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THE UNDER-PENSIONED

The Under-pensioned

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The Under-pensioned: Introduction

This report estimates the impact of being ‘under-pensioned’ by comparing the pension income of different individuals against the ‘policy stereotype’. The policy stereotype represents the type of individual who is often used to look at the outcomes generated by the current pension system, even though he is not the average individual. He is a man, working continuously from age 21 until retiring at age 65, with median earnings at each age and a private pension contribution of 8% of salary.

Most people have at least some characteristics that are different from the policy stereotype. These can lead to lower retirement income:

- **Low earnings:** state and private pension incomes are lower for those who had lower earnings during working life
- **Labour market experience:** time spent out of standard, full-time employment can reduce state and private pension income
- **Private pension coverage:** low and/or infrequent contributions to private pensions (either by an individual or an employer) reduces private pension income
- **The length of time spent in retirement:** state and private pension income falls relative to other incomes (such as the incomes of those in work, and means-tested benefits) the longer it is received.

Chapter 1 of this report outlines which groups are most at risk of low pension income today, and the relative importance of each of these groups.

Chapter 2 identifies the specific causes of low pension income, and estimates the relative importance of each cause and the cumulative impact of multiple disadvantage. Examples are given of the groups particularly at risk from each cause.

Chapter 3 examines how recent changes in the UK pension system will change the relative risk of low pension income for these groups.

The Individual Model

To undertake this analysis, the PPI has constructed a model to look at the projected retirement incomes of different hypothetical individuals – the Individual Model (IM). The model makes comparisons of retirement incomes for different individuals over different periods of time, and is used to highlight the characteristics that reduce retirement income, and estimate by how much. A separate technical paper, available from the PPI website, outlines the IM and the policy stereotype in more detail.

The analysis is based on single pensioners

The IM looks at pension incomes for individuals, and assumes that they are single – for example, when calculating entitlement to the Pension Credit. There are 5 million single pensioners in the UK and 5.8 million married pensioners¹. To the extent that people are married or cohabiting during retirement, and so may have access to their partner's pension income, this analysis may overstate some of the problems of low individual pension income.

However, this does not mean that all couples are likely to be comfortable in retirement. Two low pension incomes will not make a good income for a couple. At some point, one partner will become single – usually the woman. Widowhood can have a substantial impact on pension income, particularly if the woman has little pension income in her own right.

Analysis of specific under-pensioned groups

This report concentrates on generic causes of low pension income, although throughout the report reference is made to specific groups who display the characteristics most likely to lead to low pension income. More detailed reports on pension income for women, disabled people, ethnic minorities and non-standard workers are available from the PPI website.

¹PPI analysis of 2001 Census data for England and Wales, Scotland and Northern Ireland

The Under-pensioned: Summary

For most people pension income is likely to be lower than that of the 'stereotype' person typically used in policy planning. In particular women, disabled people, ethnic minorities, people with experience of non-standard work and people living to very old ages are more likely to have low pension incomes. Together, these groups cover the majority of the population.

- More than half of the population are women, increasing to three-quarters of the population aged 75 or older
- One-quarter of the population are disabled
- Approaching one in ten people in the UK belong to ethnic minority groups
- Two-fifths of all workers are either self-employed, working part-time, or in temporary jobs
- One-quarter of women and one-fifth of men are expected to live into their nineties

Low earnings are the most important cause of low pension income. The direct link between the amount of state or private pension and earnings level means that pension income is directly linked to earnings when in work. Women, disabled people and people from ethnic minorities are more likely to have low earnings.

Any time not spent in full-time work reduces pension income. Part-time work results in lower pension income. Men and women who are caring for children, the elderly or disabled people are more likely to be in part-time work, or not in paid employment at all. Disabled people and people from ethnic minorities are more likely to be unemployed or not working.

Low or irregular private pension contributions reduce pension income. Lack of access to private pension arrangements, either through an employer or individually, reduces pension income. Low earnings tend to result in no, or low, pension contributions. Women and people from ethnic minorities are less likely to contribute to private pensions. Self-employed workers lose employer contributions to private pensions.

Retiring later can improve pension incomes. The positive impact of working one year longer can be larger than the negative impact of retiring one year earlier. Women and non-standard workers are more likely to work after state pension age, while disabled people and some ethnic minorities are more likely to retire early.

Living to older ages reduces pension income. Pension income falls relative to earnings after retirement. Most women will be widowed or divorced, further reducing income. Disability increases with age, and the additional costs of disability are not fully covered by benefits. Older pensioners are more likely to need means-tested support, but may be less likely to receive it.

Disadvantage is cumulative. People in under-pensioned groups are likely to suffer from a series of disadvantages that combine to reduce pension income substantially.

The current pension system will not resolve the under-pensioned problem. Increased redistribution through State Second Pension and the rapid expansion of means-testing through the Pension Credit will not fully compensate under-pensioned groups. In future, even the policy stereotype will need to claim the Pension Credit from state pension age, reducing the value of making private pension contributions.

Any contributory pension system will disadvantage people who are less likely to be in permanent, full-time employment, particularly if the resulting pensions are higher for those who had higher earnings during their working life.

Chapter 1: Who are the under-pensioned?

Pensioners who are women, disabled, from ethnic minority groups or who have had a history of non-standard employment are more likely to have low pension incomes. Older pensioners are more likely to have lower pension incomes. For most people pension income is likely to be lower than policy planning would typically suggest.

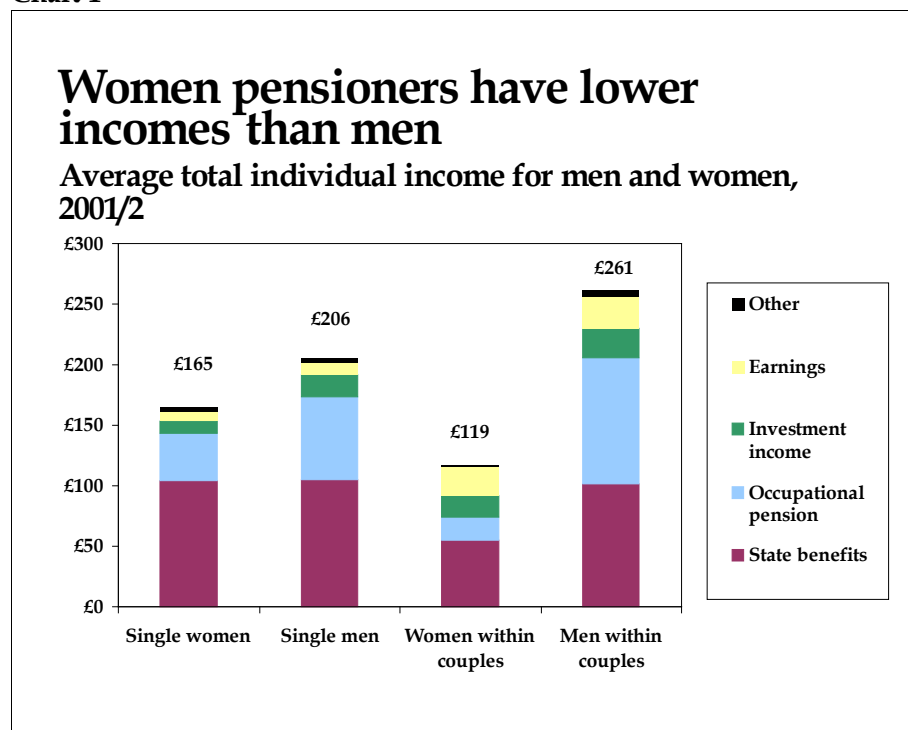
Women pensioners

Women make up the majority of the pensioner population yet on average are poorer than men and predominate at lower income levels.

Taking into account the lower state pension age for women (60 compared to 65 for men), there are almost twice as many women pensioners than men in the UK: 6.9 million women and 3.9 million men². The proportion of the population who are women increases with age, from 52% of those aged 65 to 69 to two-thirds of people aged 80 to 84, three-quarters of those aged 90 to 94, and almost 90% of those aged 100 or older³.

The average weekly income for a single woman over state pension age in 2001/2 was £165, compared to £206 for men (Chart 1).

Chart 1⁴



² Curry and O'Connell (2003)

³ Derived from the GAD interim 2001-based population projections database

⁴ WEU (2003)

The difference is even wider when looking at the individual incomes of married men and women, though this is hard to interpret as no account is taken of the degree of access a woman has to her partner's income.

Women are more likely to live to older ages, and so are more susceptible to the decline in income associated with ageing. Reliance on means-testing because of low income is more likely at older ages.

Disabled pensioners

Disabled pensioners are more likely to experience lower living standards in retirement despite similar levels of retirement income as the non-disabled.

At ages above state pension age, the proportion of people who are disabled increases significantly. Almost a quarter of people aged above state pension age receive disability benefits⁵. Above age 90, over half of people receive disability benefits⁶. Many more may be entitled to receive disability benefits, but not claim them⁷.

Receiving disability benefits increases income in retirement by an average of £48 per week. Despite receiving lower incomes from sources such as occupational and personal pensions, disabled pensioners have higher incomes than non-disabled pensioners. The average gross income for a single pensioner receiving a disability benefit is £206, compared to £187 for a single pensioner not receiving a disability benefit (Chart 2).

However, this does not take into account the additional costs that disabled people may face. A single pensioner with a medium severity disability may face extra costs of up to 70% of income⁸. The level of benefits received does not appear to increase incomes by enough to meet this level of additional cost in full, suggesting that disabled pensioners have lower disposable incomes than non-disabled pensioners, despite higher gross incomes.

