

Individuals

2

Summary

Pension saving can be valuable because it allows individuals to smooth consumption between periods when they are relatively well off (when they are working) to periods when they have less money (when they are retired). Despite this, the overall level of private pension saving is low and falling.

Automatic enrolment can be an effective technique for increasing overall participation in pension saving, and this should generate significant benefits in the form of greater consumption smoothing.

This chapter investigates the characteristics of individuals who will be automatically enrolled and the impacts for them of pension saving.

Analysis within the chapter suggests that:

- People on low earnings throughout their lives probably do not need to save, but earnings are highly dynamic – there are relatively few people who have low earnings throughout their lives.
- More importantly, most of those on low earnings live in family units and have a working partner with significant earnings and are therefore likely to benefit from pension saving.
- Whether people will get a good return on saving depends on a range of factors, including how the employer contribution is accounted for, what returns look like, and what an individual's circumstances are in the future. These are very hard to predict in advance.

- **Individuals who choose to opt out potentially do badly as they do not benefit from the employer contribution, and may also lose out from lower wage growth as employers seek to cope with the costs of automatic enrolment.**

This leads to the conclusion that there is no single earnings threshold that encourages saving amongst all those who need to save while neatly excluding those for whom the value of saving is more questionable. A relatively low earnings threshold has the benefit of encouraging those with a working partner, those who will go on to earn more and those in receipt of tax credits to save. But it also encourages persistently low earners to save. A higher earnings threshold does the reverse of this.

2.1 Introduction

By saving, people smooth their consumption over their lifetime. Pension saving specifically involves deferring consumption from working life to retirement. If people save so little that their standard of living falls dramatically at retirement, they are likely to be able to increase their lifetime welfare by saving more. Yet, on many measures, private pension saving is inadequate and it is falling.

The reforms proposed by the Pensions Commission were designed to result in more people saving for their retirement and, thereby, benefiting from not seeing their living standards fall too far in retirement. There is, however, a risk that, for some people, pension saving may not be right. This chapter investigates the characteristics of individuals who will be automatically enrolled and the impacts for them of pension saving.

In particular, it focuses on the following:

- Whether some people really need to save. There may be a group of individuals who can currently expect a similar income in retirement to the income they have during their working life. Such individuals do not need to save. We believe this risk is higher amongst low earners, because the state provides a basic level of income in retirement, which might be close to the level of their income when they were working. Therefore we are keen to explore the earnings and employment dynamics of lower earners to understand whether the current earnings threshold (the level of earnings at which people are automatically enrolled) is right.
- Whether there are good incentives to save for all groups. Even where individuals need to save, they may have poor incentives to do so. Means-tested benefits in retirement are withdrawn as private pension income increases. This can make it less worthwhile to save. We want to understand this interaction and look at whether people see a sufficient benefit from saving.

This chapter will therefore look at:

- The characteristics of those with and without provision (Section 2.2).
- The value of pension saving and the role of automatic enrolment (Section 2.3).
- Whether everyone needs to save (Section 2.4).
- Whether there are always good incentives to save (Section 2.5).

- What it all means for the earnings level at which people should start to save (Section 2.6).
- Any consequences of changes to the State Pension system (Section 2.7).

2.2 Characteristics of those with and without workplace pension provision

We need to understand the characteristics of those who will be automatically enrolled under the reforms as they currently stand and to see how these characteristics compare with those of otherwise similar people who already have a pension scheme.

We therefore focus on individuals aged between 22 and State Pension age, with annual earnings of over £5,035 (in 2006/07 terms). The right hand column in Table 2.1 presents the characteristics of those individuals who are already in a “qualifying scheme” (with an employer contribution of at least three per cent).¹² The middle column sets out the characteristics of those individuals who are not in a qualifying scheme and therefore would be automatically enrolled. The analysis shows the following.

Around five to six million people are currently saving into a workplace pension scheme. These people:

- Have relatively high individual earnings, with a median gross salary of £30,000.
- Are more likely to be male (63 per cent) than female (37 per cent).
- Tend to be owner occupiers (just under 90 per cent) with a high level of household wealth (a median of just under £300,000).¹³
- Are highly likely to be in the White ethnic group (94 per cent).
- Work predominantly for large employers (with 69 per cent working for employers with 250 or more workers).

Between ten and 11 million people who would be eligible for automatic enrolment are not currently saving in a workplace pension scheme with an employer contribution of three per cent or more. Compared to the group with pension provision, these people:

- Have much lower salaries, with a median gross salary of £19,000 a year.
- Are more likely to be female (though in absolute terms, the majority, 59 per cent, are still male).
- Are less likely to be owner occupiers, with around one third of people renting, and have a lower level of household wealth (a median of around £130,000).
- Are more likely to be in a non-White ethnic group (over ten per cent).
- Tend to be more likely to work for smaller employers: 33 per cent work for an employer with 19 or fewer employees.

¹² Where possible the analysis is split by those in a qualifying pension scheme (defined as having a three per cent employer contribution) and those without a qualifying pension scheme. Where data is used which doesn't include the employer contribution, a qualifying pension scheme is simply defined as being any pension scheme.

¹³ Household wealth is defined as the sum of net property wealth (value of property owned minus any mortgage debt), net financial wealth (formal and informal financial assets minus any financial liabilities), physical wealth (contents of main residence and any other property) and pension wealth (private pension wealth, including retained rights and pensions in payment).

Table 2.1: Individual characteristics of eligible employees (those between 22 and State Pension age with earnings above £5,035 in 2006/07 terms)

Characteristics	Eligible employees without a qualifying pension	Eligible employees with a qualifying pension
Number <i>million</i>	10 - 11	5 - 6
Median gross basic salary <i>£pa</i>	19,000	30,000
Earnings <i>percentage</i>		
Less than £7,336 *	6	2
£7,336 to £9,999	7	3
£10,000 to £14,999	20	7
£15,000 to £24,999	37	25
£25,000 to £32,999	15	21
£33,000 and over	15	43
Gender <i>percentage</i>		
Male	59	63
Female	41	37
Employer size <i>percentage</i>		
1-4	14	4
5-19	19	8
20-49	11	6
50-249	17	13
250+	39	69
Ethnicity <i>percentage</i>		
White	88	94
Mixed	1	1
Asian or Asian British		
Indian	3	2
Pakistani and Bangladeshi	2	*
Black or Black British	3	2
Chinese or other ethnic groups	3	1
Wealth <i>£</i>		
Median total household wealth	130,000	300,000
Housing <i>percentage</i>		
Owner occupiers	69	88
Social rented sector	13	4
Rented privately	18	8

Note: *£7,336 is the 2011/12 income tax personal allowance in current earnings terms.

