally have information on all the pension rights/funds they have accrued, whether in the state pension system, the NPSS, or in private funds. As part of its “Informed Choice” programme the Government has therefore developed integrated pension statements which set out pensions already and prospectively earned under the different elements of the state system (BSP and S2P); it has regulated the flow of information from occupational and personal pension policy providers, and it has taken legal powers (not yet used) to require private providers to incorporate state pension information in Combined Pension Forecasts [Figure 10.20].

In designing the NPSS communications a trade-off will need to be made between comprehensiveness and operational complexity. Our tentative recommendations are that:

- NPSS reports should provide information both on account values (and prospective pensions) within the NPSS and on state PAYG pensions already accrued and likely to be accrued by a variety of future possible retirement dates.

- Whether it is feasible also to integrate data on other private pensions accrued (e.g. in particular in DB occupational schemes) should be considered once the system is in place and once any operational problems with the basic information flow are fully resolved.

(iii) Frequency of communication and branding

The optimal frequency of communication with members is linked to the issue (discussed in Section 6 above) of how frequently members can make asset allocation decisions. Cost considerations are important: so too is the issue of what frequency of information is most useful to members. More frequent communications will be valued by some members, but too frequent communication will result in NPSS account reports simply being ignored.

Further analysis and consultation should be conducted before making decisions on the frequency of communication, but the Pensions Commission’s current judgement is that a high quality annual statement to each member is the key requirement. This reflects the following considerations:

- While some private occupational DC funds provide half-yearly or quarterly accounts, many work on an annual reporting basis, as do most personal pension policies.
Combined Pension Forecasting (CPF), launched in October 2001, is a collaboration of the Department for Work and Pensions (DWP) with employers and pension providers, who participate on a voluntary basis.

### Information in the CPF

**State Pension Information**
- Amount of Basic State Pension and Additional State Pension earned so far in today’s prices.
- Projected amount in today’s prices of Basic State Pension payable at State Pension Age if you pay or are credited with full National Insurance contributions from now until State Pension Age.

**Occupational or personal pension information**
- Compulsory annual benefit statement.
- An illustration of the pension (in today’s prices) the member would be likely to receive at his/her normal retirement date.

### Process and coverage of the CPF

**Process**
- DWP sends State Pension information to participating scheme/provider. It is then the scheme/provider which produces the Combined Pension Forecast.
- The vast majority of employers/providers participating in the service issue Combined Pension Forecasts annually.

**Coverage**
- By the end of August 2005 the DWP had supplied information for 4.47 million Combined Pension Forecasts and over 360 schemes were issuing or about to issue Combined Pension Forecasts.

### Potential policy developments

Powers in the Pensions Act 2004 enable the government to compel schemes to co-operate in the production of Combined Pension Forecasts. This is a reserve power, which the Government can choose to use if it believes it the best way to meet its objectives.

- The existing state pension projections are done on an annual basis, and there would be no value in doing these more frequently. An integrated “state system plus NPSS” account can only usefully be provided once a year.

The design and branding of the account report will also be important. The Pensions Commission has found the Swedish “orange envelope” an interesting example to consider. By creating a strongly branded and nationally recognised communication, received by all citizens at the same time each year, the Swedish Government’s Social Insurance Agency is able to foster a national debate around the adequacy of pension rights accumulated and the asset allocation choices that people have to make.
9. A scheme-specific tax regime?

In Chapter 7 Section 2 we reached the conclusion that, while in principle there might be good arguments for redesigning the current system of pension tax relief so as to redistribute the benefit to basic and lower-rate taxpayers, there is no practical way to do this in the foreseeable future, given in particular the complexities created by Defined Benefit schemes. The issue remains whether it would be possible and desirable to design a tax regime specifically for the NPSS.

Such a scheme specific tax regime could take the form illustrated in Figure 10.21. All members, whatever their marginal tax rate, would receive a government matching contribution set so that the scheme, relative to the existing system, would be value neutral for a basic rate tax payer. With no tax-free lump sum available the match could be equal to 42% of the employees' contribution (for someone contributing at the default level).

The key advantage of such a scheme would be the simplicity of the message. For every £1 the individual puts in, the government would contribute over 40p. With employer matching contributions in addition, the overall match would be over one-for-one. In addition:

- While tax-free lump sums would no longer be allowed, evidence on how much importance individuals attach to this feature is unclear [See Chapter 7]. And there is a good argument that since the aim of the NPSS is to ensure that people achieve a minimum of earnings replacement in retirement, 100% annuitisation would be preferable.

- Such a scheme would simplify the treatment of additional individual contributions to the NPSS, since tax relief credited would be independent of the individual’s marginal tax rate.

Some disadvantages of the scheme also however need to be considered:

- The less favourable economics for higher-rate taxpayers might make it sensible for them to opt-out, and for their employer to make alternative arrangements within the existing tax regime, proliferating pension funds (e.g. for the individual who progressed from basic rate to higher-rate during their career) and adding administrative complexity for business.

- The impact on the cash-flow of public finances would be negative, even if the scheme were designed to be value neutral over the long-term. Extra tax relief would be given up front, while extra tax revenue (through the elimination of the tax-free lump sum) would flow later. (This might however be an appropriate offset to the decline of contracting-out rebates, which swells short-term government cash flow but which should not be devoted to current expenditure.)

Contributions could still remain deductible in respect of the separately calculated tax credits however, maintaining the highly favourable treatment of those on the tapers of Working Tax Credit and Child Tax Credit.
The tax regime for pensions has just been changed significantly. There is a

good case for stability for at least several years.

We have not reached a clear conclusion on the balance of these considerations. 

We are attracted by the idea of a simple “government match” approach, but

we do not believe it is essential to the success of the NPSS. The pros and cons

of introducing a scheme-specific regime should therefore be considered further,

and should be a subject on which government should now consult.

In reviewing the issue, government should also consider whether there is any

scope for introducing a matching scheme which is more favourable than the

present regime, i.e. better than value neutral to basic rate or lower-rate tax

paying NPSS members, and therefore entailing some net Exchequer cost.

This option should be considered over time in the light of the overall cost of

pension tax relief which may decline as the DB to DC shift continues and the

aggregate contribution level falls.

If the decision was taken not to introduce a scheme-specific tax regime, it

would be very important that information about the advantages of existing tax relief (and NI contribution reliefs for employers) was communicated more clearly to employees and employers.
10. Indicative operational costs: international experience

Low cost operation of the NPSS is essential. The potential to make pension saving possible at substantially lower AMCs is one of the key rationales for creating this national system. Chapter 1 Section 2 set out the argument that there is a segment of the market, which it is impossible profitably to serve except at AMCs (e.g. 1% and above) which are in themselves rational disincentives to saving and which substantially reduce the pensions achieved at retirement. It argued [see the panel at the end of Chapter 1] that the key to reducing costs was to eliminate high initial advice costs by compelling or auto-enrolling people into pension saving, and to reduce contract proliferation costs by creating individual accounts within a national scheme into which individuals could continue to make contributions as they moved through different employments. It also pointed out that one of the advantages of well-run PAYG systems is that they can achieve operational costs (as a percentage of the implicit value of the pension rights accrued) of as low as 0.1%.

NPSS costs will necessarily be higher, but should still be substantially below 0.5%. The target we propose is 0.3%:

- It will not be possible to operate the NPSS at costs as low as a PAYG scheme. Auto-enrolment with the right to opt out is more complex than straight compulsion; freedom to choose between alternative funds will also add cost, so too will the need to pay investment management fees. Member communication will need to be more extensive than it has been in the past been within the PAYG system.

- But large occupational schemes face these complexities, and those with over 5000 members often operate with total costs at or below 0.3% [Figure 10.22].

Very large occupational scheme costs therefore represent a reasonable benchmark for the NPSS. During implementation planning, cost benchmarks should be designed for each element of the NPSS business system – payment system direct cost, account maintenance, fund management fees and communication with members. Best-practice benchmarks for the latter two will derive from large occupational schemes: payroll deduction costs need to be worked out in detail with HMRC or as a separate exercise if the option of a new Pension Payment System is pursued.
Figure 10.22  Occupational pension scheme costs according to the size of the scheme

Source: GAD survey of expenses of occupational pension schemes, 1998
Note: Each series has been rounded to the nearest 0.1% therefore numbers do not sum.
The average is the weighted average of all members.
International experience provides some insight into the costs which might be achieved:

- The Swedish PPM currently has a total operating cost of about 0.22%, to which must be added about 0.42% fund management charges for those who choose to invest in non-default funds, but only 0.15% for the default fund, which the vast majority of new members are now selecting. Looking forward it is anticipated that total costs (operating plus fund management) for actively managed funds will be down to 0.33% by 2020, and that the total costs of investing via the default fund will be less than 0.2% [Figure 10.23]. We believe however that costs in the Swedish system have been unnecessarily increased by (i) failure to use the government’s bulk buying power in fund management (outside the default fund) and (ii) unnecessary flexibility to make daily changes in asset allocation.

- The US Federal Thrift Savings Plan has a published operating cost of 0.06%, but we believe that this may exclude some costs arising elsewhere (e.g. payroll deduction and member enquiries) which are not explicitly allocated to the scheme. The President’s Commission on Social Security Reform, drawing on the experience of the Federal Thrift Savings Plan, has suggested that total costs for “carved out” funds could be about 0.3%, even if the range of funds available is wider than in the Federal Thrift Savings Plan and includes actively managed funds.

Further work is therefore required to establish reasonable cost targets. But the Pensions Commission believes that total costs of substantially below 0.5% per year should be achievable and that the target should be to achieve costs of 0.3% or less. Costs of 0.3% would significantly improve incentives to save for those segments of the market where pension under-provision is greatest.
Figure 10.23 Costs in the Swedish Premium Pension Scheme (PPM): current and planned

Costs in Swedish Premium Pension Scheme: non-default funds

- Total fund management fees (after discount)
- PPM administrative charge

Costs in Swedish Premium Pension Scheme: default funds

- Total default fund costs (including administration and fund management)
- PPM administrative charge

Source: Weaver 2004, information from PPM
11. A feasible implementation timescale

If the Pension Commission’s recommendations are in principle accepted it will obviously be desirable to introduce the NPSS as soon as possible, alongside the reforms to the state system discussed in Chapter 9. It will be essential however that the launch of the NPSS is as smooth and fault-free as possible, and there are significant operational challenges to be met in launching a new system.

International experience provides only broad indications of timescales required for major pension reform [Figure 10.24]:

- In Sweden major pension reform, including the introduction of a national funded pension scheme with individual accounts and asset allocation choice (the PPM), took six years from the report of the working group to the first year of contributions into the funded scheme. In the Swedish case, however, the reforms included not only the introduction of the funded PPM, but the recasting of the state PAYG system into a NDC scheme. Since we are not recommending such radical changes to the core state system, a more rapid implementation ought to be possible.

- In New Zealand, the report of the Workplace Savings Product Group, which recommended the creation of a national auto-enrolment saving scheme, was followed only nine months later by a Budget commitment in principle, with implementation planned for just two years after that. There are suggestions, however, that this timescale may slip as some of the implementation challenges become apparent.

Further detailed work will be required to establish a feasible timescale. But the Pensions Commission believes that it is reasonable to plan on the assumption that the NPSS could be in place and receiving first contributions by 2010.
**Figure 10.24** Introduction of pension reform in Sweden and New Zealand

**Swedish pension reform**

Parliamentary Working Group composed of representatives from main political parties reports outlining new system

- **1994**: Contributions prospectively designated for funded scheme (PPM) but not yet paid in
- **1998**: Legislation is passed by Parliament
- **1999**: First investments in funded scheme
- **2000**: First pension payments under new system
- **2003**: Legislation fully implemented

**New Zealand pension reform**

Savings Product Working Group recommends national auto-enrolment scheme in August 2004

- **2004**: Finance Minister announces in May budget the introduction of auto-enrolment scheme for 2007
- **2007**: Auto-enrolment scheme due to be introduced in April 2007
12. Management and governance

High quality operational management will clearly be essential to the NPSS’s success. So too will a governance structure, which provides assurance of independence. There are many details which will need to be determined, but the Pensions Commission’s current thinking is that:

- The most appropriate institutional structure is likely to be that the NPSS is a non-departmental public body, with its own board. Within the range of possible structures, this is likely most effectively to balance: (i) the need for an institution which is clearly separate from direct government influence, particularly in its decisions on the range of investment fund choices; and (ii) the need for an institution which is clearly public and non profit-making [Figure 10.25].

- While the NPSS itself would be responsible for the overall integrity and effectiveness of the system, particular operational functions would be or could be outsourced:
  - If the PAYE option for the collection of contributions is chosen, payroll deduction and contribution accounting would effectively be outsourced to HMRC under clearly defined service agreements [see Section 3 above].
  - A range of options could exist for outsourcing member account maintenance and member communication functions. These should be assessed using normal criteria for choosing between in-house and outsourced operations.

