Institute for Fiscal Studies

The Changing Face of Retirement

Future Patterns of Work, Health, Care and Income among the Older Population

IFS Report R95

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Contents

Executive Summary

This report presents projections of mortality, family composition, health, care receipt, care provision, labour supply and receipt of disability benefits for people aged 65 and over from 2010–11 through to 2022–23, as well as projections of their wealth and incomes, in order to offer commentary on the net income distribution and rates of poverty for those aged 65 and over through to the early 2020s. We also discuss the effect some alternative policy scenarios could have on the evolution of these incomes.

Demographic circumstances

- Mortality rates are projected to improve, particularly for men, over the simulation period, leading to an increase in the proportion of older pensioners living in couples rather than alone. In 2010–11, 25% of those aged 85 and over lived in couples; we predict that this will rise to 38% by 2022–23. While the percentage of those aged 85 and over who are in couples has been increasing in recent decades (for example, by around 5 percentage points a decade between 1990 and 2010), the projected increase over the next decade would represent an acceleration of this trend.

- Women aged 65 and over generally report being in poorer health than men at a given age, but we project that the health of women at all ages will increase consistently over the simulation period, continuing a trend seen in the recent past. On our five-level health index, the proportion of women in the best health group rises within each age group by around 7 percentage points – for example, from 39% in 2010–11 to 47% in 2022–23 for women aged 65 to 74; for men, the increases within each age band are more modest.

- The proportion of women receiving some form of care falls slightly in all age groups as projected health improves, with a sharper fall among those aged 65 to 74, for whom the projected decline is from 29% in 2010–11 to 24% in 2022–23.

- We predict that care provision among older women will almost double over the simulation period (from 4% in 2010–11 to 7% in 2022–23 for those aged 85 and over) as their husbands live longer. Although this might suggest that an excessive burden could be placed on these carers, we see that in fact they generally come from the increased number of older women in good health. Provision of care from both men and women in the worst health category is found to have declined in recent years (from 20% in 2002–03 to 17% in 2010–11 for men and from 14% to 10% for women over the same period) and our model projects that this decline will continue through to 2022–23 (to 15% and 8% for men and women respectively).

- Our labour supply model shows the effects of the rising state pension age (SPA), with both men and women remaining in paid work longer as the SPA rises. The majority of the increase is for women, whose SPA is rising the most (and among whom health is projected to improve): 16% of 65- to 69-year-old women are in work in 2010–11 and we expect this to rise to 37% in 2022–23. Our model projects that 60- to 64-year-old women will be as likely to be in paid work as men of that age by 2018–19, with the equivalent being true of 65- to 69-year-old women by 2020–21.

- Despite rising employment rates among older people, we do not see a projected increase in employment among those in poor health. Instead, the additional female workers are drawn predominantly from the healthiest of our five health categories: the employment rate of 65- to 79-year-old women in the best health is projected to rise by 9ppts from 15% in 2010–11 to 23% in 2022–23 (therefore rising at a faster rate than it has been in recent years), while we project that the rate among the least healthy women remains static at just 3%.

- In line with the results of the care receipt simulations described above, we see receipt of attendance allowance falling for women, from 58% in 2010–11 to 48% in 2022–23 for those aged 85 and over, and rising for men from 43% to 48% for the same age group. Receipt of this benefit is concentrated among the very elderly, so the rate for all those aged 65 and over was 12% for men and 20% for women in 2010–11 and we project this to rise to 14% for men and fall to 17% for women.

- The receipt of disability living allowance (DLA) is projected to fall, partly because of improvements in health but also because of the lagged effect of reforms to DLA for working-age individuals, which reduce the claimant rate at younger ages and then gradually feed through into reduced receipt of DLA among those aged 65 and over. Between 2010–11 and 2022–23, we project that receipt of DLA among those aged 65 to 74 will fall from 10% to 6% among men and from 10% to 8% among women.

Gross incomes

- We project that between 2010–11 and 2022–23 the average real gross income among those aged 65 to 74 will grow by an average of 3.8% per year. Average growth within the top quintile of the individual gross income distribution is projected to be greater than that within the bottom quintile (4.9% compared with 1.5%). This growth in income – and the fact that it is greater for the top quintile – is driven by an increase in earned income, which is projected to grow by an average of 8% per year for this age group. This increase in mean earnings occurs as the state pension age rises and some people remain in work for longer. In addition, real median earnings for 65- to 74-year-old women in paid work are projected to rise over the period,

suggesting the additional older workers are earning more on average than workers aged 65 and over were in the past.

- For older age groups, the model projects slower growth in average incomes, and growth is again projected to be greater towards the top of the income distribution than the bottom, due to rising asset income.

- Despite the increase in earnings, most gross income for the 65-and-over population comes from state and private pensions. For those in the bottom three quintiles of the income distribution, state pensions form the majority of gross income in 2010–11 and this is projected to remain the case through to 2022–23. The variation in income levels among those aged 65 and over is driven primarily by the size of private pension income and, for younger individuals within this age group, income from earnings.

- Families' net wealth is projected to rise and is primarily made up of housing wealth rather than financial assets. Property wealth is projected to grow in all groups as a result of both increasing house values and an increasing proportion of older individuals being owner-occupiers. In particular, we project that by 2018–19 over 75% of single pensioners will be owner-occupiers, compared with 68% in 2010–11.

Net incomes and poverty

- Between 2010–11 and 2014–15, our model predicts slow growth in median net incomes among those aged 65 and over. Our projections suggest that median income growth will then increase, averaging 2.0% a year between 2014–15 and 2022–23, moving back towards the rate of growth in net family incomes for this group through the 2000s, which averaged just over 2.8% per year.

- Median income is projected to grow faster than during the 2000s for younger pensioners (3.0% per year versus 2.7% per year for those aged 65 to 74) but more slowly for older pensioners (1.6% per year versus 3.0% per year for those aged 75 and over), something of a reversal of fortunes within the pensioner population.

- Income inequality among the 65-and-over population is projected to increase, with incomes at the 90th percentile growing at 3.3% per year in real terms and incomes at the 10th percentile growing at just 0.6% per year. The 90/10 measure of income inequality is thus projected to rise from 2.7 to 3.8 over the course of the 2010s. This increase is primarily driven by rising earned income among 65- to 74-year-olds.

- Absolute poverty using a benchmark uprated in line with the consumer price index (CPI) is projected to fall sharply from 20.1% in 2014–15 to 12.7% in 2022–23, around a third of its 2000–01 level.

- As rates of poverty decline among those in couples, being an older single woman will become a stronger indicator of being in income poverty, which could have important implications for the targeting of policy. By this, we do not mean that specific single women in our model will fall into poverty – we project that income poverty actually falls among women who are alive and single in both 2010–11 and 2022–23 – but that this association is the result of the changing composition of the single pensioner population.

Policy reforms

- We project that retaining disability living allowance until 2022–23, rather than replacing it with personal independence payment (PIP), would only lead to a small increase in the proportion of those aged 65 and over receiving disability, incapacity or carers' benefits (from 21% to 22%), but would increase the mean income of those affected by £17 per week.

- We estimate that indexing the state pension by the CPI rather than by the triple lock after the end of this parliament would reduce average net incomes among those aged 65 and over by around 3% in 2022–23, with the losses concentrated in the middle and lower middle of the distribution. We estimate that this would increase rates of absolute poverty in 2022–23 by 2ppts, from 13% to 15%. This is against the backdrop of public spending on state pension provision being projected (by the Department for Work and Pensions) to rise by 24% between 2010–11 and 2018–19 while spending on all other benefits and tax credits falls by 7%.

- Many with unannuitised defined contribution (DC) pension pots will, as a result of Budget 2014, have greater flexibility in how they use their DC pension wealth. We project that those retiring with unannuitised DC pots between 2016–17 and 2022–23 will have funds worth an average of £200,000. A fund of this size would provide a choice between roughly £200 per week of gross income and £200,000 in wealth. This unannuitised DC wealth is larger, on average, among those with more non-pension wealth in 2022–23. However, we project that among the least wealthy fifth of the population, this is around 16% of the size of non-pension wealth holdings, whereas it is only 3% of the size of non-pension wealth for the wealthiest fifth.

- Our model suggests that changes to annuity rates would only have a limited impact on the incomes of those aged 65 to 74 over the next few years. We project that a 20% rise or fall in annuity rates from 2016–17 would lead to a rise or fall in the average net incomes of those aged 65 to 74 of less than 1% in 2022–23. In part, this is because only a minority of families would be affected by such a change; but even across those families who would be affected, the average increase or fall in their net incomes would be less than 3.5%.

A summary of some of the key results can be found in Table ES.1.

Table ES.1. Selected results from each of the models

	2010–11	2022–23	Change
Demographic outcomes			
Those aged 85 and over: single men	19.4%	16.4%	–3.0ppts
Those aged 85 and over: single women	55.4%	45.1%	–10.3ppts
Those aged 85 and over: couples	25.2%	38.5%	13.3ppts
Men aged 65+ in best health	48.9%	48.8%	–0.1ppts
Women aged 65+ in best health	32.1%	37.4%	5.3ppts
Men aged 65 to 74 getting care	17.6%	18.7%	1.1ppts
Women aged 65 to 74 getting care	28.9%	23.9%	–5.1ppts
Men aged 85 and over providing care	16.1%	21.0%	4.9ppts
Women aged 85 and over providing care	4.2%	7.3%	3.1ppts
Men aged 65 to 69 in paid work	28.6%	29.9%	1.3ppts
Women aged 65 to 69 in paid work	15.5%	36.9%	21.4ppts
Men aged 65 to 74 receiving DLA	10.0%	5.8%	–4.2ppts
Women aged 65 to 74 receiving DLA	10.4%	8.3%	–2.1ppts
Men aged 85 and over receiving AA	43.0%	48.0%	5.0ppts
Women aged 85 and over receiving AA	57.6%	47.9%	–9.7ppts
Incomes			
Gross individual income of those aged 65 to 74	£321.1	£502.1	3.8% p.a.
... of which gross earnings	£37.3	£94.7	8.1% p.a.
Net family income: 10th percentile	£278.7	£299.4	0.6% p.a.
Net family income: 50th percentile	£432.7	£507.7	1.3% p.a.
Net family income: 90th percentile	£740.7	£1,088.5	3.3% p.a.
Absolute income poverty (CPI uprated)	17.6%	12.7%	–4.9ppts

1. Introduction

The UK population is ageing, a process which brings with it a variety of concerns around the prospects for pensioner incomes and the appropriate design of taxpayer-funded support for pensioners. These concerns have led to substantial reforms in recent years. For example, the last government increased financial support for pensioners substantially and, following the recommendations of its Pensions Commission, legislated to introduce automatic enrolment into workplace-based pensions for most employees. In addition to introducing automatic enrolment, the current government has legislated to speed up the move to a single-tier state pension system, tasked the Dilnot Commission to review the funding of adult social care and, in its most recent Budget, announced a relaxation of the rules governing annuitisation of defined contribution pension schemes. The first change to the state pension age in over half a century is also under way, with the female state pension age rising gradually from age 60 since April 2010. These are all truly radical changes.

Over the decade from 2002 to 2012, data from the Office for National Statistics show that the population aged 65 and over increased by 15%, compared with growth in the population as a whole of 7%, meaning that the percentage of the population aged 65 and over edged up from 16% to 17%. Over the next few years, with the baby boomers born just after the end of the Second World War now starting to celebrate their 65th birthdays, the number of individuals aged 65 and over will increase sharply. Over the decade between 2012 and 2022, official projections suggest that growth in the population aged 65 and over will accelerate to 22%, while growth in the overall population will drop back slightly to 6%. If correct, this suggests that in 2022 the percentage of the population aged 65 and over will rise to 20%.

This changing structure of the population will have many economic implications, affecting the labour market, the demand for different goods and services (both publicly and privately provided), and the demand for, and provision of, informal care between family members. The comparatively rapid growth of the older population makes it increasingly important that public policies targeted at this group are well designed, both for those who benefit from these policies and for those who pay for them.

