

3. Financial circumstances and consumption

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In this chapter, we assess changes to the material living standards of individuals aged 50 and over in England, taking advantage of the multiple measures of material well-being in the ELSA data. The analysis in this chapter shows the following:

- Looking at changes in the distribution of income among individuals aged between 50 and the state pension age (SPA) between 2002–03 and 2008–09, we see that this age group has significantly higher average incomes in real terms in 2008–09. Income is also somewhat more unequally distributed in this age group than it was in 2002–03.
- The same holds true for individuals aged above the SPA: average incomes are higher and inequality is somewhat greater.
- Looking at changes in the sources of income between 2002–03 and 2008–09, we see that for individuals aged between 50 and the SPA, earnings from employment have become a more significant source of income for those towards the bottom of the income distribution, but a smaller share of income for those towards the top.
- Among individuals aged above the SPA, income from the state (benefits and the state pension) remains the largest single source of income (on average) for those in the bottom two-thirds of the income distribution. However, its share of overall income has fallen slightly between 2002–03 and 2008–09, as income from private pensions has grown in importance across the distribution.
- Turning to changes in the distribution of wealth between 2002–03 and 2008–09, we see that the largest shift in the wealth distribution occurred between 2002–03 and 2004–05, with a significant increase in wealth (on average) between these years. This increase appears to have been driven almost entirely by housing wealth, with other sources of wealth changing little. However, recent declines in house prices have started to move this trend into reverse.
- After four waves of ELSA, we have now observed over a thousand individuals both before and after their retirement. Comparing pre-retirement incomes with post-retirement incomes, we find that average income falls significantly (in real terms) on entering retirement. Most individuals have post-retirement incomes amounting to less than three-quarters of their pre-retirement income. However, among individuals with low incomes (less than £150 per week) before retirement, income actually tends to increase on entering retirement, perhaps as a result of state support

for pensioners on low incomes (such as the Pension Credit) and the state pension.

- Spending on basics (food, domestic fuel and clothing) at the mean went up by 9.4% and spending on domestic fuel increased by 37.3% between 2004–05 and 2008–09.
- Spending on basics as a percentage of income can be used as a yardstick of welfare. A quarter of households experienced an increase of more than 10 percentage points in the share of their income devoted to basics between 2004–05 and 2008–09.
- Those in the bottom income quintile (after controlling for other factors) are 17 percentage points more likely to experience a 10 percentage point or more increase in the share of their income devoted to basics than those in the top income quintile. If we choose to use spending on basics as a percentage of income as a yardstick of welfare, this implies that the poorest have been affected the most by the rise in prices of food and domestic fuel.
- Retirement is not associated with a big change in the share of income devoted to spending on basic goods and on leisure once changes in income and other factors that occur around the time of retirement have been accounted for.

3.1 Introduction

The living standards of older people have long been a concern of policymakers, with the current coalition government committed to ‘safeguarding key benefits and pensions’ to provide older people ‘with the support they need’, as part of the coalition’s programme for government.¹ The previous Labour government also targeted the well-being of older people, introducing a number of reforms to the tax and benefit system aimed at reducing the number of pensioners living on very low incomes – notably, the introduction of the Minimum Income Guarantee for pensioners, later replaced by the Pension Credit. These policies attempted to create a ‘floor’ for pensioners’ income, to ensure that the incomes of retired people could not fall below a certain level (currently £132.60 per week for a single pensioner and £202.40 per week for couples).

However, income is just one yardstick by which to measure living standards. Another important aspect of individuals’ living standards is the level of their consumption. Consumption and income are closely related but nonetheless can tell us a different story about living standards. For example, Brewer, Goodman and Leicester (2006) showed that the fall in relative income poverty for pensioners seen in the 1990s and early 2000s was not replicated in terms of expenditure. Because of the way that individuals draw down their savings to fund consumption (and, equally, save at times when income is high), consumption can tell us about longer-term living standards rather than the snapshot picture that is sometimes given by looking at income alone.

¹HM Government, 2010.

In this chapter, we assess changes to the material living standards of individuals aged 50 and over in England, taking advantage of the multiple measures of material well-being in the ELSA data. We begin in Section 3.2 by assessing changes to the income and wealth distribution between 2002–03 and 2008–09 (the first and fourth ELSA waves, respectively). We also use the longitudinal nature of the ELSA data to examine how individuals' pre-retirement income compares with their income after retiring (the 'replacement rate', an important statistic for retirement policy). In Section 3.3, we consider what has happened to spending on 'basics' (food, domestic fuel and clothing) between 2004–05 and 2008–09 (the second and fourth waves of ELSA).

3.2 Financial circumstances

3.2.1 Methods

Measurement of income in ELSA

From its inception, ELSA has included a wide range of questions relating to respondents' income from a range of sources, including income from employment, private and state pensions, financial assets, state benefits and other sources. Income information is collected at the family unit level,² so that for couples who keep their finances together, only one member of the couple is asked the series of income questions, while for couples who keep their finances separate, the questions are asked of both respondents separately.