- The most sensitive and judgemental decisions which the NPSS would need to make will relate to the range of investment fund choices made available, the procedures by which private fund managers would compete for mandates, the description of the risk return characteristics of different funds provided to scheme members, and the definition of the default fund. Key issues to be determined will therefore include how far these decisions should be constrained by legislation, and what governance arrangements should be put in place to ensure professional competence and integrity in the use of discretionary powers. The Pensions Commission’s current but tentative thinking, is that:
  - Legislation should define fairly clearly the default fund and the government bond fund options, and should provide some general guidelines on the range of other funds to be made available, but leave significant latitude for detailed decisions.
In implementing a new executive function, such as the NPSS, there are several options. These are summarised below:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Example</th>
<th>Key Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive agency</td>
<td>Jobcentre Plus</td>
<td>Directly responsible to Minister and Minister fully accountable to Parliament</td>
</tr>
<tr>
<td></td>
<td>National Savings and Investments</td>
<td>No independent legal status</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staffed by civil servants</td>
</tr>
<tr>
<td>Non-Departmental Public Body (NDPB)</td>
<td>Pension Protection Fund</td>
<td>NDBP is directly responsible to Parliament for functions within its remit although</td>
</tr>
<tr>
<td></td>
<td>Student Loan Company</td>
<td>Minister remains accountable for its continued existence and expenditure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Established under statute with own legal identity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Allocated own budget</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not staffed by civil servants</td>
</tr>
<tr>
<td>Private tender company with contracted responsibility</td>
<td>Public private partnerships for schools and hospitals</td>
<td>Government out-sources function to private sector provider</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contract sets out respective liabilities and terms</td>
</tr>
</tbody>
</table>

- A dedicated Investment Funds Board may be required as a sub-committee of the main board of the NPSS, to allow detailed and expert consideration of issues relating to the range of appropriate funds.

- Appropriate reporting processes to Government and Parliament will need to be designed.

- One possibility which should be considered is whether the NPSS should be housed within, amalgamated with, or linked with the already existing National Savings and Investments (NS&I). The advantage would be that “National Savings” is an extremely well-respected brand, and that the NS&I organisation already exists, operating retail savings accounts within the public sector but with significant commercial expertise. We have not investigated this option in detail, and there may be reasons why on further analysis it is inappropriate, but we recommend that the possibility of a role for the NS&I brand and organisation should be explored during the implementation planning phase.
We have recommended the creation of a National Pension Savings Scheme (NPSS), and we have proposed reforms to the state system which will make it simpler and less means-tested, providing a better base on which this scheme and other pension saving can build. The inevitable consequence of these reforms is however that some combination of higher public expenditure on pensions as a percentage of GDP and higher State Pension Ages will be required.

Our recommendations should now be subject to extensive debate and consultation. The process of debate and consultation should aim to achieve as much consensus as possible, and to make transparent to people the unavoidable choices and trade-offs facing both public policy and individuals in their own decision-making. In the past, a lack of consensus and transparency have in themselves contributed to the major problems which the UK pension system faces. In particular:

- Lack of consensus has driven a lack of policy continuity which has helped create the bewildering complexity of the UK pension system.

- And lack of transparency, for instance on the long-term impact of changes to the State Earnings-Related Pension Scheme (SERPS) or the long-term implications for effective pension ages of linking the Basic State Pension (BSP) to prices, have undermined trust and understanding. People intuitively feel that the state will do less for them in the future, but do not understand how much less, nor trust that the promises made will be maintained.
Achieving consensus will not be easy, because deciding the way forward involves important political judgements. In particular it involves deciding how to strike the balance between increased public expenditure and increased State Pension Ages, which is unavoidable if rising pensioner poverty or a relentless increase in the spread and/or severity of means-testing are to be avoided. The Pensions Commission has suggested a specific range for that trade-off. We have suggested that State Pension Age (SPA) will have to rise to somewhere between 67 and 69 by 2050 and that public expenditure on pension and pensioner benefits will need to rise from 6.2% of GDP today to between 7.5% and 8% GDP in 2050.

Different people may well argue either for higher expenditure and a smaller increase in SPA or for lower expenditure and a more rapid increase in SPA. Such trade-offs are the essence of political debate. But achieving at least some degree of consensus may be easier if there can be at least be agreement on some core principles. We suggest two:

- First the principle that over the long run, intergenerational equity requires that pension ages rise roughly in proportion with life expectancy so as to keep stable the proportion of adult life spent paying into and receiving a state pension. This principle does not resolve all choices over the next 40 years, during which the retirement of the baby boom generation will make rises proportionate to life expectancy insufficient to stabilise public expenditure as a percentage of GDP. But it does at least limit the range of possible trade-offs over which debate should range.

- Second the principle that significant pre-warning of changes in SPA should be given, thus enabling people who are approaching retirement to be certain about the age from which they will be able to draw a state pension. We have suggested a principle that increases in SPA should be announced at least 15 years in advance. The implications of this however are that long-term management of public finances requires intensive debate now about the SPA which should exist in 2025 or 2030, and that it should be clearly understood by people more than 15 years from retirement that their own SPA may and probably will change from that which exists today.

But whatever decisions are made in response to this Report, and however much desirable continuity in policy can be achieved, pension policy will and should be subject to continuing debate over time, in the light of new information becoming available. It is quite possible that life expectancy forecasts will change significantly from those which we have used in this Report. Trends in voluntary private pension savings could turn out more favourable or less favourable than we have assumed. Participation and total contribution rates (default and voluntary) within the NPSS will only become apparent over time. Rates of return, and reasonable expectations of future rates of return, may be different from those which we have assumed.

As the information available changes, so should the precise public policy direction, even if the overall framework of the system maintains as much
continuity as possible. But public debate on policy changes will we believe be better focused and more likely to arrive at consensus if there is a permanent independent advisory body charged with presenting to society the unavoidable choices which need to be faced.

We therefore recommend that a permanent Pensions Advisory Commission should be created, charged with continually assessing developments and laying before Parliament every three to four years a report describing key trends in demography, pension provision, employment and retirement patterns, and spelling out the unavoidable trade-offs which result. Key issues for the Commission to consider would be:

- Latest best estimates of future life expectancy and thus of the unavoidable future trade-off between increased public expenditure and increased State Pension Ages. The Commission should we believe be the source of authoritative and independent estimates of what public expenditure consequences would result from a variety of different future SPA scenarios, and should illustrate what future rises in SPA might be implied by the principle of pension ages rising in proportion with life expectancy increases, given latest life expectancy forecasts.

This analysis should also seek to identify whether:

- The gaps in life expectancy by socio-economic class are closing, widening or staying constant, and identify the implications for policies relating, for instance, to the age at which the Guarantee Credit should be available.

- The evidence suggests that ageing by different groups is on average healthy or unhealthy and thus the feasibility of retirement age increases in line with increases in pension age.

- Latest trends in private pension provision on average and across different gender, socio-economic and ethnic groups, and of participation and contribution rates within the NPSS, and thus of the overall coverage and adequacy of pension provision. This data would inform future debate over appropriate adjustments in employee or employer default contribution rates, and over whether the auto-enrolment approach (rather than full compulsion) was sufficient to achieve significant improvements in pension provision. This would also have implications for the speed with which the State Second Pension should become flat-rate.

- Analysis of trends in average retirement ages, and in employment rates among older people, by gender, region, occupation and socio-economic class. This analysis is required to identify whether increases in SPA (starting with the increase in women’s SPA between 2010 and 2020) are accompanied by increases in productive employment, or merely by greater reliance on Income Support, Incapacity Benefit and Jobseekers’ Allowance. The implications for policies relating to occupational health, training, age discrimination and financial incentives for later working could then be identified.
This Annex summarises both likely data developments already in hand which the Pensions Commission welcomes, and recommendations on further improvements which should be considered. These are discussed in more detail in the appendices.

In Appendix A we welcome the developments made during the past two years, and those planned for the future, which should considerably help future policymakers and organisations considering the area in the future. These are areas affecting very large proportions of national income and assets. We hope that progress will continue to be made in the areas we have identified. In particular we welcome:

- The Family Resources Survey data-linking project.
- The anticipated pension contributions data from the Annual Survey of Hours and Earnings.
- The continuing development of the English Longitudinal Study of Ageing project, both in terms of pension wealth, and health analysis.
- Progress that has been made in the development of the Household Assets Survey, which we continue to regard as a major priority.
- Developments that have occurred so far in the Government Actuary’s Department Occupational Pension Schemes Survey, and we hope this continues to develop when the Office for National Statistics takes responsibility for the survey in the future.
- The creation of the Pensions Analysis Unit in the ONS to build on the work of the Pension Statistics Task Force, and continue the publication of Pension Trends.
- The creation of the National Statistics Centre for Demography in the ONS and hope it will become a centre of expertise, working closely with policymakers.
- The planned research and collaboration in the area of healthy ageing.
- The planned Department for Work and Pensions (DWP) survey on public attitudes to pension issues.
We also make the following recommendations on priorities:

- We recommend that DWP publish a paper describing Pensim2 and what it does, including a range of analysis to illustrate its capabilities and limitations.

- We recommend that DWP investigates the best way to provide access to Pensim2 for specialist external analysts.

- We recommend that the Pension Statistics Task Force Advisory Group, or a similar group, should continue as one way to facilitate cross-departmental co-ordination in pension data issues.

- We recommend that the new National Statistics Centre for Demography in ONS, in conjunction with relevant policymakers and analysts throughout government, should undertake a feasibility study to investigate issues of migration in relation to pension reform.

- We recommend that DWP and ONS undertake a feasibility study to investigate whether administrative data sources could provide supplementary measures of longevity to complement the ONS Longitudinal Study.

- We recommend continued monitoring, and publication, of measures of the four options, so that the impact of pension reform in relation to these choices can be measured.

- We recommend that a single, accountable body, possibly DWP or our proposed Pensions Advisory Commission should develop an evaluation strategy as pension reforms develop, and report publicly on a regular basis on progress being made.

We make the following proposals for government consideration:

- Thought still needs to be given as to whether it is possible to collect information from GPPs.
- The Annual Business Inquiry should consider if employer pension contributions can be separately identified on the short form.
- DWP and ONS analysts should work together to agree the best approach to monitor the impact of the change in women’s State Pension Age.
- Analysts, policymakers, and regulators need to work together on the development of administrative systems for the proposed NPSS.
- Existing surveys be changed to take account of the proposed NPSS.
- Lessons need to be learnt from the development of ‘Kiwisaver’ in New Zealand if it proceeds.
In Appendix E we make the following recommendations:

- Official publications which set out estimates of projected life expectancy should ideally provide not only the best mean estimate, but also the range of possible results which could arise from alternative reasonable assumptions. The GAD publications already include high and low variants: these should be given wider publicity.

- Pension systems (state and private) must be resilient in the face not only of rising life expectancy, but of large uncertainty over how rapid the rise will be. This implies that pre-retirement longevity risk should be shifted from the pension provider to the individual, either via linking future pension ages to future presently unknown increases in life expectancy, or by moving to ‘Notional Defined Contribution’ systems of the sort described in Chapter 1 Section 5.

In Appendix F we make one further recommendation:

- Government and other producers of long-term projections, e.g. to 2050, on pensions policy should be careful to emphasise the uncertainty inherent in such analysis and ideally should present sensitivity analysis.
Data improvements summary
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key conclusions of the First Report &quot;Pensions: Challenges and Choices&quot;</td>
<td>38</td>
</tr>
<tr>
<td>Behavioural economics, irrationality and inertia: further insights</td>
<td>68</td>
</tr>
<tr>
<td>Notional Defined Contribution systems</td>
<td>105</td>
</tr>
<tr>
<td>Reducing the high cost of personal pension provision</td>
<td>110</td>
</tr>
<tr>
<td>The rise and decline of the private sector Defined Benefit pension: a brief summary</td>
<td>122</td>
</tr>
<tr>
<td>Risk and return in pension fund investment: implications for default fund design</td>
<td>196</td>
</tr>
<tr>
<td>Meeting increasing demand for annuities</td>
<td>225</td>
</tr>
<tr>
<td>Stylised individuals</td>
<td>237</td>
</tr>
<tr>
<td>Difficulties in offsetting Additional Pension rights</td>
<td>246</td>
</tr>
<tr>
<td>The complexities of reforming tax relief in Defined Benefit schemes</td>
<td>319</td>
</tr>
<tr>
<td>How tax relief on pensions works, compared to other methods of saving</td>
<td>324</td>
</tr>
</tbody>
</table>
List of panels
<table>
<thead>
<tr>
<th>Figure number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex.1</td>
<td>Impact of the 1940s-1960s baby boom on the old age dependency ratio</td>
</tr>
<tr>
<td>Ex.2</td>
<td>Percentage of pensioner benefit units on Pension Credit</td>
</tr>
<tr>
<td>Ex.3</td>
<td>Public expenditure on state pensions and pensioner benefits: range proposed for debate</td>
</tr>
<tr>
<td>Ex.4</td>
<td>State Pension Ages assumed in modelling</td>
</tr>
<tr>
<td>Ex.5</td>
<td>The public expenditure versus SPA trade-off: state pension and pensioner benefit expenditure as a percentage of GDP</td>
</tr>
<tr>
<td>Ex.6</td>
<td>State pension provision: the unavoidable trade-off</td>
</tr>
<tr>
<td>Ex.7</td>
<td>Target pension income as a percentage of earnings for the median earner: at the point of retirement</td>
</tr>
<tr>
<td>Ex.8</td>
<td>Pensions Commission recommendations</td>
</tr>
<tr>
<td>Ex.9</td>
<td>Effective SPA for the BSP: given price-indexation and formal SPA remaining at 65. Value of pension receivable at different ages in current earnings terms</td>
</tr>
<tr>
<td>Ex.10</td>
<td>Implementation details relating to the National Pension Savings Scheme</td>
</tr>
</tbody>
</table>