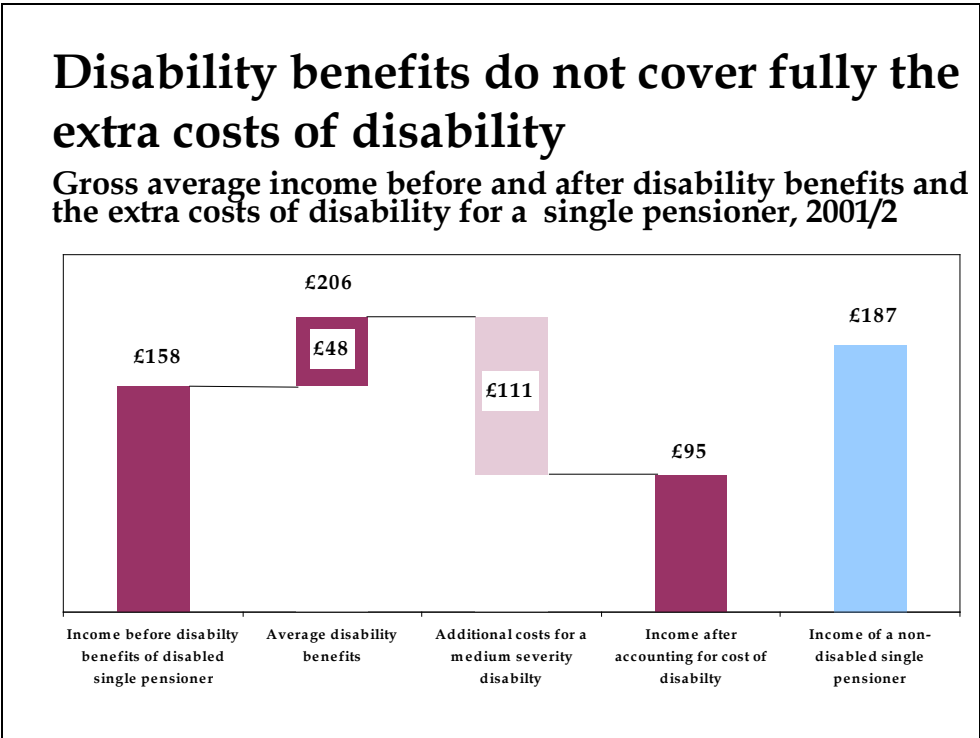
⁵ Including Attendance Allowance, Disability Living Allowance, Incapacity Benefit, Severe Disablement Allowance, disability-related components of Minimum Income Guarantee and those in hospital receiving Basic State Pension.

⁶ DWP (2002 CGA)

⁷ Estimates from Craig and Greenslade (1998) suggest take-up rates for Attendance Allowance of between 40% and 60%

⁸ Burchardt and Zaidi (2003). Severity based on the OPCS severity score scale.

Chart 2⁹



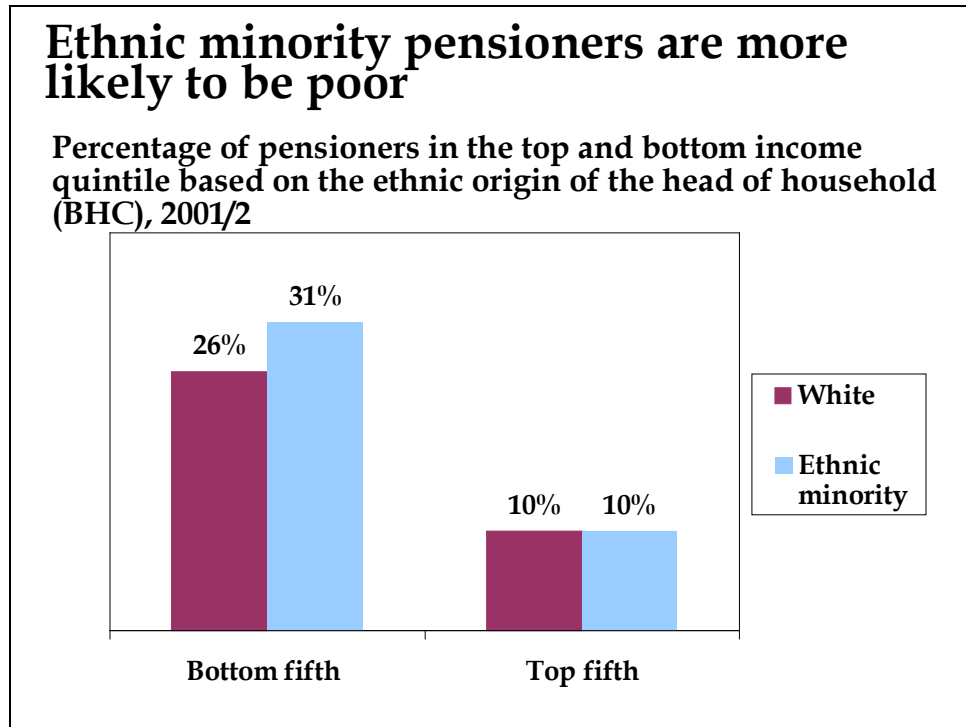
⁹ PPI illustrative calculation based on data from the 2001/2 Pensioners' Incomes Series, assuming costs of 70% (from Burchardt and Zaidi (2003) of pre-benefit income (£158)

Ethnic minority pensioners

Black and minority ethnic (BME) pensioners are more likely to live in poorer households, and may face specific barriers to claiming entitlements and services.

Ethnic minority households are disproportionately found at the bottom of the income distribution. Of the 400,000 pensioners living in households headed by someone from an ethnic minority, 31% are found in the bottom quintile compared to 26% of white pensioners (Chart 3).

Chart 3¹⁰



Pensioners with histories of non-standard employment

Pensioners with a history of non-standard employment are more likely to work beyond state pension age (SPA) with a significant part of their income coming from earnings.

Although part-time earnings might be expected to lead to lower pension incomes, there is no clear evidence that incomes in retirement are lower on average for those with a history of self-employment. However, the picture is complicated by high levels of self-employed earnings received after SPA. Earned income represents 45% of the total weekly income of those self-employed people working past SPA¹¹.

¹⁰ DWP (2003 HBAI). BHC is Before Housing Costs.

¹¹ Smeaton and McKay (2003)

People who have been self-employed during their working life are more likely to continue working after SPA. For example, self-employed men aged 50-59 are more than twice as likely to be working ten years later as employees¹². Working, often in non-standard employment, beyond SPA may either be a positive choice or regarded as a financial necessity.

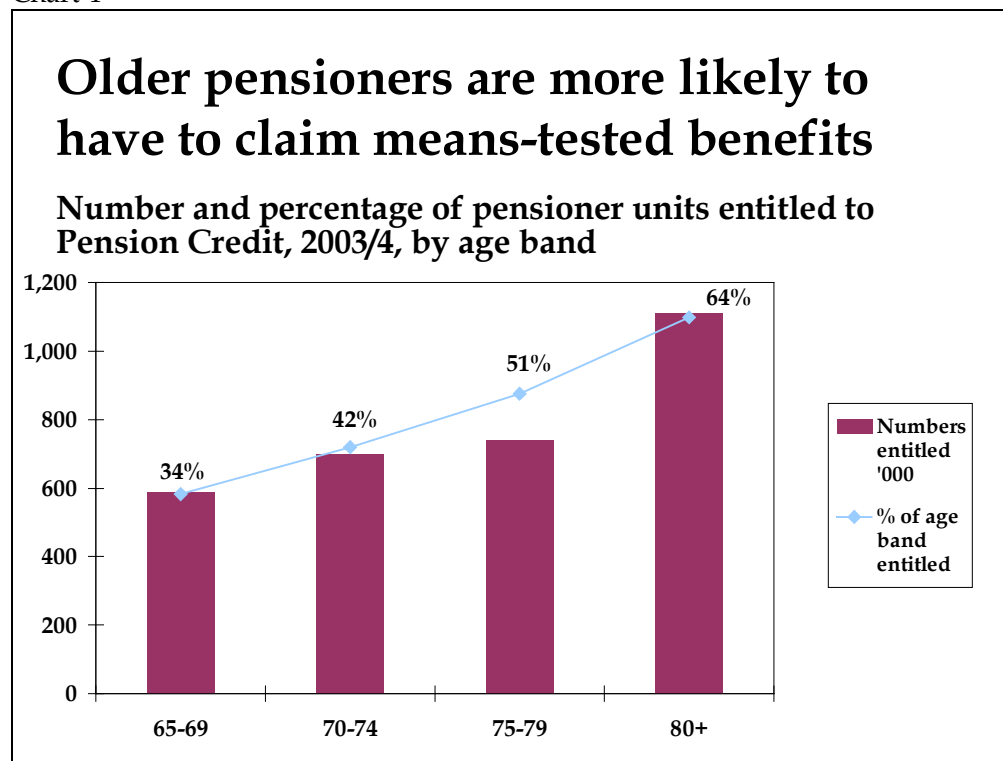
Older pensioners

Living longer increases the risk of having low income¹³. 4% of the population – 23% of pensioners – are aged 80 or older¹⁴.

Older pensioners are less likely to be able to work to supplement pension incomes. They are also more likely to have lived longer than expected, and so to have run down any assets they may have saved for retirement.

Pensions in payment – both from the state and private pensions – normally increase each year in line with price increases (at best), and over a long period of time can decline substantially relative to ‘adequate’ levels of income. For example, the Guarantee Credit component of the Pension Credit will be increased in line with changes in average earnings. As a result, reliance on means-testing increases with age (Chart 4).

Chart 4¹⁵



¹² Smeaton and McKay (2003)

¹³ See PPI Briefing Note Number 6 *Why are Older Pensioners Poorer?*

¹⁴ Derived from GAD interim 2001-based population projections database

¹⁵ DWP data

For most people pension income is likely to be lower than that of the ‘stereotype’ person typically used in policy planning

Policy planning often assumes a male in full-time, permanent employment throughout his working life, making regular contributions to a private pension. However, most people belong to one or more of the groups who are most at risk of low pension incomes.