Information about each source of income is collected via a two-stage process: respondents are first asked to report a precise value for their income from a given source; any respondent who refuses to report (or is not sure of the exact amount) is then asked a series of questions designed to elicit an upper and lower bound for their income from that source. Where respondents have an upper and lower bound, they are then allocated a precise value using an imputation procedure known as the 'conditional hot deck'.³ This leaves only a small fraction of respondents with completely missing income information (see under 'Sample' below).

For the purposes of the analysis below, total income is defined net of taxes and is the sum of employment income, income from self-employment, private pension income, state pension income, other benefit income (excluding Housing Benefit and Council Tax Benefit), asset income and any other income. While our income measure is at the family unit level, we analyse the data at the individual level, following the approach of the Department for Work and Pensions (DWP) 'Households Below Average Income' series⁴ (though the latter measures incomes at the household, rather than the family unit, level). This is motivated by the fact that it matters how many people are living in a particular family unit (if two individuals are living in a low-income

²A family unit is defined as a single person or a couple and any dependent children that they might have.

³See annex 9.1 of Marmot et al. (2003) for more information about imputation of income components.

⁴See Brewer et al. (2009).

family, we care about both those individuals' welfare). Total family incomes are adjusted to take into account family size (a procedure known as 'equivalising') using the modified OECD equivalence scale.⁵ Cross-sectional weights are used in all calculations.

Measurement of wealth in ELSA

The ELSA survey collects detailed information on respondents' wealth, including their financial wealth (savings and investments), physical assets and debts (credit cards, loans, etc.). ELSA also has detailed questions relating to respondents' housing wealth (and any mortgage debt they may have) and private pension wealth. Information regarding each source of wealth is collected according to the same two-stage process as that described above, with individuals who refuse to give an exact amount (or who do not know the exact amount) being asked a series of questions designed to elicit upper and lower bounds. As was the case for income sources, these individuals are then allocated a precise amount using the 'conditional hot deck' imputation procedure.

In the analysis below, we focus on total non-pension wealth (financial plus physical plus housing wealth minus any debt). The analysis is conducted at the individual level, though wealth is measured at the family unit level. As in the income analysis, weights are used in all calculations.

Sample

For our cross-sectional analysis of incomes and wealth, our sample is all core ELSA sample members in each wave. We exclude only individuals whose income or wealth information is completely missing, even after being asked the series of questions designed to elicit upper and lower bounds. This removes less than 2% of the income and wealth samples in 2002–03 and just under 3% of the income and wealth samples in 2008–09.

For our longitudinal analysis of replacement rates after retirement, our sample is core ELSA sample members who were in work in 2002–03 and who were still in the ELSA sample in 2008–09 but had retired from work by this time (a sample of just over 1,000 individuals). To avoid our results being driven entirely by outliers, however, we then remove from the sample individuals whose incomes have been subject to imputation without a clear upper or lower bound ('open band' imputation) for any income source. This stringent data requirement reduces the sample to around 600 observations in total.

3.2.2 The income distribution

We begin by considering how the income distribution in ELSA has changed over time, from the first ELSA wave in 2002–03 to the fourth ELSA wave in 2008–09. Figure 3.1A shows the distribution of family income (adjusted to

⁵Note, however, that the modified OECD equivalence scale is designed to adjust incomes at the household, rather than the family unit, level. Over 80% of our sample live in households with just one family unit, but for those who live in households with multiple family units the use of this equivalence scale is an approximation. For more details regarding equivalence scales, see the OECD documentation at <http://www.oecd.org/dataoecd/61/52/35411111.pdf>.

Figure 3.1A. The income distribution among individuals aged between 50 and the state pension age, 2002–03 and 2008–09