In 2014–15, an estimated £114.1 billion (6.6% of national income) will be spent by the government on state pensions and benefits to pensioners across Great Britain, making up just over half (55%) of total government spending on benefits and tax credits.[1] Three-quarters of this state support for pensioner incomes is spent on providing the state pension, with the remainder funding support targeted at those with disabilities and those on lower incomes, as well as

[1] Authors' calculations from figures in https://www.gov.uk/government/publications/benefit-expenditure-and-caseload-tables-2014.

universal benefits for older individuals such as the winter fuel payment. State support for pensioners also comes in other guises such as spending on public services, with the National Health Service and the provision of adult social care of particular benefit to the older population.

We cannot assume simply that the pensioner population a decade from now will look similar to today's population. There will not just be more pensioners but those retiring over the next few years will have experienced different economic conditions in their working lives, been subject to a different policy environment at different points in their lives, benefited from different technological and medical advances, and made different decisions about their savings than have today's pensioners.

Indeed, we can see from recent history how quickly things can change. The proportion of 65- to 69-year-old men in work fell from over 33% in 1970 to a low point of 11% in 1987, before recovering to 22% in 2010. Meanwhile, the proportion of 60- to 64-year-old women in work also rose substantially, from 17% in 1985 to 31% in 2010.[2] Perhaps most dramatically, income has risen much faster among pensioners than among the non-pensioner population over the last 20 years. In 1990, median income among pensioner households was a third lower than among the rest of the population; by 2010–11, it was only 10% lower.[3] The pensioner population now is quite different from that of a decade ago and dramatically different from that of just 30 years ago. Understanding whether and how this might change over the next decade will be crucial to policy development and also to thinking about longer-term priorities.

In this report, we model the future demographic structure of the population aged 65 and over up to 2022–23 by simulating six broad groups of outcomes – mortality, health, care receipt (both formal and informal), care provision, labour market outcomes and receipt of disability benefits – for thousands of individuals using a dynamic microsimulation model. This model takes those individuals who were aged 52 and over in 2010–11 and interviewed as part of the English Longitudinal Study of Ageing (ELSA) – a representative sample of the household population in England – and 'ages' them throughout the simulation period to 2022–23. Our demographic model, RetSim, simulates the changes in outcomes using observed transitions, and information about the characteristics of the people who make those transitions, from the first five waves of ELSA (from 2002–03 to 2010–11). Applying the model to the latest wave of ELSA provides a simulation of the population aged 65 and over in every other year up to 2022–23.[4]

[2] Authors' calculations using the Family Expenditure Survey from 1970 to 1983 and the Labour Force Survey from 1983 onwards.

[3] Authors' calculations using Family Expenditure Survey 1990 and the Family Resources Survey 2010–11.

[4] As those in the ELSA sample were aged 52 and over in 2010–11, our simulations cannot run past 2023–24, the point at which all these individuals will be aged 65 or over. The biennial nature of the ELSA survey means that it is natural to project outcomes for alternate future years.

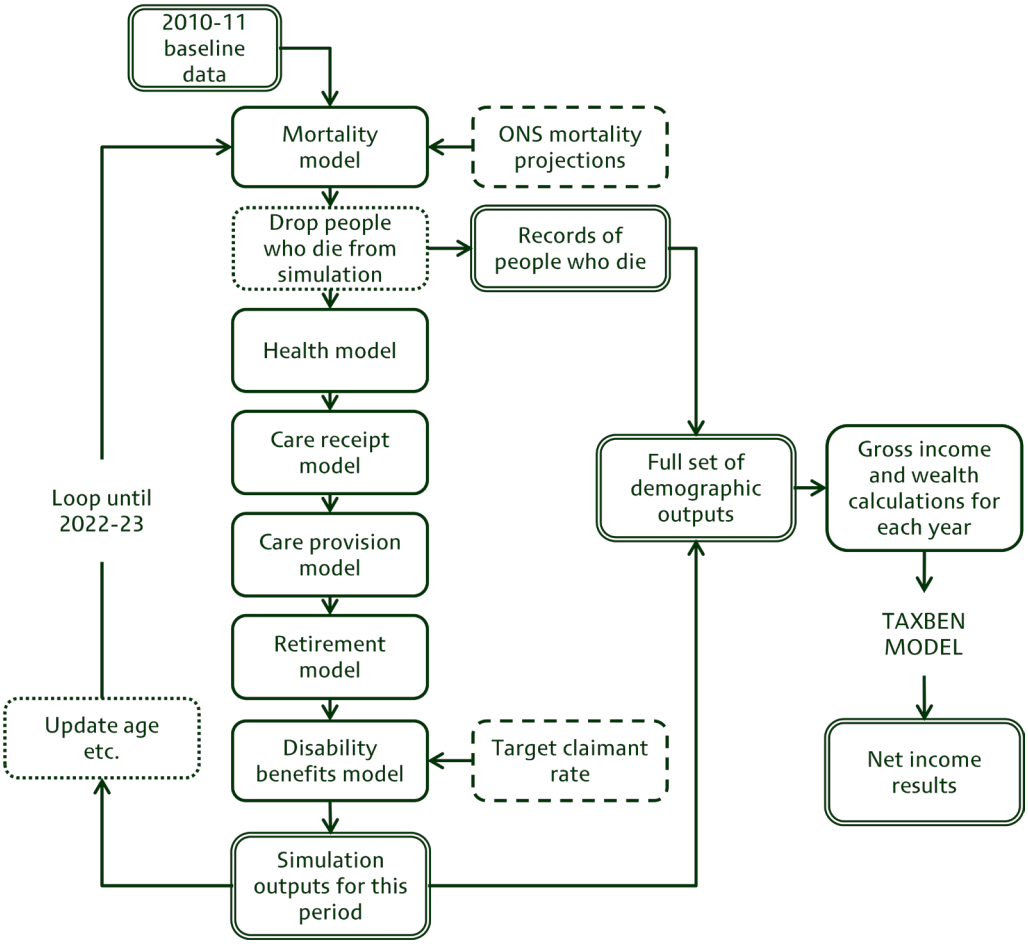
The work that we present here aims to shed some light on how the demographic and financial circumstances of this group will change. This report contains several important results. First, it shows how the household structure of the population aged 65 and over, and the health of this population, are likely to evolve over the next decade. Second, it documents patterns of both care provision and care receipt (both formal and informal) in recent years – for example, by age and family type – alongside projections through to 2022–23, which, in addition to being of direct interest, are also an important determinant of subsequent labour market activity. Third, we examine patterns of labour market activity among older men and women and how these are likely to evolve given, among other things, the ongoing increase in the female state pension age and the planned increase in the male state pension age, which will see both rising to 66 in 2020. Fourth, we utilise the detailed information on state and private pension rights available in ELSA alongside information on income from employment and income from savings and other assets, and feed this into the IFS tax and benefit model, TAXBEN, to project how pensioners' incomes are likely to evolve over the next decade. Finally, we set out what effect some alternative policy scenarios could have on the evolution of these incomes. In particular, we look at two possible alternative reforms to state support for pensioner incomes and two scenarios for the evolution of the market for annuities.

The structure of this report is as follows. Chapter 2 briefly outlines the methodology used to produce the results. Much more detail is available in the technical report published alongside this report (Browne et al., 2014). Chapter 3 presents the results of each of the eight modules within the model and describes some of the reasons for the trends and changes that we see in the data. Having generated the demographic outputs, we then construct the gross income and wealth for each benefit unit in each year of the simulation; these results are presented in Chapter 4. Again, the detail of this modelling is presented in Browne et al. (2014). Next, we pass the gross income data through TAXBEN, the IFS tax and benefit model, which allocates means-tested benefits to each benefit unit and derives its net income. We present these net income results in Chapter 5 (including projections for income inequality among pensioners and for trends in absolute income poverty) and then, in Chapter 6, go on to present and discuss the impact of some different policy scenarios on the distribution of net incomes. Chapter 7 concludes.

2. Methodology

The demographic results in this report are produced by RetSim, a model that is estimated on the first five waves of the English Longitudinal Study of Ageing (ELSA). ELSA is a panel survey that interviews adults aged 50 and over, and their partners, every two years. The structure of the survey means that we can predict, for example, how likely someone is to change working status or become more or less healthy in the next two-year period, based on their characteristics now. This kind of prediction is the basis of the RetSim dynamic microsimulation model.[5] An overview of the model's structure is shown in Figure 2.1.

Figure 2.1. Overview of the model



[5] A dynamic microsimulation model takes a group of people who are representative of the population to be modelled and 'ages' them, simulating their characteristics of interest in future time periods. This is different from a static model, which only simulates circumstances in a single time period, and from analysis of specimen households, which looks at the circumstances of a handful of 'typical' families. A microsimulation approach lets us model a diverse population more representatively than would a specimen family approach, without having to account explicitly for the range of combinations of characteristics and circumstances. Instead, we gain these automatically by drawing our group of individuals from survey data that are designed to be representative of the population of interest.

We examine the evolution of the health, care needs, care provision, retirement decisions, incomes and wealth of the population aged 65 and over in England from 2010–11 through to the early 2020s by simulating the future circumstances of the population that is aged 52 and over in 2010–11. Starting with this age group means that we have a representative sample of the 65-and-over age group in 2022–23. Simulated individuals leave the model when they die, but for no other reason, and no one enters the model population after 2010–11. While divorce, marriage and childbirth are all possible within the population aged 52 and over, the rates at which they occur are much lower than in younger age groups and so we do not add to the complexity of the model by attempting to model fertility or relationship formation and dissolution.

Taking respondents to the fifth wave of ELSA in 2010–11 as our base population, we simulate changes in individuals' characteristics for each two-year simulation period from 2010–11 to 2022–23. To simulate an individual from one period to the next, we pass them through a series of modules, each modelling the evolution of one characteristic.

Having produced the demographic outputs, we are in a position to construct gross incomes for each individual and family over the course of the simulation period. We also allow families' wealth holdings to evolve throughout the simulation period and add the income from this wealth (interest from financial assets and rental income from rental property) to their gross income measure.

We then pass families' gross income into the IFS tax and benefit model, TAXBEN, to derive their net incomes. Specifically, this takes into account payments of income tax, National Insurance contributions and council tax and receipt of means-tested and universal benefits. For 2010–11, 2012–13 and 2014–15, we use the tax and benefit systems that were actually in place. For later years, we incorporate any future policy changes announced up to and including Budget 2014 and we assume that universal credit is partially rolled out in 2016–17 and fully rolled out in 2018–19. Benefit rates and tax thresholds are uprated in line with public finance defaults as currently forecasted by the Office for Budget Responsibility (OBR).

Full details of the model specifications and modelling assumptions can be found in Browne et al. (2014), the technical paper that accompanies this report.

3. Results: Demographics, Health, Care, Employment, and Disability Benefits

This chapter presents the non-financial results from our model, showing the projected change in the characteristics and activities of the population aged 65 and over in England during the period from 2010–11 to 2022–23.[6] The discussion of results follows the ordering of the model set out in Figure 2.1. We start by describing the mortality projections and their implications for family composition (Section 3.1). We then turn to look at the changing health of the older population (Section 3.2), before examining predicted trends in the receipt, and the giving, of care (Sections 3.3 and 3.4). We go on to look at trends in employment outcomes and the receipt of disability benefits (Section 3.6). Finally, we consider the interactions between the different sub-models (Section 3.7).

3.1 Mortality and family composition

Our model uses estimates of how the mortality probabilities of those aged 52 and over vary with characteristics observed in the ELSA data over the period between 2002–03 and 2010–11. Under the assumption that these associations continue to hold in the future, it then uses these relationships to project the likelihood that each individual will survive until the next simulated year.

In order to incorporate the fact that longevity at older ages is expected to continue to improve, we adjust our model so that the predicted mortality rates by age, sex and year of birth match projections made by the Office for National Statistics (ONS). These projections suggest that, in the UK, a man aged 65 in 2000 was expected to live to 84, whereas by 2010 a man aged 65 would be expected to live to 86. For women average life expectancy of those aged 65 is projected to have increased from 87 in 2000 to 89 in 2010.[7] As we discuss below, changing life expectancies in the older population will have important implications for the household structure of the older population.