- More than half of the population are women, increasing to three-quarters of the population aged 75 or older¹⁶
- One-quarter of the population are disabled¹⁷
- Approaching one in ten people in the UK belong to ethnic minority groups¹⁸
- Two-fifths of all workers are either self-employed, working part-time, or in temporary jobs¹⁹
- One-quarter of women and one-fifth of men are expected to live into their nineties²⁰

More information about how specific groups of people differ from the policy stereotype can be found in four papers available from the PPI website. These papers cover women, disabled people, people from ethnic minority groups and non-standard workers.

¹⁶ Derived from GAD interim 2001-based population projections database

¹⁷ PPI analysis of the Labour Force Survey, Spring 2003

¹⁸ ONS (2003 C)

¹⁹ Derived from ONS (2003 LFSQS)

²⁰ O’Connell (2002)

Chapter 2: The causes of low pension income

The UK pension system is based on labour market experience. Policy planning and presentation typically makes unrealistically high assumptions on earnings, work history and private pension build-up. Low earnings are the most important cause of low pension income. Any time not spent in full-time work reduces pension income. Low or irregular private pension contributions reduce pension income. Retiring later can improve pension incomes. Living to older ages reduces pension income. Disadvantage is cumulative.

The UK pension system is based on labour market experience

The UK pension system is built upon the contributory principle, and the amount of pension received is closely linked to employment²¹. The contributory system in the UK links retirement incomes to the number of years worked, and to some extent to the level of earnings.

In the state pension system, the amounts received from the Basic State Pension (BSP) and State Second Pension (S2P) are dependent upon contributions made before retirement. The amount received from SERPS and S2P²² is greater for people who had higher earnings. SERPS/S2P entitlement can range from zero for those earning below the LEL, not working, or self-employed since 1978 to a maximum of 29% of National Average Earnings (NAE). In comparison, BSP is worth 16% of NAE²³.

There is an even stronger link to work and earnings in the private pension system, which provides around one-third of total pensioners' incomes²⁴. The income from a private pension is proportional to earnings. Most private pensions are provided through employers, and very few of those not in work have a private pension.

The history of the current state pension system can be traced back to the Beveridge report in 1942²⁵. The system was designed to operate in a labour market of continuous full-time employment for men, and in a social environment of marriage and single-earner households – the norms in the UK before World War II.

The system has evolved over time to take account of changes in the labour market and society. For example, there are now credits in the BSP for unemployment and Home Responsibilities Protection (HRP) for those caring. Those with low earnings, some carers and those unable to work because of disability receive boosted S2P benefits.

²¹ For further detail on the UK pension system, see the glossary and PPI (2003 PP)

²² Or contracted-out equivalent

²³ For someone reaching SPA in 2003/4 PPI (2003 PP)

²⁴ PPI calculation based on DWP (2003 PIS). Includes all sources of income, including earnings.

²⁵ Beveridge (1942)

However, the current system of credits is not perfect, and gaps remain. The increase in protection for those not in full-time employment has been offset by a reduction in the relative importance of the benefits – BSP in particular – that provide this protection. The unemployed, self-employed, and many carers are not covered by S2P. Those with working lives different from the norm can find themselves with lower retirement income – or ‘under-pensioned’.

Policy planning typically makes unrealistic assumptions

To look at the impact of various changes in working life characteristics, a baseline, or reference individual is needed against which to measure change. The IM reference individual is²⁶:

- A man
- Starting work at age 21
- Fully retiring at State Pension Age (SPA - 65) giving a working life of 44 years
- In continuous full-time employment
- Earning median age-specific earnings²⁷
- Making continuous private pension contributions of 8% a year²⁸

Some of the characteristics of the reference individual are composite, based on aggregate characteristics across the UK. These characteristics reflect the average across the population as a whole. For example, earnings are based on all full-time employees, including male, female, white, ethnic minority, disabled and non-disabled. It has been necessary to make an assumption about some other characteristics. For example, a gender had to be assigned to model life expectancy.

The particular characteristics of the reference individual are a reflection of those most often used to evaluate the outcomes of the UK pension system²⁹ (and sometimes implicit in its design), and can be seen as a ‘policy stereotype’. **However, the policy stereotype by no means represents an average or typical pensioner.**

Most pensioners are women. Few people remain in work to age 65. Even fewer will have 44 years of continuous pension contributions. More people are having spells when they are not in full-time employment – either

²⁶ This chapter concentrates on the results obtained from the IM. More technical details about the structure of the model, the assumptions used, and sensitivity analysis can be found in the technical paper accompanying this report, available from the PPI website (Curry 2003 (TP)).

²⁷ The median is the point in the middle of the distribution, if all observations are placed in size order. Half of earners therefore have earnings less than the median. The mean, or average, earnings level is higher than the median, and is increased by a small number of people with very high earnings.

²⁸ Or having them made on his behalf by his employer

²⁹ For example, figures 2.7 and 2.8 in DWP (2002 GP) illustrating future state pension income assume at various points a working life from age 16 to state pension age and 35 years of continuous private pension contributions, and constant relative earnings levels throughout a working life.

through unemployment, temporary work or self-employment. People may have had different opportunities to build up private pensions at different times in their working life.

Although all of the characteristics of the policy stereotype seem reasonable in isolation, they combine to give a pension income above the average. **The level of pension income calculated for the policy stereotype retiring in 2003, at 42% of national average earnings, is higher than the average level of pension income for a single pensioner today of 37% of NAE³⁰.**

The policy stereotype who retires in 2003 is estimated to start with total pension income (state and private) of £202 per week, and a replacement rate (compared to earnings in the year before retirement) of 68%. He would become entitled to the Pension Credit at age 76 (Table 1).

Table 1: IM Results for the policy stereotype (in 2003 price terms)

		2003
At retirement	Real income p.w.	£202
	% average earnings	42%
	Replacement rate	68%
At age 75	Real income p.w.	£201
	% average earnings	35%
At age 85	Real income p.w.	£228
	% average earnings	32%
Age of eligibility for Pension Credit		76

The next sections of this chapter look at the impact on the pension income of the policy stereotype of changing characteristics *one at a time*. This is to give an illustration of the broad order of magnitude of specific changes, rather than a realistic example of, say, a self-employed individual. The final section looks at the impact of cumulative changes in characteristics.

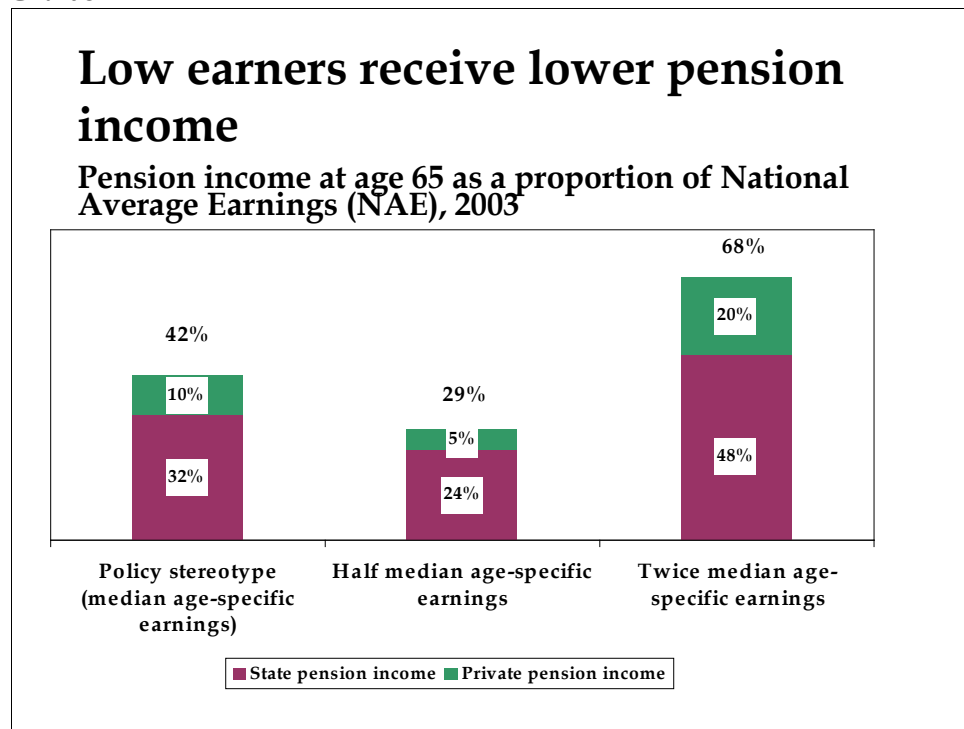
³⁰ Based on calculations from the Pensioners' Incomes Series 2001/2 DWP (2003 PIS)

Low earnings are the most important cause of low pension income

The direct link between state and private pension income and earnings levels means that pension income is directly linked to the earnings received when in work.

Individuals with low earnings throughout their working life receive lower pension income (Chart 5).

Chart 5³¹



The amount received in private pension income is directly linked to earnings. However, lower-earning individuals also receive lower state pension income. Even though the Basic State Pension is flat-rate, income from second-tier pensions is lower for those with lower earnings³². This is only partially compensated by the Pension Credit.

³¹ PPI calculations from the IM. Each example is based on the policy stereotype, the only difference being the assumed level of earnings. The policy stereotype has median age-specific earnings.

³² Second-tier pensions (SERPS and S2P) are assumed to be paid through state benefits, rather than being contracted-out. In reality, many pensioners (particularly higher earners) are likely to receive SERPS/S2P equivalents through a contracted-out private pension. However, it will still have been derived from state contributions (contracted-out rebates), and so should be considered a state pension benefit.

Women, disabled people, people from ethnic minorities and non-standard workers are more likely to have low earnings

Women: Women working full-time have lower levels of earnings than men working full-time, at all ages³³. Part, but not all, of this can be explained by the different occupational types and industries that women work in. Also important are levels of qualifications, the gender pay gap, and the impact of spending time out of the labour market. Many women work part-time, and as well as the reduction in earnings from working fewer hours, their hourly earnings are even lower than those of full-time women employees³⁴.