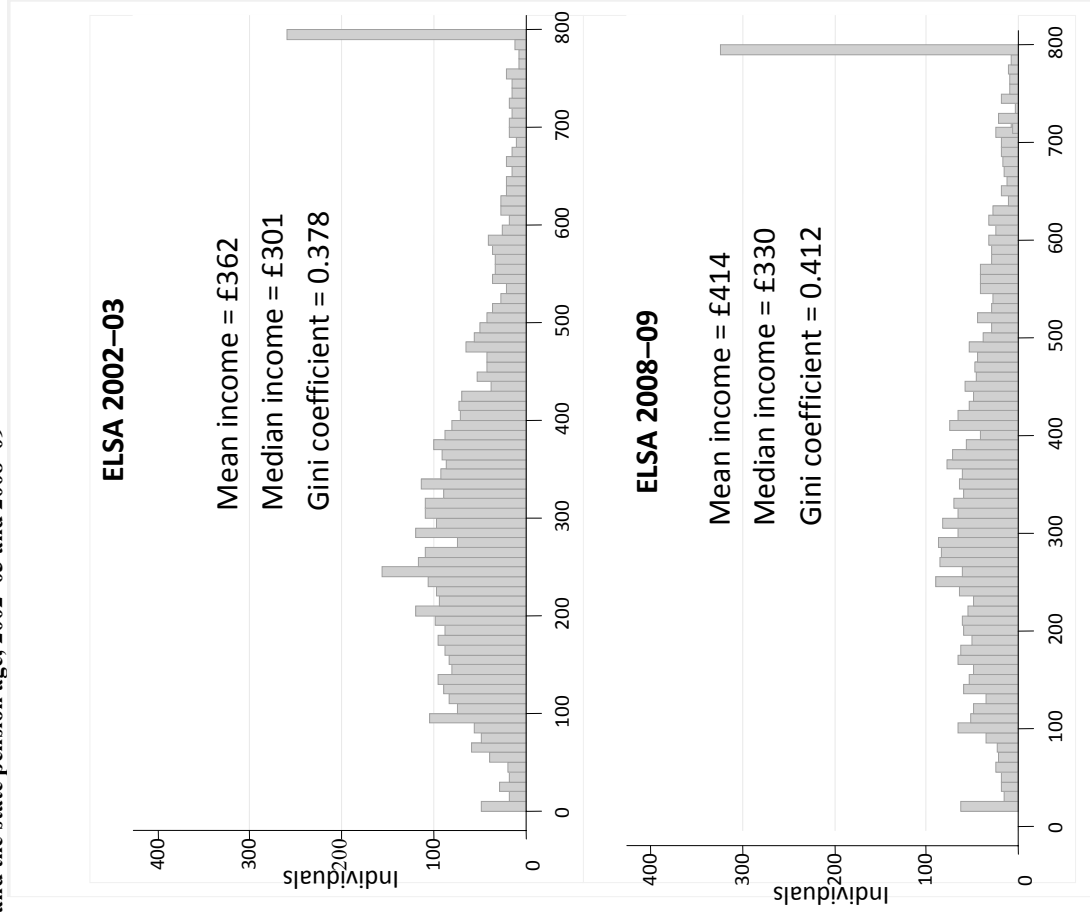
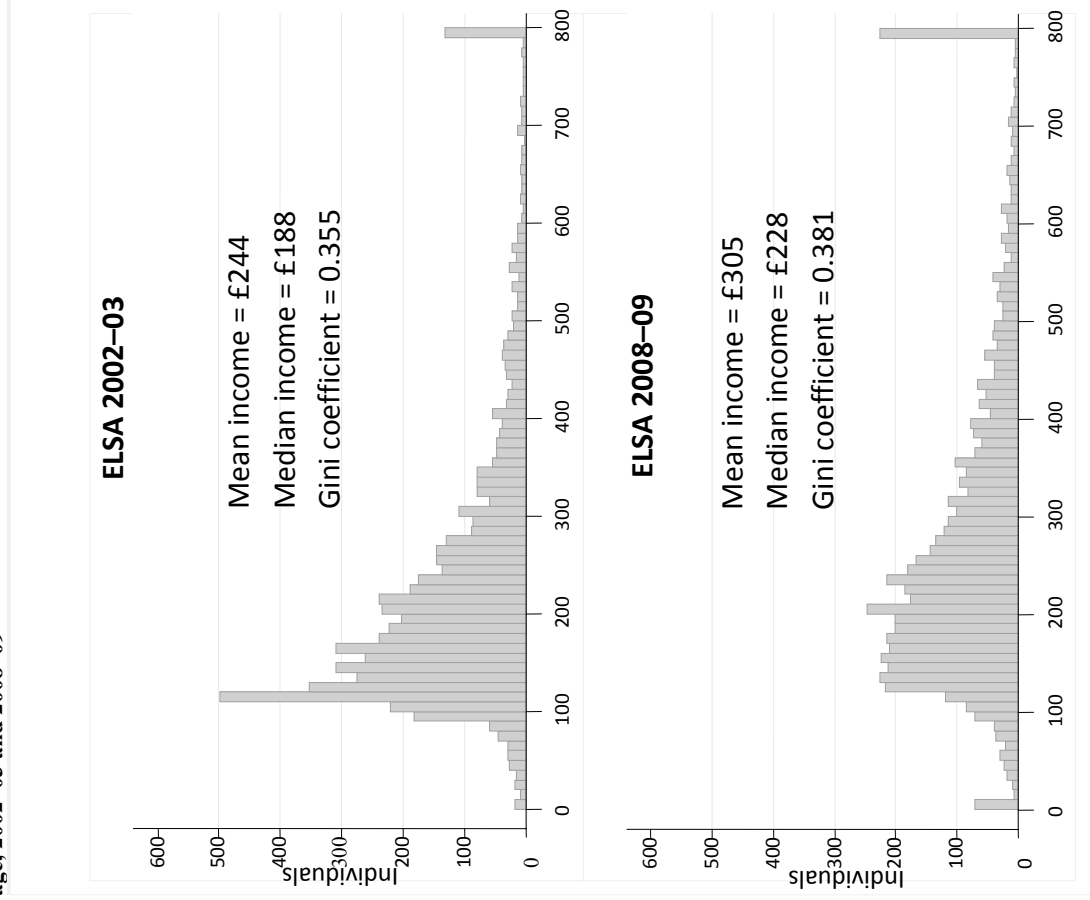


Figure 3.1B. The income distribution among individuals above the state pension age, 2002–03 and 2008–09