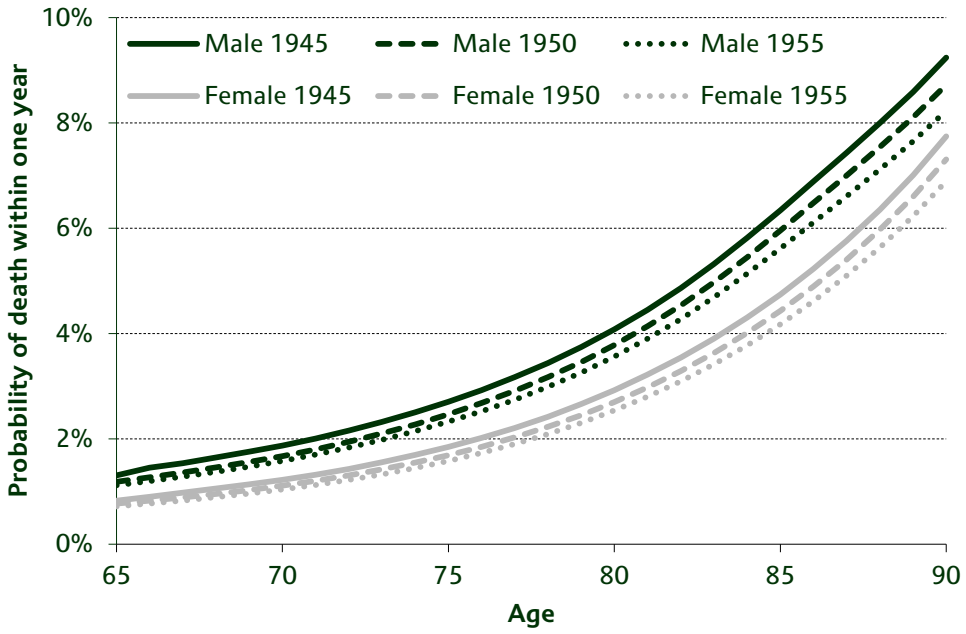
Figure 3.1 shows how the one-year mortality projections from the ONS vary by age and sex for selected years of birth (but for England not the UK, since our model runs on English data). Unsurprisingly, at a given age, men have a greater chance of dying than women while, more generally, older individuals have a greater chance of dying than younger individuals. Again, the projected improvement in mortality prospects across successive cohorts is noticeable. For example, the chance of a woman aged 80 dying in the next year is projected to fall from 2.9% for those born in 1945 to 2.5% for those born in 1955 (and compared

[6] Unless otherwise stated, the source of all data from 2002–03 to 2010–11 is ELSA waves 1 to 5, and the source of all data in later years is the RetSim model running on ELSA wave 5 data. All years in the figures refer to financial years: i.e. 2002 is 2002–03, etc.

[7] See Office for National Statistics (2014).

with 3.7% among those born in 1935). For men aged 80, a slightly larger difference is projected, from 4.1% for those born in 1945 to 3.6% for those born in 1955 (compared with 5.1% among those born in 1935). The key assumption we make when incorporating these projected improvements in mortality into our model is that they occur uniformly (within each age, sex and year-of-birth group) rather than being concentrated on a particular set of individuals. So, for example, we assume that improvements in mortality are not different by socio-economic group, education or region.[8] Over the course of our simulation, we see the median age among those aged 65 and over rise from 73 in 2010–11 to 75 in 2022–23.[9]

Figure 3.1. Improvements in mortality rates by birth cohort



Source: Correspondence with Office for National Statistics.

The value that our mortality model adds to the simulation, in contrast to simply taking the ONS projections and applying them directly to those in our baseline data (the 2010–11 wave of ELSA), is that it allows for variation in mortality probabilities between individuals of the same sex, age and year of birth. So, for example, because individuals with better health are found, on average, to have a considerably greater chance of surviving for the next two years (over and above the effect of other characteristics, including sex and age) over the period between 2002–03 and 2008–09, our model will continue to give individuals with better levels of health a greater chance of survival in future. Other factors that are found to be associated with a statistically significant increase in the chance of dying in

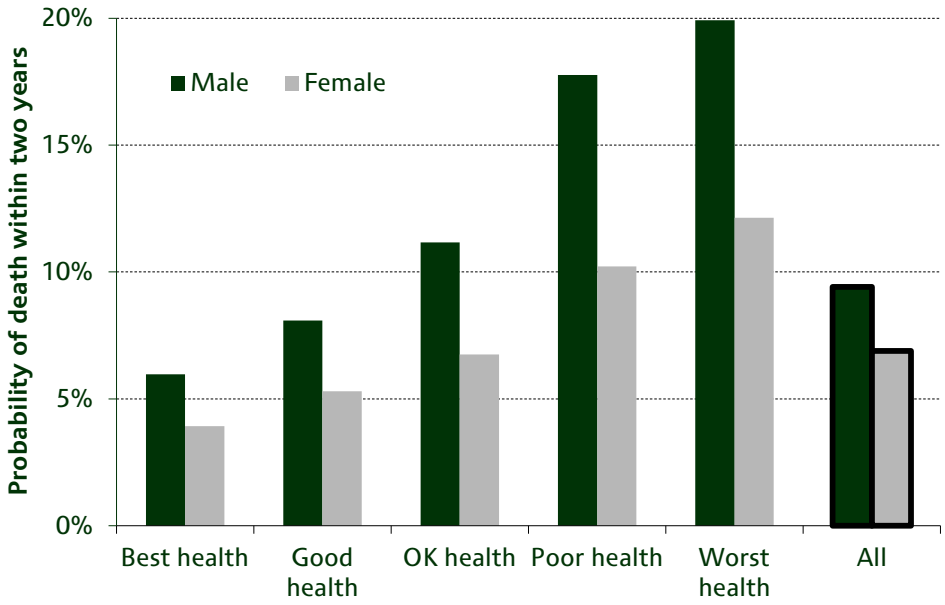
[8] This assumes that inequalities in mortality across the characteristics included in our model remain constant over time. Recent evidence suggests that relative inequality in mortality across socio-economic classes has been widening (Office for National Statistics, 2013b).

[9] Similarly, the age marking the 25th percentile rises from 69 to 70 and that marking the 75th percentile rises from 79 to 82.

the next two years include being single, receiving care, not being in paid work and smoking.

The projected chance of death over the next two years among those aged 75 to 84,[10] and how this varies with their current health, is shown in Figure 3.2. Among this age group, men have on average a 9% chance, and women a 7% chance, of dying over the next two years. However, there is a clear relationship between the predicted two-year mortality rate and the measure of health we construct from the ELSA data.[11] Among those judged to be in the best health, men have on average a 6% chance, and women a 4% chance, of dying in the next two years, whereas for those in the worst health the average chances of death are over three times as great, at 20% for men and 12% for women. This relationship comes both from the fact that being in better health is directly associated with being less likely to die in the next two years and from the impact of other factors associated with our health measure that are also associated with a reduced chance of death, such as being in a couple or not smoking.

Figure 3.2. Probability of death in next two years, for 75- to 84-year-olds by health status



The fact that our model predicts that different individuals have a different chance of dying between one period and the next means that the composition of each birth cohort within our sample, in terms of characteristics such as financial circumstances or household composition, will also change over the course of the simulation.

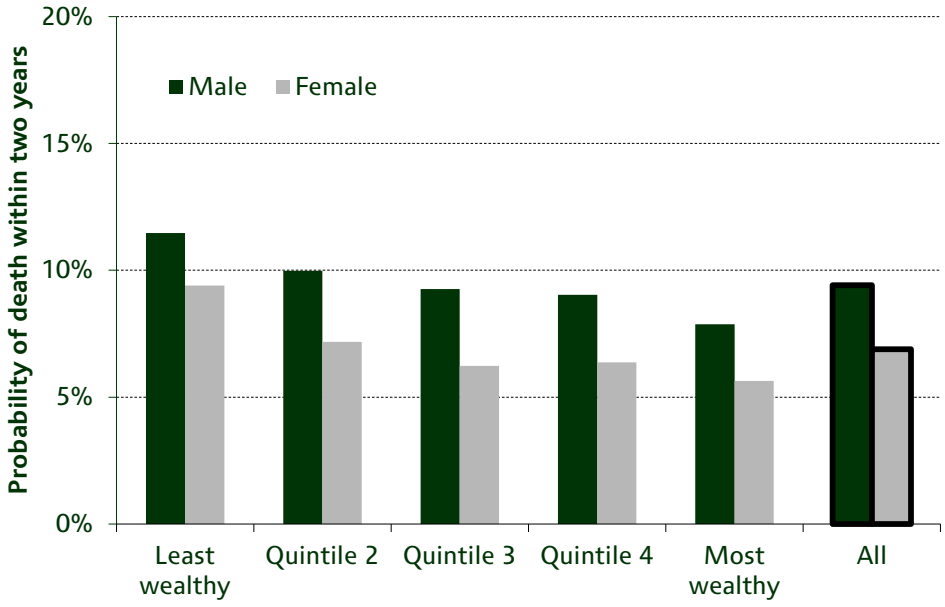
[10] This is the average probability for all 75- to 84-year-olds throughout the simulation period.

[11] Our measure of health is constructed using individual responses to a set of objective questions. More details are provided in Section 3.2. More individuals are in the best health category, and fewer are in the worst health category, than in any of the others.

One example of this is wealth. Our model suggests that an individual's position in the wealth distribution[12] does not have a statistically significant association with subsequent mortality once other observed characteristics are controlled for. However, wealth is correlated with characteristics (such as health and smoking behaviour) that are found to have a statistically significant association with an individual's own chances of survival. This correlation means that, on average, those with lower wealth are less likely to survive over a two-year period.

A similar phenomenon occurs with both education and an individual's position in the income distribution. Note that this is not to say that wealth, income and education are not determinants of subsequent mortality. Rather, it suggests that if lower wealth, education or income does lead to a greater likelihood of an individual dying, then this operates through, for example, a prior deterioration in the measure of health we construct rather than having an additional impact over and above health.[13]

Figure 3.3. Probability of death in next two years, for 75- to 84-year-olds by wealth quintile



Note: Quintiles defined on family net non-pension wealth when first observed in ELSA, by age group and couple status.

Evidence on the magnitude of the correlation between wealth and subsequent mortality among men and women aged 75 to 84 is shown in Figure 3.3. Men in the fifth of the population with the lowest wealth at baseline are 1.5 times as likely to die in the next two years than those in the richest fifth of the population

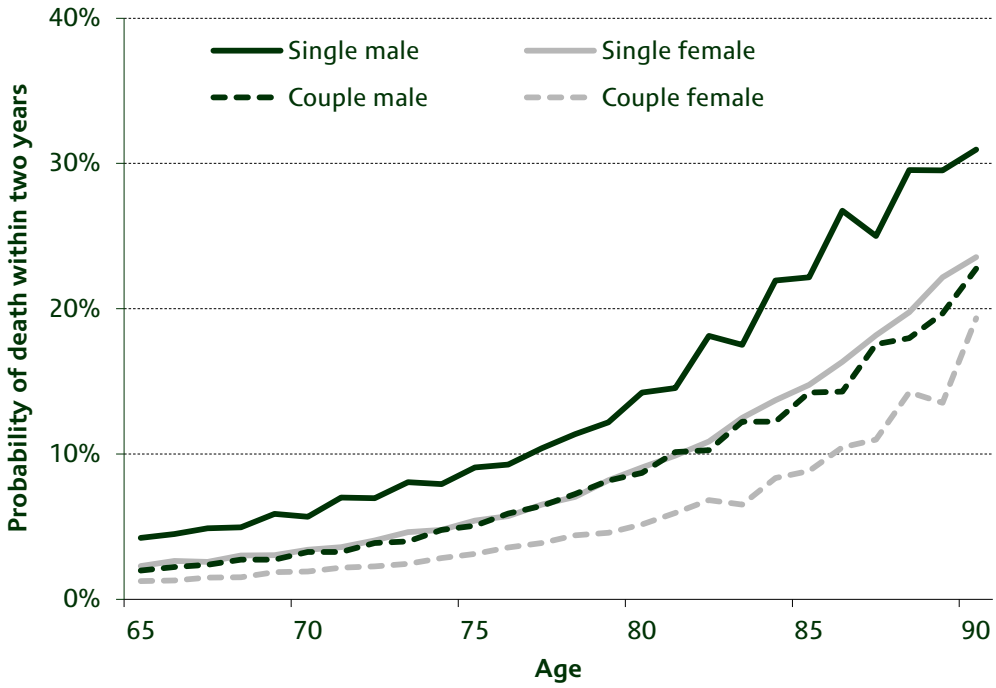
[12] Computed separately for singles and couples, by age band, using data from the first year in which the household was interviewed.