Source: Department for Work and Pensions volumes modelling, private sector only.
 Annual Survey of Hours and Earnings, Great Britain 2009, Office for National Statistics.
 Family Resources Survey, 2003-04, 2004-05 and 2005-06, Department for Work and Pensions.
 Wealth and Assets Survey, Great Britain 2006-08, Office for National Statistics .

2.3 The value of pension saving and the role of automatic enrolment

2.3.1 The value of pension saving

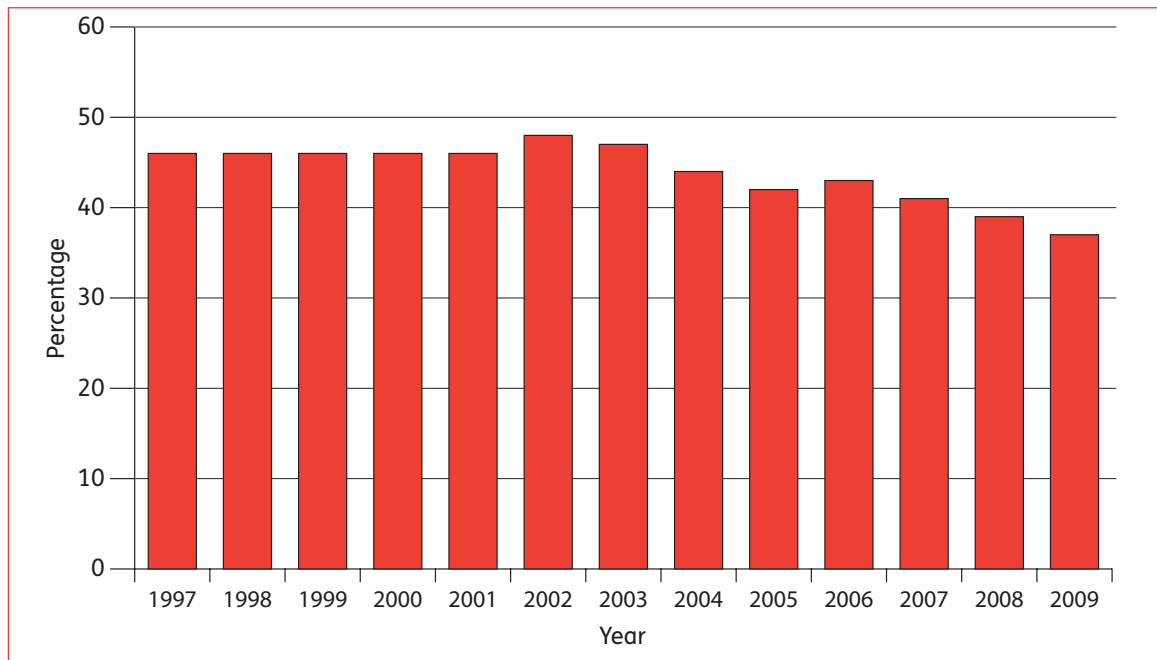
Private pension saving aims to provide individuals with an additional income in retirement over and above the income they will receive from the State via State Pensions and other benefits. The benefits of pension saving come from the individual moving income from a time when they have more income (working life) to a time when income is relatively lower (retirement). As a result, most people will increase their lifetime welfare by saving for their retirement. In economic terms, they are “consumption smoothing”, ensuring that there is not a big drop in their spending power when they retire. Moving their consumption across time should make them better off because consumption is worth more to them when they are able to consume less.

In a world in which everyone was behaving rationally and in their own best interests, they would be choosing levels of pension saving to provide their desired or optimal level of smoothing. But the point of automatic enrolment is that, for behavioural reasons, there is convincing evidence that, left to their own devices, people do not make these long term decisions optimally. But not everyone is behaving irrationally by not saving. The concepts are important because they help us to understand who will benefit most from private pension saving. Those with significantly higher earnings in work than in retirement will gain, and those on low incomes in work will have less consumption to smooth.

2.3.2 Current trends in private pension saving

Despite the value of pension saving, the overall level of private pension saving in this country is low and falling. As Chart 2.1 demonstrates, there have been substantial falls in the level of private pension saving, even in the years since the work of the Pensions Commission. As we can see, employee membership of private sector workplace pension schemes fell from 46 per cent in 1997 to 37 per cent in 2009 (from 7.9 million in 1997 to 7.0 million in 2009). Since the number of private sector jobs increased over that period, the number of private sector jobs with no pension provision rose even more steeply. In 2009, over 11.5 million private sector jobs had no pension provision, an increase of 2.5 million since 1997. In addition, as a result of the swift decline in coverage of defined benefit pensions and the introduction of less generous defined contribution schemes, the amount being saved per person is also falling.

Chart 2.1: Percentage of private sector employee jobs with employer-sponsored pension provision



Source: Annual Survey of Hours and Earnings, United Kingdom 1997 – 2009, Office for National Statistics.

2.3.3 Impact of automatic enrolment

Automatic enrolment is designed to address this low and falling level of pension provision. Whilst many individuals are aware of the need to save into a pension, a range of factors, including inertia and myopia, prevent them from doing so¹⁴. Automatic enrolment “nudges” people into saving in a pension. It does this by creating a default position whereby the individual will save unless they take an active decision to opt out.

The ability to opt out is important when thinking about who we should be encouraging to save. We want to set eligibility criteria so that we encourage as many of the “right” people to save as possible, whilst bringing in the fewest number of people for whom the value of pension saving is more questionable. The ability to opt out is a key component in mitigating some of the risk associated with enrolling some people who may rationally decide that pension saving is not right for them.

Research has shown that automatic enrolment can be expected to increase the level of participation in pension schemes. The 401(k) experience in the United States shows there is a large difference in participation rates between employees hired before automatic enrolment (50 to 75 per cent) and after automatic enrolment (90 per cent or more)¹⁵.

In the UK, almost two in three (65 per cent) people eligible for automatic enrolment say they would stay in and save in a workplace pension if automatically enrolled tomorrow¹⁶.

14 Clery E, McKay S, Phillips M and Robinson C, 2007, “Attitudes to pensions: the 2006 survey”, DWP Research Report No 434.