Disabled people: The median earnings of disabled people are around 10% lower than those of non-disabled people³⁵. This is partly because people who become disabled during their working life often had relatively low earnings before they become disabled³⁶.

Ethnic minorities: Hourly earnings are also lower than for the white population for most ethnic minority groups³⁷, and are considerably lower for the Pakistani/ Bangladeshi group. The exceptions are Indian, Chinese and 'other' ethnic minority groups. At most ages, full-time employees from ethnic minority groups are likely to earn less than white full-time employees³⁸.

Non-standard workers: The earnings of people in non-standard employment tend to be lower than those in full-time employment. Part-time workers earn on average £148 per week, compared to the average full-time wage of £465 per week³⁹. Average earnings across temporary employees are 20% lower than the average across permanent employees⁴⁰. Even after becoming permanent employees, people who started in temporary work have on average lower earnings throughout the rest of their career⁴¹.

Average earnings of the full-time self-employed are £150 per week higher than the average earnings of full-time employees⁴², but the distribution of earnings is very different. The self-employed are more likely to have very high earnings, but also more likely to have low earnings. A quarter of full-time self-employed people earn less than £174 per week, while 5% earn more than £1,243 per week⁴³.

³³ PPI analysis of the Labour Force Survey, Spring 2003

³⁴ ONS (2003 NES)

³⁵ PPI calculation from Labour Force Survey, Spring 2003. Median for disabled people is £344 per week, compared to £375 per week for non-disabled people.

³⁶ Burchardt et al (2000), using a work-limiting definition of disability

³⁷ WEU (2002 EM)

³⁸ PPI analysis of the Labour Force Survey, Spring 2003

³⁹ ONS (2003 NES)

⁴⁰ PPI analysis of the Labour Force Survey Q1 2003

⁴¹ Booth et al (2002)

⁴² £580 per week compared to £430 per week – PPI analysis of the Family Resources Survey 2001/2, excluding those with zero earnings

⁴³ PPI analysis of Family Resources Survey 2001/2, excluding those with zero earnings

Any time not spent in full-time work reduces pension income

Anyone who does not work as a full-time employee is likely to receive lower income from BSP, SERPS/S2P and private pensions. The size of the impact depends upon the alternative chosen instead of full-time work:

- Part-time workers have lower income, and so receive lower SERPS/S2P benefits and make smaller private pension contributions (if they make any)
- The self-employed are not members of SERPS/S2P
- Full-time carers for children or elderly relatives receive some protection of state benefits through credits for BSP and, from 2002, S2P⁴⁴, but in the absence of earnings may be less likely to be able to afford to make private pension contributions
- The unemployed receive credits for BSP, but not SERPS/S2P and may not be able to afford to continue private pension contributions
- An individual not in work, and not qualifying for any caring credits, may not build up any state pension entitlement.

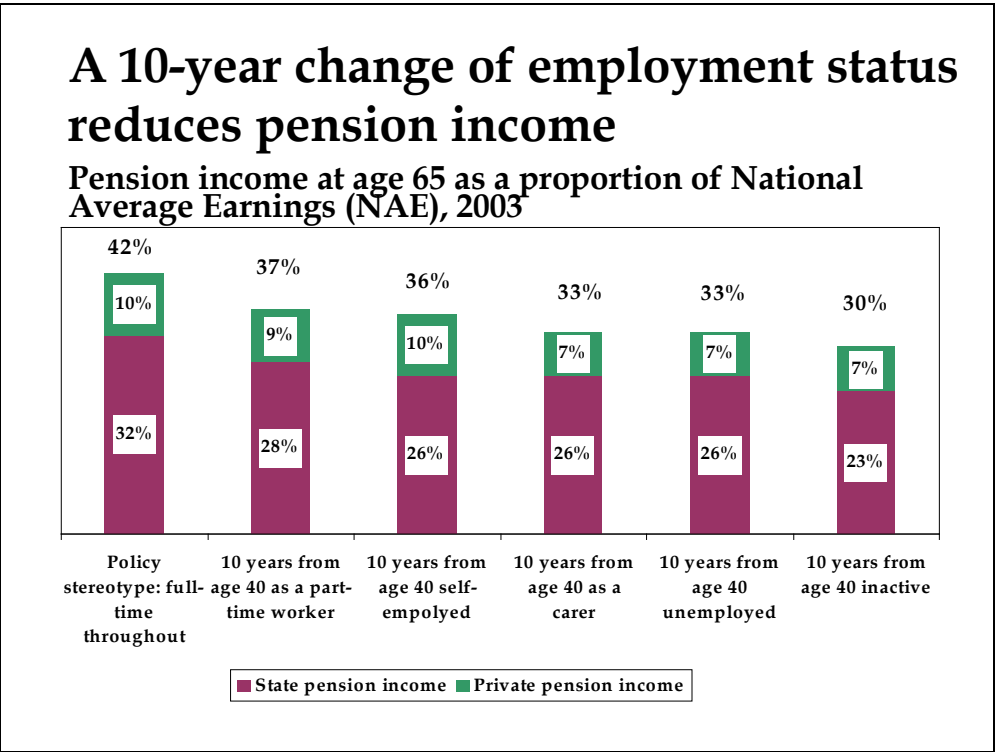
A 10-year change in employment status in the middle of a career that is otherwise as a full-time employee can have a large impact on the level of pension income received, depending on the new employment status (Chart 6).

State pension income is reduced most for inactivity, where there is no entitlement to the Basic State Pension. None of the different cases qualify for SERPS, except part-time work where entitlement is reduced compared to full-time work⁴⁵. Lower contributions for part-time work and gaps in contributions in other employment types reduce private pension income.

⁴⁴ Not all carers receive S2P credits, as the eligibility conditions are tighter than those for BSP. For example, caring for children who are older than 5 does not qualify for an S2P credit.

⁴⁵ Credits for caring apply only to S2P accruals from 2002

Chart 6⁴⁶



⁴⁶ PPI calculations from the IM. Each example is based on the policy stereotype, with different employment status assumed between ages 40 and 49. Self-employed and part-time examples are assumed to continue to make private pension contributions. Totals may not sum due to rounding.

People caring for children, the elderly or disabled are more likely to be in part-time work, or not in paid employment at all. Disabled people and people from ethnic minorities are more likely to be unemployed or not working.

Women: Women are less likely than men to be in paid employment. Between age 16 and state pension age over one in four women are not in, or looking for, paid work, compared to less than one in six men⁴⁷. The vast majority of women who are not working or seeking work aged between 25 and 49 are looking after family or the home⁴⁸. Having a family is often combined with part-time work. Between one-third and half of all mothers are in part-time work, depending on age.

Disabled people: Just under half of working age disabled people are in work, compared to 80% of non-disabled people of working age⁴⁹. Disabled people who want a job are twice as likely as non-disabled people not to have one⁵⁰, and are also twice as likely to be long-term unemployed⁵¹.

Ethnic minorities: One-third of working age people from ethnic minority groups are not in, or looking for, paid employment, compared to one-fifth of their white counterparts. The employment rate is lower for ethnic minority groups, and the unemployment rate is higher. As well as being more likely to be unemployed, people in ethnic minority groups are likely to remain unemployed for longer⁵². People in some ethnic minority groups are more likely to work part-time, and people in other groups are more likely to be self-employed. For example, 32% of working age people in the Black African group work part-time, while 23% of people in the Chinese group are self-employed⁵³.

Non-standard workers: Almost two-thirds of spells of self-employment last for more than 5 years, and almost half last longer than 10 years. On average a spell of self-employment lasts almost 8 years⁵⁴. The median length of time spent in temporary work before finding a permanent position (either in the same firm or a different one) is around 3½ years for fixed-term contracts, and 18 months for seasonal work⁵⁵.

⁴⁷ ONS (2003 LMT)

⁴⁸ PPI analysis of the Labour Force Survey, Spring 2003

⁴⁹ ONS (2003 LMS)

⁵⁰ The unemployment rate - the proportion of people looking for work who are unemployed - is almost twice as high for disabled people (7.9%) than for non-disabled people (4.2%)

⁵¹ Unemployed for 1 year or more

⁵² Modood et al (1997)

⁵³ WEU (2002 EM)

⁵⁴ Knight and McKay (2000)

⁵⁵ Booth et al (2000)

Low or irregular private pension contributions reduce pension income

Lack of access to private pension arrangements, either through an employer or individually, reduces pension income. Low earnings tend to result in no, or low, private pension contributions.

Private pension provision is an important component of the UK pension system. Around one-third of pensioner income is currently derived from private pensions⁵⁶. However, private pension coverage is not universal. Only 56% of workers (people in employment or self-employed) have a private pension, and younger workers are much less likely to have a private pension⁵⁷. Of those who do have private pensions, many do not make regular contributions⁵⁸.

The level of income received from a private pension depends upon the level of contributions, the number of contributions, and the age at which contributions are made⁵⁹. Those making low (or no) contributions, those contributing infrequently, and those starting to make pension contributions later are all likely to see reduced pension income. When contributions are made is less important than the total number of contributions.

⁵⁶ PPI calculations based on DWP (2003 PIS). Includes all sources of income, including earnings.

