

Annex A – Benefit expenditure estimates: methods and assumptions.

- A.1 This Annex sets out more detail on the costs of State Pension reform and the methodology used to calculate these costs. It sets out the assumptions behind these estimates, the models used in calculating them, and the costs themselves.
- A.2 The material in this Annex draws upon and updates the information contained in Appendices A to C of the Regulatory Impact Assessment accompanying the White Paper.

Assumptions

Population projections

- A.3 Demographic projections underpinning expenditure projections are based on data produced by the Population Division of the Office for National Statistics (ONS) and by the Government Actuary's department (GAD).
- A.4 We have used the latest (2004-based) population projections for the United Kingdom and constituent countries, published in October 2005. The projection reflects the following assumptions on future rates of mortality, fertility and migration:
- mortality rates improving consistently into the future: at each age the year-on-year reduction in mortality rates converges from current rates to 1 per cent per year by 2029 for all ages, and mortality continues to improve at this constant rate thereafter;
 - the average number of children per mother remaining constant over time at 1.74 children; and
 - an annual net inflow of migrants of 145,000.

Policy assumptions

- A.5 Figures A1, A4 and A7 below contains expenditure projections assuming current policies continue into the future in cash, 2006/7 prices and GDP terms. The principal assumptions behind these projections are:
- standard minimum guarantee element of Pension Credit rises with prices from 2008/9;
 - the Savings Credit threshold is linked to the value of the basic State Pension;

- basic State Pension rises in line with the Retail Price Index (RPI), but with a minimum annual uprating of 2.5 per cent;
 - disability benefits are uprated by RPI;
 - The cost of free TV licences for the over-75s increases by 1.5 percentage points above RPI each year; and
 - Winter Fuel Payments are fixed in cash terms.
- A.6 For modelling purposes only, income tax allowances and thresholds are assumed to be indexed by earnings beyond 2010/11. National Insurance thresholds are uprated as currently set out in legislation, which is a mix of price uprating, earnings uprating and increases in line with the basic State Pension.
- A.7 Figures A.1c, A.4c, and A.7c shows expenditure on state pensions under the reformed system in cash, 2006/7 prices and GDP terms. The policy detail underpinning these projections is as set out in this document.
- A.8 All the figures reflect the equalisation of State Pension age for men and women between 2010 and 2020.

Economic assumptions

- A.9 The principal economic assumptions behind these projections cover inflation, employment and unemployment, and productivity growth. Earnings and GDP assumptions flow from these. For the period up to 2010/11, the economic assumptions are as presented in the Budget 2006 Financial Statement and Budget Report, updated to take account of more recent information. Beyond this, the main assumptions are as follows:
- For inflation, the Bank of England is assumed to meet its 2 per cent target for the Consumer Prices Index (CPI) on average, though with some variation around this (which in turn impacts on the average uprating for the basic State Pension, which is assumed to have a minimum uprating of 2.5 per cent per year). All other inflation assumptions (such as RPI) are determined relative to this CPI baseline, with differences between them to take account of the different coverage and methodology behind the different measures, and differential inflation in house prices, which we assume will rise in the long term in line with earnings.
 - Employment assumptions use the cohort projection method described in the Long-Term Public Finance Report, which generally results in fairly constant employment rates at each age. However, there are

bigger increases in employment rates for older women due to the feed through of strong cohort effects, and an adjustment for the equalisation of the State Pension age. The combination of an ageing population, with an assumption that older working age people will continue to have lower employment rates than younger groups, results in a small fall in economic inactivity, and a consequent small rise in employment rates of around one percentage point across the projection period. This change is mainly concentrated between 2010 and 2020, as equalisation occurs.

- Productivity is assumed to increase at 2 per cent per year beyond the medium term planning horizon, and it is assumed that real earnings growth follows productivity growth, implicitly assuming no change in the labour share of overall GDP. Real GDP growth is the combination of employment and productivity growth.

Other assumptions

- A.10 **Contracting out** of the State Second Pension is assumed to continue to decline in the future in the private sector, falling by two-thirds in 2050 compared with current levels. The majority of this reflects the feeding through of schemes that have already closed to new members, but there is a further decline as a result of assumed future closures. Defined contribution schemes (contracted-out money purchase and appropriate personal pension) have a further reduction assumed, resulting from the lowering of the cap on age related rebates in the recent contracted-out rebate review. It is also assumed that there is no change in contracting out in the public sector (where virtually all employees are contracted out).
- A.11 **Pensioner incomes** brought to account in Pension Credit are modelled in the Department's dynamic microsimulation model Pensim2, and these are based on a number of lower level assumptions about pension contributions and labour market histories consistent with Treasury's employment assumptions. More detail on the projections of pensioner incomes can be found in the factsheet on Projections of Pension Credit Entitlement.¹
- A.12 **Pension Credit take-up** overall is assumed to remain at the 2007/08 level, which is projected to be around two-thirds of the eligible population. This is a change from the White Paper publication which assumed a take-up rate of around four-fifths, reflecting latest evidence on Pension Credit out-turns. The effect of switching to a lower take-up assumption for Pension Credit is to reduce the additional costs of Pension Credit reform by less than £0.5bn a year in the first 10 years and by under £1bn in 2050.

¹ Published on the DWP website at: www.dwp.gov.uk/pensionsreform/forum/docs/fs-pc-projection.pdf

- A.13 **Rents** are assumed to rise in line with earnings, reflecting the general path of house prices over the past few decades.
- A.14 **Council taxes** are assumed to rise in line with earnings, consistent with Council Tax revenue remaining fairly constant as a proportion of total government revenue.
- A.15 **Personal accounts** have not been included in the projections – estimates are based on current savings behaviour.

Models

- A.16 The costs of changes to the state pension system proposed in the RIA have been estimated by using a number of models. All these models provide projections of expenditure under a set of assumptions about future trends in the key economic, demographic and policy variables. As with the long-term projections, these estimates should be considered with care as they are very dependent on assumptions about future trends.
- A.17 No single model is best suited to estimating cost changes across all the elements of State Pensions. The approach taken here is to use the most appropriate model for each main element of the cost, and combine these estimates to produce an overall costing. The estimates in the RIA incorporate the regular annual update to models, including new data and some changes to reflect improvements in methodology. The main changes from the White Paper approach are highlighted below.

Aggregate models

- A.18 Estimates of the costs of changes to the basic State Pension and State Second Pension have, as far as possible, been made from the same models used for the base long-term expenditure projections, originally developed by GAD. This follows the approach used in the White Paper.
- A.19 There are separate models for basic State Pension and Additional Pension (AP). Both are aggregate models – they project expenditure in respect of groups of pensioners (categorised, for example, by age, birth cohort and gender).

- A.20 The basic State Pension model uses administrative data on the entitlements of current pensioners together with assumptions to project expenditure into the future. The key assumptions include:
- population;
 - marital status; and
 - average entitlement.
- A.21 Population estimates are based on GAD's 2004-based principal population projection, with proportions by marital status from GAD's 2003-based marital status projections.
- A.22 Assumptions about average entitlement are based on administrative data, with forward projections based on trends derived from the analysis of data from the National Insurance Recording System 2 (NIRS2). This showed that the introduction of Home Responsibilities Protection in 1978 has had a considerable impact on increasing women's National Insurance contribution records and hence their entitlement to the basic State Pension. Men and women up to the age of 45 now have virtually identical entitlements. This is assumed to feed through into older age groups as these cohorts age.
- A.23 The assumptions used within the basic State Pension model have also been used to project outcomes – for example the proportions of people reaching State Pension age with full basic State Pension – under the current system and under reform proposals (showing, for example, the impact of changes to the number of qualifying years required for full basic State Pension).
- A.24 The Additional Pension model also uses administrative data on the accruals of current pensioners to project expenditure into the future. In addition, it makes use of NIRS2 data on National Insurance contributions to estimate current accruals for those below pension age.
- A.25 To estimate future contributions and rebates, a National Insurance model developed by GAD is used, which projects contributions based on population, mortality, earnings and contracting out assumptions.
- A.26 Population and mortality are based on GAD's 2004-based principal population projection, with an income related adjustment to mortality (since those with higher incomes tend to have lower mortality rates).
- A.27 Earnings are assumed to grow in line with the Treasury's economic projections. It is also assumed that the current distribution of earnings between age groups continues.

A.28 Contracting out for occupational schemes in the private sector is assumed to continue to decline by two thirds in the future, compared to current levels. Contracting out for personal pension schemes is also assumed to decline, and includes an allowance for the expected effect of revised age related rebate rates, which makes contracting out less attractive to those over 44 years old.

Pensim2

A.29 Pensim2 is a dynamic micro-simulation model that has been developed in DWP to inform analysis of likely future trends in pensioner incomes. Pensim2 builds up a picture of the future pensioner population by modelling future life events and work histories for a representative sample of individuals.

A.30 The model currently starts from a set of base data representative of the GB household population in 2001. This base data includes detailed information on the characteristics of individuals and their employment and pension histories to date. For each subsequent year, sets of equations are used to model, for each individual, the probability of certain events occurring, based on estimates from current data. The calculated probabilities are then used within the model to determine what happens to each individual in a given year.

A.31 The key elements that are simulated include:

- partnership formation and dissolution;
- mortality;
- fertility;
- education;
- labour market status and earnings; and
- accrual of occupational and personal pensions.