15 Madrian C and Shea D, 2002, “Coming up short: the challenge of 401(k) plans”, The Brookings Institute and Beshears J, James J, Choi D, Laibson B, Madrian C and Weller B, “Public Policy and Saving for Retirement: The “Autosave” Features of the Pension Protection Act of 2006”. Available at: <http://www.economics.harvard.edu/faculty/laibson/files/Better%20living%20080216.pdf>.

16 Bourne T, Shaw A and Butt S, 2010, “Individual attitudes and likely reactions to the workplace pensions reforms 2009”, DWP Research Report No 669.

Based on this research and a range of other evidence, DWP expect that, after accounting for people who opt out, automatic enrolment could result in:

- Five to nine million people newly saving or saving more in all forms of workplace pension scheme
- Three to four million people newly saving or saving more in existing forms of workplace pension scheme and
- Two to six million people saving in NEST, including some who were previously saving in existing forms of workplace pension scheme, and some who opt in.

Further detail of the methodology used to derive these figures is set out at Annex C, Chart C.1.1.

As a result of automatic enrolment and the associated higher levels of pension saving, the expectation is that society as a whole will feel substantially better off¹⁷. This is measured by a concept known as social welfare. According to the methodology set out in a DWP technical working paper¹⁸, the impact of consumption smoothing might increase social welfare significantly¹⁹. This amount does not represent a financial transfer, but represents the value to individuals from transferring income from more affluent times to retirement²⁰. And whilst there are obviously many judgements to be made in calculating these sorts of numbers, they do give a good sense that automatic enrolment could raise social welfare substantially.

2.4 Does everyone actually need to save?

Pension saving is valuable where individuals have more money in their working lives than they do in retirement. Where the reverse is true, and an individual has more money in retirement than in working life, the value of consumption smoothing disappears.

This section is designed to help us understand who should and should not be saving. It estimates the “replacement rates” (defined below) that individuals on stable earnings over their lifetime can expect to see. We then go on to look more closely at earnings dynamics and family make-up to help us understand the value of the replacement rate analysis.

2.4.1 Replacement rates

One of the key measures we have to help us understand who needs to save is the replacement rate. Replacement rates show annual income in retirement as a proportion of annual income in working life. So a replacement rate of 100 per cent shows that an individual has the same income in retirement as they did in working life. A replacement rate of 50 per cent shows that an individual has half the income in retirement that they had in working life.

17 Layard R, Mayraz G and Nickell S, 2006, “Marginal Utility of Income”, considers these ideas in some depth and suggests that the assumptions used in our analysis are conservative with respect to the value of redistribution to individuals.

18 van de Coevering et al., 2006, “Estimating economic and social welfare impacts of pension reform”, DWP Pensions Technical Working Paper. Available at: <http://research.dwp.gov.uk/asd/asd5/rports2009-2010/rrep562.pdf>.

19 by around £40 billion to £55 billion for the period up to 2050 according to DWP estimates.

20 Recent developments in the field of welfare economics recommend an increase in the factor that is used to weight pension returns in the Department for Work and Pensions’ Social Welfare model. The total impact of this change has not yet been estimated, though it is expected to significantly increase the overall value of the reforms while still being conservative in terms of the assumptions underpinning the analysis.

Target replacement rates

The Pensions Commission used replacement rates within their work, and suggested that the minimum gross replacement rate, based on research on individuals' views, should be at least 45 per cent, around two thirds of which would come from the State. But the Pensions Commission also noted that the median earner might want to save more to get up to a more typical 67 per cent gross replacement rate, and that lower earners might aim for gross replacement rates of 80 per cent or more²¹.

Gross vs net replacement rates

Gross replacement rates are commonly used and simple to understand. But they are a poor indicator of the change in what someone has to live on, since an individual's gross income will be reduced by tax. And because pensioner tax allowances are more generous than working age tax allowances and pensioners do not pay National Insurance Contributions, gross replacement rates will over-state the change in living standards between work and retirement. As a result, we focus on measures of net replacement rates in this report. In fact, we might well want to take account of other differences in costs between working age and retirement. Ideally, one might want to subtract the costs of mortgages, children and costs associated with working from income during working life in order to get a fair comparison with income in retirement. We bear this in mind, but do not attempt to show the effects numerically.

Replacement rates by earnings and age

Table 2.2 shows what replacement rates look like for individuals at different income levels, depending on whether or not they save into a pension scheme following automatic enrolment. See C.1.2 in Annex C for a series of illustrative case studies which provide much more detail about the calculations underpinning the replacement rates, what the different sources of income are and the impact of varying real fund growth rates.

The most striking thing about this analysis is how high replacement rates are for some groups, even in the absence of any private pension saving. For those individuals with annual earnings of below £10,000 throughout their working life, we can see that the state system, through a combination of the State Pension and income-related benefits, provides the individual with a very high replacement rate. In many cases, the replacement rates are in excess of 100 per cent, making it hard to see how these individuals could be considered to need to save.

As we have discussed, even where replacement rates are below 100 per cent, there is a risk that automatic enrolment could result in over-saving. That is because people tend to have lower costs in retirement and therefore need less income in order to maintain their standard of living. Lower costs could come from no longer incurring work expenses (such as travel), having mortgage costs, or having dependent children.

This analysis raises significant questions about the validity of an annual earnings threshold of £5,035. Even at earnings substantially above this level, individuals see very high replacement rates from the State. Based on this analysis alone, we might easily argue that an earnings threshold of over £10,000 would be more appropriate to encourage the right individuals (those who actually need to save) to begin saving into a workplace pension.

21 Pensions: Challenges and Choices, The First Report of the Pensions Commission, 2004.

There are two key reasons to question such a conclusion. Firstly, earnings are not static. For many, earnings could change dramatically over their lifetime. For these people, saving for a pension whilst on relatively low income could be beneficial as it improves persistency of saving and increases income in retirement. Secondly, many individuals live in a family unit. It is the circumstances of the wider family that are more important in determining whether it is appropriate for a particular individual to save.