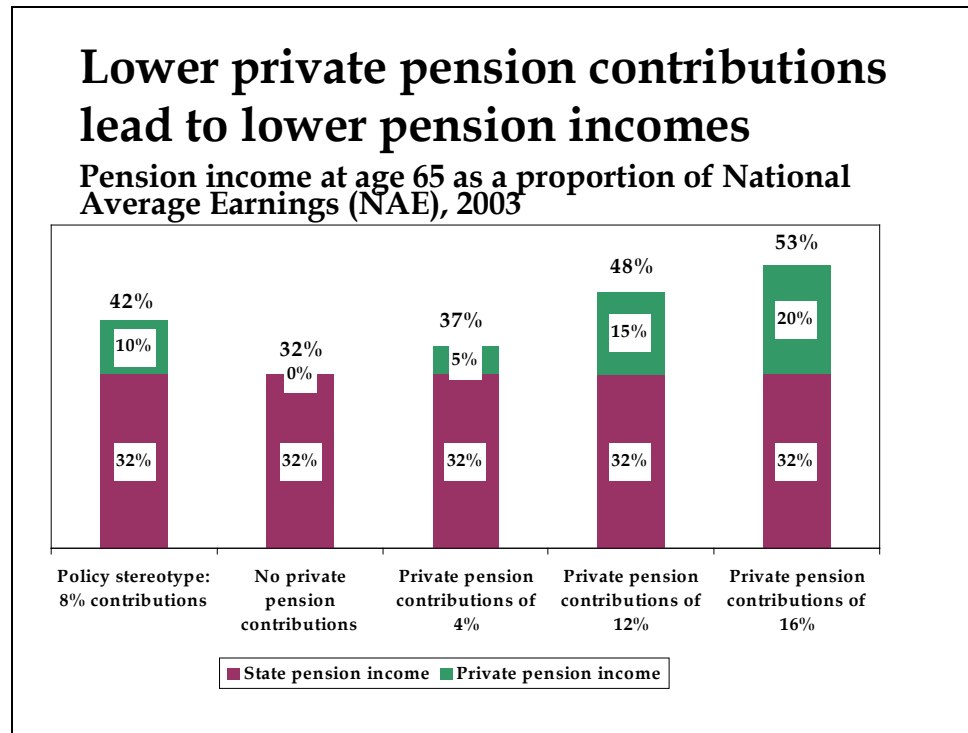
⁵⁷ Curry and O'Connell (2003) Chart 28, page 41

⁵⁸ Curry and O'Connell (2003) Chart 29 page 42

⁵⁹ Another major determinant of private pension income is the investment return received on contributions. This is not considered in this paper, although the technical paper contains some sensitivity analysis showing the impact of different investment return assumptions.

All other things being equal, an individual making low private pension contributions receives a lower level of pension income, and someone not making any private pension contributions receives a significantly lower pension income (Chart 7). Higher private pension contributions increase pension income.

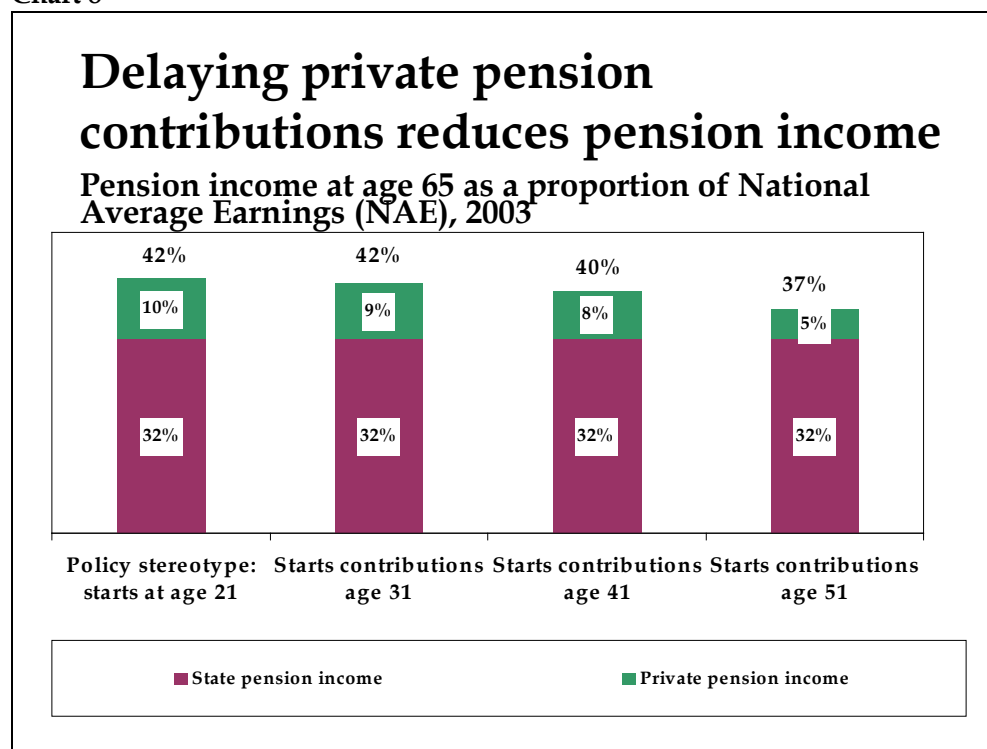
Chart 7⁶⁰



⁶⁰ PPI calculations from the IM. Each example is based on the policy stereotype, with different levels of private pension contribution, constant throughout working life. Totals may not sum due to rounding.

The level of pension income is also dependent on when contributions to a private pension are made. Pension contributions are not always continuous. Even if an individual remains in full-time employment throughout his or her working life, there may be times when pension contributions stop or start – for example changing employers (and so leaving an occupational pension scheme), or an increase in other expenditure (such as raising a family or moving house). Delaying making pension contributions can lead to a reduction in pension income (Chart 8), as less interest is built up on contributions.

Chart 8⁶¹



The timing of breaks in contributions is less important in determining the final impact on pension income than the level of contributions. The absolute size of pension contributions tends to increase by age (as earnings increase by age and contributions tend to be proportional to earnings). Early contributions tend to be lower in value but attract more compound interest. These two effects tend to cancel each other out to a certain extent in this analysis⁶². One of the implications of a low inflation/low interest rate environment is that the loss caused by not investing in pensions at earlier ages is reduced.

⁶¹ PPI calculations from the IM. Each example is based on the policy stereotype, with different starting ages for pension contributions. Totals may not sum due to rounding.

⁶² This is sensitive to the rate of return on pension contributions. If the rate of return is higher, the compound interest effect of early contributions more than offsets the impact of higher absolute contributions in later years.

Women and people from ethnic minorities are less likely to contribute to private pensions. Self-employed workers lose employer contributions to private pensions.

Women: Women are less likely than men to be accruing current private pension provision, especially at older ages⁶³. Women are also less likely to make regular contributions to a pension⁶⁴. 44% of men aged 25 to 59 and in work in 2001/2 had made contributions to a private pension in each of the last 10 years. Only 26% of women had made pension contributions in every year. 22% of women had made no private pension contributions in the last 10 years, compared to 6% of men.

Disabled people: Disabled workers are just as likely to be accruing current private pension provision as non-disabled workers, though they are less likely to make regular contributions. 37% of non-disabled people aged 25 to 59 and in work in 2001/2 had made contributions to a private pension in each of the last 10 years. For disabled people, only 30% had made contributions in every year. One-quarter of disabled workers had not made any private pension contributions at all in the previous 10 years, compared to only 13% of non-disabled workers.

Ethnic minorities: Ethnic minority workers are less likely to be accruing current and regular private pension contributions. 36% of all people aged 25 to 59 and in work in 2001/2 had made contributions to a private pension in each of the last 10 years. For people from ethnic minority groups, only 28% had made pension contributions in every year.

Non-standard workers: Almost two-thirds of full-time employees are accruing some current non-state pension provision. One-third of part-time employees have private pensions, and around a half of the self-employed. In the absence of an employer contribution, the self-employed would need to contribute more each year, or smaller amounts for more years, to achieve a similar level of private pension income.

Non-standard workers are less likely to make regular contributions to private pensions. Nearly all workers who had worked full-time in a permanent job in each of the last 10 years had made a private pension contribution in at least one year, and nearly two-thirds had made a private pension contribution in every year. Less than one-fifth of those who had ever been self-employed, worked part-time or had a temporary job had made private pension contributions every year, and a similar proportion had not made any private pension contributions.

⁶³ All figures relating to current private pension contributions are based on PPI analysis of 2001/2 Family Resources Survey, and include employer contributions

⁶⁴ All figures relating to regular contributions are based on analysis of the British Household Panel Survey waves 2 – 11, carried out for the PPI by the Gerontology Data Service of the Institute of Gerontology, Kings College London. ‘Regular’ contributions refer to a private pension contribution being made in at least one year out of the last 10 (1992 – 2002).

Retiring later can improve pension incomes

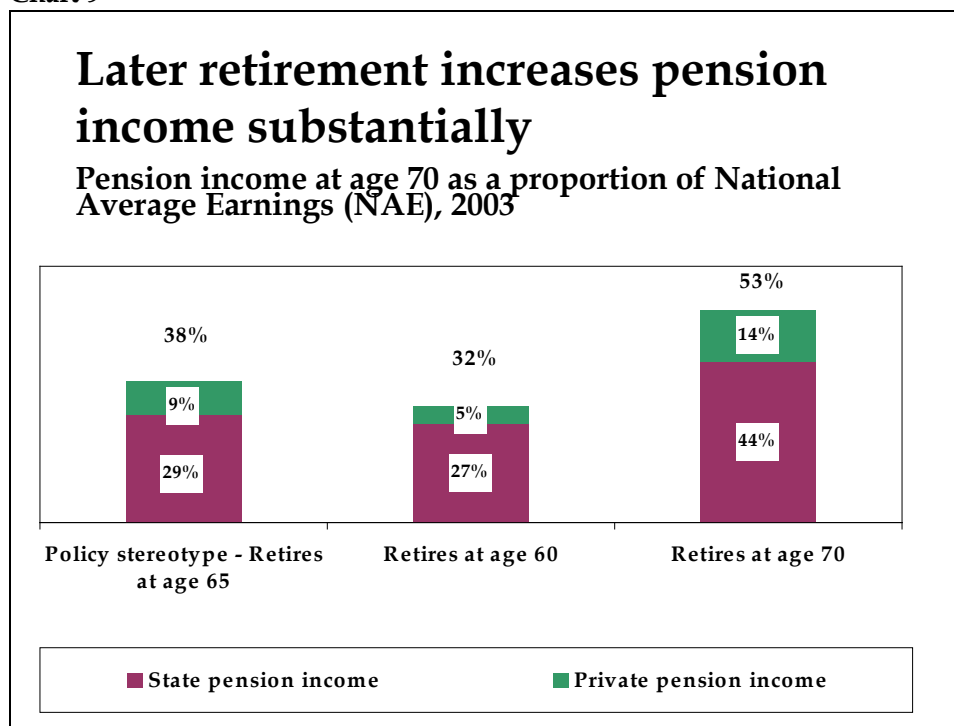
The positive impact of working one year longer can be larger than the negative impact of retiring one year earlier.