**Figure number** | **Title**                                                                 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Change in mean income of pensioners relative to average earnings</td>
</tr>
<tr>
<td>1.2</td>
<td>Percentage change in pensioner incomes relative to average earnings, 1979-2003/04</td>
</tr>
<tr>
<td>1.3</td>
<td>State pension at the point of retirement assuming a full contribution record for a person who has been on average full-time earnings throughout their working life: percentage of average earnings</td>
</tr>
<tr>
<td>1.4</td>
<td>Mean family pension wealth in each form: by decile of total pension wealth</td>
</tr>
<tr>
<td>1.5</td>
<td>Projected state spending per pensioner indexed in constant 2003/04 price terms:2004 projections</td>
</tr>
<tr>
<td>1.6</td>
<td>Gross replacement rate from the state for an employee retiring in 2005 and 2050 assuming no private saving</td>
</tr>
<tr>
<td>1.7</td>
<td>State pension income at retirement for an employee retiring in 2005 or 2050: assuming no private saving</td>
</tr>
<tr>
<td>1.8</td>
<td>Participation in private pension schemes: 2003-04, millions</td>
</tr>
<tr>
<td>1.9</td>
<td>Change in private pension participation: 2002-03 to 2003-04, millions</td>
</tr>
</tbody>
</table>
1.10 Trends in participation in private sector employer-sponsored pension schemes
1.11 Active members of private sector Defined Benefit pension schemes by scheme status, millions
1.12 Employers' attitudes to pension provision
1.13 Average contribution rates to Defined Contribution schemes
1.14 Components of funded pension contributions as a percentage of GDP
1.15 Possible change in pension savings as a percentage of GDP with the maturing of the DB-DC shift
1.16 Private pension income as a percentage of GDP by source 2005-2050
1.17 Percentage of the population in a second tier pension: age 20-SPA
1.18 Insurance company advice on contracting-in/contracting-out for personal pensions
1.19 Public expenditure on pensioners as a percentage of GDP 2005-2050: Pensions Commission base case projections
1.20 Forecast public expenditure on unfunded public sector employee pensions under unchanged plans as a percentage of GDP
1.21 The implications of current indexation arrangements and savings behaviour for the percentage of GDP transferred to pensioners: Pensions Commission base case projections
1.22 Percentage of pensioner benefit units on Pensin Credit: 2005-2050, if present indexation arrangements continued indefinitely
1.23 IFA assessments of attractiveness of different earnings segments: survey results
1.24 Awareness of SERPS/S2P: focus group results
1.25 Percentage of eligible employees who were active members of the scheme
1.26 Results of DWP workplace advice pilots
1.27 Typical Annual Management Charge in alternative forms of pension provision
1.28 Diverse attitudes to compulsion
1.29 Composition of wealth holdings by decile group of total wealth: aged 50-SPA
1.30 Percentage of 50-65 year olds in danger of having replacement rates below benchmarks of adequacy
1.31 Residential housing wealth as a percentage of GDP
1.32 Home ownership by age
1.33 Gross saving by sector as a percentage of gross national disposable income: 1980-2004
1.34 Household net acquisition of financial asset as a percentage of GDP
1.35 Household non-pension financial assets and non-mortgage debt as a percentage of GDP
1.36 Wealth holdings in a closed economy in equilibrium
1.37 Share of residential housing stock owned by household sector
1.38 Cohort life expectancy at age 65
1.39 Male cohort life expectancy at 65
1.40 Male cohort life expectancy at 65: range of possible uncertainty around 2004-based principal projection
1.41 Trends in Period life expectancy at age 65: by sex and social class
1.42 Individual underestimates of life expectancy, by age
1.43 Old-age dependency ratio: all 65+ : 20-64, UK
1.44 Percentage of adult life spent in retirement
1.45 Impact of the 1940s-1960s baby boom on the old-age dependency ratio
1.46 The pension level, pension age and tax trade-off: simplified illustration
1.47 Gross mandatory pension system values
1.48 US Social Security: President’s Commission on strengthening Social Security and creating wealth for all Americans
1.49 Typical Annual Management Charges within the Australian compulsory savings system
1.50 New Zealand’s planned “KiwiSaver” scheme
1.51 Profitable individuals under present Stakeholder charge cap regime: Group Personal Pension case
1.52 Source of costs for the median earner aged 40 in the present Stakeholder Pension system
1.53 Source of costs for the median earner aged 40 in an auto-enrolled nationally administered scheme

Figure number Title
2.1 International comparison of long-term public expenditure on pensions
2.2 Median income of people aged 65+ as a percentage of median income of people aged less than 65: 2001

Figure number Title
3.1 Public expenditure and pension age increases: Pensions Commission proposed range for debate

Figure number Title
4.1 Assumptions in the “current indexation arrangements” scenarios
4.2 State pension income at the point of retirement in 2005 assuming no private saving
4.3 Hypothetical case: future state pension income at the point of retirement if the present accrual structure were maintained indefinitely relative to average earnings: assuming no private saving
4.4 Evolution of state pensions: consequences of current indexation arrangements
4.5 Evolution of state pensions: the result by 2050 for someone who has made no private saving
4.6 Evolution of the Pension Credit thresholds
4.7 State pension income at retirement for someone retiring in 2005 and 2050: assuming no private savings
List of Figures

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.8</td>
<td>Increasing Savings Credit payments as balance of compulsory system changes</td>
</tr>
<tr>
<td>4.9</td>
<td>Total retirement income at 65 assuming some private saving in 2050</td>
</tr>
<tr>
<td>4.10</td>
<td>Income from the state at 65 assuming some private saving in 2050</td>
</tr>
<tr>
<td>4.11</td>
<td>Effective state pension age for the BSP: given price indexation and formal SPA remaining at 65: value of pension receivable at different ages in current earnings terms</td>
</tr>
<tr>
<td>4.12</td>
<td>Percentage of BSP received by 65-69 year olds: 2005</td>
</tr>
<tr>
<td>4.13</td>
<td>Projected average entitlement to BSP</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Summary of conclusions on key issues</td>
</tr>
<tr>
<td>5.2</td>
<td>Features of an auto-enrolment scheme</td>
</tr>
<tr>
<td>5.3</td>
<td>Focusing state pension capacity on flat-rate provision: three options</td>
</tr>
<tr>
<td>5.4</td>
<td>Effect of employer matching on participant behaviour: evidence from the US</td>
</tr>
<tr>
<td>5.5</td>
<td>Impact on total labour costs in the private section per 1% employer contribution: assuming 100% participation</td>
</tr>
<tr>
<td>5.6</td>
<td>Characteristics of pension systems: possible combinations</td>
</tr>
<tr>
<td>5.7</td>
<td>The macroeconomics of pre-funding</td>
</tr>
<tr>
<td>5.8</td>
<td>Buffer funds of selected countries</td>
</tr>
<tr>
<td>5.9</td>
<td>Pension Reform Group proposal: Universal Protected Pension</td>
</tr>
<tr>
<td>5.10</td>
<td>Arguments against a funded approach to flat-rate pension provision</td>
</tr>
<tr>
<td>5.11</td>
<td>Earnings-related pensions - Total size of assets/liabilities at end 2003</td>
</tr>
<tr>
<td>5.12</td>
<td>Country approaches to mandatory pension provision</td>
</tr>
<tr>
<td>5.13</td>
<td>Categories of life expectancy risk</td>
</tr>
<tr>
<td>5.14</td>
<td>State Pension Age required to keep stable the proportion of adult life spent in receipt of a state pension: if SPAs had already been equalised at 65</td>
</tr>
<tr>
<td>5.15</td>
<td>Probability of survival of 65 and 75 year old females with modeled variations around GAD 2003-based principal projection, UK</td>
</tr>
<tr>
<td>5.16</td>
<td>Scenarios for the size of the annuity market, estimated annual flows: £ billion</td>
</tr>
<tr>
<td>5.17</td>
<td>Longevity risk in UK pension provision, £ billion of total liabilities - broad estimates: end 2003</td>
</tr>
<tr>
<td>5.18</td>
<td>Public expenditure on pensioners as a percentage of GDP 2005-2050: base case projections if current indexation arrangements continue indefinitely</td>
</tr>
<tr>
<td>5.19</td>
<td>International comparison of long-term public expenditure on pensions</td>
</tr>
<tr>
<td>5.20</td>
<td>Impact of an immediate move to an universal Enhanced State Pension at the Guarantee Credit level: public expenditure on pensions and pensioner benefits as a percentage of GDP</td>
</tr>
<tr>
<td>5.21</td>
<td>Planned total SERPS/S2P expenditure as a percentage of GDP</td>
</tr>
<tr>
<td>5.22</td>
<td>Public expenditure on SERPS/S2P under current plans and if value of UEL for S2P accruals frozen in cash terms as percentage of GDP</td>
</tr>
<tr>
<td>5.23</td>
<td>Public expenditure and pension age increases: possible combinations</td>
</tr>
<tr>
<td>5.24</td>
<td>Variability of real returns on equities over historical periods: 1899-2004</td>
</tr>
</tbody>
</table>
5.25 Periods where equity returns were less than the risk-free rate by size of shortfall
5.26 Non-contribution based accrual of state pension rights
5.27 Numbers of people with accrued BSP and S2P rights derived from credits, 2002/03
5.28 Accrual of state pension rights by age and sex: percentage accruing rights in 2003/04
5.29 Projected average entitlement to BSP
5.30 Key problems and gaps in the current system of credits
5.31 Impact of universality on an Enhanced State Pension
5.32 Complexities in introducing a universal residency based pension
5.33 Possible approaches to flat-rate state pension provision
5.34 How increasing the state pension can cut some individuals’ income
5.35 Second tier pension provision: percentage contracted-in and contracted-out
5.36 Categories of contracting-out rebate: £ billion 2002
5.37 S2P accrual between the LEL and UET
5.38 The impact of eliminating contracting-out rebates: arguments made in submissions
5.39 Options for accelerating disappearance of contracting-out rebate
5.40 Sterling index linked bonds: at???
5.41 Corporate sterling bonds outstanding: 1996-2005 face value by maturity £ billion
5.42 Distribution of annuity purchase by age
5.43 Breakdown of annuity type purchased

**Figure number**

**Title**

6.1 Criteria for assessing pension reforms
6.2 Public expenditure and pension age increases: Pensions Commission proposed range for debate
6.3 Earnings levels for the stylised individuals
6.4 Pension income for the stylised individuals at 75 according to the year in which they reached 65, if current indexation arrangements continue indefinitely
6.5 Proportion of pensioner benefit units on Pension Credit assuming present indexation approaches continue indefinitely: 2005-2050
6.6 State Pension Ages assumed in modelling
6.7 Public expenditure on pensioners as a percentage of GDP under an immediate move to a Universal Enhanced State Pension at the Guarantee Credit level
6.8 ESP benefits those with high pension incomes more than individuals with lower incomes with no offset of Additional Pension rights
6.9 Possible complications in applying offset to contracted-out rights
6.10 Effect on public expenditure on pensioners as a percentage of GDP from a universal ESP with gross Additional Pension offset
6.11 A potential loser from an immediate offset ESP
6.12 Gradual step-up to an Enhanced State Pension (ESP): variants modelled
6.13 Proportion of pensioner benefit units on Pension Credit under gradual contributory ESP option 2005-2050: with ESP reaching the level of the Guarantee Credit in 2030
6.14 Pension income for the stylised individuals at 75 according to the year in which they reached 65, with a gradual ESP reaching the Guarantee Credit level
6.15 Public expenditure on pensioners as a percentage of GDP under gradual ESP options
6.16 Two-Tier flat-rate system: variants modelled
6.17 Public expenditure on pensioners as percentage of GDP under the two-tier option
6.18 Effect on public expenditure on pensioners as a percentage of GDP of universal payment for the BSP under the two-tier option
6.19 Pension income for the stylised individuals at 75 according to the year in which they reached 65, with the two-tier option
6.20 Proportion of pensioner benefit units on Pension Credit under the two-tier contributory option
6.21 Pension Credit costs as a percentage of GDP: two-tier contributory reform option and the current system assuming present indexation continues indefinitely
6.22 Impact of saving on retirement income: increase in pension income achieved as a percentage of median earnings: assuming retirement in 2050
6.23 Comparing the “Step up to ESP” and “Two-tier” options
6.24 Effect on public expenditure on pensioners as a percentage of GDP of the two-tier option with universal accrual for the BSP
6.25 Effect on public expenditure on pensioners as a percentage of GDP of two-tier option with universal accrual of BSP and full category D for those 75 and over
6.26 Effect on public expenditure on pensioners as a percentage of GDP from delaying reform until 2015
6.27 Proportion of pensioner benefit units on Pension Credit under two-tier option if reform starts in 2015
6.28 Replacement rates at the point of retirement in 2050 under the two-tier options
6.29 Savings as a percentage of gross earnings required for 15% replacement for the median earner from the NPSS
6.30 Source of contributions to the NPSS
6.31 Percentage of non-savers among men 46-55 earning £17,500 to £24,999
6.32 Contracted-out rebates in 2005/06 for salary related and personal pensions
6.33 Target pension income as a percentage of earnings for the median earner: at the point of retirement in 2053
6.34 Replacement rates at the point of retirement for someone aged 20 today
6.35 Assumptions for NPSS aggregates
6.36 Inflows and outflows from NPSS
6.37 Aggregate NPSS funds at different rates of return
6.38 Stock of annuities arising from the NPSS
6.39 Long run effect on contributions of NPSS on private pension savings as a percentage of GDP
6.40 Effect on public expenditure on pensioners as a percentage of GDP of the Pensions Commission preferred option and NPSS
6.41 Public expenditure on pensioner benefits as a percentage of GDP: 2005-2050
6.42 Percentage of pensioner benefit units on Pension Credit: 2005-2050
6.43 Pension Credit costs as a percentage of GDP: comparison of the Pensions Commission preferred option and the current system assuming present indexation continues indefinitely
6.44 The public expenditure versus State Pension Age trade off: state pension and pensioner benefit expenditure as a percentage of GDP
6.45 Effect of the NPSS on total private pension income as a proportion of GDP by source: 2005-2050
6.46 The implications of current plans and savings behaviour for the percentage of GDP transferred to pensioners aged above SPA