Table 2.2: Net replacement rates with and without default savings levels

Annual earnings		Age in first year of saving			
		22	30	40	55
£6,000	Gross weekly private pension (£)	1	1	0	0
	Final net weekly income (£)	181	180	176	170
	Net replacement rate without saving (%)	156	156	153	147
	Net replacement rate with saving (%)	156	156	153	147
	Improvement in net replacement rate from saving	0	0	0	0
£10,000	Gross weekly private pension (£)	11	9	6	2
	Final net weekly income (£)	189	187	180	174
	Net replacement rate without saving (%)	97	97	95	99
	Net replacement rate with saving (%)	102	101	97	99
	Improvement in net replacement rate from saving	5	4	2	0
£15,000	Gross weekly private pension (£)	24	20	14	4
	Final net weekly income (£)	200	196	187	180
	Net replacement rate without saving (%)	71	72	70	73
	Net replacement rate with saving (%)	79	78	74	74
	Improvement in net replacement rate from saving	8	6	4	1
£20,000	Gross weekly private pension (£)	37	30	21	6
	Final net weekly income (£)	210	207	199	187
	Net replacement rate without saving (%)	57	58	58	59
	Net replacement rate with saving (%)	66	65	63	60
	Improvement in net replacement rate from saving	9	7	5	1
£25,000	Gross weekly private pension (£)	49	41	29	7
	Final net weekly income (£)	220	217	209	195
	Net replacement rate without saving (%)	49	49	49	51
	Net replacement rate with saving (%)	58	57	55	52
	Improvement in net replacement rate from saving	9	8	6	1
£30,000	Gross weekly private pension (£)	62	51	37	9
	Final net weekly income (£)	230	226	217	205
	Net replacement rate without saving (%)	42	43	43	45
	Net replacement rate with saving (%)	52	51	49	46
	Improvement in net replacement rate from saving	10	8	6	1

Source: Department for Work and Pensions modelling.

2.4.2 Earnings dynamics

A variety of evidence suggests that earnings are highly dynamic and that relatively few people have persistently low earnings.

The Low Pay Commission (LPC) assessed the dynamics of low paid work to understand whether the National Minimum Wage (NMW) was used as a stepping-stone to higher wages or whether those paid at or below the NMW are trapped in a low wage – no wage cycle²². Their conclusions were consistent with that found in the United States²³, that minimum wage jobs tended to be entry-level jobs that are of relatively short duration for a large majority of workers. The report concluded that a substantial number of those paid at or below the NMW move after a short period into higher paid employment and, for over half of them, the upward adjustment in pay is in excess of ten per cent above the minimum.

Analysis of the British Household Panel Survey (BHPS) by the Institute for Social and Economic Research (ISER) found most people entering poverty could expect to be poor for only a short time, but there was a minority with longer spells. Relatively long spells were more likely to be experienced by women than men²⁴. This was re-iterated in their 2006 report, which concluded that the turnover in the low income population was high²⁵.

We have also undertaken an analysis of the Lifetime Labour Market Database to look at earnings dynamics. We take a group of people in a particular earnings band and then see how many of them are still there the next year, then the year after that, and so on.

Table 2.3 gives an example of this analysis. It shows that, of men aged between 28 and 32 in 1978, with earnings of between £5,000 and £10,000 in that year, 78 per cent are in that earnings range or below for at least one year between 1979 and 2006. Only 27 per cent of these men have five or more years with annual earnings between £5,000 and £10,000 or below between 1979 and 2006.

Table 2.3: Earnings dynamics over time: males aged 28 to 32 with gross earnings between £5,000 and £10,000 in 1978 (2010/11 earnings levels)

Earnings £000	Percentage				
	Between 1979 and 2006				
	One or more years	Two or more years	Three or more years	Four or more years	Five or more years
5 to 10	54	31	17	11	6
5 to 10 and above	83	76	69	65	61
5 to 10 and below	78	61	45	35	27

Source: Lifetime Labour Market Database, Great Britain, Department for Work and Pensions.

22 Jones M K, Jones R J, Murphy P D, Sloane P J, November 2004, "The Analysis of Flows Into and Out of The National Minimum Wage", BHPS, LFS and Current Population Survey, Low Pay Commission.

23 Smith and Vavrichek, 1992, reported that over 60 per cent of workers in receipt of the minimum wage in 1984 were earning more than the minimum one year later.

24 Jones M K, Jones R J, Murphy P D, Sloane P J, November 2004, "The Analysis of Flows Into and Out of The National Minimum Wage", Low Pay Commission.

25 Jenkins S, "Poverty dynamics, Family background and attainment", BHPS waves 1 to 9, ISER 2006, <http://www.ccsr.ac.uk/methods/festival/programme/lsw/jenkins.ppt>.

All of this analysis supports the argument that earnings are actually very dynamic. It might make us more relaxed about low earning individuals being automatically enrolled than the replacement rate analysis suggests, not least because getting people into the habit of saving when they are on low earnings might increase the likelihood that they will continue saving once their earnings increase.

Even so, periods of low earnings are real, and there remains a question about the value of saving at those times when earnings are lowest.

2.4.3 Family circumstances

Perhaps a more important consideration in understanding whether a particular individual needs to save, is that of the circumstances of the family unit as a whole. It could be that a low-earning individual has a higher earning partner which means that, for the family unit as a whole, workplace pension saving would help to provide a decent replacement rate in retirement. The dynamics of family formation may also be important. It may be important for women in particular to be building up some saving for retirement on their own account even if they are earning a relatively small amount as part of a large household income.

Table 2.4: Family type and economic status (by individual gross earnings band) of individuals who would be automatically enrolled under the reforms

Characteristics	Column percentage				
	Individual gross earnings				
	£5,000 to £9,999	£10,000 to £14,999	£15,000 to £19,999	£20,000 to £24,999	£25,000 and over
Family type					
Couple with children	38	25	25	27	33
Couple without children	31	37	38	38	38
Lone parent	11	6	4	2	2
Single without children	20	32	34	32	27
Economic status					
Single, in full-time work	6	30	36	33	28
Couple, both in full-time work	7	26	34	38	37
Couple, one full-time, one part time work	45	20	14	15	18
Couple, one full-time work, one not working	3	8	12	12	15
Single, in part-time work	25	9	2	1	1
Couple, both in part-time work	5	2	1	0	1
Couple, one part-time work, one not working	9	5	9	1	1

Note: Figures may not sum due to rounding.
 Source: Family Resources Survey, United Kingdom 2005-06, Department for Work and Pensions.

Table 2.4 shows just how important family characteristics are. Of those individuals with gross earnings of between £5,000 and £10,000, just over two-thirds (69 per cent) are part of a couple, with or without children. Whether that partner is earning, and how much, will be an important factor in determining whether a particular individual should save or not.

Looking at the economic status of the family group starts to shed more light on this. Crucially, nearly half of those in the lowest earning group are in couples where one is in part-time work and the other in full-time work. Another quarter are single people in part-time work. Of these, 43 per cent are lone parents and 40 per cent are single people living with others, typically their parents.