A.32 The individual labour market and pension histories generated by the model are used to calculate estimates of pensioner incomes in each year of the simulation. For contributory State Pensions, the rules of the state pension are used to calculate someone's entitlement given the extent to which they work or participate in activities that are credited. Entitlement to Pension Credit is then calculated based on all relevant income sources. Pensim2 does not at present model entitlement to Housing Benefit or Council Tax Benefit. Currently Pensim2 is used to simulate up to 2050.

A.33 The methodology and equations underlying Pensim2 were validated by the Institute for Fiscal Studies. Their findings and recommendations for further development were published in a working paper in 2004. This is

available on their website. Results from Pensim2 have been validated by comparing a range of key outputs against trends in recent administrative and survey data and the projections produced using other modelling approaches. These key outputs include demographic changes, cross-sectional and longitudinal labour market outcomes, and trends in the accrual of both state and private pensions.

- A.34 Pensim2 is particularly well-suited to long-term projections of expenditure on income-related benefits, where the distribution of future pensioner incomes is a key determinant of entitlement and expenditure. Pensim2 models the future accrual of pensions by individuals, based on their projected labour market status each year. So it captures directly key trends such as the maturing of the State Second Pension scheme, and widening coverage of basic State Pension. As such it is more likely to generate a robust distribution of future pensioner incomes.
- A.35 In view of the methodological advantages of the Pensim2 approach, and following further investigation of Pensim2 projections since the White Paper, long-term estimates of Pension Credit expenditure and entitlement in the RIA have been based entirely on estimates derived directly from Pensim2.
- A.36 Further details on Pensim2 are set out in Appendix F of the Second Report of the Pensions Commission, and in the factsheet on Projections of Pension Credit Entitlement.² All models are constantly reviewed and refined, the version of Pensim2 used in the RIA analysis has been improved since the White Paper, for example State Second Pension expenditure growth is much closer to DWP dedicated expenditure model patterns (3.7 per cent for Pensim2 compared with 3.5 per cent for expenditure models).

Policy Simulation Model (PSM)

- A.37 The PSM is a model of the current benefit, tax and National Insurance system, which is used extensively in DWP to assess the effect of changes in benefit policy. The PSM is a micro-simulation model, which models the impact of changes on a representative sample of households. It is based on *Family Resources Survey* data for 2003/04 projected forward to 2005/06 in line with forecasting assumptions.
- A.38 Medium-term projections of expenditure on Pension Credit are made using a forecasting model based on the PSM, projected forward in line with assumptions about future growth in the main components of income and taking into account future changes in the number of pensioners, by

² Published on the DWP website at: www.dwp.gov.uk/pensionsreform/forum/docs/fs-pc-projection.pdf

age group. These trends are then applied to current caseloads and expenditure estimates based on DWP administrative data. The PSM has also been used to estimate the impacts of pension reform measures on Housing Benefit and Council Tax Benefit expenditure, which are not included in Pensim2 yet.

Methods

A.39 All data and modelling is based on Great Britain. Adjustments are made to convert to a United Kingdom basis using relative expenditure per head and differing projected trends in population in relevant age groups. Basic State Pension and State Second Pension are also adjusted to incorporate pensions paid to individuals residing overseas, using a methodology developed by GAD.

Changes to State Pension age

- A.40 Changes to State Pension age result in savings in benefits paid to pensioners, but with some additional costs in working-age benefits, generally for people between age 65 and the new pension age.
- A.41 Savings on pensioner benefits are simply calculated by assessing how much expenditure would be paid to people aged between 65 and the new pension age. For the purposes of these estimates, it is assumed there are no additional accruals to State Second Pension and basic State Pension entitlement over the age of 65.
- A.42 Costs to working-age benefits – principally Incapacity Benefit and the associated elements of Income Support, Housing Benefit and Council Tax Benefit – have been calculated by extrapolating the pattern of receipt of these benefits, per capita, from the age groups below 65 up to the new pension age. In most cases receipt of these benefits rises steadily with age, and this is simple to extrapolate. However, it has not been assumed that the higher pension age leads to lower levels of benefit receipt for people in their fifties and early sixties, although this is a possible outcome (for example if employment rates increase among those groups).
- A.43 Disability Living Allowance costs are based on the patterns of flow onto the benefit in the ages immediately below 65, as it is assumed – for the purposes of these estimates – that the maximum age at which it can be claimed is moved in line with rising State Pension age. This in turn reduces the number of new claims to Attendance Allowance among pensioners, as a higher proportion already receive Disability Living Allowance.

A.44 It is likely that changes in State Pension age will have an impact on the ages at which individuals take occupational and personal pensions. This would affect the income received from those pensions (for example by affecting the period over which funds accumulate, or the annuity rate offered), which could in turn affect expenditure on income-related benefits. These effects will depend on individual and employer reactions to the changes in State Pension age and are therefore difficult to predict reliably. No account has been taken of them in this analysis.

- A.45 The effects of raising State Pension age on employment are very uncertain. A range of scenarios have been considered when looking at the effect of changing State Pension age on economic growth:
- **the low impact scenario** simply assumes those affected by the higher State Pension age change their labour market participation in the year in which they are affected – so, for example, when State Pension age is raised by one year from 65 to 66, participation is only affected for those aged 65 - and this is estimated by extending the labour force exit rates seen over the ages immediately below this to the new State Pension age
 - **For the high impact scenario**, it is assumed that labour force exit is delayed by the same amount as State Pension age is raised, for anyone over the age of 55. For example, for cohorts facing a one year increase in State Pension age, their participation at age 56 is what it was at age 55, and for cohorts facing a three year increase in State Pension age, participation at age 58 is what it was at 55; this continues as they age, up to age 70. This scenario means that the employment effects of raising State Pension age actually start 10 years before State Pension age is raised.
 - **The central projection** is simply the average of the high and low impact scenarios.

There is more information on the methodology and assumptions behind changing employment levels in the publication *Economic and social welfare impacts of pension reform*.

A.46 Estimates of benefit expenditure and National Insurance Rebates assume higher levels of employment resulting from State Pension age rises. Change in employment as a result of reform will impact on GDP. The costs in tables A.1, A.4, and A.7 - showing spending on pensioners under reform - assume that GDP rises slightly as a result of reform, based on the central projection above. This means that total spending on pensioner benefits is 7.5% in 2050 rather than 7.7% without any increase in GDP.

A.47 The central projection of employment increases due to rises in State Pension age are likely lead to an overall increase in National Insurance revenues. Assuming National Insurance rates remain comparable to now, the increase in National Insurance revenues could

be 0.1% of GDP (around £1bn in 0607 prices) from 2024 rising to 0.2% of GDP by 2050 (around £6 billion in 0607 prices).

Uncertainty

A.48 The costs presented in this annex are highly dependent on the underpinning assumptions. The main areas which may noticeably influence expenditure are:

Earnings and prices growth

A.49 As the basic State Pension is indexed by earnings, higher growth in real earnings will increase expenditure, and vice versa. Movements in real earnings growth tend to be correlated with similar movements in GDP, so costs expressed as a proportion of GDP may not be affected.

Employment

A.50 An increase in the employment rate has numerous effects. As the number of people in work grows, GDP and income from National Insurance Contributions will increase. Expenditure on State Second Pension may rise as individuals accrue greater entitlement. Potentially, future expenditure on income related benefits may fall as more people are able to save for their own retirement, or have improved basic State Pension and State Second Pension entitlements.

Mortality

A.51 Mortality rates have been falling for many years now, due to improvements in technology, healthcare, and preventative medicine. The mortality projections underpinning the analysis contained in this annex assume these trends will continue. Therefore, expenditure on pensioners will continue to rise as the stock of pensioners swells. The effect of any variation will build up progressively.

Fertility

A.52 Changes to the fertility rate will have a very long-term effect on pensions expenditure. For example, a greater number of births than predicted for a given year will take at least a further 16 years to have any effect – whenever this new generation can join the workforce. This generation will then take a full working lifespan to become pensioners.

A.53 A greater number of births will lead, initially, to a greater number of contributors and an increase in National Insurance Contributions;

eventually, these generations will retire and result in an increase in pensions expenditure.

Migration

- A.54 Changes in migration will have different effects on the projections depending on the composition of those entering or leaving the country.
- A.55 An increase in the number of working age migrants will positively influence the support ratio, and lead to a larger number of individuals in employment, contributing more to the economy. However, in the longer term, these migrants will become entitled to state pensions.
- A.56 An increase in the number of older migrants may lead to increased expenditure in the short-term. The precise effect will depend on their previous country of residence, and any reciprocal arrangement with the UK.

Savings behaviour and contracting out

- A.57 Any change in the proportions contracting out of Defined Benefit schemes will change both future expenditure on State Second Pension and on the contracted-out rebate.
- A.58 Costs do not include effect of personal accounts. Any increase in the numbers engaged in private pension saving may reduce expenditure on Pension Credit.

Costs, and Notes to the Tables

A.59 The tables below set the costs of pensioner benefits in cash (figures A.1 to A.3), 2006/7 prices (figures A.4 to A.6) and GDP terms (figures A.7 to A.9):

- **Figures A.1, A.4 and A.7** set out total spending on pensioner benefits with (a) no reform, (b) earnings uprating of the standard minimum guarantee, and (c) the whole reform package.
- **Figures A.2, A.5, and A.8** set out further details further details of the changes in benefit expenditure resulting from different aspects of reform.
- **Figures A.3, A.6 and A.9** show projections of the change in contribution income arising in respect of the individual proposals in the Bill.