[13] Previous work in the UK has found a relationship between position in the wealth distribution and subsequent mortality (Attanasio and Emmerson, 2003), although this was not able to control for as rich a measure of health as we use here. Our finding is in line with ongoing work by Gemma Tetlow at IFS.

(11% compared with 8%), while for women the relationship is slightly stronger, at 1.7 times as likely (9% compared with 6%). This means that as we project further forwards in time, our model predicts that the population within each birth cohort will become disproportionately comprised of individuals from towards the top of the 2010–11 wealth distribution.

The relationship between position in the wealth distribution and subsequent mortality is found to be stronger among younger age groups than among older age groups. Among men aged 52 to 64, the chances of dying in the next two years are twice as great among those in the lowest wealth quintile as among those in the highest wealth quintile. This falls to 1.9, 1.5 and 1.2 times as great among those aged 65 to 74, 75 to 84 (as shown in Figure 3.3) and 85 and over, respectively. Among women, there is slightly less variation in this ratio by age group: it falls from 2.0 times among those aged 52 to 64 to 1.7 among those aged 65 to 74 and those aged 75 to 84 (again as shown in Figure 3.3) and to 1.4 times among those aged 85 and over.

Figure 3.4. Probability of death by 2012–13, modelled in 2010–11, by age, sex and couple status

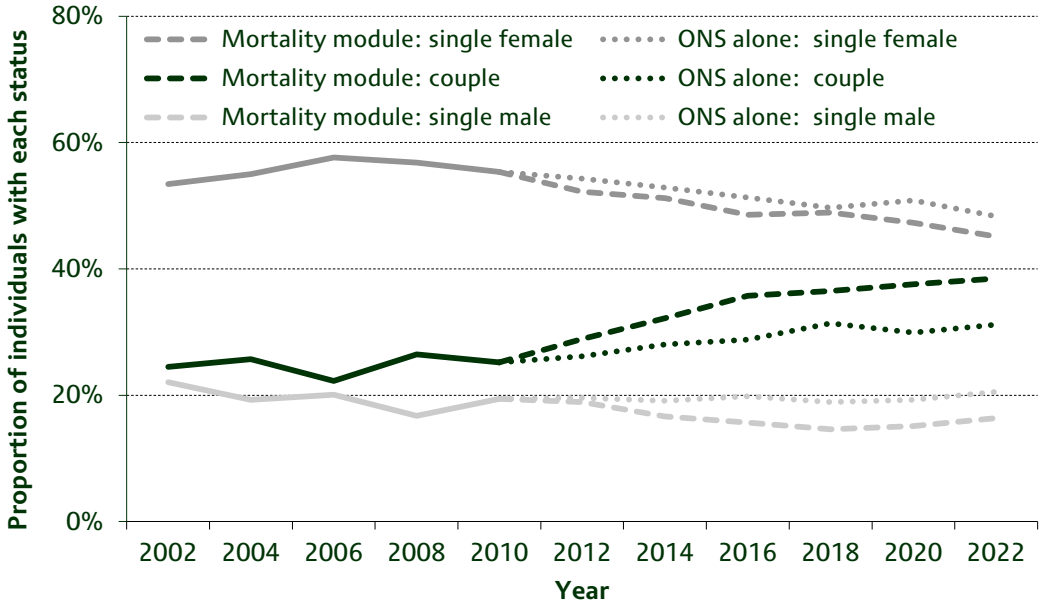


Our model also predicts that mortality rates will be much greater among single men than among men in couples and among single women than among women in couples. This is partly explained by the fact that singles start in worse health, on average, and are more likely to smoke, but there appears to be an additional association with being single even after controlling for other characteristics. The resulting mortality projections by sex, couple status and age are shown in Figure 3.4. For example, our model predicts that, in 2010–11, single 80-year-old men are 1.6 times as likely to die by 2012–13 as are 80-year-old men in couples (14%

compared with 9%), while for women the relationship is stronger, at 1.8 times (9% compared with 5%).

One particularly striking output of our model is its prediction of how the family composition of the older population, and in particular the population at very old ages, will change between 2010–11 and 2022–23. In 2010–11 among individuals aged 85 and over, 55% were single women, 19% were single men and 25% were in couples. As shown in Figure 3.5, we project that, by 2022–23, these proportions will be 45%, 16% and 38%, respectively. While the percentage of those aged 85 and over who are in couples has been increasing in recent decades (for example, by around 5 percentage points a decade between 1990 and 2010), the projected increase over the next decade would represent an acceleration of this trend.[14] This trend is driven, in part, by the ONS projection that male life expectancy at older ages is catching up (if only slightly) with female life expectancy. It could also be due to other characteristics that are associated with mortality changing across successive cohorts.

Figure 3.5. Proportion of individuals in each benefit unit type: age 85 and over



Also shown in Figure 3.5 is the extent to which the RetSim model builds on the raw age, sex and birth-year projections produced by ONS. The result of running RetSim without our mortality model – instead giving everyone within an age, sex and birth-year cell the same probability of dying – is shown by the dotted lines. This distributes the improvements in mortality equally between single people and those in couples, increasing the proportion of people in couples over time as husbands (and some wives) live longer and partnerships dissolve more slowly as

[14] Authors' calculations using weighted data from the Family Resources Survey and the Family Expenditure Survey.

a result of death. Our model builds on this by allowing the probability of death to vary within age, sex and birth-year cells, leading (as discussed above) to those in couples having a lower chance of death in a given period than single people. This strengthens the effect predicted by using the ONS projections alone that a higher proportion of pensioners will live in couples in the future.

This anticipated increase in the proportion of older individuals who are in couples will have many implications for the well-being and needs of this group of the population. There is evidence that, in many dimensions, individuals at older ages who are in couples are better off than those who are single,[15] so this is likely to be a very good news story. Policymakers working in areas relating to the older population will need to consider how this increased likelihood of remaining in a couple until much later in life affects their policy formation and communication. For example, communicating policy to the person in a couple who has habitually managed all the finances could be very different from communicating with a widow or widower who is not used to that responsibility. In addition, there are implications of this trend for families planning their own future – for example, in considering likely future social care needs or when and whether to move to a smaller property.

3.2 Health

Once our model has projected who survives into the next period, it then takes the group of survivors and predicts the level of their health, which is measured as an index that takes one of five possible values ranked from best health to worst health.

This five-category measure of health is based on individual responses to a range of objective questions regarding problems with mobility, eyesight, hearing, urinary incontinence, stress and clinical depression. Those with no reported problems are ranked as being in the best health, those with one problem as having good health, those with two or three problems as having OK health, those with four or five problems as having poor health and those with six or more flags (of a maximum of 13) as being in the worst health category.[16] Unsurprisingly, health in the previous period is a key predictor of health in the current period. For example, both men and women who are currently in the best health category are 17 percentage points (ppts) more likely to stay there than those in the second-best health category are to move up to the best health category in the next period. Those currently in the worst health category are 61ppts (men) and 63ppts (women) more likely to stay there than those in the second-worst health category are to move down to the worst health category in the next period.

[15] For example, chronic loneliness significantly increases mortality(Patterson and Veenstra, 2010), single pensioners are more likely to be in poverty than pensioners in couples, though rates are falling (The Poverty Site, 2010, chart 1), and our own results presented in this report show that being in a couple is positively correlated with improved mortality rates and health.

[16] This index has been developed by James Banks, Richard Blundell and James Browne for the purposes of predicting eligibility for disability benefits as part of an ongoing project at IFS.

Attributes associated with a reduced probability of moving into (or remaining in) the best health category (after taking into account other factors, including health in the previous period) are being older, reporting having had poor health in childhood, receiving care and smoking. Interestingly, providing care is also found to be associated with being less likely to move into the best health category. We find that those in couples – and particularly women in couples – are relatively more likely than single individuals to move into the best health category. As healthier individuals are subsequently more likely to survive, this last relationship will contribute towards the better mortality rates predicted for those in couples compared with those for single individuals, which were highlighted in the previous section.

Among individuals aged 65 and over, our model predicts a slight increase over the simulation period in the proportion who are in the top two health categories. This increase comes mainly from a decline in the proportion who are in the middle health category, and holds for both men and women. However, since the age structure of the population aged 65 and over is changing over this period, and given that older individuals are more likely to be in poor health than younger individuals, it is more informative to look at the trends in health among individuals of similar ages. For this reason, Figure 3.6 presents the proportion of men who are projected to be in the best health category over time by age group. Figure 3.7 gives the same information for women.

Figure 3.6 shows the percentage of men aged 75–84 who are in the best health category increasing by 5ppts to 48% between 2010–11 and 2022–23, with smaller increases among other age groups.

Among women, who are on average found to be in worse health than men, and therefore of whom fewer are in the best health category at the start of the