Amongst those people in a couple, with a working partner, we can start to get a sense of the total earnings of that family. This is set out in Table 2.5. We can see that, in the vast majority of cases, the total gross earnings of the couple will be significantly higher than the earnings of one individual. If we focus on individuals earning between £5,000 and £10,000 who have a working partner, around 90 per cent have combined earnings of over £15,000. Three-quarters (78 per cent) have combined earnings of over £20,000.

Table 2.5: Gross earnings of couples where both partners work

Partner's earnings	Column Percentage				
	Gross earnings of individual who would be automatically enrolled				
	£5,000 to £9,999	£10,000 to £14,999	£15,000 to £19,999	£20,000 to £24,999	£25,000 and over
Less than £5,000	4	4	8	9	12
£5,000 to £9,999	8	6	6	8	11
£10,000 to £14,999	11	12	8	8	8
£15,000 to £19,999	15	17	17	11	8
£20,000 to £24,999	16	18	18	19	10
£25,000 and over	46	43	43	45	51

Note: Analysis based on a couple who both have income from employment and/or self-employment. At least one of the couple must be an eligible jobholder without a qualifying scheme. The top categories always apply to an individual who is an eligible jobholder without a qualifying scheme. Where both members of the couple are eligible jobholders without a qualifying scheme, the top categories refer to the lower earner, with their partner's income described on the left side of the table.

Source: Family Resources Survey, United Kingdom 2005-06, Department for Work and Pensions.

Finally, we can look at what all this means in terms of where low-earning individuals sit within a household income distribution (after housing costs have been taken into account)²⁶. Table 2.6 shows that those with gross earnings between £5,000 and £10,000 a year live in households spread very evenly across the income distribution. They are more likely to be in the second and middle quintiles than the population as a whole, and more than half are in the top three quintiles. In other words, having very low earnings is not a very strong indicator of being in the poorest households.

²⁶ Analysis is consistent with that used in "Households Below Average Income", see <http://statistics.dwp.gov.uk/asd/index.php?page=hbai>.

Table 2.6: Where individuals sit in the household income distribution

Household income distribution	Column Percentage				
	Individual gross earnings				
	£5,000 to £9,999	£10,000 to £14,999	£15,000 to £19,999	£20,000 to £24,999	£25,000 and over
Bottom quintile	21	15	9	6	2
Second quintile	26	22	18	13	7
Middle quintile	25	29	29	24	14
Fourth quintile	17	22	29	38	28
Top quintile	11	12	15	19	49

Note: Quintile of the net equivalised after housing costs household income distribution.

Source: Family Resources Survey, United Kingdom 2005-06, Department for Work and Pensions.

All of this analysis suggests that attempting to determine the appropriateness of various earnings thresholds at an individual level grossly underestimates the importance of family units. The vast majority of low-earning individuals live in households with a working partner, and the majority of these partners have significant earnings. A significant proportion are also eligible for tax credits which, as we describe below, means they are likely to have a substantial incentive to save. It may, therefore, be entirely appropriate for a low-earning individual to save for a pension, helping to ensure that the family unit as a whole has a decent replacement rate and income in retirement.

The impact of this on earnings thresholds is discussed in Section 2.6.

2.5 Incentives to save

We have focussed so far on the question of who needs to save in order to smooth their income over time. We believe this is crucial. But more attention has probably been paid to the different question of incentives to save. Will people who are automatically enrolled get a good return on their contributions? Much concern has been expressed about the effects of means-tested benefits on these returns. Overall returns to pension saving are complex, affected by what levels of return from saving are thought to be acceptable, investment returns, annuity rates and the interaction with the tax and benefit system.

This section starts with a discussion around how we can measure returns from saving and then looks at what is an acceptable level of return from saving. It then moves on to consider various factors which influence returns before presenting evidence of expected returns for those who do save.

2.5.1 Measuring levels of return

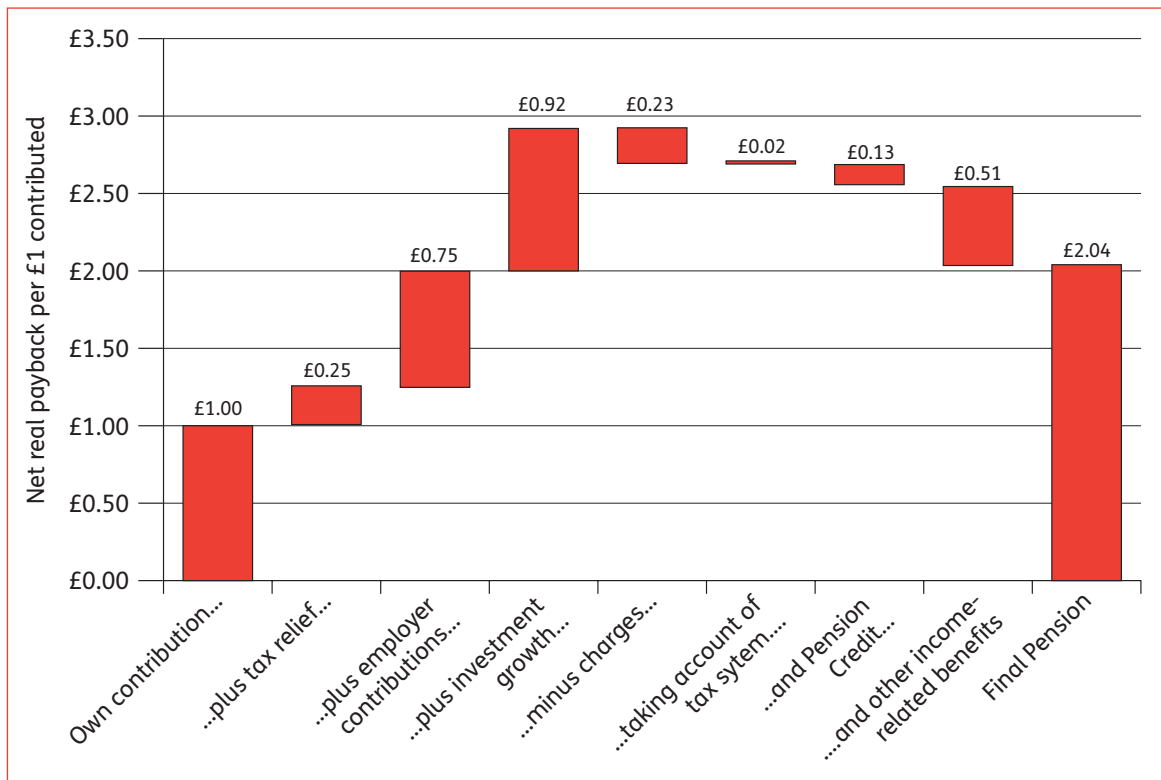
There are various ways to measure the return an individual sees from saving. One measure is to use a “payback calculation”. It takes account of expected investment returns, employer contributions, tax relief, inflation and income-related benefits that would have been received in the absence of private saving. Payback figures are presented in real terms, to take account of inflation over a lifetime.