Notes: In all income distribution figures, incomes above £790 have been grouped together in the right-most bar. The sample is the cross-sectional sample in each wave as described in Section 3.2.1. The sample size for wave 1 is 4,861 below SPA and 6,330 above SPA. The sample size for wave 4 is 3,697 below SPA and 5,908 above SPA.

take into account family size using the modified OECD equivalence scale) among individuals between 50 and the state pension age (currently 60 years old for women, 65 for men), in pounds per week (constant 2008–09 prices), in ELSA in 2002–03 and 2008–09. Individuals have been placed into £10 income bands. Negative incomes (such as self-employment losses) have been set to zero – the left-most bar in the distributions – while incomes greater than £790 per week have been grouped together into the right-most bar (at £790–£800). Figure 3.1B shows the income distribution for individuals aged above the state pension age. Both figures also show measures of average income (mean and median), as well as a measure of inequality – the Gini coefficient, which varies between 0 and 1, with higher values signifying greater inequality.

The figures make clear that average income has increased, at both the mean and the median, in both age groups, implying that real incomes have increased. Incomes are also somewhat more unequally distributed in 2008–09 than they were in 2002–03, with both age groups showing a modest rise in the Gini coefficient.⁶

Unsurprisingly, average incomes are higher among individuals below the SPA in both 2002–03 and 2008–09, though the gap between the two is smaller in 2008–09 (the mean income of pensioners is 33% below the mean for individuals aged 50 to the SPA in 2002–03, but 26% below it by 2008–09). The distribution of income among pensioners shows a particularly dramatic shift: the 2002–03 pensioner income distribution has a notable spike at around £120 per week, due to clustering around the value of the Minimum Income Guarantee, but by 2008–09 this spike has flattened out somewhat, with a mass between about £130 and £250 per week but no pronounced spike. This lack of a spike in the 2008–09 distribution may be partly due to a change in the structure of the Minimum Income Guarantee, which was reformed (and renamed the ‘Pension Credit’) in 2003. While the notion of a guaranteed minimum income was maintained in the Pension Credit (known as the ‘Guarantee Credit’), the Pension Credit also paid additional money to pensioners who had put aside some savings of their own towards their retirement (attempting to address the disincentive to save created by the Minimum Income Guarantee). This element of the Pension Credit (the ‘Savings Credit’) seems likely to have made benefit payments less tightly bunched around a single value. Moreover, there are fewer individuals in the 2008–09 income distribution whose incomes are derived solely from the state pension (topped up with the Pension Credit) than there were in 2002–03, suggesting that private sources of income are becoming more important in this age group (a possibility that we investigate further below).

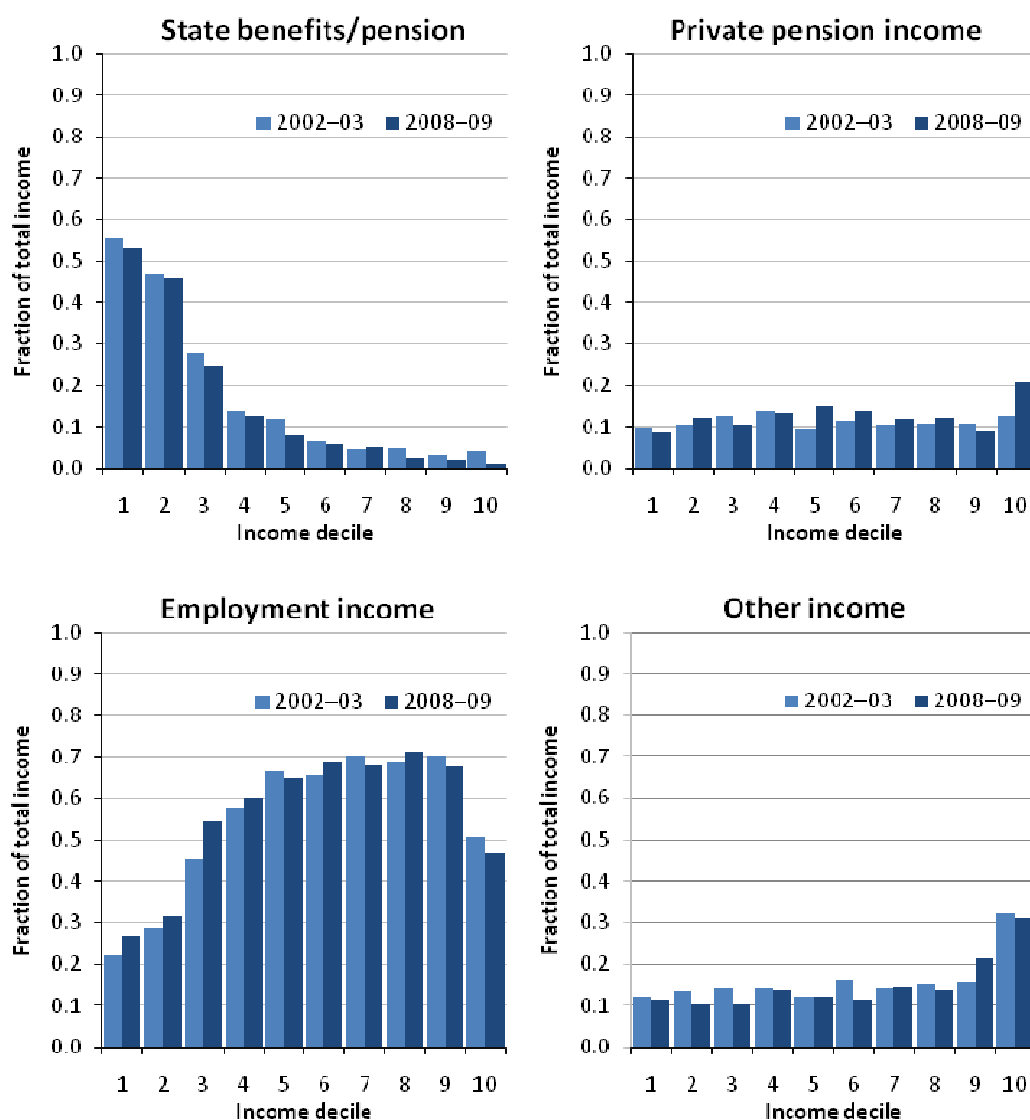
Families derive their income from many different sources, such as earnings from employment, income from the state (benefits and the state pension) and income from private pensions. In Figure 3.2, we examine how different sources of income have changed between 2002–03 and 2008–09, at different points in the income distribution. As in Figure 3.1, we have separated the population into those below the SPA (but aged 50 or over), shown in Figure 3.2A, and those above the SPA, shown in Figure 3.2B. For both age groups,