Figure 3.6. Proportion in best health by age group: men

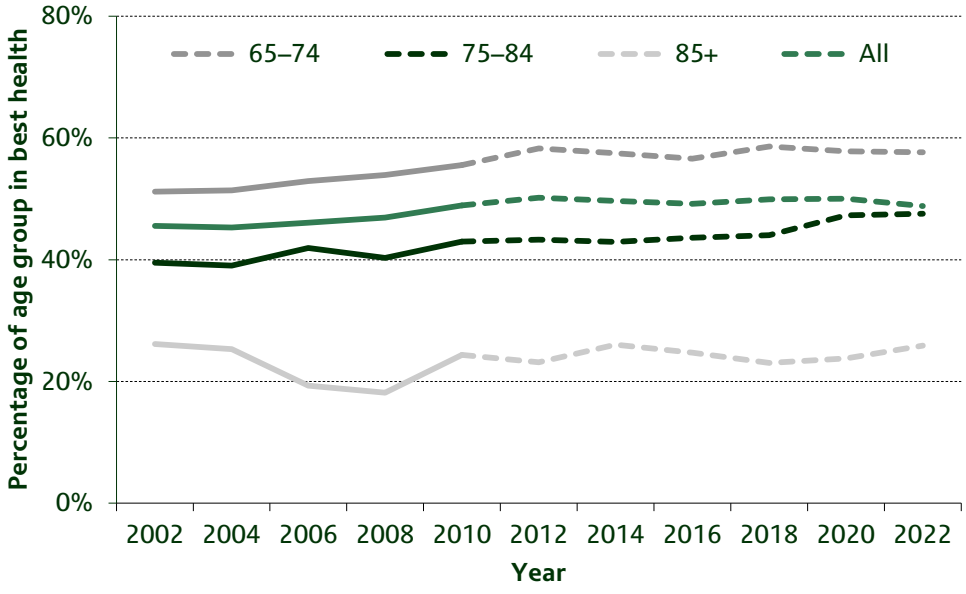


Figure 3.7. Proportion in best health by age group: women

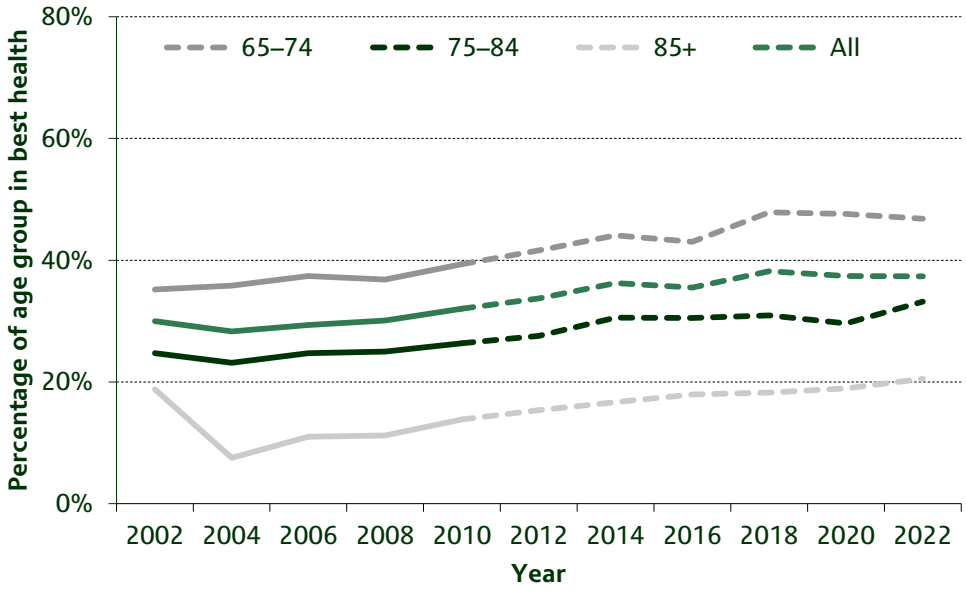
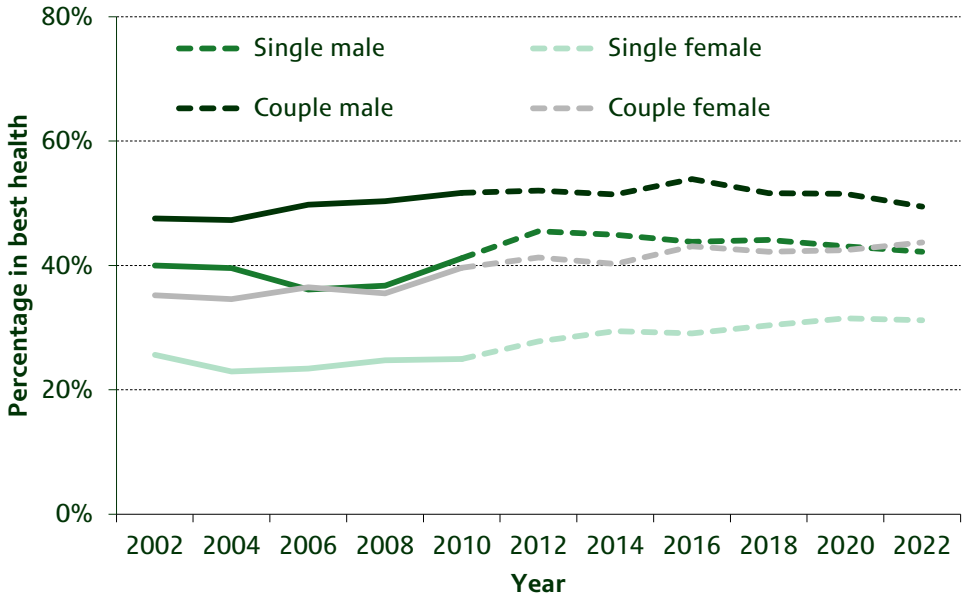


Figure 3.8. Proportion in best health by couple status: age 65 and over



simulation, our model predicts a larger increase in the proportion in the best health category. This percentage increases by around 7ppts in each age group, reaching 47% for those aged 65–74, 33% for 75- to 84-year-olds and 21% for the 85-and-over group.

The breakdown of the proportion in best health by couple status, as shown in Figure 3.8, shows us two key things: first, that – as alluded to above – those in couples are generally healthier than single people of the same sex; and second, that the increase in healthier women between 2010–11 and 2022–23 is primarily

Overall, receipt of care is projected to be fairly flat between 2010–11 and 2022–23, but the model projects that the proportion receiving care will decline for women in all age groups and rise slightly for certain groups of men. The trend among women is linked to the projected improvement in their health, as set out in the previous section.

There is also a projected decline in receipt of formal care among men and women aged between 75 and 84, and among women aged 85 and over. The fact that this trend is not visible by family type suggests that this decline is offset by an increase in the number of older people in couples, who instead receive informal care.

3.4 Care provision

The next section of our model estimates whether or not an individual provides care. The care burden faced by the population aged 65 and over will be of direct interest to policymakers. In addition, provision of care is an important determinant of changes in labour market behaviour (as we will see in the next section), and so can indirectly affect the family incomes of this group. As well as projecting whether or not an individual gives care, our model also predicts whether they give 'high-intensity' care, which we define as being care of 35 hours or more per week. Those providing this amount of care, if they have earnings of no more than £100 per week, can be eligible for carer's allowance.

Those providing care in the previous period are more likely to provide care in the current period, with this being particularly true of those who were providing high-intensity care in the previous period. Those in couples, those not in bad health and those not in paid work are also found to be more likely to provide care. For those in couples, a particularly strong relationship is found with the health of their partner. Compared with those whose partner is in the best health category, those whose partner is in the second-best health category are up to 10ppts more likely to provide care. This association is much larger for those with partners in worse categories of health: those whose partner is in the worst health category are up to 31ppts more likely to provide care than those whose partner is in the best health category. Of those 6% of people in couples with a partner in the worst health category, 83% provided care in 2010–11 (of which 28% was high-intensity care).

Actual care provision in 2010–11 and projected care provision in 2022–23 are shown in Table 3.2. As with care receipt, care provision is shown separately for men and women split by age band and couple status.

Those in couples are more likely to provide care than those who are single, with men in couples being more likely to provide care than women in couples. As with the receipt of care, this could be genuine – perhaps reflecting the poorer health, on average, of female partners than of male partners. Alternatively, it could, at least in part, be due to social norms leading to men and women having a different threshold for what they decide to report as providing care for their spouse.

Pensions are by far the largest source of income for this age group, and the difference in incomes across the quintiles is driven by private pensions and earnings. For the bottom three quintiles, in both 2010–11 and 2022–23, state pensions account for over half of income. By contrast, in the top two quintiles, the majority of income is, on average, from private sources.

A noticeable difference between the sources of income in the two years is that earnings play a much bigger role in 2022–23, as the rising SPA extends people's working lives. We project that the mean earnings of 65- to 74-year-olds will increase by 154% between 2010–11 and 2022–23, equivalent to around 8% per year. This is because of two things: the people who are working later in life are earning more than people of that age earned in the past (as we will see in Figures 4.6 and 4.7) and substantially more people are working in 2022–23 (21% of the age group) than in 2010–11 (16%). In the richest quintile, where we see the biggest role for earnings, the employment rate rises from 39% to 50%. By contrast, it rises from just 4% to 5% in the poorest quintile. This is unsurprising: it is hard to be in paid work and still be in the poorest fifth of individuals aged 65 to 74. Because we are looking at mean, rather than median, incomes in this section, every additional person who earns any money from paid work will increase the average earnings figure.

There is also an increase in the amount of income in the highest quintile coming from property or financial assets in 2022–23 compared with 2010–11. We will see in Figure 4.9 that this is partly due to greater-than-inflation increases in financial wealth for those with the largest wealth holdings, although again the changing composition of the age group will play a significant role.

These two factors – higher average earnings and higher average income from financial assets – help to explain why higher growth in average incomes is projected for the highest-income fifth of the population aged 65 to 74 than for the poorest fifth: those in paid work and those with greater amounts of financial wealth are typically found towards the top of this income distribution. In addition, we predict that average private pension income will grow faster than average state pension income and that the mean income from disability benefits among this age group will fall over the course of the simulation, not least as a result of policy reform.

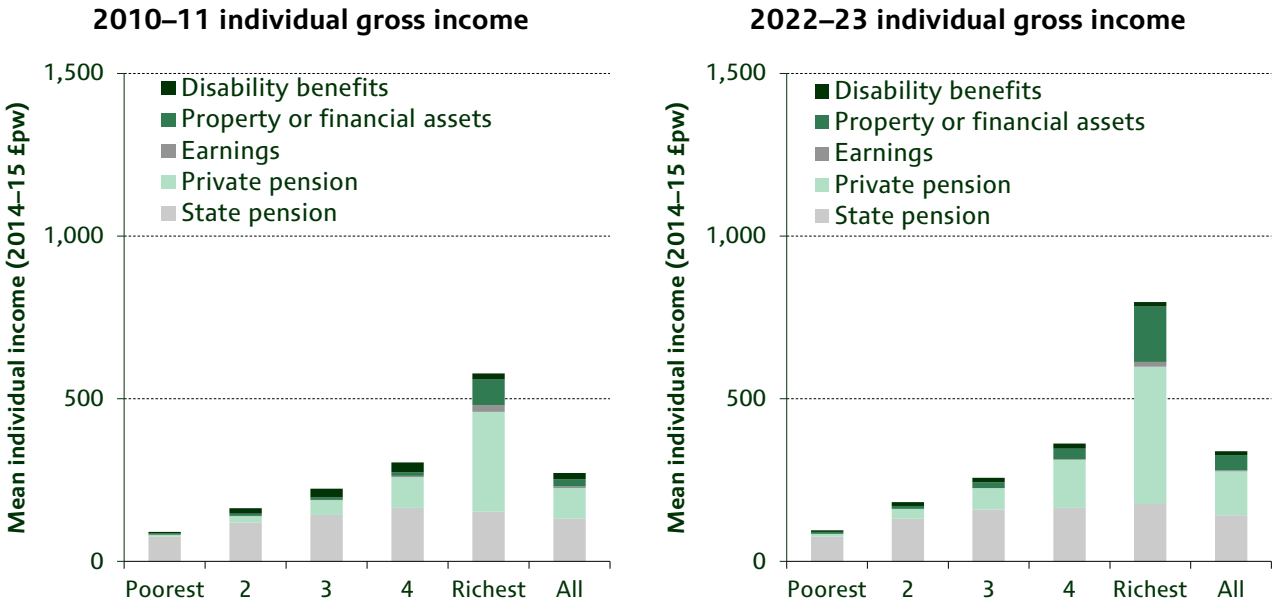
Our projections suggest that mean real gross income from private pensions will have increased over the course of the simulation period by an average of 5% per year for the 65–74 age group, 3% per year for the 75–84 age group and 2% per year for the 85-and-over age group. Data from earlier waves of ELSA[31] show the mean net equivalised family income from private pensions increasing at an average of 5% per year for those aged 65 to 69, and of 8–9% per year for those aged 70 and above, between 2002–03 and 2010–11. To the extent that these two

[31] http://www.elsa-project.ac.uk/uploads/elsa/data/economic/t1.xlsx deflated by the consumer price index (CPI). Source uses the unmodified OECD equivalence scale.

sets of figures are comparable, this suggests a slowing in the growth of income from private pensions between cohorts of pensioners.

Figure 4.2 provides the same breakdown of sources of gross income for those aged 75 to 84. The increase in employment rates mainly occurs among those aged under 75, so for this age group we see much less of a role for changes in earnings, and comparatively less change in the composition or scale of gross incomes, between the two years. Average incomes are projected to grow by 25% in total, or an average of 1.9% per year, with average annual growth in mean incomes of 0.4% in the poorest quintile, rising to 2.7% in the richest.

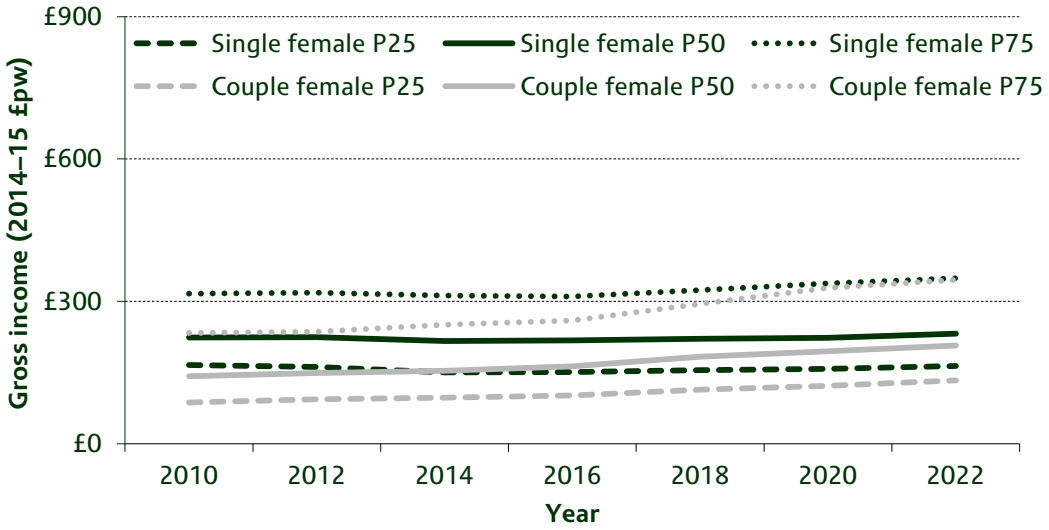
Figure 4.2. Sources of gross income by gross income quintile: age 75–84



Note: Quintiles are defined within the age group on unequivalised individual gross income.