Payback takes a stream of contributions made whilst working and compares that to an income stream in retirement. So a £2 payback means that each £1 saved is worth, on average, £2 over the course of retirement (technically, the £2 in this example is the net present value at retirement from the annuity purchased).

To illustrate payback for someone on a benefit taper in retirement, we can use a ‘waterfall chart’ which shows the elements that increase payback compared to those that reduce it. Chart 2.2 shows the saving situation of a hypothetical individual, a man on constant lower than average earnings who is automatically enrolled into an employer-sponsored pension scheme at age 25 in 2012. The chart shows the way in which his contributions and deductions from his pension influence the final amount he should expect in return for all of the inputs over his working life.

It shows that for each pound he contributes, over the life of his pension, he gets tax relief of £0.25, he gets an employer contribution of £0.75, and investment growth gives him £0.92. From that, he is deducted £0.23 for charges, and loses £0.64 of income-related benefits that he would have been entitled to in the absence of private saving. This means that, at the end of the day, his £1 will be worth £2.04 over the lifetime of his pension.

Chart 2.2: Waterfall chart illustrating payback for an example individual – male on 70 per cent of overall median earnings:



Source: Department for Work and Pensions modelling.

If someone receives a payback of £1 then they receive their own contributions back in real terms. Beating inflation over a long time period could be deemed to be an achievement in itself (most savings accounts currently offer a negative real rate of return, even before tax), and so a payback of £1 could be considered a good return. However, individuals may expect a positive investment return on their saving or compensation for loss of liquidity arising from tying their savings up in a pension they cannot access till their retirement and would therefore expect a payback greater than £1.

But a crucial issue in measuring levels of payback is how to take account of the role of the employer contribution and who pays for it.

If we believe that, for the individual, the employer contribution is effectively “free money”, then we may judge that a £1 payback in real terms means maintaining the real value. But if we think that, in the end, the individual pays for the employer contribution, then we would want to see payback of at least £1.75 before accepting that the return is not negative (reflecting the £1 contribution from the individual and the £0.75 pence employer contribution that the individual also pays for).

At the macro level, employer contributions are clearly not “free money” – employers are likely to pass on at least some of the costs of pension contributions to employees in the form of lower wage growth, or less directly, higher prices.

At an individual level, the situation is different. The individual can remain in pension saving, following automatic enrolment, or they can opt out. If they opt out, they do not get the employer contribution and are unequivocally worse off. If they remain in, they do get the employer contribution and there is no additional “cost” to it.

The employer contribution should not be considered to be “free money”. Nor will most individuals end up paying for all the employer contribution. We need to test payback against both these benchmarks.

2.5.2 Factors that influence returns

Tax relief

Tax relief is provided by the State on pension contributions to encourage people to defer income to later life. It means that an individual does not pay tax on their pension contributions whilst they are working, instead they pay the tax when they draw their pension. This can enhance returns, particularly if people drop down a tax band in retirement and so pay income tax at a lower rate than that of the relief received. 25 per cent of the pension pot can also be taken as a tax-free lump sum upon retirement, a further advantage of pension saving.

The IFS found, that even for people who do not drop a tax band in retirement²⁷, “The most favourable tax treatment [compared to a range of other assets, including ISAs, housing, stocks and shares]...is seen to apply to saving in private pensions, which gets upfront relief from income tax and allows an individual to benefit from a 25 per cent tax-free lump sum when he/she begins to draw his/her pension. Employer contributions to pensions also benefit from exemption from employee National Insurance contributions.”

²⁷ Wakefield M, 2009, “How much Do We Tax the Return to Saving?”, IFS Briefing Note BN82.

Receipt of benefits or tax credits in working life

Receipt of working age benefits may also be an added incentive to save. Half an individual's contribution to a private pension scheme is disregarded from their income when calculating entitlement to income-related benefits, and is fully disregarded when calculating entitlement for tax credits. In other words, for many low income individuals in receipt of tax credits, the amount received in tax credits could be higher as a result of making pension contributions. For example, from 2011 those basic rate taxpayers entitled to Working Tax Credit with annual income above around £6,500, will receive an extra 41p in tax credits for investing an extra £1 in a pension scheme, implying a 61 per cent rate of tax relief on contributions. However, this incentive may not be enough to compensate for the loss of income from pension contributions for less well-off families.

Analysis of the Family Resources Survey²⁸ suggests that just over a third (36 per cent) of those earning between £5,000 and £10,000 a year who would be automatically enrolled under the reforms, are in receipt of tax credits. A further 24 per cent of these individuals earning between £10,000 and £14,000 a year are in receipt. For these groups, even though they have low earnings, the incentive to save is considerable.

Receipt of benefits in retirement

By definition, benefits targeted on those with the lowest incomes and wealth in retirement will not be awarded to those who have access to a sufficient amount of their own means. So some individuals will find that when assessed for benefit entitlement, their income in retirement is not much higher than it would have been if they had saved nothing at all.

Around 55 per cent of all pensioner households are estimated to be eligible for means-tested benefits in 2010, projected to fall to around 40 per cent by 2050²⁹.

The combined effects of different tax rates and tax credit receipt in work and in retirement are illustrated in Table 2.7. It shows how much money one would need to put into a pension to match the return from a £1 contribution in a savings vehicle like an ISA where savings are made from taxed income but no further tax is levied. The very big incentives to save for those on the tax credit taper in work are very evident, even for those who then end up on the Pension Credit taper in retirement. Only those who are basic rate taxpayers in work but end up on the Pension Credit taper in retirement suffer a disincentive. As it happens, this is not dissimilar to the disincentive to saving created by the standard income tax treatment of ordinary bank and building society accounts.

²⁸ Family Resources Survey, United Kingdom 2005-06, Department for Work and Pensions. It is likely to underestimate the actual number of people in receipt.