Choosing a later retirement age has three distinct effects on private pension income:

- The number (and size, if earnings increase with age) of contributions is increased
- The cumulative investment return on contributions is higher, as interest accrues over more years
- A higher annuity rate is payable, as the pension is expected to be paid for a shorter length of time.

Retiring at age 70 increases pension income at that age by up to 15 percentage points of NAE (Chart 9) at age 70, compared to an individual retiring at age 65. Retiring at age 60 rather than age 65 reduces pension income at age 70 by 6 percentage points of NAE.

Chart 9⁶⁵



⁶⁵ PPI calculations from the IM. Based on the policy stereotype, with different retirement ages. For retiring early, state pensions are not assumed to be available until state pension age, but private pension income starts from age 60. For late retirement, both state and private pensions are assumed to be deferred, based on the enhanced deferral rates from 2006 outlined in DWP (2002 GP).

Retiring later increases private pension income through an additional 5 years of contributions. State pension income is also increased by deferring or accumulating benefits⁶⁶. As well as reducing private pension income, retiring early also reduces the number, and value, of contributions to state pensions.

For an individual retiring at 65, just 5 years of price-linking has a substantial impact on total pension income. His pension income, worth 42% of NAE at age 65, declines to 38% of NAE by the time he is 70.

Women and non-standard workers are more likely to work past state pension age, while people from ethnic minorities and disabled people are more likely to retire early

Women: A similar proportion of men and women of state pension age (SPA) or older are in work. However, this masks some important differences in the five years immediately after reaching SPA. 25% of women continue to work between ages 60 and 64, compared to only 13% of men aged between 65 and 69. This reflects the younger age of women, and the likelihood that their partners continue to work until they reach the higher SPA for men⁶⁷.

Disabled people: Lower economic activity rates at older ages suggest that disabled people retire earlier than non-disabled people. The employment rate of disabled people aged between 50 and state pension age is only 43%, compared to 83% for non-disabled people of the same age⁶⁸. People with a disability are much less likely to work beyond age 60, with employment rates less than half those of non-disabled people.

Ethnic minorities: There are significant differences in health status in old age between different ethnic groups. In particular, Pakistani and Bangladeshi elders are most likely to report ill-health, with 39% of those aged 60 or older reporting an illness or activity that had restricted their activity in the last 2 weeks, compared to only 19% of white people of the same age⁶⁹. A factor in this could be the different socio-economic circumstances of older people from ethnic minority groups⁷⁰.

Non-standard workers: People who have been self-employed at some point during their working lives are more likely to work past state pension age⁷¹, and non-standard employment in general is much more likely past state pension age⁷². However, it is not clear if continued working beyond state pension age is a positive choice, or a necessity to maintain a reasonable level of income.

⁶⁶ Fewer than 2% of people actually defer state benefits. If instead the benefits are claimed while the individual is still in work they can be accumulated to provide a higher income later.

⁶⁷ Smeaton and McKay (2003)

⁶⁸ PPI analysis of the Labour Force Survey, Spring 2003

⁶⁹ Evandrou M. (2000)

⁷⁰ Although differences in health remain even after accounting for different socio-economic circumstances Evandrou M. (2000)

⁷¹ Knight and McKay (2000)

⁷² Smeaton and McKay (2003)

Living to older ages reduces pension income

Pension income falls relative to earnings after retirement. Many individuals, having started retirement without needing to claim Pension Credit, fall back onto Pension Credit at an older age.

State pensions in payment (not including Pension Credit) are increased each year in line with changes in prices. Some private pensions in payment are also increased in line with prices (the Retail Prices Index – RPI), some to limited changes in prices (e.g., the lower of RPI or 5%), and some do not increase at all (e.g., a level annuity)⁷³. At best, total income from pensions each year increases in line with price inflation. As national average earnings (NAE) increases faster than prices⁷⁴, then pension income falls relative to earnings.

The fall in relative value of pension income is only one of the factors leading to falling incomes relative to earnings after retirement. The longer people live, the more likely it is that they have lived longer than they expected, or had saved for. Any savings a person may have made are more likely to have run down. Costs may also increase for older pensioners.

The Pension Credit (PC) will become an increasingly important source of retirement income. PC consists of the Guarantee Credit (GC)⁷⁵, which ensures a minimum level of income (£102.10 a week for single pensioners in 2003), and the Savings Credit (SC), which is designed to avoid penalising small savings. SC is payable on income above the full Basic State Pension (BSP) level, and can provide a top-up of up to £14.90 a week (for a single pensioner), and is payable on incomes of up to £139 a week (for a single pensioner).

Until the end of this parliament (May 2006 at the latest), GC will be increased every year in line with the growth in average earnings. It is assumed that this will continue, in line with recent government projections⁷⁶. The gap between GC and BSP will widen by more than average earnings. As SC entitlement is based on the size of this gap, the level of income below which individuals are entitled to SC will also increase faster than average earnings.

Both GC and SC will therefore increase relative to other pension income. Even the policy stereotype, retiring with income substantially above PC levels falls back onto PC later in his retirement (Chart 10).

⁷³ See Appendix 3 of the technical paper for an illustration of the effect of different annuity types

⁷⁴ This is generally the case, although there have been some years (e.g 1977) where price inflation has been higher than earnings growth.

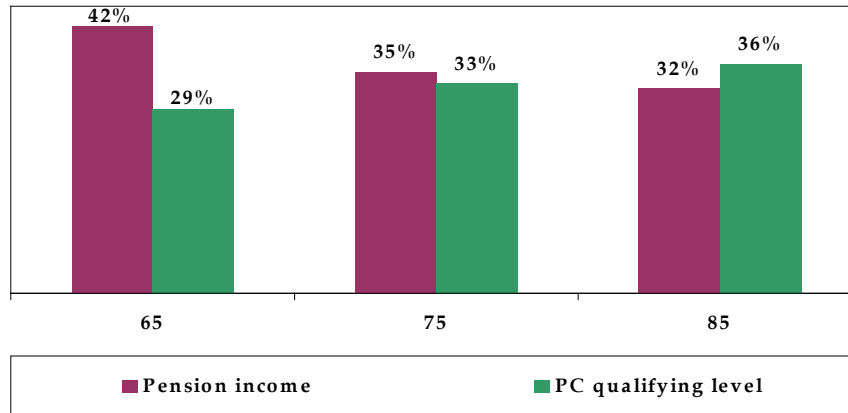
⁷⁵ Before October 2003, GC was known as the Minimum Income Guarantee (MIG).

⁷⁶ DWP (2002 GP). Reducing the minimum income level for pensioners below the current level (22% of NAE) may not be sustainable.

Chart 10⁷⁷

Individuals fall back onto Pension Credit during retirement

Pension income of the policy stereotype (retiring at age 65 in 2003) at different ages, as a proportion of National Average Earnings (NAE)



Women are more likely to live to older ages. Disability increases with age, and the additional costs of disability are not fully covered by benefits.

Women: More women than men will reach state pension age, and women then live longer than men after state pension age. Despite this, many women appear to be relying on a partner to provide retirement income. Almost half of women over age 65 are widows, with lower average incomes than other pensioners. Higher life expectancy increases the costs of pension provision, and reduces the value of pension income at older ages. This increases the chances of claiming means-tested benefits in old age.

Disabled people: Almost a quarter of people above state pension age, and over half of people aged 90 or older, receive state disability benefits. Although the income of pensioners receiving disability benefits is higher than the income of pensioners that do not receive them, this does not take into account the additional costs of disability, which can be substantial⁷⁸.

⁷⁷ PPI calculations from the IM, based on the policy stereotype

⁷⁸ See Chart 2

Disadvantage is cumulative

People in under-pensioned groups are likely to suffer from a series of disadvantages that combine to reduce pension income substantially. People belonging to more than one of these groups are likely to see even lower pension income.