A.60 Other notes for the tables are:

- Figures refer to financial years, for example 2020 refers to 2020/21.
- Figures exclude tax revenue implications of reform.
- The tables only contain projections of changes in expenditure and income. No estimate is made of the overall position of the National Insurance Fund.
- All expenditure projections in this Annex apply to the whole of the United Kingdom.

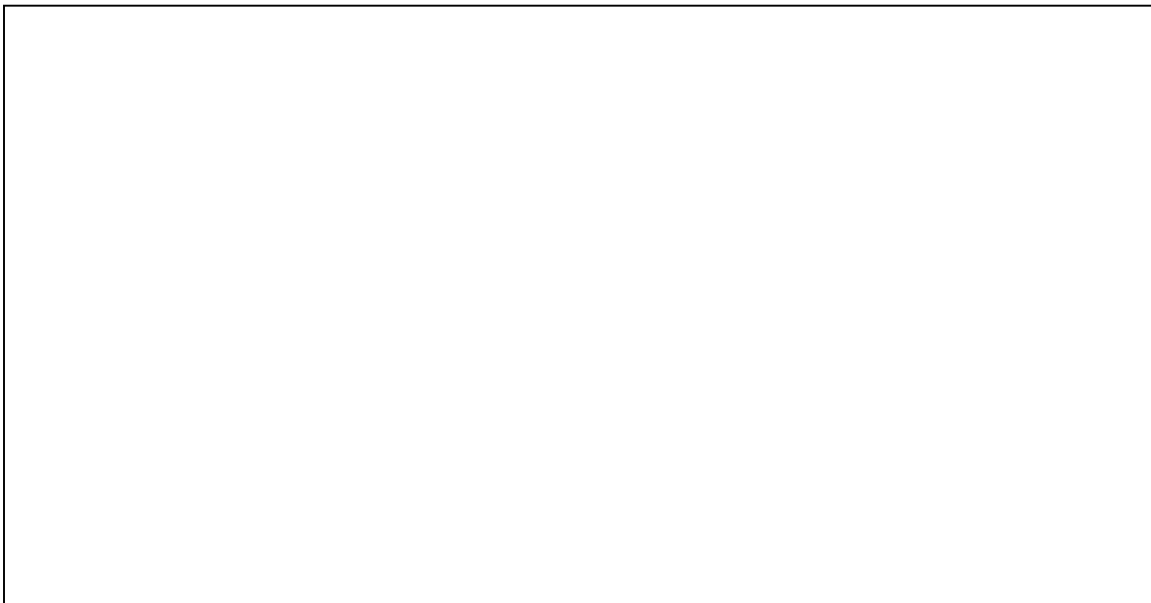


Figure A.1: Summary of pensioner expenditure, cash, £ billion

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2030	2040	2050
(a) without reform																
NI Pension Benefits:																
Basic State Pension	51.2	53.8	56.2	58.6	61.3	64.1	66.8	69.5	72.2	75.1	78.0	81.1	84.7	137.9	204.7	285.2
SERPS / S2P	11.5	12.5	13.5	14.5	15.6	16.7	17.8	19.0	20.2	21.4	22.7	24.0	25.5	49.4	92.2	186.2
Non-NI Pension Benefits:																
Pension Credit	7.5	7.4	7.3	7.3	7.2	7.0	6.9	6.7	6.5	6.2	6.2	6.0	5.9	4.6	3.1	2.1
Other Pension Benefits	2.9	2.9	3.0	3.0	3.0	3.0	3.1	3.1	3.1	3.2	3.2	3.3	3.4	5.0	7.2	10.4
Total Pension Benefits	73	77	80	83	87	91	95	98	102	106	110	114	119	197	307	484
Housing and Council Tax Benefits	7.9	8.3	8.6	8.6	8.3	8.1	7.9	7.7	7.5	7.3	7.1	6.9	6.7	7.5	9.4	14.6
Attendance Allowance & Disability Living Allowance	8.7	9.2	9.7	10.2	10.7	11.1	11.6	12.2	12.6	13.2	13.8	14.4	15.1	25.2	39.1	56.3
Total pensioner benefits	90	94	98	102	106	110	114	118	122	126	131	136	141	230	356	555
(b) with earnings indexed standard minimum guarantee:																
Pension Credit	8.2	8.8	9.4	10.0	10.6	11.1	11.8	12.3	13.0	13.6	14.6	15.4	16.5	35.1	73.8	139.6
Total Pension Benefits	74	78	82	86	91	95	99	104	108	113	119	124	130	227	378	621
Housing and Council Tax Benefits	7.9	8.3	8.6	9.0	9.2	9.4	9.6	9.9	10.1	10.3	10.5	10.7	10.9	18.4	32.0	62.9
Total pensioner benefits	90	96	100	105	110	115	121	126	131	137	143	149	156	271	449	741
(c) with other reforms:																
NI Pension Benefits:																
Basic State Pension	51.2	53.8	56.2	58.5	62.2	66.1	70.1	74.1	78.3	82.7	87.4	92.3	98.0	185.3	327.6	519.1
SERPS / S2P	11.5	12.5	13.5	14.5	15.6	16.7	17.8	19.0	20.2	21.4	22.7	24.0	25.6	49.8	96.6	186.1
Non-NI Pension Benefits:																
Pension Credit	8.0	8.4	8.9	9.3	9.5	9.6	9.9	9.9	10.0	9.9	10.1	10.1	10.3	11.9	13.4	15.1
Other Pension Benefits	2.9	2.9	3.0	3.0	3.0	3.0	3.1	3.1	3.1	3.2	3.2	3.3	3.4	4.9	7.0	10.1
Total Pension Benefits	74	78	82	85	90	95	101	106	112	117	123	130	137	252	445	730
Housing and Council Tax Benefits	7.9	8.3	8.6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.3	14.6	22.2	40.7
Attendance Allowance & Disability Living Allowance	8.7	9.2	9.7	10.2	10.7	11.1	11.6	12.2	12.6	13.2	13.8	14.4	15.1	24.5	37.7	53.3
Total pensioner benefits	90	95	100	104	110	116	122	128	134	140	147	154	163	291	505	824

Figure A.2: Detailed additional benefit spend with whole reform package, cash, £ billion

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2030	2040	2050
National Insurance Benefit Changes																
Basic State Pension																
- ADIs	0.0	0.0	-0.1	-0.2	-0.4	-0.5	-0.7	-1.0	-1.2	-1.5	-1.9	-2.3	-2.6	-3.5	-3.5	-5.2
- coverage	0.0	0.0	0.1	0.2	0.3	0.4	0.6	0.7	0.9	1.0	1.2	1.3	1.5	4.8	8.9	12.4
- earnings uprating	0.0	0.0	0.0	0.0	0.9	2.1	3.4	4.9	6.5	8.2	10.1	12.1	14.4	57.2	147.2	307.1
- SPA increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11.1	-29.8	-80.4
Total additional BSP spend	0.0	0.0	0.0	0.0	0.9	2.0	3.3	4.7	6.1	7.7	9.3	11.1	13.3	47.4	122.8	233.9
State Second Pension																
- abolition of contracting out in DC schemes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	1.8	7.0	14.1
- flat-rating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	0.4	2.3	3.3
- coverage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	1.1	4.4	11.8
- SPA increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.9	-9.3	-29.3
Total additional S2P spend	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	4.4	-0.1
Total National Insurance benefits to pensioners	0.0	0.0	0.0	0.0	0.9	2.0	3.3	4.7	6.1	7.7	9.4	11.2	13.4	47.8	127.2	233.8
State Pension Age - increase in working-age spend	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.4	5.2
Total additional NI benefit spend	0.0	0.0	0.0	0.0	0.9	2.0	3.3	4.7	6.1	7.7	9.4	11.2	13.4	48.8	129.6	239.0
Non-NI Benefits																
Pension Credit																
- earnings uprating standard minimum guarantee	0.7	1.4	2.2	2.8	3.4	4.1	4.8	5.6	6.5	7.3	8.4	9.4	10.6	30.5	70.7	137.5
- offset due to increased BSP & S2P	-0.1	-0.2	-0.2	-0.2	-0.4	-0.7	-1.2	-1.6	-2.1	-2.7	-3.4	-4.1	-4.9	-19.7	-52.3	-109.2
- Savings Credit reforms	0.0	-0.2	-0.4	-0.5	-0.6	-0.7	-0.7	-0.8	-0.8	-0.9	-1.0	-1.2	-1.3	-3.3	-7.1	-13.4
- SPA increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.9	-1.9
Total additional Pension Credit spend	0.5	1.1	1.6	2.0	2.4	2.7	2.9	3.2	3.5	3.7	3.9	4.1	4.4	7.3	10.3	13.1
HB/CTB																
- earnings uprating HB/CTB	0.0	0.0	0.0	0.4	0.9	1.3	1.7	2.1	2.6	3.0	3.4	3.8	4.3	10.8	22.6	48.4
- offset due to increased BSP & S2P	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	-0.5	-0.6	-2.9	-7.7	-16.0