²⁹ Department for Work and Pensions modelling using Pensim2. Pensim2 is a dynamic micro simulation model that ages the individuals in a sample and simulates the key life events that occur from birth to death. It models pensions through to 2100.

Table 2.7: Contribution to pension required to match £1 contribution to an ISA for different combinations of working life and retirement tax rates

Tax rate in work	Tax rate in retirement	Required contribution pence
Basic rate (20%)	Basic rate (20%)	94
Higher rate (40%)	Higher rate (40%)	86
Higher rate (40%)	Basic rate (20%)	71
Basic rate (20%)	Pension Credit taper (40%)	114
Tax credit taper (59%)	Basic rate (20%)	48
Tax credit taper (59%)	Pension Credit taper (40%)	59

Note: Assumes 3 per cent real rate of return and 2 per cent inflation.

Employee contribution to a pension (10-year investment).

Source: Wakefield, M, 2009, "How much Do We Tax the Return to Saving?", IFS Briefing Note BN82.

Expected investment returns

Low investment returns have a large impact on overall pension pots in retirement, and will have the biggest impact on the retirement income of young individuals and higher earners in particular. PPI case study modelling³⁰ finds that a low return investment strategy (compared to a medium one) takes a median earner who begins investing at age 25 from being at 'low risk' of not getting a good return on saving to being at 'medium risk'. However, the same individual at age 55 stays in the 'medium risk' category.

Trivial Commutation

Pension rules allow for very small pots to be 'trivially commuted' – this means the whole pot is taken as a lump sum rather than being used to purchase an annuity. This will benefit those who have accrued relatively small pension pots, and as such will benefit those on low incomes who are automatically enrolled later in their working life.

Trivial commutation is allowed where all private pensions are below one per cent of the Lifetime Allowance. In 2010/11 the Lifetime Allowance is set at £1.8million, meaning that individuals with total pension entitlements worth up to £18,000 can receive this as a lump sum rather than a pension.

Individuals can have up to £10,000 of capital before it affects their entitlement to means-tested benefits in retirement. Individuals with very small pots can therefore trivially commute their pension and still claim means-tested benefits.

Annuity rates

An annuity is an income in retirement which is guaranteed until death. Annuity rates vary depending on the age, health and gender of the purchaser. Better annuity rates mean higher income in retirement.

Annuity rates are normally expressed in terms of a percentage and translate into the proportion of the pension pot at the time of annuity purchase that will be received each year; an eight per cent annuity rate means that a pension of £8,000 a year will be received from a pension pot of £100,000.

³⁰ Pensions Policy Institute, 2010, "PPI Submission to the DWP Review: Making auto-enrolment work."

2.5.3 Evidence of expected returns

Population modelling from the Department for Work and Pensions using their Pensim2 Model³¹ can be used to forecast expected payback.

At an overall level, the key findings from this analysis are that:

- Over 99 per cent are better off in retirement than if they had saved nothing.
- Over 95 per cent can expect to receive more than £1 plus inflation for every £1 saved.
- Just over 80 per cent can expect to receive more than £1.75 plus inflation for every £1 saved.

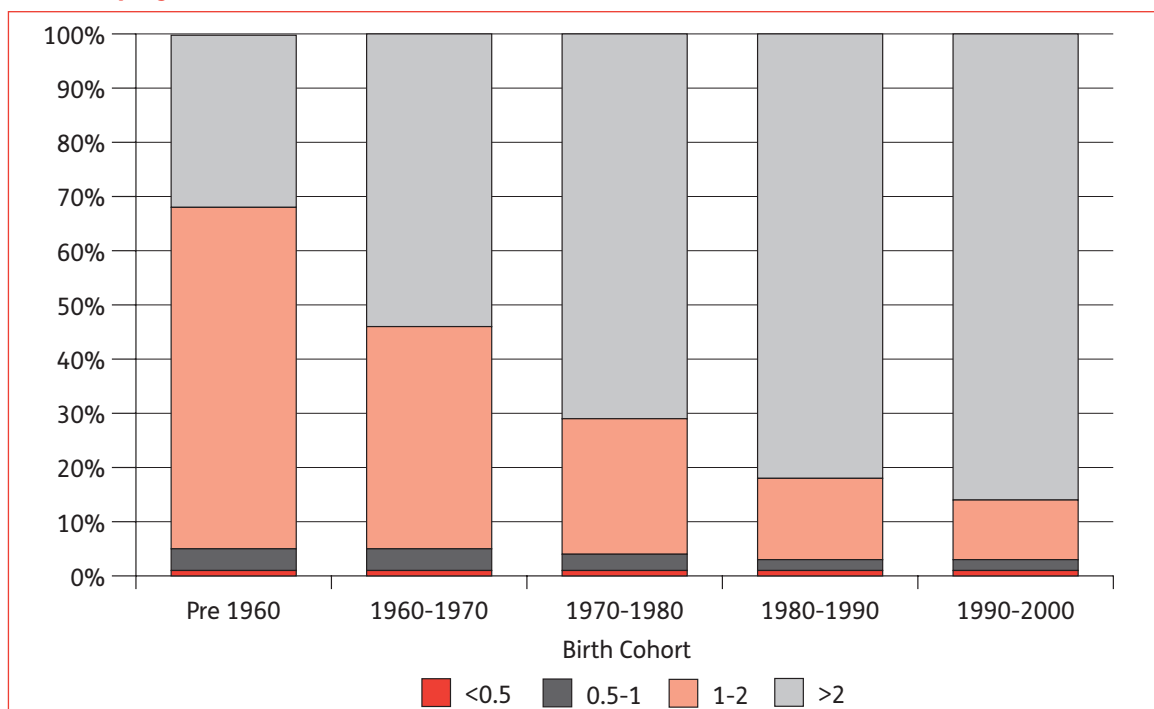
Expected returns by age

One of the concerns raised by stakeholders is the validity of enrolling older people. Chart 2.3 therefore looks at the distribution of payback for those in different birth cohorts.

It shows that levels of payback are higher amongst the younger birth cohorts than the older ones. That is because they have longer to build up savings and investment returns. It also shows the importance of defining what an acceptable level of payback is.

If a minimum acceptable level of payback is £1 – your own contributions back in real terms – then the majority of individuals at all age cohorts can be considered to do well from saving. However, if an acceptable level of payback is £1.75, then the picture is more varied, particularly for the older cohorts. Just over half of those born between 1960 and 1970 can expect a payback of £2, and this figure falls to around a third for those born before 1960.