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>Estimated distribution of combined employee and employer contribution rates in occupational DC schemes adjusted for contracting-out</td>
<td></td>
</tr>
<tr>
<td>7.2</td>
<td>How employers could opt-out of the National Pensions Savings Scheme</td>
<td></td>
</tr>
<tr>
<td>7.3</td>
<td>Impact of tax relief on retirement income: basic rate taxpayer</td>
<td></td>
</tr>
<tr>
<td>7.4</td>
<td>Breakdown of tax relief on retirement income: basic rate taxpayer</td>
<td></td>
</tr>
<tr>
<td>7.5</td>
<td>Impact of salary sacrifice on retirement income: basic rate taxpayer</td>
<td></td>
</tr>
<tr>
<td>7.6</td>
<td>Effective rate of return on non-pension and pension saving: basic rate taxpayer on salary sacrifice scheme</td>
<td></td>
</tr>
<tr>
<td>7.7</td>
<td>Impact of tax advantages across earnings bands</td>
<td></td>
</tr>
<tr>
<td>7.8</td>
<td>Difference in tax rates during working life and retirement</td>
<td></td>
</tr>
<tr>
<td>7.9</td>
<td>The impact of tax and of tax relief on returns on investment</td>
<td></td>
</tr>
<tr>
<td>7.10</td>
<td>Effective rate of return on saving for someone who ends up on Pension Credit in retirement</td>
<td></td>
</tr>
<tr>
<td>7.11</td>
<td>What do you think is the level of tax relief you are personally entitled to receive on your pension contributions?</td>
<td></td>
</tr>
<tr>
<td>7.12</td>
<td>Was the option of the tax free lump sum an incentive to save into a pension for you?</td>
<td></td>
</tr>
<tr>
<td>7.13</td>
<td>&quot;A&quot; day tax simplification</td>
<td></td>
</tr>
<tr>
<td>7.14</td>
<td>Tax treatment of different savings vehicles</td>
<td></td>
</tr>
<tr>
<td>7.15</td>
<td>Costs of tax relief in 2004/05</td>
<td></td>
</tr>
<tr>
<td>Figure number</td>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>8.1</td>
<td>Increase in private pension income as a result of working and saving for longer</td>
<td></td>
</tr>
<tr>
<td>8.2</td>
<td>Reactions to suggestion that working longer is required: focus group results</td>
<td></td>
</tr>
<tr>
<td>8.3</td>
<td>Trends in mean age of retirement</td>
<td></td>
</tr>
<tr>
<td>8.4</td>
<td>Employment rates for men and women aged 50-SPA</td>
<td></td>
</tr>
<tr>
<td>8.5</td>
<td>Percentage of people aged 50-SPA in receipt of incapacity related benefits, by sex</td>
<td></td>
</tr>
<tr>
<td>8.6</td>
<td>Deferral of the state pension: face value of BSP and net present value of BSP by age at which taken</td>
<td></td>
</tr>
<tr>
<td>8.7</td>
<td>Correct and misleading estimates of life expectancy post-SPA</td>
<td></td>
</tr>
<tr>
<td>8.8</td>
<td>Participation in job-related training by age</td>
<td></td>
</tr>
<tr>
<td>9.1</td>
<td>Indexation regimes under present arrangements and Pensions Commission’s preferred option</td>
<td></td>
</tr>
<tr>
<td>9.2</td>
<td>State pension income at the point of retirement in the long term</td>
<td></td>
</tr>
<tr>
<td>9.3</td>
<td>State pension income at SPA under the Pensions Commission’s preferred option as a percentage of median earnings assuming 44 years of accrual</td>
<td></td>
</tr>
<tr>
<td>10.01</td>
<td>Earnings bands used for earnings related pension provision in selected countries</td>
<td></td>
</tr>
<tr>
<td>10.02</td>
<td>Replacement rate from NPSS for someone age 20 today: earnings level and rate of return scenarios.</td>
<td></td>
</tr>
<tr>
<td>10.03</td>
<td>Replacement rate from NPSS for someone age 20 today: earnings level and retirement age scenarios.</td>
<td></td>
</tr>
<tr>
<td>10.04</td>
<td>Effect of maximum contribution cap at different earnings levels</td>
<td></td>
</tr>
<tr>
<td>10.05</td>
<td>Contribution rates in US pension plans: impact of default rate and auto-enrolment</td>
<td></td>
</tr>
<tr>
<td>10.06</td>
<td>How employers could opt-out of the National Pension Savings Scheme</td>
<td></td>
</tr>
<tr>
<td>10.07</td>
<td>National Pension Savings Scheme: Key Flows</td>
<td></td>
</tr>
<tr>
<td>10.08</td>
<td>Transfers of contributions and information in the Pay-As-You-Earn system</td>
<td></td>
</tr>
<tr>
<td>10.09</td>
<td>Possible impact of National Pension Savings Scheme on private sector total labour costs</td>
<td></td>
</tr>
<tr>
<td>10.10</td>
<td>Features of the Swedish Premium Pension Scheme</td>
<td></td>
</tr>
<tr>
<td>10.11</td>
<td>Features of the Thrift Savings Plan for Federal employees in the USA</td>
<td></td>
</tr>
<tr>
<td>10.12</td>
<td>Participation in company pension plans as fund choice increases</td>
<td></td>
</tr>
<tr>
<td>10.13</td>
<td>Active fund choice versus passive acceptance of default options within Swedish Premium Pension Scheme</td>
<td></td>
</tr>
<tr>
<td>10.14</td>
<td>Permitted number of fund allocation changes per year for UK occupational Defined Contribution schemes</td>
<td></td>
</tr>
<tr>
<td>10.15</td>
<td>Default funds in occupational Defined Contribution schemes</td>
<td></td>
</tr>
<tr>
<td>10.16</td>
<td>UK pension system annuity rules: as from April 2006</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>10.17</td>
<td>Inheritance rights for survivors in the event of death before scheme pension age</td>
<td></td>
</tr>
<tr>
<td>10.18</td>
<td>Information to members of private pension schemes: regulatory requirements</td>
<td></td>
</tr>
<tr>
<td>10.19</td>
<td>Communications in the Swedish Premium Pension Scheme: extracts from the orange envelope</td>
<td></td>
</tr>
<tr>
<td>10.20</td>
<td>Combined Pension Forecast</td>
<td></td>
</tr>
<tr>
<td>10.21</td>
<td>Possible design of scheme specific tax regime</td>
<td></td>
</tr>
<tr>
<td>10.22</td>
<td>Occupational pension scheme costs according to the size of the scheme</td>
<td></td>
</tr>
<tr>
<td>10.23</td>
<td>Costs in the Swedish Premium Pension Scheme (PPM): current and planned</td>
<td></td>
</tr>
<tr>
<td>10.24</td>
<td>Introduction of pension reform in Sweden and New Zealand</td>
<td></td>
</tr>
<tr>
<td>10.25</td>
<td>National Pension Savings Scheme: Institutions</td>
<td></td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Active members</td>
<td>Active members are current employees who are contributing (or having contributions made on their behalf) to an organisation’s occupational pension scheme. The scheme may be open or closed but cannot be frozen.</td>
<td></td>
</tr>
<tr>
<td>Additional Pension (AP)</td>
<td>A generic term used for the state pension paid in addition to the Basic State Pension. From 1978-2002 it was State Earnings Related Pension Scheme and from 2002 it is State Second Pension.</td>
<td></td>
</tr>
<tr>
<td>Additional Voluntary Contribution (AVC)</td>
<td>These are personal pension contributions made by someone who is also a member of an occupational scheme as a top-up to their occupational entitlement. Additional Voluntary Contributions can be made into the occupational scheme or to a stand-alone product called a Free-Standing Additional Voluntary Contribution plan.</td>
<td></td>
</tr>
<tr>
<td>Alternative asset classes</td>
<td>Alternative asset classes include hedge funds, commodity and managed futures, private equity, and credit derivatives.</td>
<td></td>
</tr>
<tr>
<td>Annual Management Charge (AMC)</td>
<td>This is the charge generally applied to personal pension plans where the fee is levied as an annual charge on the value of the fund. This charge covers the sales, administration and fund management costs of the fund.</td>
<td></td>
</tr>
<tr>
<td>Annuity</td>
<td>Purchased with an individual pension pot, which has been built up in a Defined Contribution Pension Scheme, to provide a pension that is usually payable for life. A single-life annuity pays benefits to an individual. A joint-life/survivors annuity pays benefits to the spouse/dependent partner after death of the first. A level annuity pays constant payments whereas an index-linked annuity pays benefits relating to an index (for example the Retail Prices Index).</td>
<td></td>
</tr>
<tr>
<td>Approved Personal Pension (APP)</td>
<td>This is a personal pension which meets certain regulatory requirements, so that it can receive minimum contributions (contracted-out rebates from National Insurance (NI) payments) enabling an individual to contract-out of the State Second Pension.</td>
<td></td>
</tr>
<tr>
<td>Attendance Allowance</td>
<td>A non-means-tested benefit payable to pensioners if they have additional needs because of illness or disability. For more details see Appendix F in the First Report.</td>
<td></td>
</tr>
<tr>
<td>Auto-enrolment/ automatic enrolment</td>
<td>A pension scheme where an individual is made a member by default, and has to actively decide to leave the scheme.</td>
<td></td>
</tr>
</tbody>
</table>
### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Earnings Index (AEI)</strong></td>
<td>Average earnings are obtained by dividing the total gross pay by the number of employees paid. The index is a measure of change in average earnings in the UK.</td>
</tr>
<tr>
<td><strong>Average earnings terms</strong></td>
<td>Figures have been adjusted to remove the effect of increases in average earnings over time. Thus if something shown in average earnings terms increases then it is rising faster than average earnings, whereas if it is constant, it rises at exactly the same pace as average earnings.</td>
</tr>
<tr>
<td><strong>Average salary scheme</strong></td>
<td>A Defined Benefit scheme that gives individuals a pension based on a percentage of the salary earned in each year of their working life (rather than the final year).</td>
</tr>
<tr>
<td><strong>Baby boom</strong></td>
<td>A temporary marked increase in the birth rate. There were two baby booms in the second half of the twentieth century: immediately following the Second World War and in the early 1960s.</td>
</tr>
<tr>
<td><strong>Basic advice sales force regime</strong></td>
<td>Basic advice is a short, simple form of savings and investment advice aimed at people with straightforward financial needs. The adviser should make recommendations about suitable savings products (within his product range) based on the individual’s answers to pre-scripted questions. In recommending a Stakeholder Pension he must explain the risk and return relationship. The adviser should assess suitability based on other factors such as debt if he is made aware of these circumstances. There is normally no up front fee. Basic advice can be provided face-to-face, over the telephone or over the internet.</td>
</tr>
<tr>
<td><strong>Basic State Pension (BSP)</strong></td>
<td>There are four main types of Basic State Pension:</td>
</tr>
<tr>
<td><strong>Category A</strong></td>
<td>A contributory based pension requiring 44 years of contributions, credits or Home Responsibilities Protection. Payable on claiming at State Pension Age at the rate of £82.05 per week (2005/06). Those with less than full contribution records receive a pro rata amount subject to a de minimis of 25%. There is an age addition of 25p per week for individuals aged over 80.</td>
</tr>
<tr>
<td><strong>Category B</strong></td>
<td>Pension payable under the same conditions except that the contribution record used is the spouse’s contribution record. Widows and widowers receive Category B pension at the same rate as Category A pension. Married women (and married men from 2010) with a Category A pension entitlement worth less than £49.15 per week (2005/06) can top up their pensions to £49.15 per week using their spouses’ contribution record, this portion of top-up is called the Category BL pension.</td>
</tr>
<tr>
<td><strong>Category C</strong></td>
<td>Now obsolete.</td>
</tr>
<tr>
<td><strong>Category D</strong></td>
<td>Non-contributory pension paid to residents of the UK aged over 80 and satisfying a residency test of at least 10 years in any continuous 20 year period before or after the 80th birthday. The pension is £49.15 per week (2005/06)</td>
</tr>
</tbody>
</table>

For more details see ‘A guide to State Pensions’, 2005
Behavioural Economics  A class of economic theories using insights from psychology to understand how individuals make economic decisions (see panel in Chapter 1).

Bond  A debt investment with which the investor loans money to an entity (company or government) that borrows the funds for a defined period of time at a specified interest rate.