- SPA increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-2.0	-6.3
Total additional HB/CTB spend	0.0	0.0	0.0	0.4	0.8	1.2	1.5	1.9	2.3	2.6	3.0	3.3	3.6	7.1	12.8	26.1	
Other Non-NI Benefits - reduction due to SPA change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-1.5	-3.3
Total Non-NI benefits to pensioners	0.5	1.1	1.6	2.5	3.2	3.8	4.5	5.1	5.7	6.3	6.9	7.4	8.0	13.5	21.6	35.9	
State Pension Age - increase in working-age spend	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	3.0	8.2
Total additional Non-NI benefit spend	0.5	1.1	1.6	2.5	3.2	3.8	4.5	5.1	5.7	6.3	6.9	7.4	8.0	14.7	24.6	44.1	
Total benefit spend																	
Total additional spend: pensioners	0.5	1.1	1.6	2.4	4.0	5.9	7.8	9.8	11.9	14.0	16.3	18.6	21.5	61.3	148.9	269.7	
Total additional spend: pensioners and working-age	0.5	1.1	1.6	2.4	4.0	5.9	7.8	9.8	11.9	14.0	16.3	18.6	21.5	63.5	154.3	283.2	

Figure A.3: Financial effect of contracting out rebates on National Insurance contributions, cash, £ billion

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2030	2040	2050
Cost of DB rebate	8.1	8.3	8.5	8.8	9.6	9.8	10.1	10.3	10.6	10.7	10.9	11.2	11.5	15.2	22.1	31.4
Cost of DC rebate	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in contracting out rebate:																
- from flat-rating S2P	0.0	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.5	-0.8	-1.0	-1.2	-1.5	-1.8	-5.9	-6.4	-4.3
- SPA change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.4
Total	10.0	10.2	10.5	10.7	9.6	9.7	9.7	9.8	9.8	9.7	9.7	9.7	9.7	9.3	15.8	27.5

Figure A.4: Summary of expenditure on pensioner benefits, 06/07 prices, £ billion

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2030	2040	2050
(a) without reform																
NI Pension Benefits:																
Basic State Pension	48.6	49.7	50.5	51.2	52.2	53.0	53.8	54.4	55.0	55.6	56.3	56.9	57.8	71.4	80.4	85.0
SERPS / S2P	10.9	11.5	12.1	12.7	13.3	13.8	14.4	14.9	15.4	15.9	16.3	16.8	17.4	25.6	36.2	55.5
Non-NI Pension Benefits:																
Pension Credit	7.1	6.8	6.5	6.3	6.1	5.8	5.6	5.2	5.0	4.6	4.5	4.2	4.0	2.4	1.2	0.6
Other Pension Benefits	2.7	2.7	2.7	2.6	2.6	2.5	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.6	2.8	3.1
Total Pension Benefits	69	71	72	73	74	75	76	77	78	78	79	80	82	102	121	144
Housing and Council Tax Benefits	7.5	7.7	7.8	7.5	7.1	6.7	6.4	6.1	5.7	5.4	5.1	4.8	4.6	3.9	3.7	4.3
Attendance Allowance & Disability Living Allowance	8.3	8.5	8.8	8.9	9.1	9.2	9.4	9.5	9.6	9.8	9.9	10.1	10.3	13.0	15.3	16.8
Total pensioner benefits	85	87	88	89	90	91	92	93	93	94	94	95	96	119	140	165
(b) with earnings indexed standard minimum guarantee																
Pension Credit	7.7	8.1	8.5	8.8	9.0	9.2	9.5	9.6	9.9	10.0	10.5	10.8	11.3	18.2	29.0	41.6
Total Pension Benefits	70	72	74	75	77	79	80	81	83	84	85	87	89	118	148	185
Housing and Council Tax Benefits	7.5	7.7	7.8	7.9	7.8	7.8	7.8	7.7	7.7	7.6	7.6	7.5	7.5	9.5	12.6	18.8
Total pensioner benefits	86	88	90	92	94	96	97	99	100	101	103	104	107	140	176	221
(c) with other reforms:																
NI Pension Benefits:																
Basic State Pension	48.6	49.7	50.6	51.2	52.9	54.7	56.4	58.1	59.7	61.3	63.0	64.7	66.9	95.9	128.	154.
SERPS / S2P	10.9	11.5	12.1	12.7	13.3	13.8	14.4	14.9	15.4	15.9	16.4	16.9	17.5	25.8	37.9	55.4
Non-NI Pension Benefits:																
Pension Credit	7.6	7.8	8.0	8.1	8.1	8.0	8.0	7.7	7.6	7.3	7.3	7.1	7.0	6.2	5.3	4.5
Other Pension Benefits	2.7	2.7	2.7	2.6	2.6	2.5	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.5	2.8	3.0
Total Pension Benefits	70	72	73	75	77	79	81	83	85	87	89	91	94	130	175	218
Housing and Council Tax Benefits	7.5	7.7	7.8	7.9	7.8	7.7	7.6	7.5	7.5	7.4	7.3	7.2	7.0	7.6	8.7	12.1
Attendance Allowance & Disability Living Allowance	8.3	8.5	8.8	8.9	9.1	9.2	9.4	9.5	9.6	9.8	9.9	10.1	10.3	12.7	14.8	15.9
Total pensioner benefits	86	88	90	91	94	96	98	100	102	104	106	108	111	151	198	246

Figure A.5: Detailed additional benefit spend, 06/07 prices, £ billion

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2030	2040	2050
National Insurance Benefit Changes																
Basic State Pension																
- ADIs	0.0	0.0	-0.1	-0.2	-0.3	-0.4	-0.6	-0.8	-0.9	-1.1	-1.4	-1.6	-1.7	-1.8	-1.4	-1.6
- coverage	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.9	1.0	2.5	3.5	3.7
- earnings uprating	0.0	0.0	0.0	0.0	0.8	1.7	2.8	3.8	4.9	6.1	7.3	8.5	9.8	29.6	57.8	91.5
- SPA increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.8	-11.7	-23.9
Total additional BSP spend	0.0	0.0	0.0	0.0	0.7	1.7	2.6	3.6	4.7	5.7	6.7	7.8	9.1	24.5	48.2	69.7
State Second Pension																
- abolition of contracting out in DC schemes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.9	2.8	4.2
- flat-rating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	0.2	0.9	1.0
- coverage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.6	1.7	3.5
- SPA increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.5	-3.7	-8.7
Total additional S2P spend	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	1.7	0.0
Total National Insurance benefits to pensioners	0.0	0.0	0.0	0.0	0.7	1.7	2.7	3.7	4.7	5.7	6.8	7.8	9.2	24.7	50.0	69.7
State Pension Age - increase in working-age spend	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.9	1.6
Total additional NI benefit spend	0.0	0.0	0.0	0.0	0.7	1.7	2.7	3.7	4.7	5.7	6.8	7.8	9.2	25.3	50.9	71.2
Non-NI Benefits																
Pension Credit																
- earnings uprating standard minimum guarantee	0.6	1.3	1.9	2.4	2.9	3.4	3.9	4.4	4.9	5.4	6.1	6.6	7.3	15.8	27.8	41.0
- offset due to increased BSP & S2P	-0.1	-0.2	-0.2	-0.2	-0.3	-0.6	-0.9	-1.3	-1.6	-2.0	-2.5	-2.9	-3.4	-10.2	-20.6	-32.5
- Savings Credit reforms	0.0	-0.1	-0.3	-0.4	-0.5	-0.6	-0.6	-0.6	-0.6	-0.7	-0.8	-0.8	-0.9	-1.7	-2.8	-4.0
- SPA increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.6
Total additional Pension Credit spend	0.5	1.0	1.4	1.8	2.0	2.2	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.8	4.1	3.9
HB/CTB																
- earnings uprating HB/CTB	0.0	0.0	0.0	0.4	0.7	1.1	1.4	1.7	1.9	2.2	2.5	2.7	2.9	5.6	8.9	14.4
- offset due to increased BSP & S2P	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4	-1.5	-3.0	-4.8
- SPA increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.8	-1.9
Total additional HB/CTB spend	0.0	0.0	0.0	0.4	0.7	1.0	1.2	1.5	1.7	1.9	2.1	2.3	2.5	3.7	5.0	7.8
Other Non-NI Benefits - reduction due to SPA change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.6	-1.0
Total Non-NI benefits to pensioners	0.5	1.0	1.4	2.1	2.7	3.2	3.6	4.0	4.4	4.7	5.0	5.2	5.5	7.0	8.5	10.7
State Pension Age - increase in working-age spend	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.2	2.5

Total additional Non-NI benefit spend	0.5	1.0	1.4	2.1	2.7	3.2	3.6	4.0	4.4	4.7	5.0	5.2	5.5	7.6	9.7	13.1
Total benefit spend																
Total additional spend: pensioners	0.5	1.0	1.4	2.1	3.4	4.9	6.3	7.6	9.0	10.4	11.7	13.0	14.6	31.7	58.5	80.4
Total additional spend: pensioners and working-age	0.5	1.0	1.4	2.1	3.4	4.9	6.3	7.6	9.0	10.4	11.7	13.0	14.6	32.9	60.6	84.4

Figure A.6: Financial effect of contracting out rebates on National Insurance contributions, 06/07 prices, £ billion

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2030	2040	2050
Cost of DB rebate	7.7	7.7	7.7	7.7	8.1	8.1	8.1	8.1	8.1	7.9	7.9	7.9	7.8	7.9	8.7	9.4
Cost of DC rebate	1.8	1.8	1.7	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in contracting out rebate:																
- from flat-rating S2P	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.4	-0.6	-0.7	-0.9	-1.1	-1.2	-3.1	-2.5	-1.3
- SPA change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
Total	9.5	9.5	9.4	9.3	8.1	8.0	7.8	7.7	7.5	7.2	7.0	6.8	6.6	4.8	6.2	8.2