⁶Increasing inequality is also seen in these age groups in the Family Resources Survey, at least up to 2006–07. See appendix A of Brewer, Muriel and Wren-Lewis (2009).

we have divided individuals into 10 equally sized groups (decile groups) based on their family income, from those with the lowest incomes (decile 1) to those with the highest (decile 10).⁷

Figure 3.2A makes clear the extent to which state benefit income matters for individuals below the SPA on low incomes, making up more than half of the income of individuals in the bottom decile of the income distribution in both 2002–03 and 2008–09. Unsurprisingly, however, it is employment income

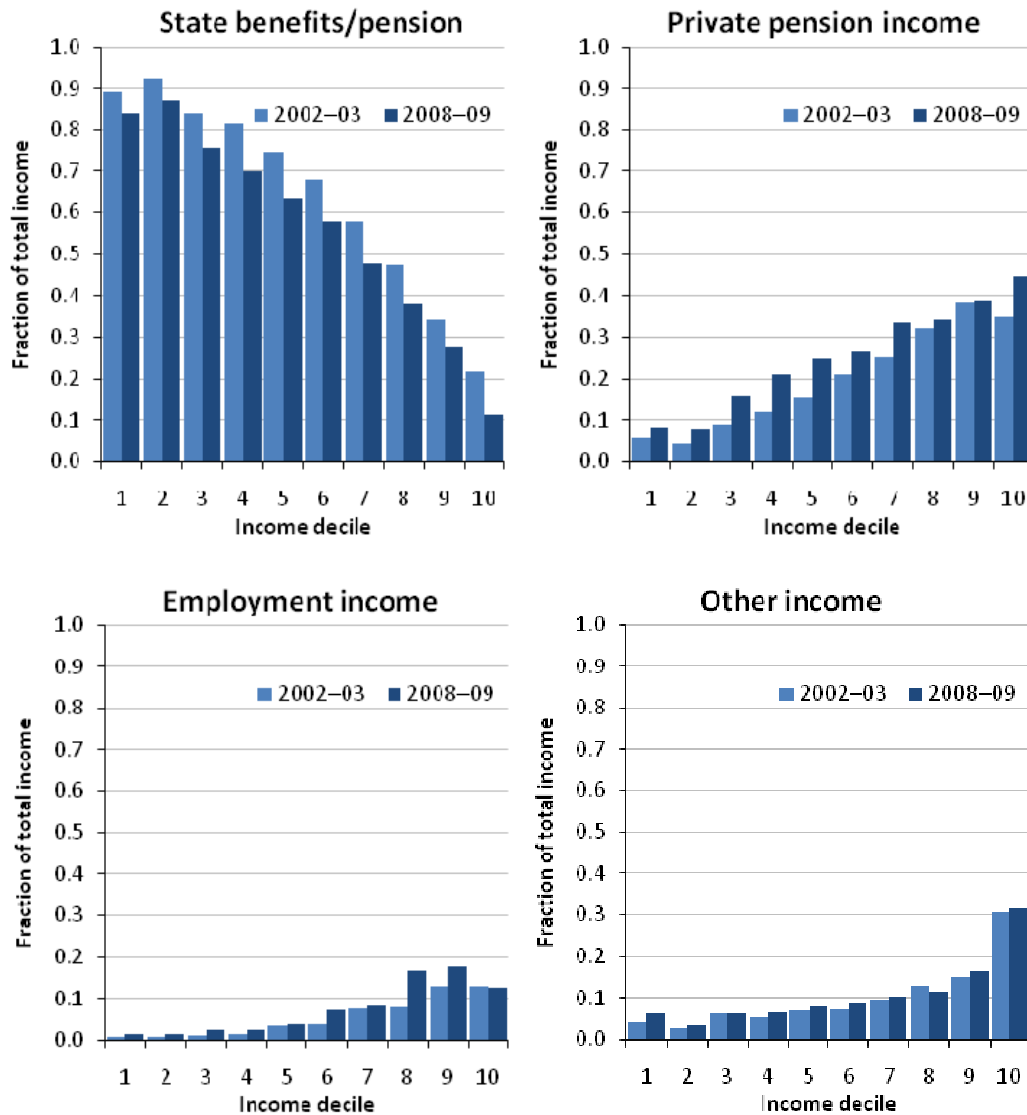
Figure 3.2A. Sources of income among individuals aged between 50 and the state pension age, 2002–03 and 2008–09