Finally, we present the results for those aged 85 and over in Figure 4.3. By assumption, there are no earnings for this group (our model does not allow people to be in paid work above the age of 79), but disability benefits make up a more substantial proportion of income on average than for younger age groups. Again, pensions are the main source of income, and here, in the absence of earnings, private pension income very visibly dictates the shape of the charts. On average, gross incomes of those aged 85 and over increase by 18% over the period, or by 1.4% a year on average. Growth is slightly faster towards the top of the income distribution, with average incomes in the poorest quintile growing by an average of 0.2% per year, increasing to 1.0% in the fourth quintile and jumping to 2.3% per year for the richest quintile. This latter effect is due to income from financial assets – the fastest-growing component of income – being concentrated in the top quintile in both years.

Figure 4.5. Gross income distribution: women



We see that, while men in couples have higher individual gross incomes than do single men, the pattern is reversed for women, with single women having the higher incomes. However, the differences between singles and couples are not exceedingly large for either sex: the medians for both singles and couples nearly always both lie above the two lower quartiles and below the two upper quartiles.

We project that real gross incomes for both men and women will grow over the simulation period. In terms of the change over time, the gross incomes of men are projected to increase gradually over the period, with little difference in the growth of incomes at each of the percentiles presented in Figure 4.4. Among women, gross incomes at each of these percentiles are projected to increase more quickly, with the average income of relatively high-income women in couples projected to increase most quickly: the gross income of women in couples at the 75th percentile is projected to rise from £233 per week in 2010–11 to £346 per week in 2022–23.

As described above, these increases come predominantly from private sources: we see a larger increase in average earnings for women than for men, as shown below, and the median income from private pensions among women in couples aged 65 and over rises from zero in 2010–11 to just over £20pw in 2022–23. This is compared with just over £30pw for single women, a figure that remains fairly stable over the course of the simulation, £150pw in 2022–23 for men in couples, up from £100 in 2010–11, and almost £115 for single men in 2022–23, up from just over £70. Median income from state pensions also grows more quickly among women in couples, at around 5% per year, than among men in couples, at around 2%. This reflects the fact that successive generations of women are increasingly likely to be entitled to higher state pensions, due to having spent a greater proportion of their lives in work. In addition, those reaching state pension age after April 2010 were required to have fewer years of National Insurance contributions in order to qualify for a full pension.

Figure 4.8. Families' net property wealth (nominal)

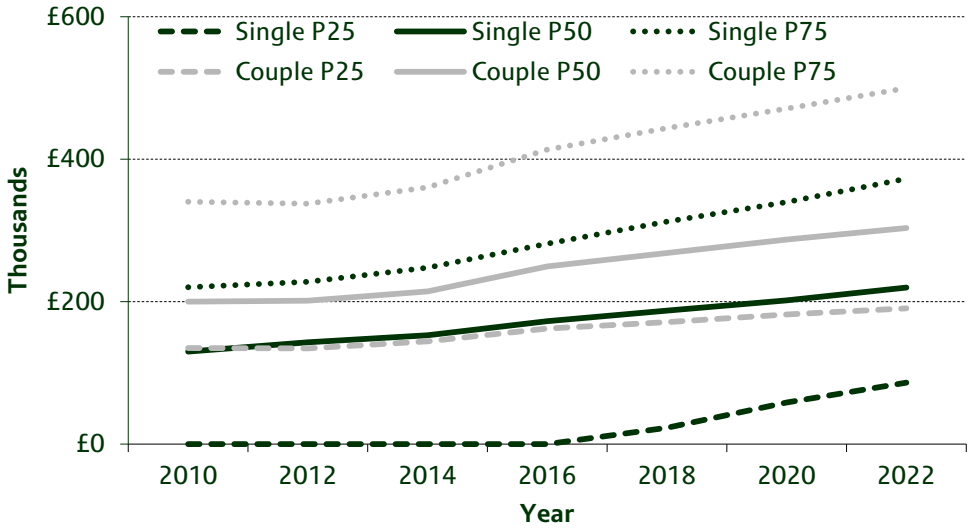
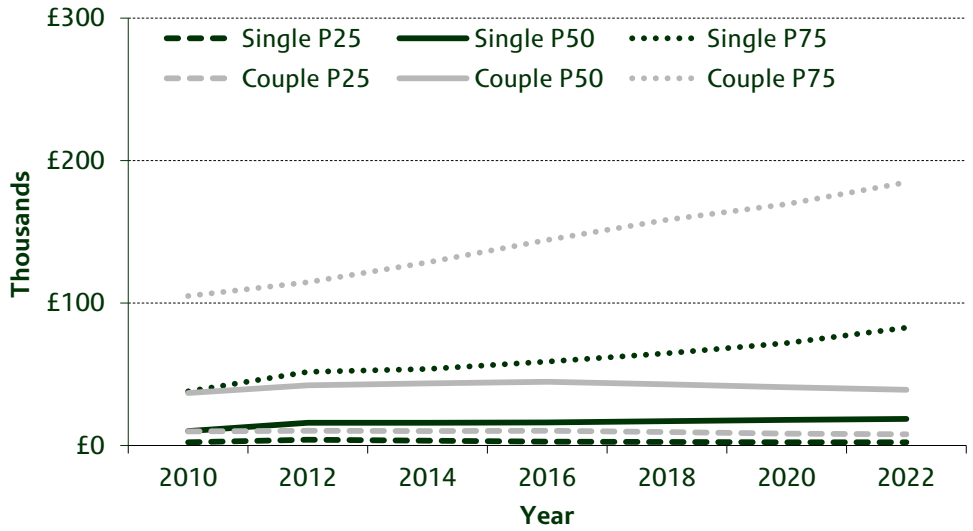


Figure 4.9 shows families' net financial wealth – i.e. holdings in savings accounts, stocks, shares and bonds net of any non-mortgage debt – over the course of the simulation period. While these nominal holdings are projected to be broadly flat on average at the middle and lower end of the wealth distribution, we see average increases at the 75th percentile of around 5% per year among couples and 7% among singles. This growth is due to a combination of the reinvestment of returns to assets and additional active saving and investment from income among the population as a whole over time.

It should be noted, by comparing Figures 4.8 and 4.9, that the majority of households hold a very small proportion of their wealth in financial assets as opposed to property. This balance of relatively liquid versus relatively illiquid assets is of considerable importance in the debate on the financing of social care.

Figure 4.9. Families' net financial wealth (nominal)



In the next chapter, we pass the gross income results through the IFS tax and benefit model, TAXBEN, to arrive at net incomes for the modelled population and then combine these with the wealth results above to provide commentary on the living standards of the pensioner population through to the early 2020s. In Chapter 6, we model the effect of several recent or possible policy changes on the incomes of this group and discuss the impact that they might have on levels of poverty and the distribution of incomes.

5. Results: Net Income

In this chapter, we present our projections for the net incomes of the pensioner population through to 2022–23, using the gross income results described in Chapter 4 and TAXBEN, the IFS tax and benefit model. For 2010–11, 2012–13 and 2014–15, we use the tax and benefit systems that were actually in place. For later years, we incorporate any future policy changes announced up to and including Budget 2014 and we assume that universal credit is partially rolled out in 2016–17 and fully rolled out in 2018–19. Benefit rates and tax thresholds are uprated in line with public finance defaults as currently forecasted by the OBR. Further detail on the assumptions in the modelling is given in Browne et al. (2014).[35]

Throughout this chapter, we look at changes in equivalised[36] net income at the family level (an individual, their spouse if they have one and any dependent children) rather than at the household level. This is simply because ELSA does not contain comprehensive data on the incomes of individuals who live in the same household as ELSA sample members if they are not in the same family unit: so, it has comprehensive information on the sample member's spouse, but not on any adult children that they live with, for example. The family incomes of our population will of course be lower, if anything, than their household incomes, but this difference will be small on average – median net equivalised family income for the 65-and-over population was about 4% lower than median net equivalised household income for the same age group in 2010–11.[37]

5.1 Net income projections

The projected evolution of different percentiles in the net family income distribution is presented in Figure 5.1. Between 2010–11 and 2014–15, our model predicts slow growth in median net incomes among those aged 65 and over. Our projections suggest that median income growth will then increase, averaging 2.0% a year between 2014–15 and 2022–23, moving back towards the rate of growth in net family incomes for this group through the 2000s, which averaged just over 2.8% per year.[38]

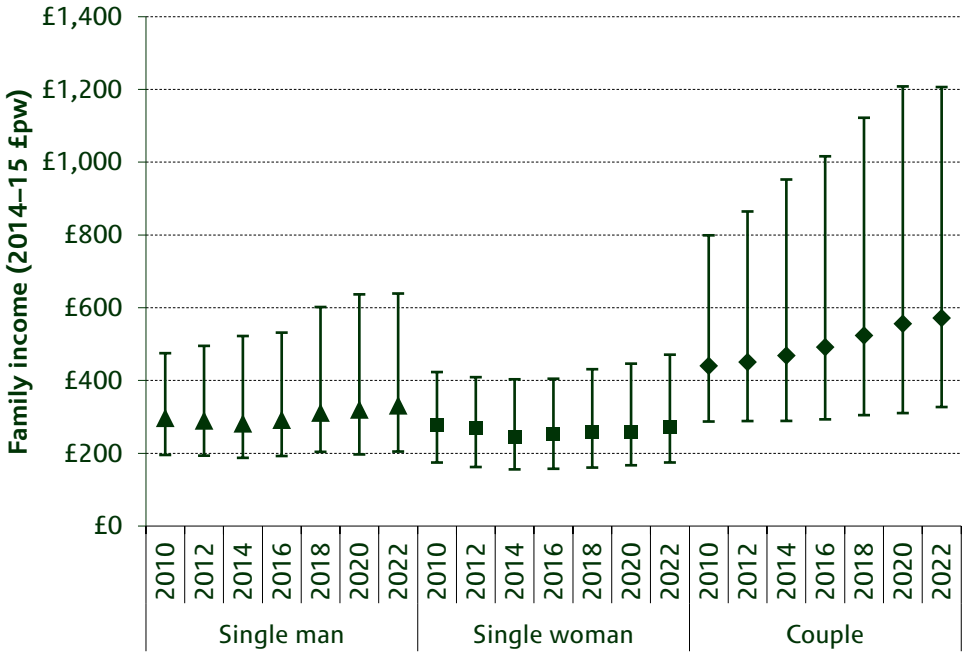
[35] Unless otherwise stated, the source of all is the RetSim model running on ELSA wave 5 data and TAXBEN. We assume full take-up of means-tested benefits. All years in the figures refer to financial years: i.e. 2010 is 2010–11, etc. All income figures in this section are presented in 2014–15 prices and before housing costs are deducted.

[36] For comparability with HBAI poverty statistics, we use the modified OECD equivalence scale, which assumes that a single individual needs two-thirds of the income of a couple to enjoy the same standard of living.

[37] Authors' calculations using the Family Resources Survey 2010–11.

[38] Authors' calculations using the Family Resources Survey, various years.

Figure 5.3. Distribution of family incomes by family type



Note: The little shapes indicate the 50th percentile (median) and the horizontal dashes the 10th and 90th percentiles.

It is important to bear in mind that this slight fall in net incomes is likely to reflect a change in the composition of the group of single women over time, rather than implying that the incomes of similar single women are falling over time. As discussed in Chapter 3, the model projects a sizeable decline in the proportion of pensioners who are single women (shown for those aged 85 and over in Figure 3.5), with a corresponding increase in the proportion of pensioners who are in couples. If the chance that a woman's husband survives increases by more over time for those with a high family income than for those with a low family income (i.e. if improvements in mortality are concentrated among richer men), this would put downward pressure on the average income among single women. Indeed, when we restrict our attention to women who were already single in 2010–11 (and who are projected to be alive in 2022–23), their incomes are projected to increase by 0.8% a year through to 2022–23, a very similar increase to that projected for single men.

5.2 Absolute poverty projections

The simulated income distributions also allow us to project the percentage of those aged 65 and over who will be below certain levels of income in each year, and hence below a chosen poverty threshold. In the following, we present results for absolute income poverty as defined for the 2020 child poverty targets: that is, having an income that is less than 60% of the 2010–11 median income in real terms, before housing costs are deducted. Using the data underlying the UK government's official poverty statistics, we calculate that 17.6% of those aged 65

and over in England were judged to be in income poverty on this basis in 2010–11.[40] We do not present results for *relative* income poverty, as this would require us to project median income among the population as a whole. To the extent that median incomes grow faster than prices, relative poverty will fall less quickly (or rise more quickly) than absolute poverty.