Figure A.7: Summary of expenditure on pensioner benefits, per cent of GDP

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2030	2040	2050
(a) without reform)																
NI Pension Benefits:																
Basic State Pension	3.5	3.5	3.5	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.0	2.6
SERPS / S2P	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.2	1.4	1.7
Non-NI Pension Benefits:																
Pension Credit	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.0	0.0
Other Pension Benefits	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Pension Benefits	5.0	5.0	4.9	4.9	4.8	4.8	4.8	4.7	4.6	4.6	4.6	4.5	4.5	4.6	4.5	4.4
Housing and Council Tax Benefits	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1
Attendance Allowance & Disability Living Allowance	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
Total pensioner benefits	6.2	6.1	6.1	6.0	5.9	5.8	5.7	5.7	5.6	5.5	5.4	5.3	5.3	5.4	5.2	5.1
(b) with earnings indexed standard minimum guarantee																
Pension Credit	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	1.1	1.3
Total Pension Benefits	5.1	5.1	5.1	5.0	5.0	5.0	5.0	5.0	4.9	4.9	4.9	4.9	4.9	5.4	5.6	5.7
Housing and Council Tax Benefits	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.6
Total pensioner benefits	6.2	6.2	6.2	6.2	6.1	6.1	6.1	6.0	6.0	5.9	5.9	5.9	5.9	6.4	6.6	6.8
(c) with other reforms:																
NI Pension Benefits:																
Basic State Pension	3.5	3.5	3.5	3.4	3.5	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	4.3	4.7	4.6
SERPS / S2P	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.2	1.4	1.7
Non-NI Pension Benefits:																
Pension Credit	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.2	0.1
Other Pension Benefits	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Pension Benefits	5.1	5.1	5.0	5.0	5.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.9	6.4	6.5
Housing and Council Tax Benefits	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4
Attendance Allowance & Disability Living Allowance	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
Total pensioner benefits	6.2	6.2	6.2	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.8	7.3	7.3

Total Non-NI benefits to pensioners	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
State Pension Age - increase in working-age spend	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total additional Non-NI benefit spend	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Effect of higher GDP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2
Total benefit spend																
Total additional spend: pensioners	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.8	1.4	2.1	2.3
Total additional spend: pensioners and working-age	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.8	1.4	2.1	2.4

Table A.9: Financial effect of contracting out rebates on National Insurance contributions, per cent of GDP

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2030	2040	2050
Cost of DB rebate	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3
Cost of DC rebate	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in contracting out rebate:																
- from flat-rating S2P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.0
- SPA change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2

Annex B – Outcomes for individuals - case studies

B.1 This Annex sets out further analysis relating to the costs and benefits section of Chapter 2. Specifically examples of outcomes for individuals and couples at State Pension age, and State Pension outcomes (both basic State Pension and State Second Pension) for median and high earners in 2010, 2020, 2030, 2040 and 2050.

Outcomes for individuals

- B.2 An important part of reform is to ensure a more generous, simpler State Pension to act as a solid foundation for private saving. Key features are:
- Commitment to uprate the basic State Pension by earnings ensuring a foundation in the long term – means basic State Pension retains its value relative to earnings.
 - Flat rating State Second Pension which provides an additional £1.40 in retirement for each year in employment or caring.
 - So for someone with 30 years of working or caring will get £115, someone with 40 years of working or caring £129 a week.
- B.3 Figures B.2 – B.4 below show the level of income at the point of state pension age in 2050/53 for pensioners who were low, median and high income earners through their working life. They show outcomes under:
- the current system with standard minimum guarantee uprated in line with prices from 2008;
 - the current system with the standard minimum guarantee uprated in line with earnings from 2008; and
 - the whole reform package, including personal accounts (for consistency with similar charts published elsewhere).
- B.4 These charts are presented in constant earnings terms. Increases between the current system in 2050 and under state reform reflect pensioners getting better off faster than earnings growth more widely – ie their income is increasing relative to those of working age. The table below sets out the assumptions for people's earnings, and working lives.

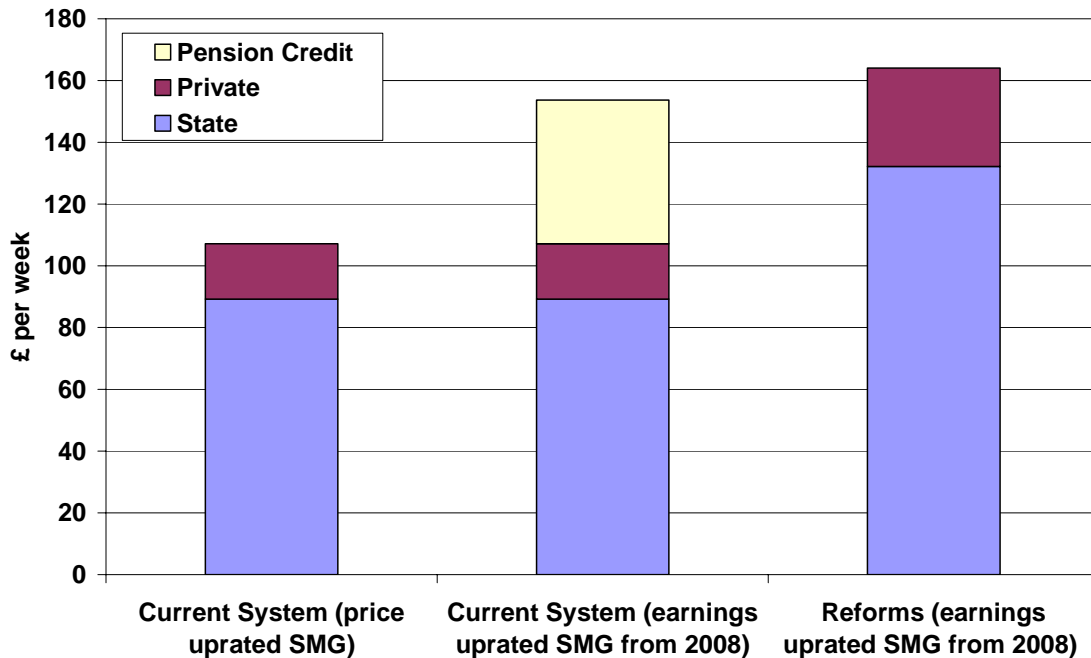
Figure B.1: Table of assumptions:

	Employed from	labour market status	Weekly earnings	Gender
Individuals				
Low earner	25 to SPA	Employed	£230	Male
Median earner	25 to SPA	Employed	£440	Male
High earner	25 to SPA	Employed	£630	Male
Couples				
Low income , made up of:				
Broken work history	25 to SPA	Employed with spells of unemployment.	£180	Male
Medium career break	21 to SPA	Employed with career break for child between 28 and 39.	£420	Female
Moderate income , made up of:				
Median earner	25 to SPA	Employed	£440	Male
Uncredited carer	16 to SPA	Employed then leaves paid employment at 50 because of caring responsibilities, but not eligible for credits.	£220	Female
High income , made up of:				
High Earner	21 to SPA	Employed	£860	Male
Career Break	16 to SPA	Employed with career break from 26 to 33 and works part time from 33 to 40	£240	Female

Notes: After reform, time credited and working are treated the same for the purpose of accruing State Pension. However, individuals are assumed not to be contributing to a personal account during years when they are credited for State Pension. Gender only affects the return from private pensions due to differing annuity rates for men and women.

- B.5 Example of outcomes, especially for people with broken work records, is contained in the Gender Impact of Pension Reform.
- B.6 Figures B2-B4 show that under reform people reaching State Pension age receive more contributory state pension than they would under the current system (with price uprating of standard minimum guarantee and basic State Pension) rolled forward. This is due to earnings uprating the basic State Pension, and for the low earner flat rating of the State Second Pension. These increases in incomes from contributory state pensions as a result of reform will give greater savings incentives as people will see clearer returns on private saving.

Figure B.2. : Low earner’s weekly gross income at State Pension age – current system with Pension Credit uprated by prices or earnings and under reform.