Buffer funds (national)  A number of countries have chosen to smooth the age-related expenditure associated with the baby-boom generation by establishing national reserve or buffer funds. Most stipulate a certain annual level of contributions or source of income which is then invested. Most countries, with national buffer funds, invest (at least partially) in overseas assets, and in higher return but higher risk assets such as equities [see Figure 5.8].

Bulk-buyout  On winding up an occupational scheme, trustees will normally buy out accrued benefits of members and other beneficiaries with immediate or deferred annuities. Where there is a deficit in scheme funding the scheme will be assessed by the Pension Protection Fund.

Bulk negotiated funds  The central clearing house negotiates specifies a limited number of fund options (by risk or asset class) and then invites tenders from fund managers.

Citizens’ Pension  Proposal for a State Pension Payable to every individual over State Pension Age who meets defined residency criteria. The level usually suggested is equal to the Guarantee Credit component of Pension Credit (£109.45 per week in 2005/06).

Clearing house  In relation to pension schemes an agency which collects and distributes information and contributions. The clearing house may also take on some administrative functions.

Cohort life expectancy  See life expectancy

Contract proliferation  The acquisition of multiple personal pension provision contracts by an individual.

Contracting-out  The system by which individuals can choose to opt-out of State Second Pension and use a proportion of their National Insurance contributions to build up a funded pension. There are four types of schemes, into which an individual may contract-out. The rules and rebate levels are different for each. These are: Contracted-out Salary Related scheme, Contracted-out Mixed Benefit scheme, Contracted-out Money Purchase scheme and Approved Personal Pension. For more details see Appendix F in the First Report.

Contracted-out Salary Related scheme (COSR)  Schemes contracted-out as Defined Benefit or salary related schemes.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracted-out Mixed Benefit scheme (COMB)</td>
<td>A scheme with distinct sections, one of which operates under the Contracted-out Salary Related scheme regime and the other under the Contracted-out Money Purchase regime.</td>
</tr>
<tr>
<td>Contracted-out Money Purchase scheme (COMP)</td>
<td>Schemes contracted-out as Defined Contribution or money purchase schemes.</td>
</tr>
<tr>
<td>Council Tax Benefit (CTB)</td>
<td>A means-tested benefit through which the UK government helps qualifying individuals meet their Council Tax payments. Qualification criteria include income, savings and personal circumstances.</td>
</tr>
<tr>
<td>Decile</td>
<td>The deciles of a distribution divide it into ten parts.</td>
</tr>
<tr>
<td>Decumulation</td>
<td>The drawing down of pension assets to fund retirement. In the UK it is permitted to access pension assets partially as a tax free lump sum and partially as an income stream (i.e. annuity or income drawdown).</td>
</tr>
<tr>
<td>Default fund</td>
<td>In compulsory or auto-enrolled Defined Contribution pension schemes some members do not make a choice of investment fund. These members will have their contributions paid into a default fund, designated for the purpose.</td>
</tr>
<tr>
<td>Default rate</td>
<td>In many pension schemes it is possible for the individual to select a level of contributions. In compulsory or auto-enrolled pension schemes some members will do not make a choice regarding their preferred level of contribution. These members will therefore pay contributions at a specified default level.</td>
</tr>
<tr>
<td>Deferred members</td>
<td>A member of an occupational pension scheme who has accrued rights or assets in the scheme but is no longer actively contributing (or having contributions paid on his behalf) into the scheme.</td>
</tr>
<tr>
<td>Defined Benefit (DB) Pension Scheme</td>
<td>A pension scheme where the pension is related to the members’ salary or some other value fixed in advance.</td>
</tr>
<tr>
<td>Defined Contribution (DC) Pension Scheme</td>
<td>A scheme where the individual receives a pension based on the contributions made and the investment return that they have produced. They are sometimes referred to as money purchase schemes.</td>
</tr>
<tr>
<td>Direct execution</td>
<td>Where individuals buy a financial product directly from the provider without using a financial adviser.</td>
</tr>
<tr>
<td>Disability Living Allowance</td>
<td>A non-means-tested benefit which is mainly paid to people under State Pension Age if they have additional needs because of illness or disability. For more details see Appendix F in the First Report.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Discount rate</td>
<td>An interest rate used to reduce an amount of money at a date in the future to an equivalent value at the present date.</td>
</tr>
<tr>
<td>Earnings-related provision</td>
<td>The pension rights accrued in the scheme are linked to earnings. In a state pension scheme the formula may take account of average earnings over the working life or be based on a certain number of years as well as the number of contribution periods. The alternative to earnings-related provision is flat-rate provision.</td>
</tr>
<tr>
<td>Economically inactive</td>
<td>People who are neither employed nor unemployed, e.g. those who are not doing paid work but caring for children.</td>
</tr>
<tr>
<td>Effective pension age</td>
<td>The age at which an individual can achieve the same amount of state pension in earnings terms as he can achieve at the current State Pension Age.</td>
</tr>
<tr>
<td>Employer-sponsored scheme</td>
<td>A pension scheme which is organised through the employer, enabling pension contributions to be made through the payroll. Often the employer will also make a contribution. An employer-sponsored scheme can either be occupational or group personal in nature.</td>
</tr>
<tr>
<td>European Economic Area</td>
<td>The European Economic Area consists of all 25 countries of the European Union as well as Iceland, Lichtenstein and Norway.</td>
</tr>
<tr>
<td>Equity</td>
<td>Share or any other security representing an ownership interest.</td>
</tr>
<tr>
<td>Equity release</td>
<td>Equity release schemes give older home owners a way of accessing part or all of the value of the home, either as a lump sum or as an annuity, while continuing to have full residence rights during their lifetime.</td>
</tr>
<tr>
<td>Executive pension schemes</td>
<td>A Defined Contribution pension scheme arranged through an insurance company for the benefit of a senior employee.</td>
</tr>
<tr>
<td>Final salary scheme</td>
<td>A Defined Benefit scheme that gives individuals a pension based on the number of years of pensionable service, the accrual rate and final earnings as defined by the scheme.</td>
</tr>
<tr>
<td>Flat-rate provision</td>
<td>The pension rights accrued in the scheme are on a flat-rate basis. Thus the level of earnings is not taken into account by the formula, which is based on the number of contribution years. The alternative to flat-rate provision is earnings-related provision.</td>
</tr>
<tr>
<td>Free-Standing Additional Voluntary Contribution (FSAVC)</td>
<td>An Additional Voluntary Contribution plan which is separate from the individuals’ occupational pension fund.</td>
</tr>
<tr>
<td>Glossary Term</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FRS17</td>
<td>FRS17 is the accounting standard for UK pension costs. It is mainly concerned with <strong>Defined Benefit occupational schemes</strong> but applies to all retirement benefits. It requires sponsoring employers to value on a &quot;fair value&quot; basis the assets and liabilities of their occupational schemes. The resulting surplus (or deficit) must then be recognised as an asset (or liability) in the company balance sheet. FRS17 replaced the previous standard SSAP24 on 30th November 2001.</td>
</tr>
<tr>
<td>Funded</td>
<td>Pension schemes in which pension contributions are paid into a fund which is invested and pensions are paid out of this pot.</td>
</tr>
<tr>
<td>Gilts</td>
<td>An abbreviation for 'gilt-edged securities', also known as government <strong>bonds</strong>. These are <strong>bonds</strong>, loans etc. issued by the UK government. They are often similar in structure to corporate bonds, paying a fixed amount to the owner following a given schedule. Gilts are generally considered to be one of the safer forms of investment so generate a correspondingly lower return than some more risky assets such as corporate bonds or <strong>equities</strong>. Some gilts make payments which are fixed in cash terms, whereas others make payments which go up in line with inflation.</td>
</tr>
<tr>
<td>Gross Domestic Product (GDP)</td>
<td>A measure of economic activity in a country. It is calculated by adding the total value of a country's annual output of goods and services.</td>
</tr>
<tr>
<td>Group Personal Pension (GPP)</td>
<td>A <strong>personal pension</strong> scheme which is organised through the employer, but still takes the form of individual contracts between the employee and the pension provider.</td>
</tr>
<tr>
<td>Guarantee Credit</td>
<td>A <strong>means-tested benefit</strong> which is part of the <strong>Pension Credit</strong> and provides pensioners with a minimum level of income. In 2005/06 the level of the Guarantee Credit for a single person is £109.45 per week. For a couple the level is £167.05 per week.</td>
</tr>
<tr>
<td>Guaranteed Minimum Pension (GMP)</td>
<td>The minimum pension that must be provided by a <strong>contracted-out</strong> salary-related scheme for pensions accrued between 1978 and 1997. The GMP is roughly equivalent to the foregone <strong>SERPS</strong> from <strong>contracting-out</strong>.</td>
</tr>
<tr>
<td>Hedge funds</td>
<td>An investment fund where the fund manager can use financial derivatives and borrowing. This allows them to take more risk than an <strong>equity</strong> or <strong>bond</strong> fund, in the hope of providing a higher return.</td>
</tr>
<tr>
<td>Her Majesty's Revenue and Customs (HMRC)</td>
<td>The new department responsible for the business of the former Inland Revenue and HM Customs and Excise. It is the department responsible for <strong>National Insurance</strong>.</td>
</tr>
<tr>
<td>Home Responsibilities Protection (HRP)</td>
<td>This helps protect the <strong>National Insurance</strong> records of people who have caring responsibilities and are eligible for certain benefits. For more details on how this works see Appendix F in the First Report.</td>
</tr>
</tbody>
</table>
Housing Benefit (HB)  
A means-tested benefit through which the UK government helps qualifying individuals to meet rental payments. Qualification criteria include income, savings and personal circumstances.

Incapacity Benefit  
Benefit paid to people incapable of work and who have either paid or been credited with sufficient National Insurance contributions, or became incapable of work in youth.

Income drawdown or income withdrawal  
Where an individual takes the tax-free lump sum and does not convert the remaining pension fund to an annuity but draws income directly from the fund.

Independent Financial Adviser (IFA)  
An independent financial adviser is someone who is authorised to provide advice and sell a wide range of financial products. They are distinguished from tied financial advisers, who can only give advice in investment products offered by a specific company.

Indexing regimes  
Policy on the uprating of thresholds used in the calculation of tax or benefits. Typically these thresholds increase each year in line with inflation or average earnings. Over the long-term, indexing regimes can dramatically change the impact of taxes and benefits.

Index-linked  
Bonds, gilts, annuities and other financial products can be linked to an index and pay an income which increases in line with that index and the capital values of which increase in line with that index.

Individual Savings Account (ISA)  
ISAs are accounts which can be used to hold many types of savings and investment products including cash, life insurance and stocks and shares. They are available to most UK residents and there are strict rules regarding the maximum amount allowed for each component and the overall amount you can invest in any one tax year. The returns earned in an ISA (capital growth and income) are tax free.

Inertia  
People often accept the situation with which they are presented as a given. As a result auto-enrolment increases participation rates, and the Save More Tomorrow schemes over time lead to an increase in saving.

Informed Choice programme  
The Informed Choice programme is a government programme of initiatives, which aim to foster an increasingly proactive approach by individuals to saving for retirement.

Insurance-managed occupational pension schemes  
Occupational pension schemes where an insurance company is responsible for the administration of the fund and may also provide some guarantees relating to investment performance.

Investors in People  
The Investors in People standard is a business improvement tool designed to advance an organisation's performance through its people.
<table>
<thead>
<tr>
<th>Glossary Item</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jobseeker’s Allowance</strong></td>
<td>Jobseeker’s Allowance is a benefit paid to people capable of work, who are not in work or are working less than 16 hours a week and are actively seeking work. It is only available to people under <strong>State Pension Age</strong>.</td>
</tr>
<tr>
<td><strong>Large firm</strong></td>
<td>For statistical purposes, the Department of Trade and Industry usually defines a large firm as one with 250 or more employees.</td>
</tr>
<tr>
<td><strong>Learning and Skills Council</strong></td>
<td>The aim of the Learning and Skills Council is to make England better skilled and more competitive. It is responsible for planning and funding vocational education and training for everyone.</td>
</tr>
<tr>
<td><strong>Life expectancy</strong></td>
<td>Life expectancy (or the expectation of life) at a given age, x, is the average number of years that a male or female aged x will live thereafter, and is calculated using age and gender-specific mortality rates at ages x, x+1, x+2 etc. Period life expectancy is calculated using age-specific mortality rates for the period under consideration and makes no allowance for changes in age-specific mortality rates after that period. Cohort life expectancy is calculated allowing for subsequent known or projected changes in age and gender-specific mortality rates after that period. For example, a period life expectancy calculation for a male aged 50 in calendar year 2000 would use male mortality rates for age 50 in 2000, age 51 in 2000, age 52 in 2000 (and so on). The cohort life expectancy would be calculated using male mortality rates for age 50 in 2000, age 51 in 2001, age 52 in 2002 (and so on). The cohort definition is the better measure of true life expectancy.</td>
</tr>
<tr>
<td><strong>Lifestyle fund</strong></td>
<td>An investment fund that has an asset mix determined by the level of risk and return that is appropriate for an individual investor at different stages in the lifecycle. The fund invests in higher return but higher risk assets when the individual is young and gradually moves to less risky assets (i.e. bonds) during the 10 to 15 years before the individual plans to retire.</td>
</tr>
<tr>
<td><strong>Limit to life hypothesis</strong></td>
<td>The theory that there is an absolute age beyond which humans cannot live.</td>
</tr>
<tr>
<td><strong>Long-dated gilts/bonds</strong></td>
<td><strong>Gilts</strong> or <strong>bonds</strong> with many years (e.g. 20) left until maturity.</td>
</tr>
<tr>
<td><strong>Longevity</strong></td>
<td>Length of life.</td>
</tr>
<tr>
<td><strong>Longevity bond</strong></td>
<td>A <strong>bond</strong>, which has an interest rate linked to overall life expectancy rates. It increases in value if <strong>longevity</strong> rises and shrinks if it falls.</td>
</tr>
<tr>
<td><strong>Longitudinal</strong></td>
<td>A research study which follows a group of individuals over a period of time.</td>
</tr>
<tr>
<td><strong>Lower Earnings Limit (LEL)</strong></td>
<td>The level of earnings at which an individual is treated as if they have made <strong>National Insurance</strong> contributions. In 2005/06 the limit is £82 per week or £4,264 per year.</td>
</tr>
</tbody>
</table>
Lower Earnings Threshold (LET), also referred to as the underpin for the purposes of calculation of State Second Pension anyone earning less than the Lower Earnings Threshold (£12,100 in 2005/06) and above the Lower Earnings Limit is treated as if they had earnings at the Lower Earnings Threshold.