Notes: Other income includes income from assets, self-employment and other payments into the household. The sample is the cross-sectional sample in each wave as described in Section 3.2.1. The sample size for wave 1 (2002–03) is 4,861 and for wave 4 (2008–09) is 3,697.

⁷Note that income sources in these figures are still measured at the family unit level, so even individuals below the SPA may be gaining some income from the state pension if their partner is above the SPA, and retired individuals may still be gaining income from employment if their partner is still working.

Figure 3.2B. Sources of income among individuals above the state pension age, 2002–03 and 2008–09



Notes: Other income includes income from assets, self-employment and other payments into the household. The sample is the cross-sectional sample in each wave as described in Section 3.2.1. The sample size for wave 1 (2002–03) is 6,330 and for wave 4 (2008–09) is 5,908.

which forms the largest income source for most individuals in this age group. The trends over time are not large, but we do see some variation in the sources at different points in the income distribution. It is interesting to note that income from employment has become a larger share of income for individuals towards the bottom of the income distribution, but a smaller share of income among those towards the top. Individuals towards the top of the income distribution are instead deriving an increased fraction of their income from private pensions, though ‘other’ sources of income (including income from assets) remain an important income source for the top decile.

Figure 3.2B shows just how important income from the state (in the form of both pensions and benefits) is for families containing individuals above the SPA. For such families in the bottom two-thirds of the income distribution,

state benefits/pensions form the largest single income source in both 2002–03 and 2008–09. However, the share of state income in total pensioner income has fallen slightly, across the income distribution, as other income sources have grown in importance.

The most significant increase is seen in private pension income, which makes up a larger share of pensioners' incomes in 2008–09 than it did in 2002–03 right across the income distribution. Indeed, towards the bottom of the income distribution, the share of private pension income in total income has almost doubled since 2002–03 (from an admittedly low base). There has also been a significant increase in the share of income coming from private pensions at the top of the pensioner income distribution, with private pension income now comprising nearly half of all income for the top decile.

Interestingly, among individuals in the top half of the pensioner income distribution (but not at the very top), income from employment has also grown as a share of total income. This may reflect the fact that individuals are now able to work and draw a pension from their employer at the same time, following a reform in 2005.

These changes in the shares of different income sources are largely driven by the changing composition of the pensioner population, rather than by changes in the income sources of existing pensioners. Many of the oldest individuals in the 2002–03 ELSA wave have subsequently died, and their 'replacements' in the pensioner age group (individuals reaching the SPA by 2008–09) are a younger cohort, who have been more exposed to changes in the pension system which saw an increased emphasis on private (rather than state) pension provision. When we repeat the analysis in Figure 3.2B using only the cohort of individuals aged above the SPA in 2002–03 (excluding the 'youngest' pensioners from the sample), the fraction of income derived from the state barely changes at all between 2002–03 and 2008–09.⁸ Even this sensitivity test will understate the full composition effect, since it ignores the impact of members of the cohort dying between 2002–03 and 2008–09. Nonetheless, it supports the suggestion that these changes are driven largely by composition effects, rather than by changes in the income sources of existing pensioners.

The picture that emerges from Figures 3.1B and 3.2B, then, is of a pensioner population that has become better off, on average, between 2002–03 and 2008–09, though much of this will be due to composition changes rather than to changing circumstances of existing pensioners. An increasing share of their income comes from private sources (both employment and pensions) rather than the state, but the state remains a hugely important income source for all but the highest-income pensioners.

3.2.3 The wealth distribution

Having examined the flow of income among older people in England, we now move on to consider their stock of wealth. Figures 3.3A and 3.3B show the cumulative distribution of net total wealth, excluding pensions, for two age groups (aged 50 to the SPA, and SPA plus), in all four ELSA waves to date.

⁸Results available from the authors on request.