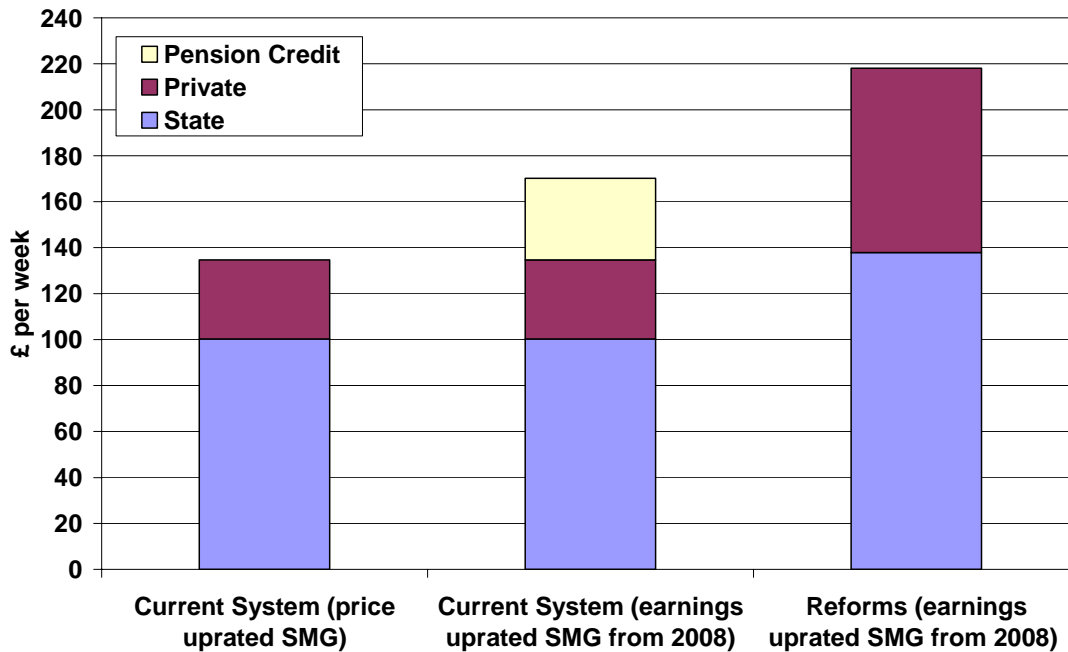
Source: DWP calculations

Notes: In 2005/6 earnings terms, income shown before tax. Assumes low earner earns £230 a week, has a good working life (40 years of saving and working) and reaches state pension age in 2050 under the current system or 2053 (43 years of saving and working) after reform due to the pension age rises from 65 to 68.

Under the current system it is assumed that saving is 5% of salary between the primary threshold and UEL into a stakeholder pension, with a 1.5% annual management charge. This is equivalent to the employee-only contribution rate into the new personal accounts.

After reform it is assumed that saving is 8% of salary between the primary threshold and the UEL into a personal account (which includes 3% employer contribution, and has 0.5% annual management charge).

Figure B.3: Median earner’s weekly gross income at State Pension age – under current system with Pension Credit uprated by prices or earnings and under reform.



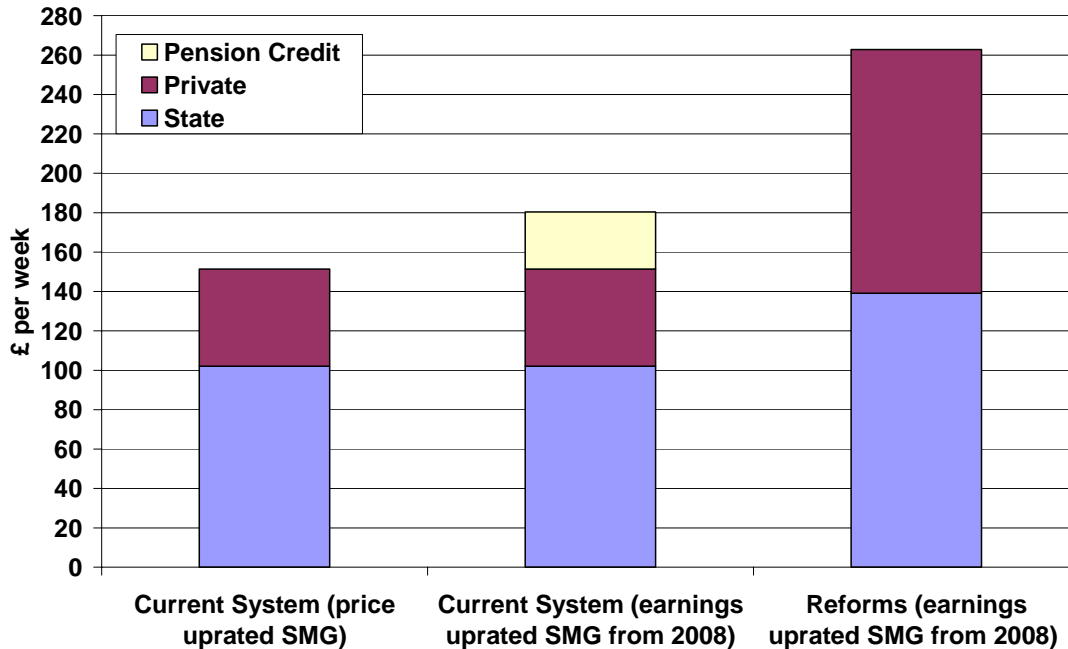
Source: DWP calculations

Notes: In 2005/6 earnings terms, income shown before tax. Assumes low earner earns £440 a week, has a good working life (40 years of saving and working) and reaches state pension age in 2050 under the current system or 2053 (43 years of saving and working) after reform due to the pension age rises from 65 to 68.

Under the current system it is assumed that saving is 5% of salary between the Primary Threshold and UEL into a stakeholder pension, with a 1.5% annual management charge. This is equivalent to the employee-only contribution rate into the new personal accounts.

After reform it is assumed that saving is 8% of salary between the primary threshold and the UEL into a personal account (which includes 3% employer contribution, and has 0.5% annual management charge).

Figure B.4: High earner’s weekly gross income at State Pension age – under current system with Pension Credit uprated by prices or earnings and under reform



Source: DWP calculations

Notes: In 2005/6 earnings terms, income shown before tax. Assumes low earner earns £630 a week, has a good working life (40 years of saving and working) and reaches state pension age in 2050 under the current system or 2053 (43 years of saving and working) after reform due to the pension age rises from 65 to 68.

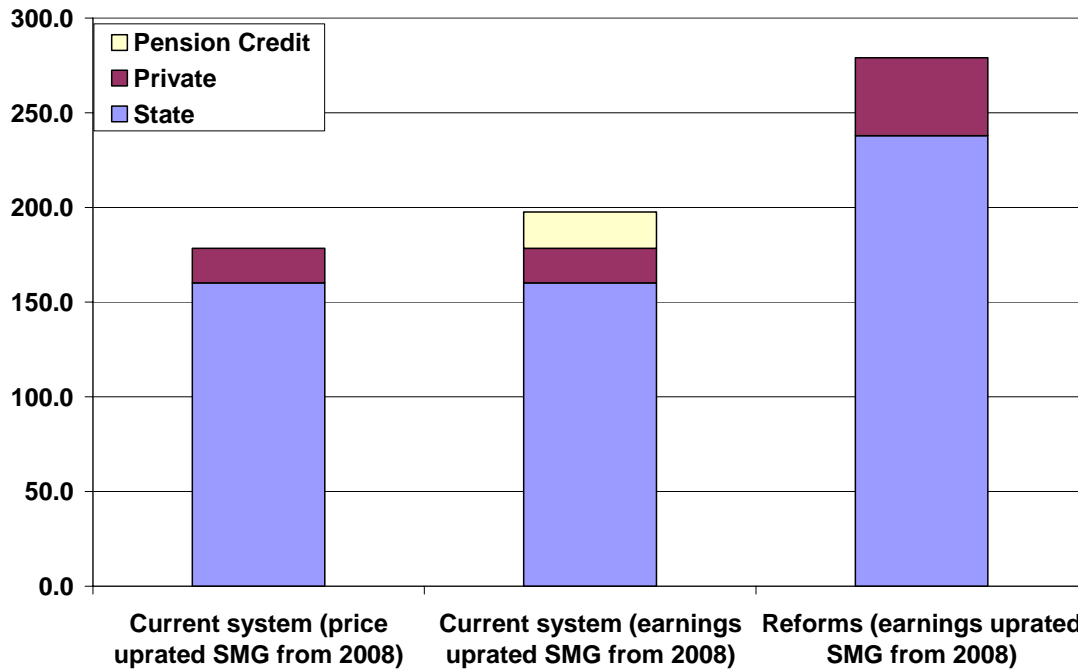
Under the current system it is assumed that saving is 5% of salary between the Primary Threshold and upper earnings limit into a stakeholder pension, with a 1.5% annual management charge. This is equivalent to the employee-only contribution rate into the new personal accounts. After reform it is assumed that saving is 8% of salary between the Primary Threshold and the UEL into a personal account (which includes 3% employer contribution, and has 0.5% annual management charge).

Outcomes for couples.

B.7 The following charts show the results for hypothetical couples. This shows that all the hypothetical couples receive:

- an increasing amount of income from contributory State Pension, due to improved crediting arrangements for the basic State Pension and State Second Pension;
- more private income, which reflects the introduction of Personal Accounts; and so
- a higher total income in earnings terms.