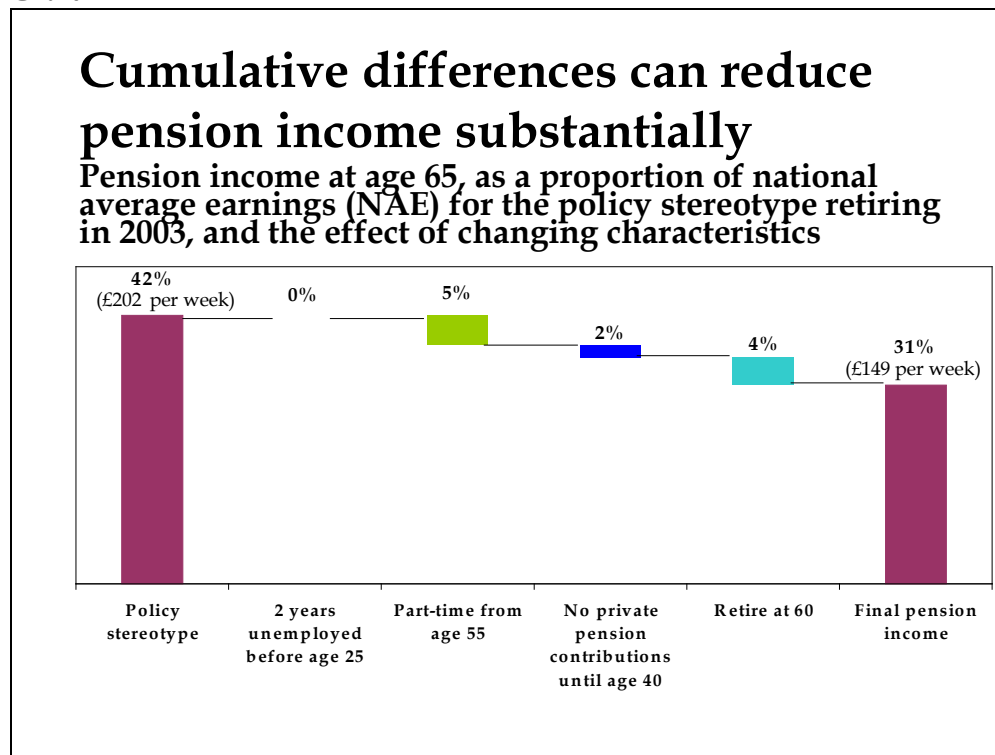
Individuals are likely to have a number of characteristics different from the policy stereotype. A more realistic individual has a pension income much lower than the policy stereotype. For example, women on average have lower earnings, less full-time employment and fewer private pension contributions.

Changing a number of characteristics at the same time helps to build up a picture of how these characteristics interact to change pension income. For example, an individual who:

- Is unemployed for 2 years between ages 20 and 25
- Works part-time from age 55
- Does not start private pension contributions until age 40, and
- Retires early at age 60,

would see a pension income of more than 10 percentage points of NAE lower than the policy stereotype retiring in 2003 (Chart 11) – a reduction in pension income of one-quarter.

Chart 11⁷⁹

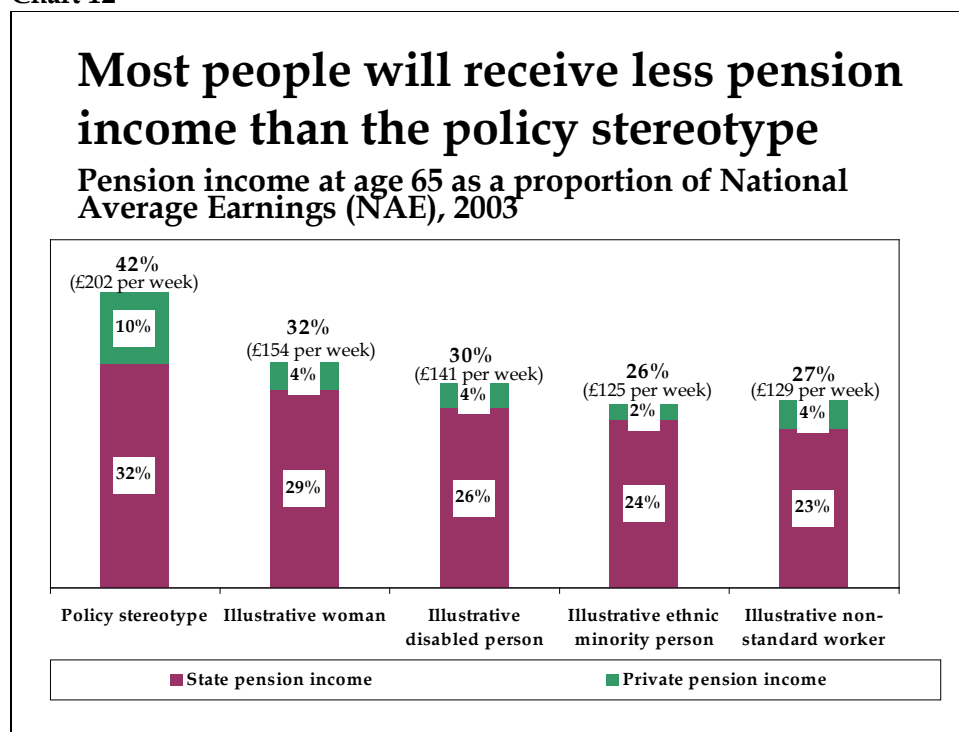


⁷⁹ PPI calculations from the IM

People belonging to under-pensioned groups are likely to have a number of characteristics different from the policy stereotype. Women, people from ethnic minorities, disabled people and non-standard employees are all more likely to have low earnings, and are less likely to be making regular private pension contributions. Some ethnic minority groups are more likely to be unemployed. Women are more likely to work part-time, and spend time out of the labour market caring for children, the elderly or disabled people. Disabled people and people from ethnic minorities are more likely not to be working at older ages, while the self-employed and women are more likely to continue working past state pension age.

These differences in characteristics can be used to construct ‘illustrative’ individuals from each of the different under-pensioned groups⁸⁰. Although these do not represent a ‘typical’ or ‘average’ person from these groups they highlight how combinations of different characteristics can lead to differences in pension income. These illustrative individuals receive substantially lower pension incomes than the policy stereotype (Chart 12).

Chart 12⁸¹



⁸⁰ The assumed characteristics used for each illustrative individual are listed in Appendix 1. Detailed analysis of the impact on pension income of each particular characteristic is shown in each of the separate under-pensioned papers, available on the PPI's website.

⁸¹ PPI calculations from the IM. For the illustrative non-standard worker, who is assumed to retire at 67, pension income is shown at age 67 rather than age 65.

These under-pensioned groups are not mutually exclusive. Disadvantage is likely to be larger for people who belong to more than one of the groups identified here. In particular, women who also belong to one of the other groups are much more likely to get a very low pension income. Ethnic minority and disabled women have the lowest earnings, are least likely to be in work (full-time or part-time), and least likely to have private pension contributions. Although some of these combinations of characteristics will be reflected in the illustrative examples they do not show the full impact for the most disadvantaged individuals.

Chapter 3: The future under-pensioned

As current policy rolls out in future, the gap between the pension income of the policy stereotype and the under-pensioned narrows. While under-pensioned groups may be slightly better off, the policy stereotype is worse off. Pensions will become more equal but less generous.

The Basic State Pension, which offers most protection to those not working, will become less important as a source of pension income. State Second Pension (S2P) will increase the pensions of low-earners, but higher earners will still receive higher state pensions. Even the policy stereotype will need to claim Pension Credit (PC) from state pension age, reducing the value of making private pension contributions.

The current system will not resolve the under-pensioned problem. The same characteristics that have led to low incomes among today's pensioner population will place the majority of the working population at risk of being under-pensioned.

Any contributory-based pension system will disadvantage some people, particularly if the resulting pensions also depend on earnings history.

The pension system becomes more equal, but less generous in future

Future generations will see a smaller reduction in retirement income from different characteristics (Chart 13 and Chart 14). S2P and PC make the pension system more equal in future (through S2P and PC), so that a typical under-pensioned individual's pension is closer to that of the policy stereotype individual of that generation⁸².

Each characteristic of the under-pensioned has a smaller negative impact on pension income in future. However, the pension income received by the policy stereotype will be lower than the 42% of NAE it is today.

⁸² Assuming that Pension Credit is claimed

Chart 13⁸³

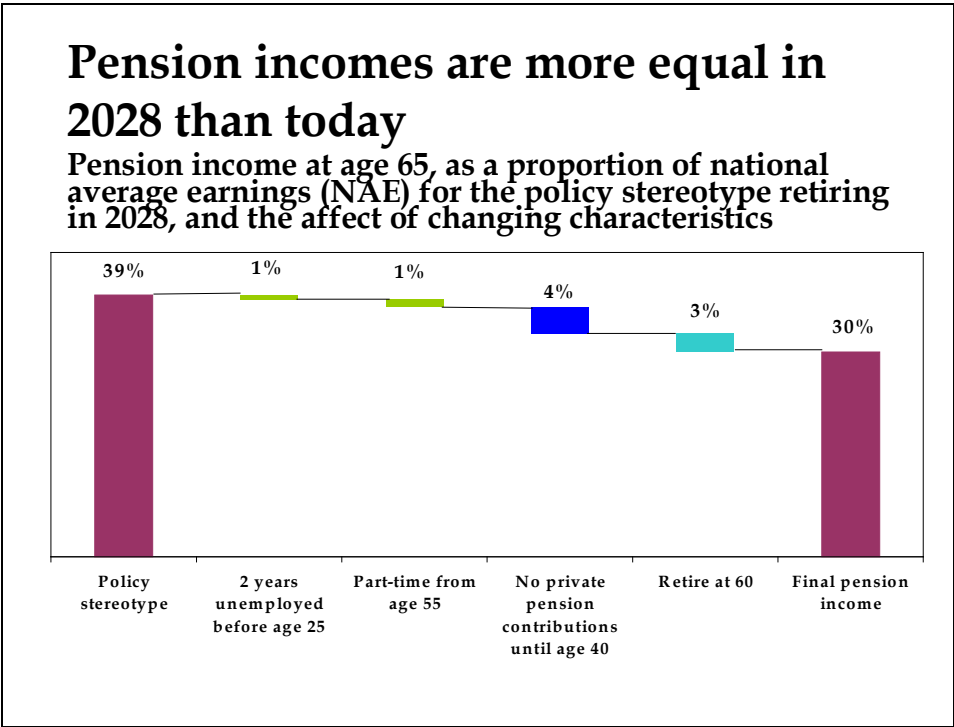
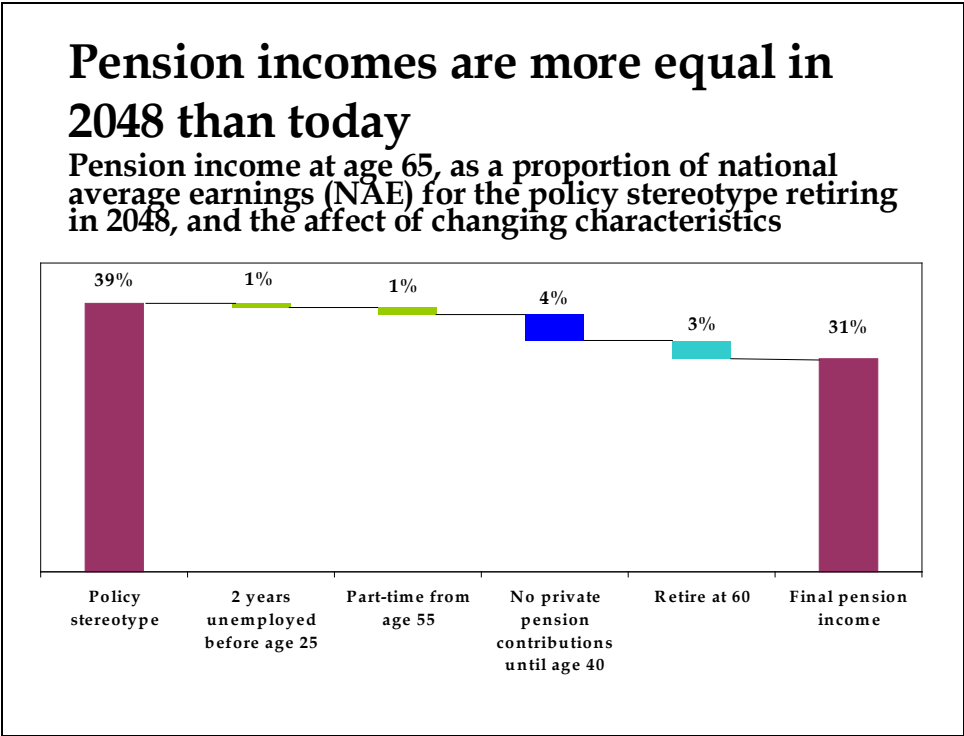