Macroeconomics The study of aggregate economic activity focusing on variables such as Gross Domestic Product, economic growth, unemployment and inflation.

Major asset classes The main groups of assets chosen for investment i.e. bonds and equities.

Marginal tax rate Highest tax rate paid by an individual.

All individuals receive a tax free personal allowance, which in 2005/06 is £4,895 for those aged under 65, £7,090 for those aged 65-74 and £7,220 for those aged over 75. The higher personal allowances are subject to withdrawal after £19,500 (2005/06). Married couple’s allowances are restricted to a narrow age band as they are phased out. Income above the relevant personal allowance is taxed at the marginal rate below:

<table>
<thead>
<tr>
<th>Taxable income (i.e. income above personal allowance)</th>
<th>Rate of income tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; £2,090</td>
<td>10%</td>
</tr>
<tr>
<td>£2,090-£32,400</td>
<td>22%</td>
</tr>
<tr>
<td>£32,400 &gt;</td>
<td>40%</td>
</tr>
</tbody>
</table>

Matching employer contributions An arrangement common in employer-sponsored Defined Contribution pension schemes by which a contribution made by an individual is added to by their employer. A pound of individual contributions might be added to by 50p or £1 up to a limit.

Mean The average value of a group, calculated as the total of all the values in a group and dividing by the number of values.

Means-tested benefits State benefits where the amount paid depends on the level of income and capital and other personal circumstances.

Median The median of a distribution divides it into two halves. Therefore half the group are above the median value and half below.

Medium-size firms For statistical purposes, the Department of Trade and Industry usually defines a medium firm as one with 50-249 employees.

Micro-employer/ micro-business In this Report it can either refer to a firm employing fewer than five employees or a firm employing fewer than nine employees.

Minimum contributions Contributions paid into a contracted-out personal pension scheme from the National Insurance scheme in place of building up rights to State Second Pension.
Minimum Income Guarantee (MIG)  The forerunner of the Guarantee Credit.

National Insurance (NI)  The national system of benefits paid in specific situations, such as retirement, based on compulsory contributions. There are four main classes of contributions.

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Contribution level</th>
<th>Income band</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1 Employed</td>
<td>12.8% for the employer and 11% for the employee unless contracted-out.</td>
<td>Pay from Primary Threshold to Upper Earnings Limit (UEL) but credited from Lower Earnings Limit (UEL).</td>
</tr>
<tr>
<td>Class 2 Self-employed</td>
<td>Flat-rate payment of £2.10 per week for 2005/06.</td>
<td>If earnings below £4,345, eligible for certificate of small earnings exemption.</td>
</tr>
<tr>
<td>Class 3 Voluntary</td>
<td>Flat-rate contribution. of £7.35 (2005/06).</td>
<td>Voluntary for those not contributing through class 1 or 2.</td>
</tr>
<tr>
<td>Class 4 Self-employed</td>
<td>8%</td>
<td>Between Lower Profits Limit (£4,895 in 2005/06) and Upper Profits Limit (£32,760 in 2005/06).</td>
</tr>
</tbody>
</table>

There are special rates of class 1 contributions for mariners and of class 2 for share fishermen and volunteer development workers. In relation to pensions, class 1 contributions accrue rights to Basic State Pension and State Second Pension, while class 2 and 3 contributions accrue rights only to the Basic State Pension. Class 4 contributions do not accrue rights to any benefit.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Insurance Number</td>
<td>Each UK resident is issued with a unique National Insurance Number. It is used for assigning National Insurance contributions and credits to an individual’s account and for the administration of Paye As You Earn.</td>
</tr>
<tr>
<td>National Insurance Recording System (NIRS2)</td>
<td>The HM Revenue and Customs (National Insurance Contributions Office) replacement computer system. The majority of the system’s functionality is now in place and operational. It collects contributions, holds contribution records, calculates contributory benefits, pays age-related rebates to occupational and personal pension schemes and can provide data to other government agencies.</td>
</tr>
<tr>
<td>National Savings and Investments (NS&amp;I)</td>
<td>A Government Department and Executive Agency of the Chancellor of the Exchequer, its role is to raise funds for the government that are cost effective in relation to funds raised on the wholesale market. It does this by offering savings and investment products to personal savers and investors, and the money placed with it is used to help finance the National Debt.</td>
</tr>
<tr>
<td>National savings</td>
<td>The UK’s gross national saving represents the extent to which, in any given year, the UK does not consume that year’s Gross National Product (Gross Domestic Product plus net income from overseas investments), but saves it, either via investment in the UK or via the acquisition of a claim on the rest of the world.</td>
</tr>
<tr>
<td>Net Present Value (NPV)</td>
<td>The present value of an investment’s future net cash flows minus the initial investment.</td>
</tr>
<tr>
<td>New Deal 50 plus</td>
<td>A programme of help provided by DWP for people aged 50 and over who want to work.</td>
</tr>
<tr>
<td>Nominal</td>
<td>Bonds, gilts or annuities which pay an income which is constant in cash terms (i.e. are not index-linked)</td>
</tr>
<tr>
<td>Normal age pensioners or normal age retirees</td>
<td>Used in this Report to refer to people who are aged at or above the State Pension Age and who are retired.</td>
</tr>
<tr>
<td>Notionally funded</td>
<td>A form of unfunded pension scheme in the public sector, where pension contributions are theoretically paid from the relevant department to HM Treasury to purchase gilts but where the future cost still has to be met out of future tax revenue.</td>
</tr>
<tr>
<td>Occupational pension</td>
<td>A pension which is provided via the employer, but the pension scheme takes the form of a trust arrangement and is legally separate from the employer.</td>
</tr>
<tr>
<td>Old-age dependency ratio</td>
<td>Used in this Report to measure the number of people above age 65 compared with the number of people aged 20-64 in the population.</td>
</tr>
<tr>
<td>P14 and P35</td>
<td>Forms sent on an annual basis by employers to Her Majesty’s Revenue and Customs giving individualised information about Pay As You Earn deductions for all employees.</td>
</tr>
</tbody>
</table>
P45 and P46
The P45 is a certificate providing details relating to tax code, pay and tax paid to date and student loan obligations relating to the previous employment. An employee should receive a P45 on leaving an employer and hand it to the new employer. If the employee does not have a P45 he is required to fill out a P46 form. This gives basic information about the National Insurance number, whether it is the main job and source of income, and from 2006/07 whether the employee is repaying a student loan.

Pay As You Earn (PAYE)
A collection mechanism used to collect tax, National Insurance and some other statutory payments (e.g. student loans) from employees and employers at source. The employer makes the appropriate deductions from weekly or monthly earnings and sends the contributions to HM Revenue and Customs. The payments are usually made monthly on an aggregate basis with annual returns of individual information to enable the reconciliation of individuals’ contributions and accounts. Pay As You Earn is not normally used as a collection method for the self-employed.

Pay As You Go (PAYG)
A pension system where the pension is paid out of current revenue and no funds are accumulated to pay future pensions. The National Insurance system is PAYG.

Pensim2
A model developed by DWP that simulates the future life course of a current population sample to estimate their future pension income. It enables aggregate and distributional analysis of alternative policy, demographic and economic scenarios. For more details see Appendix F.

Pension accrual
The build up of pension rights. In a Defined Benefit scheme this may be based on the number of years of contributions.

Pension Credit
The main means-tested benefit for pensioners, which combines the Guarantee Credit and the Savings Credit. For details on how it works see Appendix F in the First Report.

Pension Protection Fund (PPF)
The Pension Protection Fund was established in April 2005 to pay compensation to members of eligible Defined Benefit pension schemes, when there is a qualifying insolvency event in relation to the employer and where there are insufficient assets in the pension scheme to cover Pension Protection Fund levels of compensation.

Pensioner Benefit Unit (PBU)
A single (non-cohabiting) person aged over State Pension Age (SPA) or a couple (married or cohabiting) where the man, defined as the head, is over SPA.

Period life expectancy
See life expectancy.

Persistency
Where someone continues to make contributions to a pension scheme over time.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal pension</td>
<td>A pension which is provided through a contract between an individual and the pension provider. The pension produced will be based on the level of contributions, investment growth and annuity rates. A personal pension can either be employer provided (a <strong>Group Personal Pension</strong>) or purchased individually.</td>
</tr>
<tr>
<td>Pre-funding</td>
<td>Future pension promises are pre-funded by accumulating sufficient funds in advance of retirement. This is the case for all tax approved non-public sector pensions in the UK. It is the opposite to <strong>Pay As You Go</strong>.</td>
</tr>
<tr>
<td>Price-indexed</td>
<td>Increasing each year in line with inflation.</td>
</tr>
<tr>
<td>Primary Threshold</td>
<td>The point at which employers and employees become liable for <strong>National Insurance</strong> contributions. In 2005/06 the threshold is £94 per week or £4,888 per year.</td>
</tr>
<tr>
<td>Protected rights</td>
<td>The element of the <strong>Defined Contribution</strong> pension arising from <strong>Contracted-out</strong> rebates.</td>
</tr>
<tr>
<td>Protection products</td>
<td>Financial products which provide insurance against specific events, such as unemployment or illness.</td>
</tr>
<tr>
<td>Rate of return</td>
<td>The gain or loss of an investment over a specified period, expressed as a percentage increase over the initial investment cost. Gains on investments are considered to be any income received from the asset, plus realised capital gains.</td>
</tr>
<tr>
<td>Real terms</td>
<td>Figures have been adjusted to remove the effect of increases in prices over time (i.e. inflation), usually measured by the <strong>Retail Prices Index</strong>. Thus if something shown in real terms increases then it is rising faster than prices, whereas if it is constant, it rises at exactly the same pace as prices.</td>
</tr>
<tr>
<td>Reduction In Yield (RIY)</td>
<td>This measures the effect of charges (whether <strong>Annual Management Charges</strong> or implicit costs) on the return an individual achieves on investment. If the rate of return before charges was 6% but the individual receives a rate of return of only 4% after charges, then the <strong>Reduction In Yield</strong> is 2%.</td>
</tr>
<tr>
<td>Regulated advice</td>
<td>Advice from financial advisers certified by the Financial Services Authority and operating within their guidelines.</td>
</tr>
<tr>
<td>Replacement rate</td>
<td>This measures income in retirement as a percentage of income before retirement.</td>
</tr>
<tr>
<td>Retail Prices Index (RPI)</td>
<td>This is an average measure of the change in the prices of goods and services bought for consumption by the vast majority of households in the UK.</td>
</tr>
<tr>
<td>Retirement annuity contract</td>
<td>The forerunner of modern <strong>personal pensions</strong>.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Risk Based Levy</td>
<td>The levy for the new Pension Protection Fund (PPF) will from 2006/07 be based risk of the pension fund entering the PPF. Thus it will take into account the scheme’s liabilities in relation to its members, the level of funding in the scheme and the risk of the company becoming insolvent.</td>
</tr>
<tr>
<td>Risk-free rate</td>
<td>The theoretical rate of return of an investment with no risk. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time. In practice the rate of return from a short-term gilt is used as a comparator.</td>
</tr>
<tr>
<td>Salary sacrifice</td>
<td>An agreement (which HM Revenue and Customs requires to be in writing) between the employer and the employee whereby the employee foregoes part of his future earnings in return for a corresponding contribution by the employer into a pension scheme. The advantage for the employee is that employer contributions are free from tax and National Insurance whilst employee contributions are only tax advantaged.</td>
</tr>
<tr>
<td>Save More Tomorrow Scheme</td>
<td>See “Insights from behavioural economics” panel in Chapter 6 of the First Report</td>
</tr>
<tr>
<td>Savings Credit</td>
<td>Part of the Pension Credit. It is a means-tested benefit for people aged 65 or over, which is withdrawn at the rate of 40p for each £1 of pre-Pension Credit income above the level of the Basic State Pension.</td>
</tr>
<tr>
<td>Second-tier pension provision</td>
<td>Used in this Report to refer to Additional Pension and contracted-out equivalents.</td>
</tr>
<tr>
<td>Self-Invested Pension Plan (SIPP)</td>
<td>A personal pension where the individual chooses where to invest his funds instead of giving his funds to a financial services company to manage.</td>
</tr>
<tr>
<td>Self-administered scheme</td>
<td>An occupational pension scheme where the administration is carried out directly on behalf of the trustees and not handed over to an insurance company.</td>
</tr>
<tr>
<td>Small and Medium Enterprise (SME)</td>
<td>For statistical purposes, the Department of Trade and Industry usually defines a SME as a firm with 249 or fewer employees.</td>
</tr>
<tr>
<td>Small firm</td>
<td>For statistical purposes, the Department of Trade and Industry usually defines a small firm as one with 49 or fewer employees.</td>
</tr>
</tbody>
</table>
Socio-economic class Classification of individuals based on occupation. The Registrar General’s Social Class based on Occupation has been used in this Report:

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Examples of occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Professional</td>
<td>Doctors, chartered accountants, professionally qualified engineers</td>
</tr>
<tr>
<td>II</td>
<td>Managerial &amp; technical/intermediate</td>
<td>Managers, school teachers, journalists</td>
</tr>
<tr>
<td>IIIIN</td>
<td>Skilled non-manual</td>
<td>Clerks, cashiers, retail staff</td>
</tr>
<tr>
<td>Manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIIM</td>
<td>Skilled manual</td>
<td>Supervisor of manual workers, plumbers, electricians, goods vehicle drivers</td>
</tr>
<tr>
<td>IV</td>
<td>Partly skilled</td>
<td>Warehousemen, security guards, machine tool operators, care assistants, waiting staff</td>
</tr>
<tr>
<td>V</td>
<td>Unskilled</td>
<td>Labourers, cleaners and messengers</td>
</tr>
</tbody>
</table>

Stakeholder Pension A personal pension product which complies with regulations which limit charges and allow individuals flexibility about contributions.