Figure B.5: Low income couple – broken work history and median career break



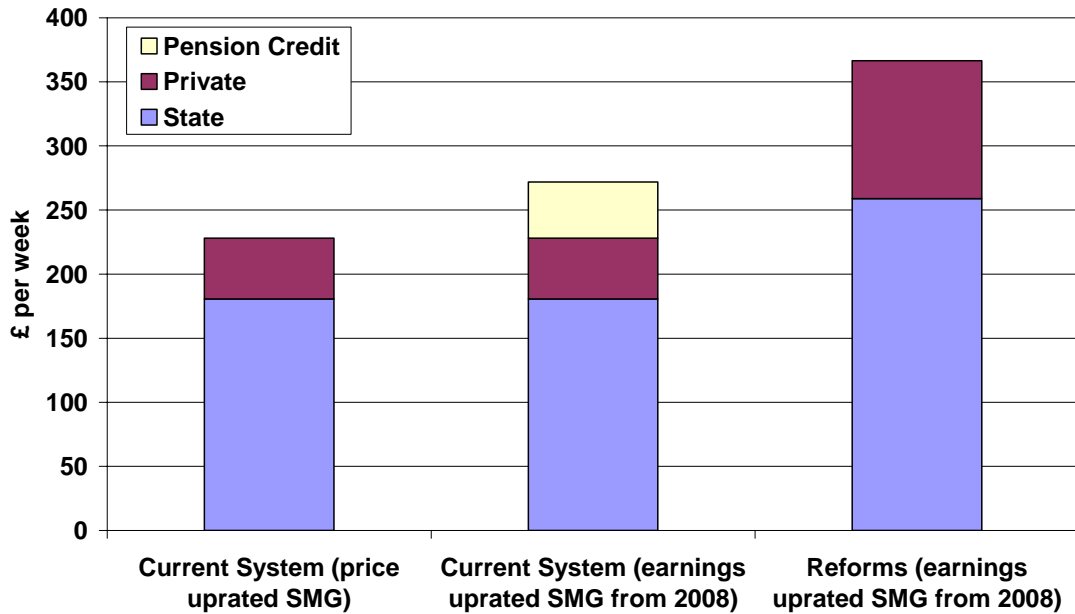
Source: DWP calculations

Notes: In 2005/6 earnings terms, income shown before tax. Assumes one person with a broken work history and one with a median career break (See assumptions table for full breakdown). They reach state pension age in 2050 under the current system or 2053 after reform due to the pension age rises from 65 to 68.

Under the current system it is assumed that saving is 5% of salary between the Primary Threshold and UEL into a stakeholder pension, with a 1.5% annual management charge. This is equivalent to the employee-only contribution rate into the new personal accounts.

After reform it is assumed that saving is 8% of salary between the Primary Threshold and the UEL into a personal account (which includes 3% employer contribution, and has 0.5% annual management charge).

Figure B.6: Moderate income couple – median earner and uncredited carer



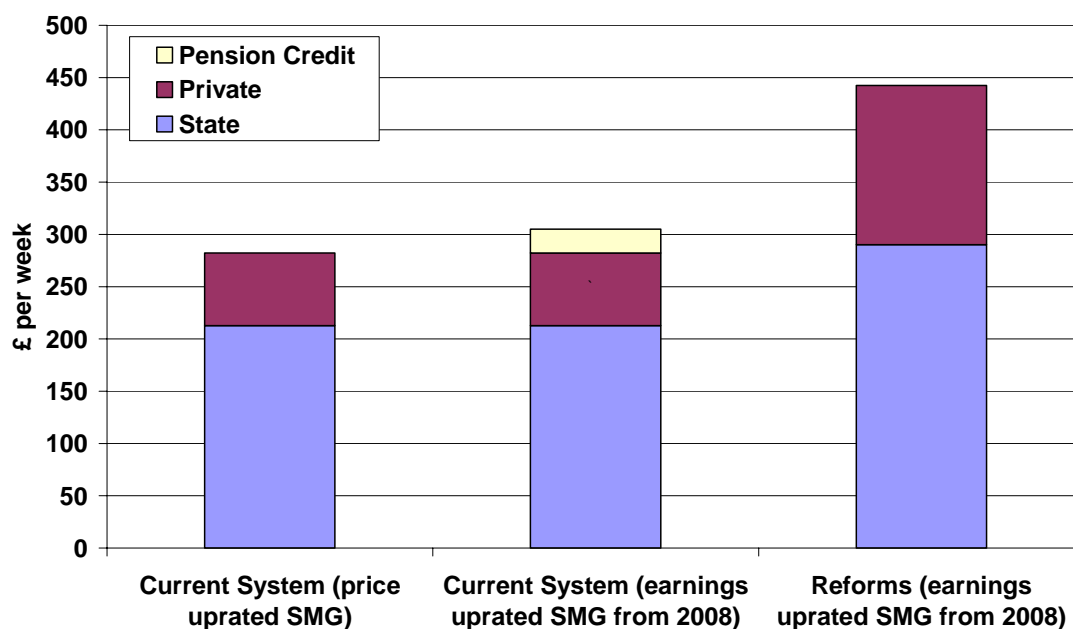
Source: DWP calculations

Notes: In 2005/6 earnings terms, income shown before tax. Assumes one person is a median earner and one is an uncredited carer (See assumptions table for full breakdown). They reach state pension age in 2050 under the current system or 2053 after reform due to the pension age rises from 65 to 68.

Under the current system it is assumed that saving is 5% of salary between the Primary Threshold and UEL into a stakeholder pension, with a 1.5% annual management charge. This is equivalent to the employee-only contribution rate into the new personal accounts.

After reform it is assumed that saving is 8% of salary between the Primary Threshold and the UEL into a personal account (which includes 3% employer contribution, and has 0.5% annual management charge).

Figure B.7: High income couple - high earner and career break.



Source: DWP calculations

Notes: In 2005/6 earnings terms, income shown before tax. Assumes one person is a high earner and one has a career break (See assumptions table for full breakdown). They reach state pension age in 2050 under the current system or 2053 after reform due to the pension age rises from 65 to 68.

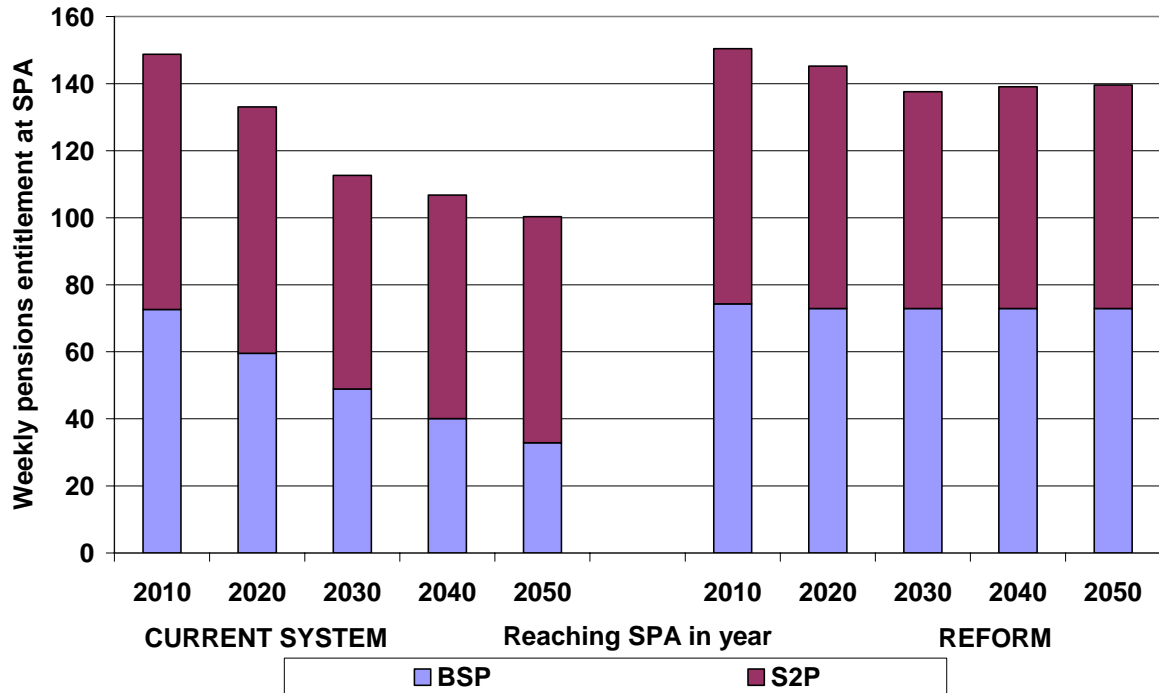
Under the current system it is assumed that saving is 5% of salary between the Primary Threshold and UEL into a stakeholder pension, with a 1.5% annual management charge. This is equivalent to the employee-only contribution rate into the new personal accounts.

After reform it is assumed that saving is 8% of salary between the Primary Threshold and the UEL into a personal account (which includes 3% employer contribution, and has 0.5% annual management charge).

State Pension outcomes

- B.8 Chapter 2 set out State Pension outcomes for a low earner with a full work (or crediting) history, showing how the State Pension entitlement changes over time – showing that the State Pension increases towards about £140 in earnings terms due to flat rating of State Second Pension. The graphs show these results for median and high earners. The charts show the median and high earners receiving more from the State Pension than they would have, had the current system rolled forward – this is due to earnings uprating of the basic State Pension. Reforms to State Second Pension essentially speed up a process of flat-rating that was already occurring.
- B.9 Figures B.8 and B.9 are in constant earnings terms – showing changes relative to earnings overall. The State Pension is expected to increase in real terms for all pensioners, meaning that pensioners should be able to purchase more in future than they can now.