Chart 14⁸⁴



⁸³ PPI calculations from the IM

⁸⁴ PPI calculations from the IM

There are two recent policy changes that will help to make pension incomes more equal for people reaching SPA in future years. These are the introduction of State Second Pension (S2P) to replace SERPS, and the introduction of the Pension Credit (PC).

S2P will improve pension incomes for some of the under-pensioned, but gaps in contributory records will remain

S2P is more redistributive than SERPS, in that those who earn below the Lower Earnings Threshold (£11,200 p.a. in 2003) receive a flat-rate benefit that is much higher than they would have received under SERPS. Anyone earning above this level also receives an earnings-related benefit, in addition to the flat-rate level. Some carers and disabled people are also 'credited in' to the flat-rate part of S2P.

For some members of the under-pensioned groups, S2P will significantly improve income, and so offset the impact of low earnings, career breaks for caring and disability. However, there will still be a number of people who will not benefit from S2P.

1.5 million, or one in eight, working women currently earn less than the Lower Earnings Limit (currently £4,004 p.a.), and so will not receive S2P for their earnings⁸⁵. As these will be part-time workers (due to the impact of the minimum wage), some of these women may qualify in other ways, through credits for caring or disability.

However, credits are not awarded to all carers or disabled people who qualify for credits in the Basic State Pension (BSP). Of those caring from children, only those whose youngest child is aged 5 or younger will qualify for credits. Credits for caring for the elderly, or disabled people, are linked to benefit receipt, such as the Carers Allowance, which are not received by every carer. Credits are also only awarded for a full financial year of qualification (April to April), and so many spells of caring will have at least part that is not covered by credits (for example, the financial year of a child's 6th birthday will not be covered).

Although S2P covers more people than SERPS, coverage is not as great as BSP. As the value of BSP reduces relative to earnings, the value of the credits awarded to those not in work will reduce. For many, this will not be replaced by the credits awarded in S2P.

Early retirement is also not covered by S2P, though is by the BSP where credits are automatically awarded to men aged between 60 and 64. The self-employed are not covered by S2P, but are in BSP.

⁸⁵ WEU (2003)

Future generations will become entitled to Pension Credit at earlier ages

Over time, the different uprating convention for PC compared to other state pensions increases the relative importance of PC as a component of pension income. A higher proportion of pensioners will be entitled to PC, and pensioners are likely to be entitled earlier in retirement. For example, while the policy stereotype retiring in 2003 becomes entitled to PC at age 74, his son retiring in 2028, and his grandson retiring in 2048 are entitled at age 65.

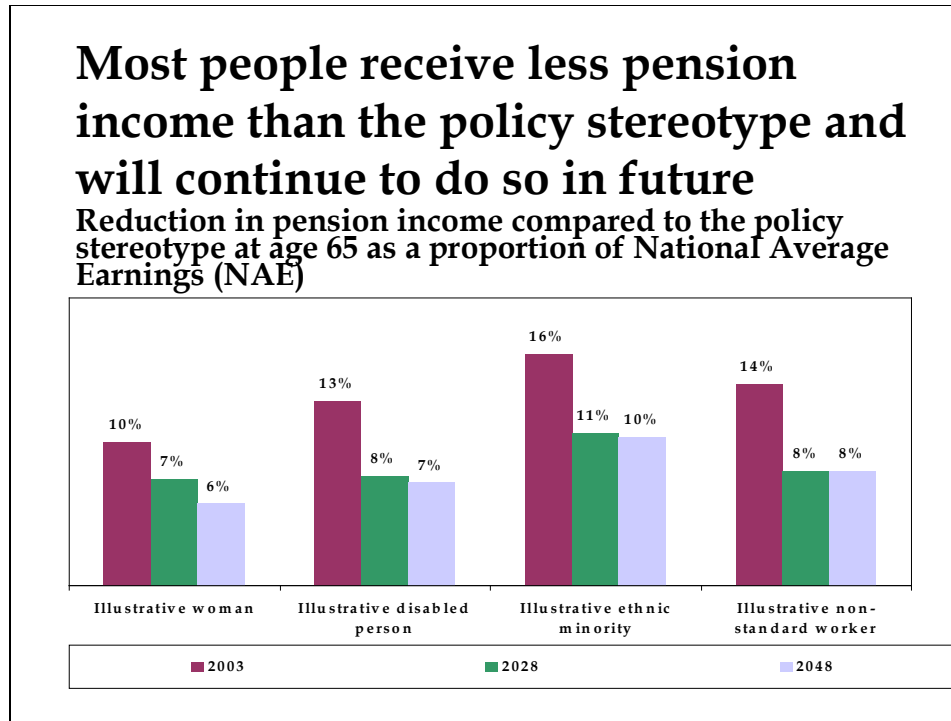
Widening entitlement to PC has two major effects. Firstly, PC entitlement reduces the loss of pension income from lower SERPS/S2P and from lower private pension income. Instead of losing £1 of means-tested income for every £1 of private pension income, individuals lose only 60p. Paradoxically, this also means that there is less to gain from making private pension contributions. Future pensioners who have saved will see a relatively smaller increase in their income compared to those who have not saved.

Secondly, it changes the balance of state pension income away from contributory pension income, which has *accrued* to the individual, towards means-tested benefit income, that must be *claimed* and is dependant on other sources of income. This raises a number of issues. For example, whether a person will qualify for PC will not be known until the individual is close to SPA, making it difficult for individual, or their advisers, to decide how much private pension provision to make, if any.

The current system will not resolve the under-pensioned problem

Despite the pension system becoming more equal in future, problems of low pension income for particular under-pensioned groups will remain (Chart 15).

Chart 15⁸⁶



There may be changes in the characteristics of people in under-pensioned groups. The gender pay gap may narrow, the earnings levels of ethnic minorities may improve relative to the white population, and disabled people may find it easier to find, or remain in, work. On the other hand, differences may get worse. There could be an increase in non-standard employment, or increases in unemployment. Even if gaps narrow, there will always be some differences between particular groups of people. And within groups, there is considerable diversity in earnings and work patterns.

Any contributory-based pension system will disadvantage those people who are less likely to be in permanent, full-time employment, particularly if the resulting pensions are higher for those who had higher earnings during their working life.

⁸⁶ PPI calculations from the IM. Figures for the non-standard worker are at age 67.

Appendix 1: Illustrative individuals

The illustrative individuals used in this analysis have a number of characteristics different from the policy stereotype.

Illustrative woman

- Longer life: using women's rather than men's life expectancy
- Lower earnings: the median age-specific full-time earnings of all women
- A career break; at age 29, lasting 7 years, to have two children and ending when the youngest reaches age 5
- Working part-time for 5 years; from age 36 to age 40, with no private pension contributions, and 40% of full-time earnings
- Working part-time while caring; from age 56 for 5 years, with private pension contributions and 40% of full-time earnings
- Continuing work past SPA; staying in part-time work until age 62

Illustrative disabled person

- 90% of median age specific earnings
- A period of unemployment when becoming disabled: for 2 years at age 30
- Longer spells of economic inactivity later in working life: 5 years from age 50
- No contributions to private pensions after becoming disabled
- A shorter working life: retiring at age 60

Illustrative individual from an ethnic minority group

- Lower earnings: the median age-specific full-time earnings of all ethnic minority workers
- Spells of unemployment: lasting 2 years at ages 25, 38, 45 and 58
- A 5-year spell of self-employment later in working life: from age 40
- Less regular contributions to private pensions: starting at age 40
- A shorter working life: not starting work in the UK until age 30, and retiring at age 60

Illustrative non-standard worker

- 80% of median age specific earnings
- A short spell of temporary work, without private pension provision, more likely at earlier ages: age 25 to 27
- A longer spell of self-employment later in working life: from age 40
- Less regular, and lower contributions to private pensions while self-employed: starting at age 50 at 4% of earnings
- A longer working life: not retiring until age 67 (but working part-time and not contributing to a private pension after SPA)

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Chris Curry takes responsibility for any remaining errors and omissions.
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