Figure 3.3A. Cumulative distribution of net total wealth (excluding pensions) among individuals aged between 50 and the state pension age, 2002–03 to 2008–09

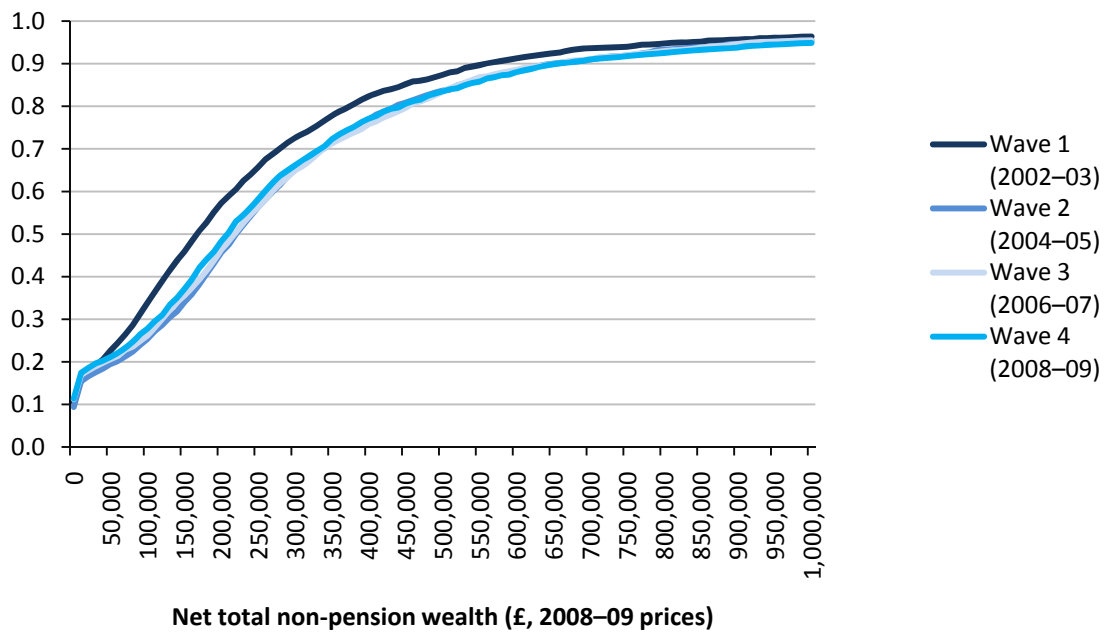
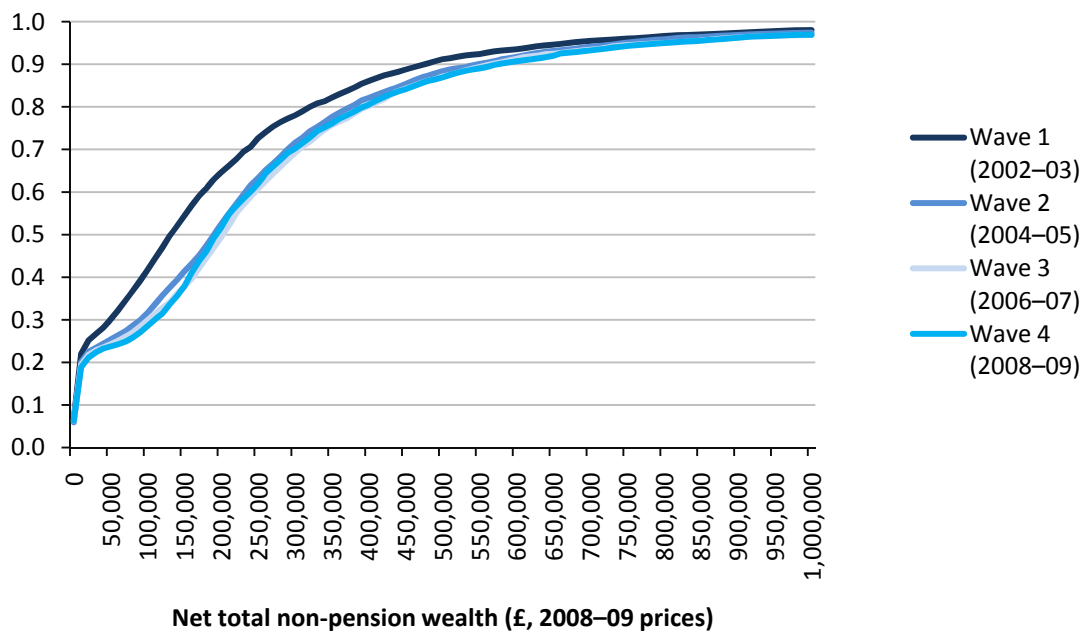


Figure 3.3B. Cumulative distribution of net total wealth (excluding pensions) among individuals above the state pension age, 2002–03 to 2008–09



Notes: The sample is the cross-sectional sample in each wave as described in Section 3.2.1. The sample sizes for those below SPA in waves 1, 2, 3 and 4 are 4,860, 3,798, 3,610 and 3,697 respectively. The sample sizes for those above SPA in waves 1, 2, 3 and 4 are 6,329, 5,461, 4,963 and 5,908 respectively.