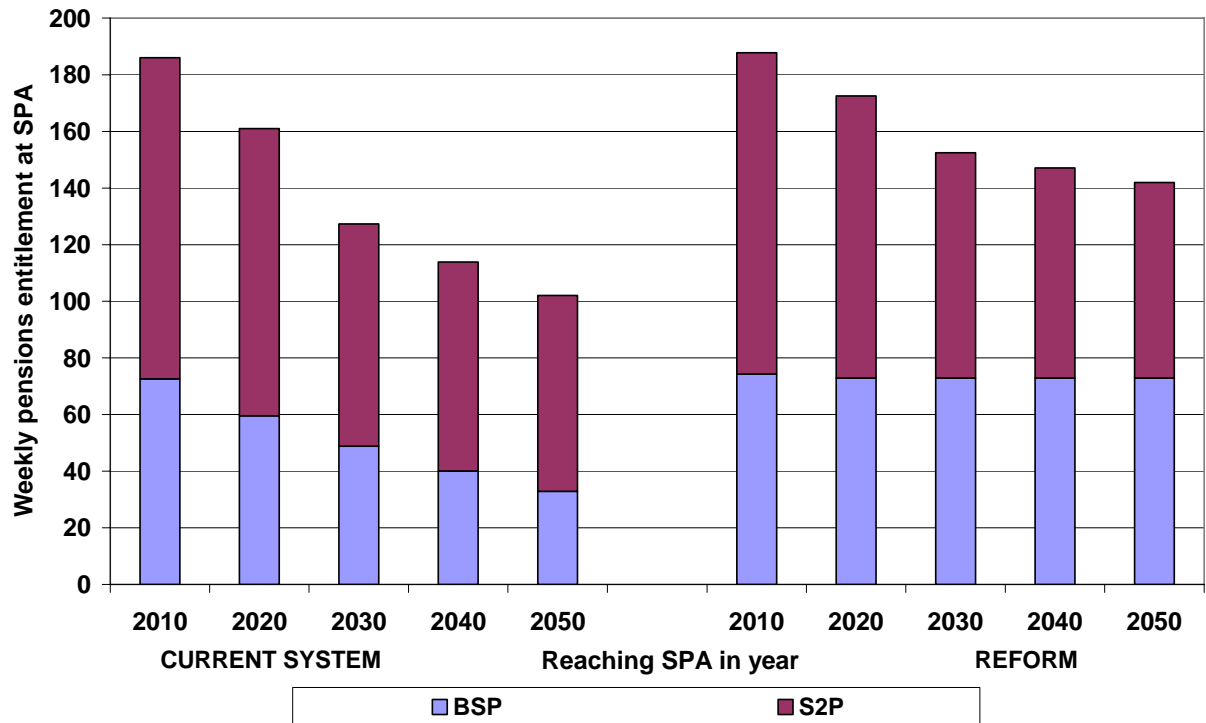
Figure B.8: Basic State Pension and State Second Pension for median earner (£440 per week) - reform compared to current system



Source: DWP calculations

Notes: Assumes that a person has a good working life (works from age 25 to SPA).

Figure B.9: Basic State Pension and State Second Pension for high earner (£630 per week) - reform compared to current system



Source: DWP calculations

Notes: Assumes that a person has a good working life (works from age 25 to SPA).

Glossary

Active members	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.
Additional Pension (AP)	The earnings-related state pension paid in addition to the Basic State Pension . From 1978-2002 it accrued under the State Earnings Related Pension Scheme (SERPS) and from 2002 under the State Second Pension (S2P) scheme.
Annuity	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).
Attendance Allowance	A non-means tested, non-contributory and tax free benefit paid as a contribution towards the extra costs faced by severely disabled people who claim help with those costs when over the age of 65.
Baby Boom	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.
Basic State Pension (BSP)	There are four main types of Basic State Pension
Category A	Based on contributions paid or credited over a persons working life. Normally person needs 44 years of contributions or credits to qualify for a full basic pension (women born between before 6 April 1955 need less) but the number of years needed can be reduced by Home Responsibilities Protection . Payable on claiming at State Pension Age at the rate of £84.25 per week (2006/07). Those with less than full contribution records receive a pro rata amount subject to a <i>de minimis</i> of 25%. There is an age addition of 25p per week for individuals aged over 80.
Category B	Pension payable under the same conditions as Category A 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 and people in civil partnerships from 2010) receive Category B pension at £50.50 (approximately 60% of the Category A rate.)
Category C	Largely obsolete – non-contributory pension now only paid to the widows of men who had already reached State Pension

	Age when the National Insurance scheme started in 1948.
Category D	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 after their 60th birthdays. The pension is £50.50 per week (2006/07)
For more details see 'A guide to State Pensions', 2005	
Contracting out	The system by which individuals can choose to opt-out of State Second Pension and use a proportion of their National Insurance Contribution 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 .
Defined benefit (DB) pension scheme	A pension scheme where the pension is related to the members' salary or some other value fixed in advance.
Defined contribution (DC) pension scheme	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.
Disability Living Allowance	A non-means tested benefit, non-contributory and tax free benefit paid as a contribution towards the extra costs of severely disabled people who claim help with those costs when under the age of 65.
Flat-rate provision	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
Funded	Pension schemes in which pension contributions are paid into a fund which is invested and pensions are paid out of this pot.
Gross Domestic Product (GDP)	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.
Guarantee Credit	A means-tested benefit which is part of the Pension Credit and brings pensioners' income up to a guaranteed minimum level. In 2006/07 the standard minimum guarantee for a single person is £114.05 per week. For a couple the level is £174.05 per week. The guaranteed minimum is higher for some groups, such as disabled people and carers, who qualify for additional amounts.
Guaranteed Minimum Pension (GMP)	The minimum pension that must be provided by a contracted-out salary-related scheme for pensions accrued between 1978 and 1997. The GMP is roughly equivalent to the foregone SERPS from contracting out .
Her Majesty's Revenue and Customs (HMRC)	The new department responsible for the business of the former Inland Revenue and HM Customs and Excise. It is the

	department responsible for National Insurance .		
Home Responsibilities Protection (HRP)	This helps protect the National Insurance records of people who have caring responsibilities by reducing the number of years of contributions or credits they need to qualify for a full basic pension.		
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		
Large firm	For statistical purposes, the Department of Trade and Industry usually defines a large firm as one with 250 or more employees.		
Life expectancy	<p>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 as he or she gets older. 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.</p>		
Longevity	Length of life.		
Lower Earnings Limit (LEL)	The level of earnings at which an individual is treated as if they have made National Insurance contributions. In 2006/07 the limit is £84 per week or £4,368 per year.		
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.		
National Insurance (NI)	The national system of benefits paid in specific situations, such as retirement, based on compulsory or voluntary contributions. There are four main classes of contributions.		
	Employment Status	Contribution level	Income band

Class 1	Employed	12.8% for the employer and 11% for the employee unless contracted-out.	Pay from Primary Threshold to Upper Earnings Limit (UEL) but credited from Lower Earnings Limit to UEL
Class 2	Self-employed	Flat-rate payment of £2.10 per week for 2006/07.	If earnings below £4,465, eligible for certificate of small earnings exemption.
Class 3	Voluntary	Flat-rate contribution of £7.55 (2006/07).	Voluntary for those not contributing through class 1 or 2.
Class 4	Self-employed	8%	Between Lower Profits Limit (£5,035 in 2006/07) and Upper Profits Limit (£33,540 in 2006/07).
<p>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.</p>			
National Insurance Recording System (NIRS2)	The HM Revenue and Customs IT system which holds and reconciles contribution records and calculates contributory benefits and personal pension schemes.		
Occupational pension.	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		
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 .		
Personal pension	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 Group Personal Pension) or purchased individually.		
Price-indexed	Increasing each year in line with inflation.		
Protected rights	The element of the Defined Contribution pension arising from Contracted-out rebates		

Real terms	Figures have been adjusted to remove the effect of increases in prices over time (i.e. inflation), usually measured by the Retail Prices Index . 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.	
Retail Prices Index (RPI)	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.	
Savings Credit	Part of the Pension Credit . It is a means-tested benefit for people aged 65 or over, which accrues at the rate of 60p for each £ of income above a threshold (currently the equivalent of the full basic State Pension) up to a maximum amount (£17.88 for a single person, `£23.58 for a couple).	
Small and Medium Enterprise (SME)	For statistical purposes, the Department of Trade and Industry usually defines a SME as a firm with 249 or fewer employees.	
Small firm	For statistical purposes, the Department of Trade and Industry usually defines a small firm as one with 49 or fewer employees.	
Class	Description	Examples of occupations
Non-manual		
I	Professional	Doctors, chartered accountants, professionally qualified engineers
II	Managerial & technical/ intermediate	Managers, school teachers, journalists
IIN	Skilled non-manual	Clerks, cashiers, retail staff
Manual		
IIIM	Skilled manual	Supervisor of manual workers, plumbers, electricians, goods vehicle drivers
IV	Partly skilled	Warehousemen, security guards, machine tool operators, care assistants, waiting staff
V	Unskilled	Labourers, cleaners and messengers
Standard minimum guarantee	The minimum level of income guaranteed to pensioners through the Guarantee Credit element of Pension Credit . (The guaranteed level for some groups of pensioners, such as severely disabled people and carers, who qualify for additional amounts is higher than the standard minimum guarantee.)	
State Earnings Related	The forerunner of the State Second Pension , which provides	

Pension Scheme (SERPS)	an earnings-related National Insurance pension based on contributions.
State Pension Age (SPA)	The minimum age at which an individual can claim their state pension. It is currently 65 for men and 60 for women born before 5 April 1950. The State Pension Age for women born on or after that date will gradually increase to 65 between 2010 and 2020.
State Second Pension (S2P)	The earnings related National Insurance pension paid on top of basic pension – gives - a more generous pension than would have been provided by SERPS for: Low and moderate earners Carers who are looking after young children or a disabled person Long-term disabled people with broken work records
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.
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.
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 2006/07 it is £33,540 per year or £645 per week.
Upper Accrual Point (UAP)	Upper Accrual Point in State Second Pension is a mechanism to erode earnings relation
Working age population	Generally defined as those aged 16-59 for women and 16-64 for men.