Stakeholder price cap The Stakeholder Pension price cap is a 1.5% Annual Management Charge (AMC) for the first ten years of the policy and thereafter a 1% AMC.

State Earnings Related Pension Scheme (SERPS) The forerunner of the State Second Pension, which provides an earnings-related National Insurance pension based on contributions. For more details see Appendix F in the First Report.

State Pension Age (SPA) The age at which an individual can claim their state pension. It is currently 65 for men and 60 for women. The State Pension Age for women will gradually increase to 65 between 2010 and 2020.

State Second Pension (S2P) The National Insurance pension which gives benefits based on an individual’s earnings and contributions. For more details see Appendix F in the First Report.
**Statutory Money** or money purchase schemes are required to send a benefit statement to all members annually. This must include information about current capital value of the fund and an illustration of the pension payable on retirement in today’s prices.

**Tax credits**

There are two main types of tax credit. Working Tax Credit is an income-related credit for working adults and Child Tax Credit is an income-related credit payable to families with responsibility for children, whether they are in or out of work.

**Tax relief**

Individuals making contributions to tax approved pension schemes receive tax relief at their **marginal tax rate** (e.g. a standard rate taxpayer will receive tax relief at 22%). Individuals contributing to **Stakeholder Pensions** receive tax relief at a minimal rate of 22%. Individuals with very low or no tax liabilities can also receive “tax relief” at 22% on contributions of up to £2,808 per year. Employers’ contributions are made from gross profits and thus are both tax and **National Insurance** privileged.

**Tax free lump sum**

25% of pension saving may be taken as a tax free lump sum. This 25% may include **Protected Rights** but not the **Guaranteed Minimum Pension**.

**Tax simplification**

Pensions Tax Simplification introduces a new tax regime for pensions which will take effect from 6 April 2006. Simplification will sweep away the eight existing tax regimes and replace them with a single universal regime for tax-privileged pension savings. A key feature is that instead of the annual limits on contributions there will be a lifetime annual limit of £1.8 million (indexed) of tax advantaged pension saving.

**Term insurance**

Life insurance which covers a specific length of time, for example to cover a mortgage.

**Trading down**

Buying a home that is less expensive than one’s current home.

**Unemployment**

The number of unemployed people in the UK is measured through the Labour Force Survey following the internationally agreed definition recommended by the International Labour Organisation, an agency of the United Nations. Unemployed people are: without a job, want a job, have actively sought work in the last four weeks and are available to start work in the next two weeks, or: out of work, have found a job and are waiting to start it in the next two weeks. For some of the ELSA analysis unemployment is not so strictly defined.

**Universal residency basis**

A state pension payable to every individual over **State Pension Age** who meets defined residency criteria.

**Unfunded**

Pension schemes which are not backed by a pension fund. Instead current contributions are used to pay current pensions along with other funds provided by the employer.
Upper Earnings Limit (UEL)  The upper limit on earnings for the purposes of calculating entitlement to State Second Pension. Also the upper limit for most employee National Insurance contributions. In 2005/06 it is £32,760 per year or £630 per week. For more details see Appendix F in the First Report.

Upper Earnings Threshold (UET)  An intermediate point prior to the Upper Earnings Limit, which affects the accrual of State Second Pension. For more details see Appendix F in the First Report.

Withdrawal rate  The rate at which a means-tested benefit is reduced for an additional pound of pre-benefit income. For more details see Appendix F in the First Report.

Working age population  Generally defined as those aged 16-59 for women and 16-64 for men. However in some of our analysis we have used a starting age of 20.
# List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABI</td>
<td>Association of British Insurers</td>
</tr>
<tr>
<td>ABI1</td>
<td>Annual Business Inquiry – employment</td>
</tr>
<tr>
<td>ABI2</td>
<td>Annual Business Inquiry – financial</td>
</tr>
<tr>
<td>ABM</td>
<td>Automatic Balancing Mechanism</td>
</tr>
<tr>
<td>ACA</td>
<td>Association of Consulting Actuaries</td>
</tr>
<tr>
<td>AEI</td>
<td>Average Earnings Index</td>
</tr>
<tr>
<td>AIIFA</td>
<td>Association of Independent Financial Advisers</td>
</tr>
<tr>
<td>AMC</td>
<td>Annual Management Charge</td>
</tr>
<tr>
<td>AP</td>
<td>Additional Pension</td>
</tr>
<tr>
<td>APP</td>
<td>Approved Personal Pension</td>
</tr>
<tr>
<td>ASHE</td>
<td>Annual Survey of Hours and Earnings</td>
</tr>
<tr>
<td>ASI</td>
<td>Alternative Secured Income</td>
</tr>
<tr>
<td>AVC</td>
<td>Additional Voluntary Contribution</td>
</tr>
<tr>
<td>BBA</td>
<td>British Bankers Association</td>
</tr>
<tr>
<td>BBSRC</td>
<td>Biotechnology and Biological Sciences Research Council</td>
</tr>
<tr>
<td>BHPS</td>
<td>British Household Panel Survey</td>
</tr>
<tr>
<td>BSP</td>
<td>Basic State Pension</td>
</tr>
<tr>
<td>CBI</td>
<td>Confederation of British Industry</td>
</tr>
<tr>
<td>CMI</td>
<td>Continuous Mortality Investigation</td>
</tr>
<tr>
<td>COMB</td>
<td>Contracted-Out Mixed Benefit scheme</td>
</tr>
<tr>
<td>COMP</td>
<td>Contracted-Out Money Purchase scheme</td>
</tr>
<tr>
<td>COSR</td>
<td>Contracted-Out Salary Related scheme</td>
</tr>
<tr>
<td>CPF</td>
<td>Combined Pension Forecast</td>
</tr>
<tr>
<td>CPS</td>
<td>Continuous Population Survey</td>
</tr>
<tr>
<td>DB</td>
<td>Defined Benefit</td>
</tr>
<tr>
<td>DC</td>
<td>Defined Contribution</td>
</tr>
<tr>
<td>DH</td>
<td>Department of Health</td>
</tr>
<tr>
<td>DWP</td>
<td>Department for Work and Pensions</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>ECHP – UDB</td>
<td>European Community Household Panel Users’ Database</td>
</tr>
<tr>
<td>EEF</td>
<td>Engineering Employers’ Federation</td>
</tr>
<tr>
<td>EFS</td>
<td>Expenditure and Food Survey</td>
</tr>
<tr>
<td>ELSA</td>
<td>English Longitudinal Study of Ageing</td>
</tr>
<tr>
<td>EMU</td>
<td>Economic and Monetary Union</td>
</tr>
<tr>
<td>EOC</td>
<td>Equal Opportunities Commission</td>
</tr>
<tr>
<td>EPP</td>
<td>Employers’ Pension Provision survey</td>
</tr>
<tr>
<td>EPSRC</td>
<td>Engineering and Physical Sciences Research Council</td>
</tr>
<tr>
<td>ESP</td>
<td>Enhanced State Pension</td>
</tr>
<tr>
<td>ESRC</td>
<td>Economic and Social Research Council</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EU15</td>
<td>European Union 15 Member States</td>
</tr>
<tr>
<td>EU-SILC</td>
<td>European Union Survey of Income and Living Conditions</td>
</tr>
<tr>
<td>FRS</td>
<td>Family Resources Survey</td>
</tr>
<tr>
<td>FSA</td>
<td>Financial Services Authority</td>
</tr>
<tr>
<td>FSAVC</td>
<td>Free-Standing Additional Voluntary Contribution</td>
</tr>
<tr>
<td>GAD</td>
<td>Government Actuary’s Department</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GHS</td>
<td>General Household Survey</td>
</tr>
<tr>
<td>GNP</td>
<td>Gross National Product</td>
</tr>
<tr>
<td>GPP</td>
<td>Group Personal Pension</td>
</tr>
<tr>
<td>HAS</td>
<td>Household Assets Survey</td>
</tr>
<tr>
<td>HB</td>
<td>Housing Benefit</td>
</tr>
<tr>
<td>HMRC</td>
<td>Her Majesty’s Revenue and Customs</td>
</tr>
<tr>
<td>HMT</td>
<td>Her Majesty’s Treasury</td>
</tr>
<tr>
<td>HRP</td>
<td>Home Responsibilities Protection</td>
</tr>
<tr>
<td>IDBR</td>
<td>Inter-Departmental Business Register</td>
</tr>
<tr>
<td>IFA</td>
<td>Independent Financial Adviser</td>
</tr>
<tr>
<td>IFS</td>
<td>Institute for Fiscal Studies</td>
</tr>
<tr>
<td>ISA</td>
<td>Individual Savings Account</td>
</tr>
<tr>
<td>IPPR</td>
<td>Institute for Public Policy Research</td>
</tr>
<tr>
<td>LEL</td>
<td>Lower Earnings Limit</td>
</tr>
<tr>
<td>LET</td>
<td>Lower Earnings Threshold</td>
</tr>
<tr>
<td>LFS</td>
<td>Labour Force Survey</td>
</tr>
<tr>
<td>LLMDB2</td>
<td>Lifetime Labour Market Database</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>LS</td>
<td>Longitudinal Study</td>
</tr>
<tr>
<td>LSE</td>
<td>London School of Economics</td>
</tr>
<tr>
<td>MIG</td>
<td>Minimum Income Guarantee</td>
</tr>
<tr>
<td>MRC</td>
<td>Medical Research Council</td>
</tr>
<tr>
<td>NAFA</td>
<td>Net Acquisition of Financial Assets</td>
</tr>
<tr>
<td>NAFL</td>
<td>Net Acquisition of Financial Liabilities</td>
</tr>
<tr>
<td>NAPF</td>
<td>National Association of Pension Funds</td>
</tr>
<tr>
<td>NDC</td>
<td>Notional Defined Contribution</td>
</tr>
<tr>
<td>NES</td>
<td>New Earnings Survey</td>
</tr>
<tr>
<td>NI</td>
<td>National Insurance</td>
</tr>
<tr>
<td>NIESR</td>
<td>National Institute of Economic and Social Research</td>
</tr>
<tr>
<td>NIRS2</td>
<td>National Insurance Recording System</td>
</tr>
<tr>
<td>NPISH</td>
<td>Non-Profit Institutions Serving Households</td>
</tr>
<tr>
<td>NPSS</td>
<td>National Pension Savings Scheme</td>
</tr>
<tr>
<td>NPV</td>
<td>Net Present Value</td>
</tr>
<tr>
<td>NS&amp;I</td>
<td>National Savings and Investments</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>ONS</td>
<td>Office for National Statistics</td>
</tr>
<tr>
<td>OPSS</td>
<td>Occupational Pension Schemes Survey</td>
</tr>
<tr>
<td>PAYE</td>
<td>Pay As You Earn</td>
</tr>
<tr>
<td>PAYG</td>
<td>Pay As You Go</td>
</tr>
<tr>
<td>PEP</td>
<td>Personal Equity Plan</td>
</tr>
<tr>
<td>PPF</td>
<td>Pension Protection Fund</td>
</tr>
<tr>
<td>PPI</td>
<td>Pensions Policy Institute</td>
</tr>
<tr>
<td>PPM</td>
<td>Swedish Premium Pension system</td>
</tr>
<tr>
<td>PSTF</td>
<td>Pension Statistics Task Force</td>
</tr>
<tr>
<td>RIY</td>
<td>Reduction in Yield</td>
</tr>
<tr>
<td>ROW</td>
<td>Rest of the World</td>
</tr>
<tr>
<td>RPI</td>
<td>Retail Prices Index</td>
</tr>
<tr>
<td>SBC</td>
<td>Small Business Council</td>
</tr>
<tr>
<td>SBS</td>
<td>Small Business Service</td>
</tr>
<tr>
<td>S2P</td>
<td>State Second Pension</td>
</tr>
<tr>
<td>SEK</td>
<td>Swedish Kroner</td>
</tr>
<tr>
<td>SERPS</td>
<td>State Earnings Related Pension Scheme</td>
</tr>
</tbody>
</table>
Abbreviations