Chart 2.3: Distribution of real payback from saving in a defined contribution pension with employer contribution after 2012



Source: Department for Work and Pensions modelling using the Pensim2 model.

³¹ Pensim2 is a dynamic micro simulation model that ages the individuals in a sample and simulates the key life events that occur from birth to death. It models pensions through to 2100.

So older cohorts face lower payback than younger cohorts and many will not even get back their own plus their employer's contributions.

That said, many of those without existing pension saving will be able to benefit from trivial commutation rules, taking some or all of their pension pot as a lump sum (which, if it falls under capital limits, will have no negative impact on their benefit entitlement).

Returns for “at risk” groups

DWP analysis suggests that there is no readily identifiable group who can be expected not to benefit from pension saving. The PPI³² concluded in their analysis that ‘suitability’ will vary from person to person depending on how they are affected by the tax and benefit system, and the other factors discussed above; but these factors are not predictable at the point of automatic enrolment.

Certain characteristics are often associated with being at risk of low payback. The most common characteristics are:

- Having very deficient State Pension records and no other resources (so being eligible to receive significant amounts of Pension Credit).
- Having low State Pension and extra needs (e.g. receiving benefit top ups for an onset of disability in later life).
- Renting in retirement and being eligible for a combination of Housing Benefit and Council Tax Benefit.

These characteristics are likely to be relatively more common amongst those born before 1960. By contrast, those with the most likelihood of getting high returns are people enrolled at a young age on high or increasing earnings who are likely to own their own homes in retirement and be part of a couple.

The problem is that these characteristics can only be measured with any certainty retrospectively, when an individual is actually in retirement.

Interpreting the evidence on incentives to save is complex. Clearly many low earners can do well from saving. On the other hand, there are groups who will get very low returns. At an individual level, however, it is very hard to tell at the point of automatic enrolment who those individuals will be.

32 Steventon, A, 2006, “Are personal accounts suitable for all?”, Pensions Policy Institute.

2.6 What does it all mean for the earnings level that triggers automatic enrolment?

The earnings threshold is one of the main policy levers that is available to change the group of people who are automatically enrolled under these reforms. We want to set a threshold which maximises pensions saving for those for whom saving is valuable, whilst minimising the number for whom it is not worthwhile. The first group for whom it may not be worthwhile are those whose income in retirement would not be much less than their income in work even without saving. The second group is those who may get a low return from saving as a result of the effects of the means-tested benefit system in retirement.

Our view is that it is the first of these issues that, in principle, could cause the most concern. It could straightforwardly lead to falls in people's lifetime welfare if they save when there is no need to. On the other hand, lifetime welfare could be enhanced even with very low returns to saving if there is very little smoothing without saving.

In practice, it is very hard to distinguish any clearly identifiable group or cut-off where one might say that those below this cut-off should not be saving and those above should be. If the world were simple and everyone always earned the same amount and always lived alone and there were no working tax credits, we would be inclined to argue for a significantly higher earnings threshold than is currently proposed, perhaps as high as £14,000 a year.

But the world is not simple. Many or most very low earners are women, who live in households with others with higher earnings and/or receive working tax credits. These may well be exactly the people who should be automatically enrolled.

Chapter 5 considers various earnings thresholds and the corresponding impacts in more detail.

2.7 Consequences of changes to the State Pension system

The discussion and analysis in this chapter is based on the current State Pension system. It is worth pausing to ask whether it would make any difference to the findings if State Pensions were to change.

Changes proposed by the NAPF for a Foundation Pension, for example, would combine the current Basic State Pension and State Second Pension into a single Foundation Pension payable to all people over State Pension age if they have accumulated at least 30 years of National Insurance contributions³³. This would make the non-means-tested part of overall State Pension provision more generous.

Within the current system, low income groups see their income from the State Pension "topped up" by the means-tested Pension Credit. Moving to a Foundation Pension would therefore reduce their reliance on means-tested benefits, but it would not necessarily increase their overall level of income.

³³ People with fewer than 30 qualifying years would receive a proportionate reduction.

In thinking about whether people need to save, our primary interest is in the level of income the individual receives in retirement, not where it comes from. Since a Foundation Pension type system, for low income groups, is likely to reduce means-tested support, not add to it, it will not have a significant impact on our analysis of who should be saving.

What it will do is change our understanding of who has good incentives to save. As we have previously seen, the incentive to save is heavily influenced by the interaction with means-tested support. Other things being equal, we could generally expect the incentives to save (and therefore payback) to improve as a result of a Foundation Pension type system.

This is supported by analysis carried out by the Pensions Policy Institute, which models the effect that a Foundation Pension at £8,500 a year increasing in line with the triple lock³⁴ would have on the incentives to save for individuals. Their analysis finds that, for the individuals they considered, a Foundation Pension would generally, but not universally, increase people's incentives to save.

2.8 Conclusion

Pension saving can be valuable because it allows individuals to smooth consumption between periods when they are relatively well off (when they are working) to periods when they have less money (when they are retired). Despite this, the overall level of private pension saving is low and falling.

Automatic enrolment is likely to prove an effective technique for increasing the overall participation level and should generate significant benefits in the form of greater consumption smoothing.

At an individual level, the analysis of replacement rates suggests that people on low earnings throughout their lives probably do not need to save. But earnings are highly dynamic and there are relatively few people who have low earnings throughout their lives. More importantly, most of those we are interested in live in family units and have a working partner with significant earnings.

Whether people have good incentives to save depends on a range of factors, including how we value the employer contribution, what returns look like and what the individuals' circumstances will look like in the future. The essential problem here is that the characteristics that are correlated with poor incentives are hard to predict in advance. What we do know is that individuals who choose to opt out do badly as they do not benefit from the employer contribution and also lose out from lower wage growth as employers seek to off-set the costs of automatic enrolment.

There is no earnings threshold that encourages saving amongst all those who need to save while excluding all those for whom the value of saving is more questionable. A relatively low earnings threshold has the benefit of encouraging those with a working partner, those who will go on to earn more and those in receipt of tax credits to save. But it also encourages persistently low earners to save. A higher earnings threshold does the reverse.

³⁴ From 2011 the Basic State Pension will be annually uprated under a 'triple lock' i.e. it will increase in line with the higher of earnings growth, price inflation (the RPI in 2011 and the CPI in subsequent years) or a fixed 2.5 per cent.