Our model projects a different measure of income from that used in calculating official poverty statistics; for example, we can only model family income, not household income, as discussed at the start of this chapter. In producing our absolute income poverty projections, we adjust for this difference by selecting as our poverty line the income level that gives the same poverty rate in our modelled population in 2010–11 as the official data suggest for that age group. In 2010–11, this poverty line is roughly £280 a week for couples and £190 a week for a single person.

Absolute poverty lines are supposed to remain constant in real terms and so need to be increased over time in line with inflation. Official UK poverty statistics currently use the retail price index (RPI) to make this adjustment. However, the Office for National Statistics (2013a) acknowledges that, due to the formula used, the RPI tends to overstate inflation.[41] In addition, it has been shown that this problem has been exacerbated by changes to the methodology in 2010, and so the RPI's overstatement of inflation is likely to be more significant going forwards than it was in the past.[42] This would imply that the official statistics will underestimate real income growth going forwards and overstate increases (and understate falls) in absolute poverty.

Figure 5.4 shows our projections for absolute poverty among those aged 65 and over, both when we uprate our absolute poverty line with the RPI and when we use the consumer price index (CPI) instead.[43] For context, we also show absolute poverty rates from official data back to 2000–01. Using the RPI, our model suggests a significant rise in absolute income poverty between 2010–11 and 2014–15 (from 17.6% to 23.3%). On this basis, absolute poverty is then expected to remain roughly constant through to 2022–23, at around the same level as in 2003–04. However, the picture is very different when we use the (more accurate) CPI measure of inflation to uprate the absolute poverty line. Absolute income poverty still rises, to 20.1% in 2014–15, but then falls sharply to 12.7% in 2022–23, around a third of its level in 2000–01. This pattern is consistent across different age groups within our modelled population, with lower poverty rates among 65- to 74-year-olds throughout.

[40] Family Resources Survey, 2010–11.

[41] See Levell (2012).

[42] See Miller (2011).

[43] We are unable to use either of the new CPIH or RPIJ inflation measures to uprate our poverty line, since forecasts of these measures are not currently available.

Figure 5.4. Absolute poverty among those aged 65 and over

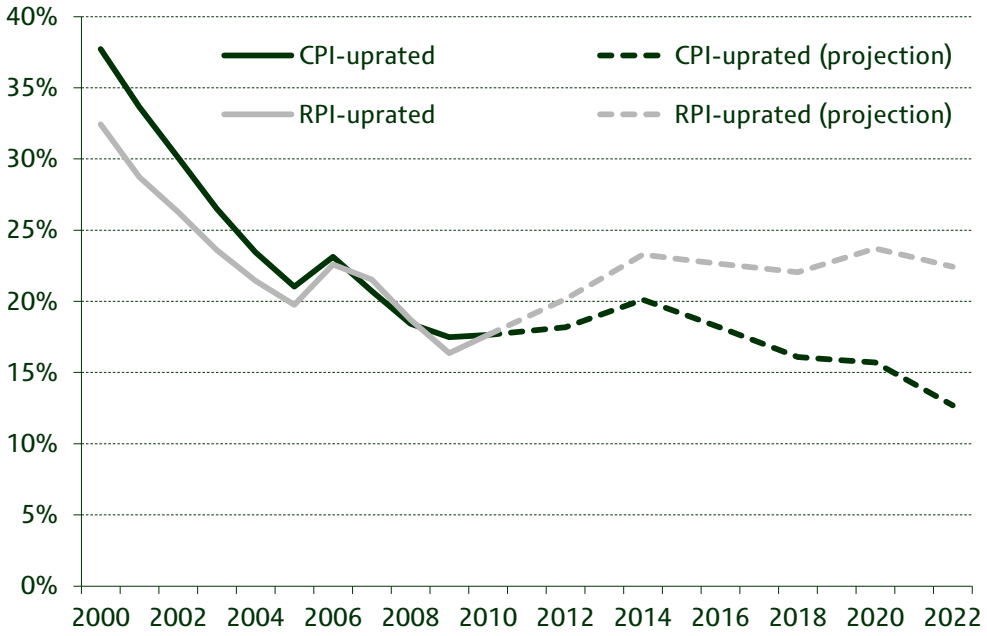
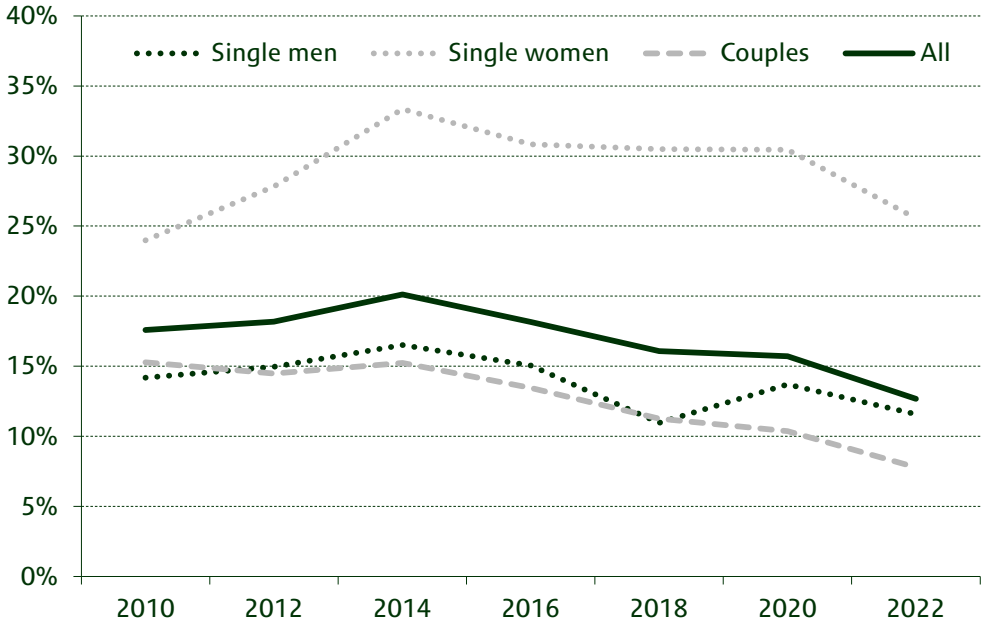


Figure 5.5. Absolute poverty by family type: 2010–11 to 2022–23



Note: Poverty line is uprated in line with CPI.

Figure 5.5 shows the projected evolution of poverty among different family types through to 2022–23 (the poverty line is uprated in line with the CPI). Our model projects a particularly sharp decline in absolute poverty among those in couples (from over 15% in 2010–11 to less than 10% in 2022–23) and an accompanying increase in poverty among single women, which is particularly pronounced between 2010–11 and 2014–15 before falling back to just above the 2010–11 poverty rate by 2022–23. In 2010–11, single women aged 65 and over are around

one-and-a-half times as likely to be in absolute income poverty, on this measure, as individuals living in couples. By 2022–23, because of the falling levels of income poverty among those in couples, they are projected to be more than three times as likely to be in poverty. As with the trends in net incomes among these family types, this is explained by changes in the composition of the group of single women over time. Looking just at those women who are single in 2010–11 (and who are projected to be alive in 2022–23), absolute income poverty falls from 28% to 17%.

While the rise in absolute income poverty among single women relative to those in couples does not represent particular women falling into poverty, it does still have important consequences for policies designed to combat poverty among the pensioner population. The fact that being a single female pensioner looks likely to become an increasingly powerful predictor of low family income may allow policymakers to focus services on vulnerable households relatively effectively, simply by targeting older single women.

6. Results: Effect of Alternative Reforms

In this chapter, we examine the projected incomes of those aged 65 and over under different policy scenarios and compare these with the projected incomes set out in Chapter 5. We first consider two reforms to state benefits:

- We assume that DLA is retained throughout the simulation period rather than being replaced by PIP for working-age claimants by 2018–19. This reform would increase state spending and so boost family incomes on average.
- We assume that the basic state pension and the new single-tier pension are indexed in line with the CPI after the current parliament rather than 'triple locked'.[44] This would lower state spending and so reduce family incomes on average.

We then model two changes that would affect those with wealth accumulated in defined contribution (DC) private pensions:

- In the light of the Budget 2014 decision to extend flexibility over how DC pensions can be drawn, we consider what would happen to incomes and wealth holdings if individuals chose to annuitise none, or only part, of their accumulated DC pension pots.
- We examine what would happen were annuity rates to fall (or increase) by 20% from 2016–17.

6.1 Reform 1: retain disability living allowance

In the results presented in Chapters 3, 4 and 5, we model the planned transition from DLA to PIP for working-age claimants.[45] In this section, we present the results of the counterfactual scenario in which DLA is retained throughout the simulation period.

The retention of DLA would not have a direct impact on the incomes of most individuals aged 65 and over, since DLA is only due to replace PIP for 'working-age' claimants.[46] Instead, the impact of the retention of DLA on these older people would increase over time, as more people would continue to claim DLA after their 65th birthday than were able to claim PIP beyond that point. As a result, the

[44] Under the 'triple lock', the basic state pension is uprated by the lowest of CPI inflation, earnings growth and 2.5%.

[45] We set out the modelling of the reform in much more detail in Browne et al. (2014), as well as earlier in this report, but the broad picture is that we use estimates of claimant numbers from the DWP impact assessment of the reform to place people into PIP levels, given their modelled DLA level, a process that results in many people either moving to a level of award that attracts a lower amount of money or moving off DLA/PIP altogether.

[46] Although their family income can be affected if they live with a younger partner.

impacts on those aged 65 and over are initially concentrated at the younger end of the age range, spreading to older individuals as the simulation progresses.

The individuals who gain from the retention of DLA in our simulation are those we model as being eligible for DLA but not PIP and those we model as being entitled to a larger amount of DLA than of PIP. Because of interactions between various benefits,[47] the results we present below are essentially our projections of a change in the overall generosity of the disability, incapacity and caring benefit system.

In 2022–23, the total claimant rate for disability, incapacity and caring benefits for those aged 65 and over is projected to be 21%. We estimate that this would rise to 22% if DLA were retained throughout the simulation period, with those affected by the change gaining £17 per week on average.

Somewhat counter-intuitively, the median income from DLA/PIP among those who receive the benefit would actually fall as a result of retaining DLA, from about £54 per week to about £42 per week. This is because, in attempting to focus support on those who need it most, the move to PIP is most likely to affect those with the lowest entitlements under the existing DLA system. That means that, while fewer people are modelled as receiving PIP, the average amount of income each one receives is higher than under DLA. This decrease in the average award is projected to be outweighed, however, by the increase in the claimant rate, leading to an overall increase in income (and therefore state spending) under DLA.

Because disability benefit income is such a small proportion of the income of the 65-and-over population who are most affected by this reform (those aged 65 to 74 and, to a lesser extent, those aged 75 to 84), changes to overall net incomes or poverty are negligible.

6.2 Reform 2: less generous indexation of state pensions

The cost of providing the state pension is substantial and growing. DWP figures show that spending on the state pension is projected to grow by 24% in real terms from 2010–11 to 2018–19, a period over which it is projected to rise from 37% to 44% of total spending on benefits and tax credits. This is against the backdrop of contrasting trends in other elements of benefit spending: overall

[47] There is an interaction with the attendance allowance system in that individuals can claim only one of AA and DLA. When PIP is introduced, those who were not entitled to PIP would have the opportunity to claim AA. When DLA is retained, individuals who gain DLA income may lose AA income as a result. Because DLA awards are higher than AA awards, this results in a net gain to the individual and a net increase in state spending. A further interaction is with the carer's allowance system, where the receipt by the individual being cared for of DLA or AA affects the carer's eligibility for carer's allowance. We allow this to impact in our model by including partner's receipt of disability benefits in the regression specification for the carer's allowance model. The reforms do not affect receipt of incapacity benefits (IB, ESA and SDA) and the inclusion of these benefits in mean incomes has a negligible effect for those aged 65 and over.

benefit and tax credit spending in Great Britain is projected to grow by just 5% over the same period and, within this, non-state-pension spending is anticipated to fall by 7%.[48]

In this section, we consider the impact of deviating from our baseline assumption that the basic state pension and the new single-tier state pension rises in line with the triple lock throughout the simulation, and instead allow them to rise only in line with the CPI from 2016–17 onwards (i.e. after the end of the current parliament). This would result in a lower state pension payment to pensioners and a reduction in state spending. Almost all the individuals in our model would be affected by such a change, since it would affect anyone in receipt of a state pension (95% of everyone aged 65 and over in 2016–17).