SIC | Standard Industrial Classification
SIPP | Self Invested Pension Plan
SME | Small or Medium-sized Enterprise
SPA | State Pension Age
TAEN | Third Age Employment Network
TSP | Thrift Savings Plan for Federal Employees
TUC | Trades Union Congress
UEL | Upper Earnings Limit
UET | Upper Earnings Threshold
WPLS | Work and Pensions Longitudinal Study
AARP, (July 2005), *International Retirement Security Survey*, USA

ABI, (September 2003), *The Future of the Pension Annuity Market – summary report*

ABI, (October 2003), *The State of the Nation’s Savings 2003*


ABI, (November 2004), *The State of the Nation’s Savings 2004*


ABI, (April 2005), *UK Pension Reform – Lessons from Abroad? Pensions in Australia, New Zealand, Sweden and the USA*

ABI, (June 2005), *Bridging the Savings Gap: An evaluation of voluntary and compulsory approaches to pension reform*

ABI, (June 2005), *Serious about Saving: the ABI Agenda for action on state and private pension reform*

ABI, (August 2005), *Contracting-out of the State Second Pension: An ABI Position Paper*


ACA, (May 2005), *UK Pension Trends Survey Report Part 2: Trends in: Scheme provision, contributions and scheme deficits*

Age Concern, (April 2005), *The women and pensions scandal A blueprint for reform*

Allinson, G., Braidford, P., Drummond, I., Houston, M. and Stone, I., (July 2005), *SMES and Employee Pensions A focus group based study on behalf of the Pensions Commission*, Durham Business School, Durham University


Bibliography


Barclays Capital, (February 2005), Barclays Equity Gilt Study 2005


Barrell, R., Kirkby, S. and Riely, R., (2005), Pensions Saving and the UK Economy, National Institute of Economic and Social Research


BCC, (2005), British Chambers of Commerce Pensions Survey 2005 – Key Findings

Bellamy, K. and Rake, K., (March 2005), Money Money Money Is it still a rich man’s world?, Fawcett Society


Better Regulation Task Force, (April 2000), Helping Small Firms Cope with Regulation - Exemptions and Other Approaches

Better Regulation Task Force, (May 2002), Employment Regulation: striking a balance

Better Regulation Task Force, (March 2005), Regulation – Less is More Reducing Burdens, Improving Outcomes

Beveridge, W.H., (1942), Social Insurance and Allied Services: Report

Bird, D., (November 2004), Methodology for the 2004 Annual Survey of Hours and Earnings, Labour Market Trends, ONS

Blake, D. and Mayhew, L., (November 2004), Immigration or bust? Options for securing the future viability of the UK state pension system, Discussion Paper P1-0413 Pensions Institute, Cass Business School

Blundell, R. and Tanner, S., (December 1999), *Labour force participation and retirement in the UK*, IFS


Cabinet Office, (2000), *Women’s income over the lifetime – the mother gap*

Cabinet Office, (2005), *Non-Departmental Public Bodies: A Guide for Departments*

CBI, (July 2003), *Focus on Investment: the impact of pension deficits*, Economic Brief


Child Poverty Action Group, (2005), *Welfare benefits and tax credits handbook 2005/06*


Chung, W., Disney, R., Emmerson, C. and Wakefield, M., (October 2004), *Public policy and saving for retirement: Evidence from the introduction of Stakeholder Pensions in the UK*, IFS

CMI Mortality Committee, (July 2005), *Working Paper 15 Projecting future mortality: Towards a proposal for a stochastic methodology*


Cooper, D., (August 2005), *Comparing pension outcomes from hybrid schemes*, DWP Research Report No. 269
Datamonitor, (October 2004), *UK IFAs 2004 – Post-Depolarization Strategies*

Datamonitor, (October 2004), *Regulatory Changes – the IFA response*

Datamonitor, (October 2004), *Worksite marketing in UK Financial Services 2004*

DH, (August 2005), *Tackling Health Inequalities: Status Report on the Programme for Action*


DSS, (December 1998), *A new contract for welfare: partnership in pensions*, Cm 4179

DTI, (July 2005), *Consultation on the draft Employment Equality (Age) Regulations 2006*

DWP, (2005), *Family Resources Survey 2003-04*

DWP, (2005), *Households Below Average Income 2003/04*

DWP, (February 2004), *Simplicity, security and choice: Informed choices for working and saving*

DWP, (February 2005), *Five Year Strategy Opportunity and security throughout life*

DWP, (February 2005), *Principles for reform The national pensions debate*

DWP, (April 2005), *The Pensioners’ Incomes Series 2003/04*

DWP, (July 2005), *Automatic enrolment in workplace pension schemes Guidance on the regulatory framework*


DWP, (November 2005), *Women and pensions The evidence*

Economic Policy Committee, (2001), *Budgetary challenges posed by ageing populations*, ECFIN/655/01-EN final


EOC, (September 2005), *Britain’s hidden brain drain – Final report*


European Commission, (May 2004), *Comparative Tables on Social Protection in the 25 Member States of the European Union, in the European Economic Area and in Switzerland - Situation on 1 May 2004 (MISSOC)*, European Commission, Brussels


European Foundation for the Improvement of Living and Working Conditions, (December 2004), *Quality of life in Europe*, Dublin


FSA, (December 2002), *Persistency of life and pensions policies Eighth survey*

FSA, (June 2004), *A basic advice regime for the sale of stakeholder products*, CP04/11

FSA, (July 2004), *Building Financial Capability in the UK*


GAD, (October 2003), *Government Actuary’s Quinquennial Review of the National Insurance Fund as at April 2000*

GAD, (June 2004), *Occupational pension schemes 2004: Twelfth survey by the Government Actuary and previous editions*


Ginn, J., (2003), *Gender, Pensions and the Lifecourse*

Goodman, A., (2004), *Consumer Understanding of Risk*

Gosling, T. and Lewis, M., (2005), *Trust no-one? Public attitudes to raising the age of retirement*, IPPR

Green, E. and White, C., (2005), *Effective means of conveying messages about pensions and saving for retirement*, DWP Research Report No. 239
Gregory, A. and Tonks, I., (March 2004), *Performance of Personal Pension Schemes in the UK*, University of Exeter


Hampton Review, (March 2005), *Final report*


Hibbett, A. and Meager, N., (October 2003), *Key Indicators of women’s position in Britain*, Labour Market Trends, ONS

Hicks, S. and Lindsay, C., (April 2005), *Public sector employment*, Labour Market Trends, ONS

HM Government, (March 2005), *Opportunity Age – Meeting the challenges of ageing in the 21st century*

HM Government, (October 2005), *Health, work and well-being – Caring for our future*

HM Treasury, (June 2004), *Consultation on “stakeholder” saving and investment products regulations*

HM Treasury, (November 2004), *“Stakeholder” savings & investment products regulations Government Response*


HM Treasury and DWP, (July 2003), *Assessing the likely market impacts of charge caps on retail investment products*


Hotopp, U., (February 2005), *The employment rate of older workers*, Labour Market Trends, ONS

HSBC, (2005), *The future of retirement in a world of rising life expectancies*

IDS, (2005), *Pensions in Practice 2005/06*


Kempson, E., McKay, S. and Collard, S., (March 2005), *Incentives to save: Encouraging saving among low-income households*, University of Bristol


Leston, J. and Watmough, M., (November 2005), *Providing pensions information and advice in the workplace where there is little or no employer contribution*, DWP Research Report No. 294

Lunnon, M., (July 2002), *Annuityisation and Alternatives*, in 'Actuarial aspects of pension reform', Paper from Seminar for Social Security Actuaries and Statisticians, Moscow


Mellon, (November 2004), *Key Pension Issues Survey*


Mintel, (2005), *Occupational Pensions, Finance Intelligence*


Murphy, C., (November 2004), *Public awareness of State Pension age equalisation*, DWP Research Report No. 221


NAPF, (2004), *Thirtieth Annual Survey of Occupational Pension Schemes*

NAPF, (July 2005), *Pension Scheme Governance – fit for the 21st century*

NAPF, (September 2005), *Towards a Citizen’s Pension*


Noble, J., (2005), *Micro-employers’ attitudes towards pensions for themselves and their employees: A report on small-scale qualitative research with employers*, DWP Research Report No. 266
A New Pension Settlement for the Twenty-First Century

NTC, (2005), *Pensions Pocket Book*

O’Brien, C., Fenn, P. and Diacon, S., (June 2005), *How long do people expect to live? Results and implications*, Centre for Risk & Insurance Studies, The University of Nottingham

OECD, (October 2003), *Monitoring the Future Social Implication of Today’s Pension Policies*

OECD, (October 2003), *Monitoring Pension Policies Annex: Country Chapters*

ONS, (2005), *Trends in Life Expectancy by Social Class 1972-2001*

ONS, (2005), *United Kingdom National Accounts The Blue Book 2005*

ONS, (October 2004), *Annual Survey of Hours and Earnings 2004*

ONS, (December 2004), *General Household Survey 2003*

ONS, (June 2005), *Family Spending 2004*

ONS, (October 2005), *Pension Trends 2005*


PPI, (July 2003), *State Pension Models*

PPI, (May 2004), *Property or Pensions?*

PPI, (October 2004), *Can current pension policy be as good as the alternatives?*, PPI Briefing Note No. 15

PPI, (February 2005), *How big is the life expectancy gap by social class?*, PPI Briefing Note No. 17

PPI, (April 2005), *The gain from deferring state pensions*, PPI Briefing Note No. 19
Bibliography

PPI, (May 2005), Should the state provide an earnings-related pension?, PPI Briefing Note No. 20

PPI, (June 2005), Kiwisaver: Another lesson from New Zealand, PPI Briefing Note No. 21

PPI, (August 2005), Can work close the ‘savings gap’?, PPI Briefing Note No. 23

PPI, (September 2005), A Commentary on the Pension Reform Debate

President’s Commission, (2001), Strengthening Social Security and creating personal wealth for all Americans: Report of the President’s Commission, USA


Rake, K. (ed), (2000), Women’s Incomes over the Lifetime: A Report to the Women’s Unit, Cabinet Office


Robson Rhodes, (March 2005), Pensions in UK Manufacturing

Rowlingson, K., (May 2004), Attitudes to Inheritance Focus group report, University of Bath/JRF

Rowlingson, K., (July 2005), Attitudes to housing assets and inheritance, Housing Finance Issue 10/2005, CML

Rowlingson, K. and McKay, S., (July 2005), Attitudes to inheritance in Britain, JRF

Sandler, R., (July 2002), Sandler Review: Medium and Long-term Retail Savings in the UK, HMT

Savings Product Working Group, (August 2004), A Future for Work-based savings in New Zealand: Final report of the savings product working group

Scanlon, K. and Whitehead, C., (March 2005), The profile and intentions of buy-to-let investors, CML

Scottish Widows, (June 2005), UK Pensions Report


Siebrits, J., (2004), Rich or retired? A profile of cash purchasers in the UK, CML


Sodha, S., (October 2005), *Housing-Rich, Income-Poor, The potential of housing wealth in old age*, IPPR


Taylor-Gooby, P., (February 2005), *Attitudes to social justice*, IPPR


The Economist, (January 2005), *Mind Games*


The Pension Research Forum, (May 2005), *Effective member engagement – does one size fit all?*

The Pension Service, (October 2005), *A guide to State Pensions*, DWP
The Pensions Advisory Service, (March 2005), *Report on Women and Pensions Helpline*

The Pensions Reform Group, (October 2001), *Universal Protected Pension: Modernising Pensions for the Millennium*


TUC, (December 2004), *Time for Action*

TUC, (June 2005), *The 80 per cent solution*

Turner, A., (September 2003), *The Macroeconomics of Pensions*, Lecture to the Actuarial Profession

Turner, A., (November 2003), *Demographics, Economics and Social Choice*, Lecture at the London School of Economics


Turner, A., (July 2005), *Sectoral and National Savings Discussion Paper*

UBS, (2005), *Pension fund indicators 2005: a long term perspective on pension fund investment*

Utkus, S., (June 2005), *Selecting a Default Fund for a Defined Contribution Plan*, The Vanguard Centre for Retirement Research, USA

Utkus, S. and Mottola, G., (April 2005), *Catch-up Contributions in 2004: Plan sponsor and participants adoption*, The Vanguard Centre for Retirement Research, USA


Vanguard, (September 2004), *How America Saves*


Wadsworth, M., (2005), *The Pension Annuity Market*, ABI


Walling, A., (July 2005), *Families and work*, Labour Market Trends, ONS
Watson Wyatt, (January 2003), *Administration Cost Survey 2003*


Which?, (2005), *Which Choice? Can the Government’s choice agenda deliver for everyone?*


Whiting, E., (July 2005), *The labour market participation of older people*, Labour Market Trends, ONS

Women and Equality Unit, (December 2004), *Interim Update of Key Indicators of Women’s Position in Britain*, DTI