Under the triple lock assumption, we project that the state pension will account for 31% of gross income among those aged 65 to 74, 42% among those aged 75 to 84 and 46% among those aged 85 and over in 2022–23. Under the assumption of CPI uprating in the next parliament, we project that these figures would fall to 30%, 39% and 44% respectively.

Figure 6.1. Impact of change to state pension indexation by income quintile, 2022–23

Note: Quintiles are defined on the equivalised net income distribution under the baseline assumption of triple-lock indexation in all years.

Figure 6.1 shows the projected impact of the change to indexation of the state pension on the equivalised net incomes of the population aged 65 and over in 2022–23. The average change in income is projected to be a fall of almost 3%, with losses concentrated around the middle and lower middle of the income distribution. The average cash loss is projected to be just over £15 per week in

[48] Authors' calculations from figures in https://www.gov.uk/government/publications/benefit-expenditure-and-caseload-tables-2014.

2014–15 prices. The cash loss in the poorest quintile is lower, at around £8, because of the lower state pension entitlements of this group and the safety net provided by pension credit. The percentage losses tail off towards the top of the distribution as similarly-sized cash losses form a smaller proportion of overall income. This reduction in state support is projected to increase the absolute income poverty rate in 2022–23 by 2ppts, from 13% to 15%.

6.3 Reform 3: changes to the proportion of DC pension wealth annuitised on retirement

In this section, we consider potential impacts of the recent relaxation of the rules surrounding the annuitisation of DC pension pots. At Budget 2014, the Chancellor announced the removal, from April 2015, of the requirement for individuals to buy an annuity (a guaranteed lifetime income) with their accumulated DC pension wealth, instead allowing them to annuitise part or none of the pot and spend, invest or bequeath the remainder as they choose.

We model this reform as first becoming visible in our model in 2016–17 (i.e. the first simulated year after the policy comes into force) and compare the scenario in which no one with unannuitised DC pension wealth who retires in 2016–17 or later buys an annuity with the baseline assumption of full annuitisation.[49] We make no assumption about how these individuals then choose to invest, spend or bequeath their 'additional' wealth, but we compare its size with average non-pension wealth holdings.[50] For the purposes of this analysis, we do not take account of the fact that those with large secure income, and those with only small DC pension pots, already did not have to annuitise their DC pensions and therefore may not be directly affected by the latest Budget measure.

Since we assume that everyone annuitises their pension wealth by the age of 65, the oldest affected person in our model in 2022–23 has reached age 72. We find that 14% of people aged 65 to 74 in 2022–23, and 7% of all people aged 65 and over, are affected by this reform by this point: that is, that they have unannuitised DC pots at the point at which they start to draw their full private pension and that this point is no earlier than 2016–17.

The mean gross weekly income in 2022–23 for those who have an annuitisation decision to make over the period from 2016–17 would be £530 if they annuitised all of their accumulated DC pension wealth and also left the labour market, of which £300 would come from private pension income. Their income if they annuitised half of their unannuitised DC pots would instead be £430, and it would be £330 if they annuitised none (of which an average of £100 would come from

[49] Note we assume 100% annuitisation at baseline, i.e. we do not reduce DC pension pot sizes by an amount taken as a lump sum.

[50] The impact of these assumptions is that we will most likely understate incomes (to the extent to which individuals invest the unannuitised funds in assets that deliver an income stream) but overstate their wealth (to the extent to which they spend or bequeath their unannuitised funds).

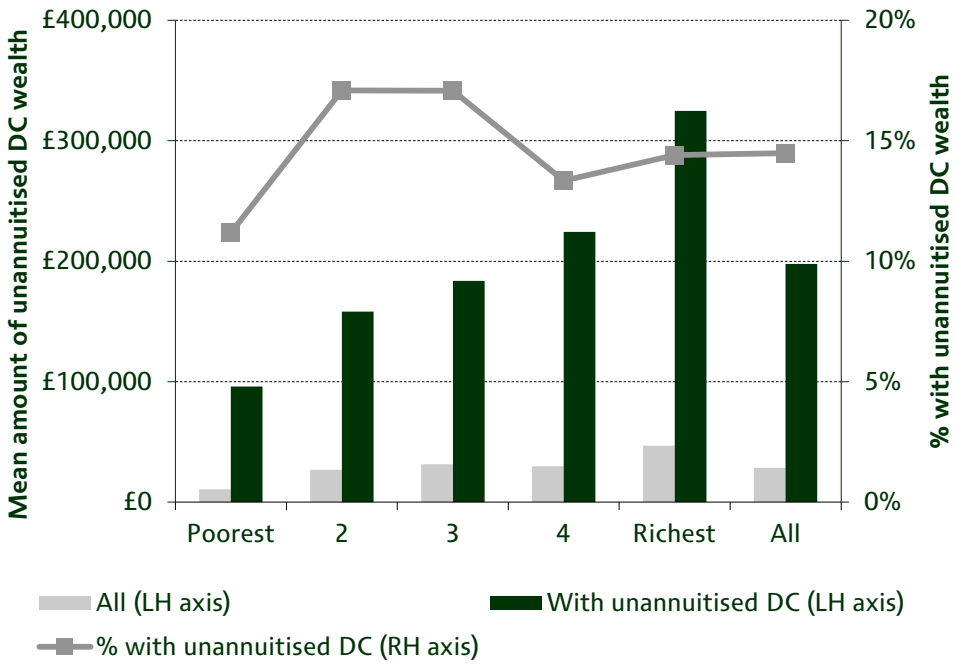
private pension income). The fact that there is still an average of £100 per week of private pension income among this group is due to some, but a minority, of those with unannuitised DC pension pots having other private pension income – for example, from a defined benefit (DB) pension scheme or from another DC pension that they have already annuitised. The mean amount of unannuitised DC wealth per affected person is around £200,000 in 2022–23, with the median being just under £75,000. At the extreme, then, the individual with mean unannuitised DC wealth can choose between around £200 per week of guaranteed gross income (fixed in cash terms) and roughly £200,000 in wealth. In reality, individuals can choose any point on the continuum between these two extremes.

These amounts are much larger than the average annuity purchases seen today. But our figures relate to the period up to 2022 and new retirees will have spent longer working after 1988 when DC pensions became more prevalent. Furthermore, our figures relate to the entire DC wealth of an individual, which in many cases is shared across more than one DC pot.

To put that £200,000 in context, we now look in more detail at the change in wealth that we project would occur if no one annuitised their DC pension wealth.

Figure 6.2 shows that just under 15% of the 65- to 74-year-olds in our model have an unannuitised DC pot or pots, with this proportion being lowest at the

Figure 6.2. Mean amount of unannuitised DC wealth by non-pension wealth quintile: 65- to 74-year-olds

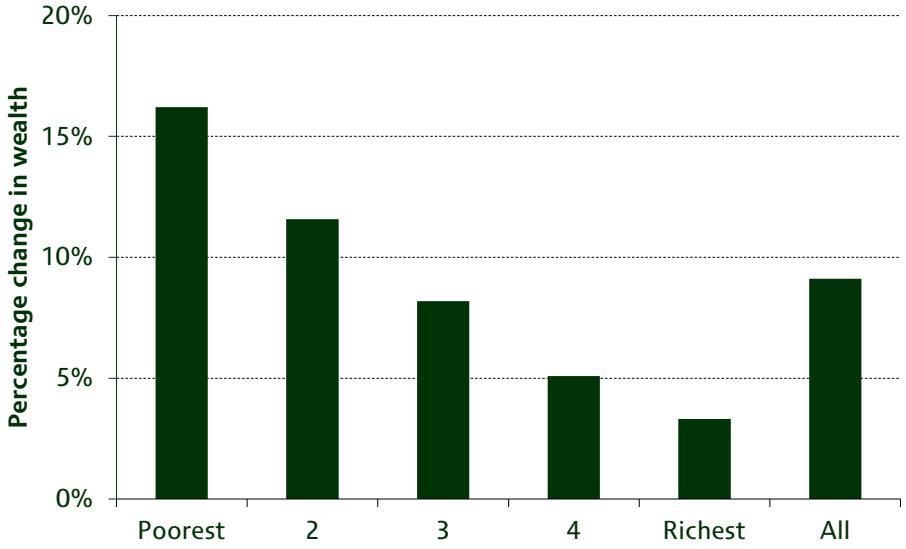


Note: Quintiles relate to net non-pension wealth and are defined across all individuals aged 65 and over in 2022–23, separately for singles and those in couples. Results presented are for all individuals aged 65 to 74 in 2022–23. Cash figures are nominal. Figures are for all those who have been eligible to make use of the relaxation to the rules from 2016–17 to 2022–23.

bottom of the wealth distribution and peaking in the middle. Those towards the top of the wealth distribution may have already annuitised their pots (as they could afford to retire earlier than average) or may be more likely to have DB rather than DC pensions, accounting for the drop-off in eligibility. The black bars in Figure 6.2 show the mean size of the unannuitised DC wealth among people who hold at least one unannuitised pot, which rises steeply with increasing non-pension wealth. At the top of the wealth distribution, the average amount of DC wealth is around £325,000; at the bottom, it is just under £100,000. The grey bars show that the mean amount of unannuitised DC wealth across all 65- to 74-year-olds is greater in higher wealth quintiles than in lower wealth quintiles. This is due to the combined effect of the increasing average amount of DC pension wealth and the humped pattern of the proportion of people eligible to make use of the new flexibilities across the wealth distribution. For the alternative scenario where individuals still annuitise half of their DC pension wealth, the height of all the bars would simply be halved.

Although the absolute amount of unannuitised DC pension wealth is much greater at the top of the wealth distribution than at the bottom, the opposite is true of its size relative to non-pension wealth. Figure 6.3 shows that if no one annuitises their pension pot from 2016–17 onwards, the overall change in mean net wealth among 65- to 74-year-olds is an increase of 9%; there are increases of 16% at the poorer end of the distribution and 3% at the richer end. Again for the alternative scenario where individuals still annuitise half of their DC pension wealth, the height of all these bars would simply be halved.

Figure 6.3. Mean percentage increase in wealth by non-pension wealth quintile: 65- to 74-year-olds



Note: Quintiles relate to net non-pension wealth and are defined across all individuals aged 65 and over in 2022–23, separately for singles and those in couples. Results presented are for all individuals aged 65 to 74 in 2022–23. Percentage changes are the mean amount of DC wealth as a percentage of mean family non-pension net wealth in 2022–23. This assumes that the DC wealth of those retiring (and not annuitising) before 2022–23 has remained constant.

recovering to grow by 2.0% a year on average over the period from 2014–15 to 2022–23, with this growth driven mostly by increased earnings.

We see something of a reversal of fortunes within the population aged 65 and over: the equivalised net incomes of 65- to 74-year-olds are projected to grow by 3% a year on average between 2014–15 and 2022–23, while income among those aged 75 and over will only grow half as fast, at 1.6% per year. This difference is driven by changes in earnings and income from private pensions. Gross income from earnings is projected to grow by an average of 8% per year between 2010–11 and 2022–23 among those aged 65 to 74, and gross income from private pensions is projected to grow by an average of 5% a year for this group. We project slower growth in private pension income among older age groups over the same period, which represents a reversal of trends seen in the previous decade. Growth of income from state pensions and disability benefits is projected to be slower than that of income from private sources.

The growing importance of earnings also contributes to an increase in income inequality among those aged 65 and over, but the average increase in incomes leads to a fall in the projected absolute poverty rate.

It is important to remember that financial well-being and income poverty are not the full story: while we project that the incomes of older people will grow strongly with increased employment, this is clearly at the expense of leisure time. With the growing number of older people in work comes a falling number available to provide care to grandchildren or voluntary support in their communities, perhaps tempering what initially appears to be an unequivocally positive story.

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