Figure 3.4A. Cumulative distribution of net non-housing wealth (excluding pensions) among individuals aged between 50 and the state pension age, 2002–03 to 2008–09

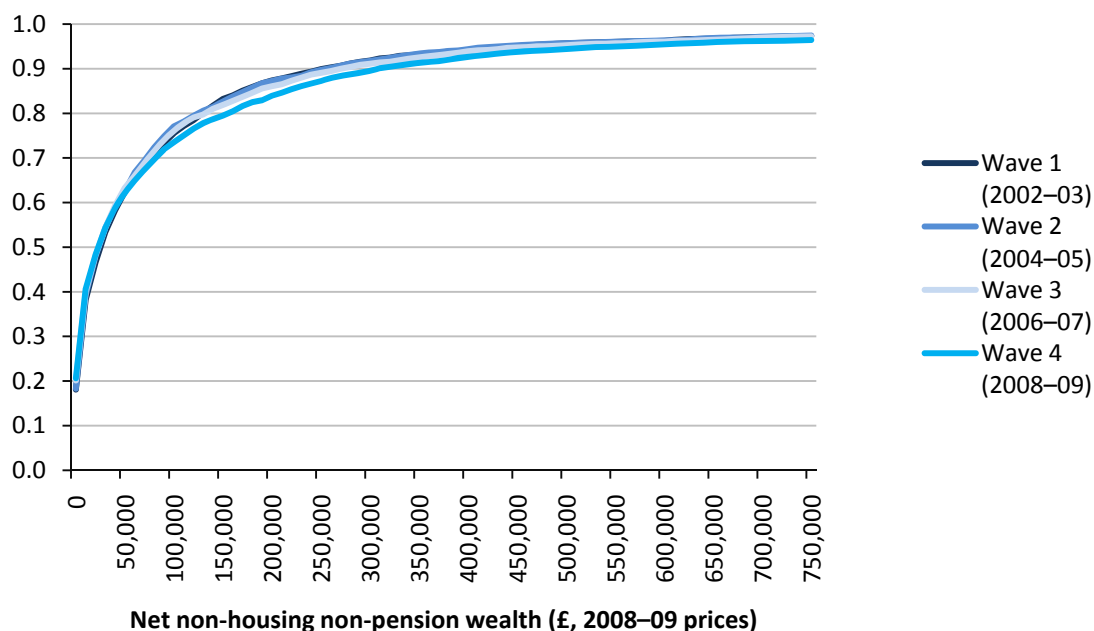
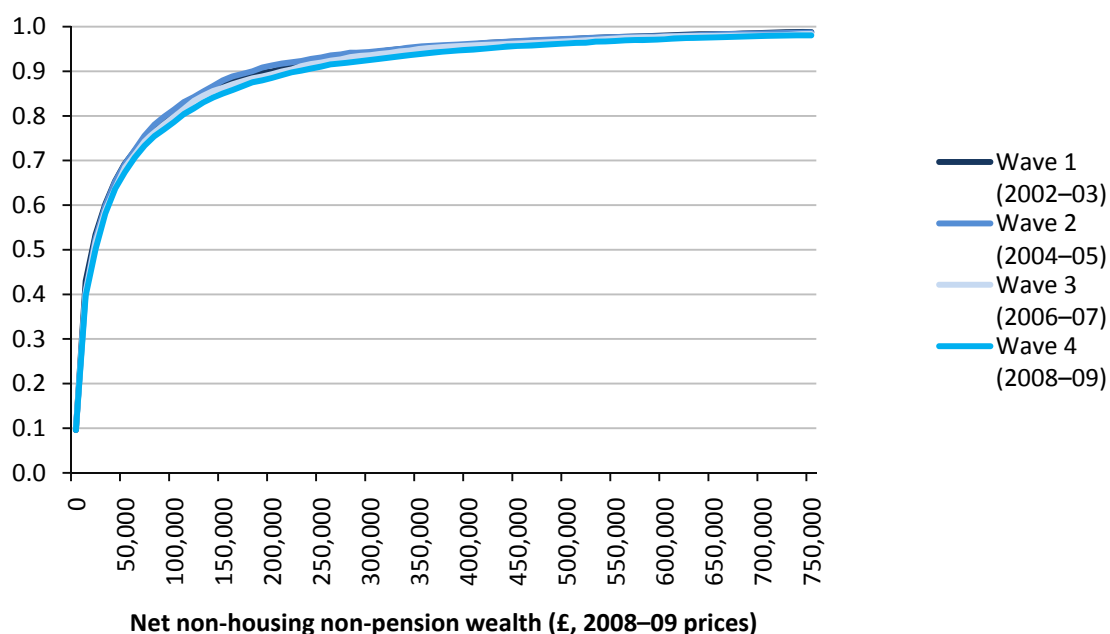


Figure 3.4B. Cumulative distribution of net non-housing wealth (excluding pensions) among individuals above the state pension age, 2002–03 to 2008–09



Notes: The sample is the cross-sectional sample in each wave as described in Section 3.2.1. The sample sizes for those below SPA in waves 1, 2, 3 and 4 are 4,860, 3,798, 3,610 and 3,697 respectively. The sample sizes for those above SPA in waves 1, 2, 3 and 4 are 6,329, 5,461, 4,963 and 5,908 respectively.

Figure 3.5A. Cumulative distribution of net housing wealth among individuals aged between 50 and the state pension age, 2002–03 to 2008–09

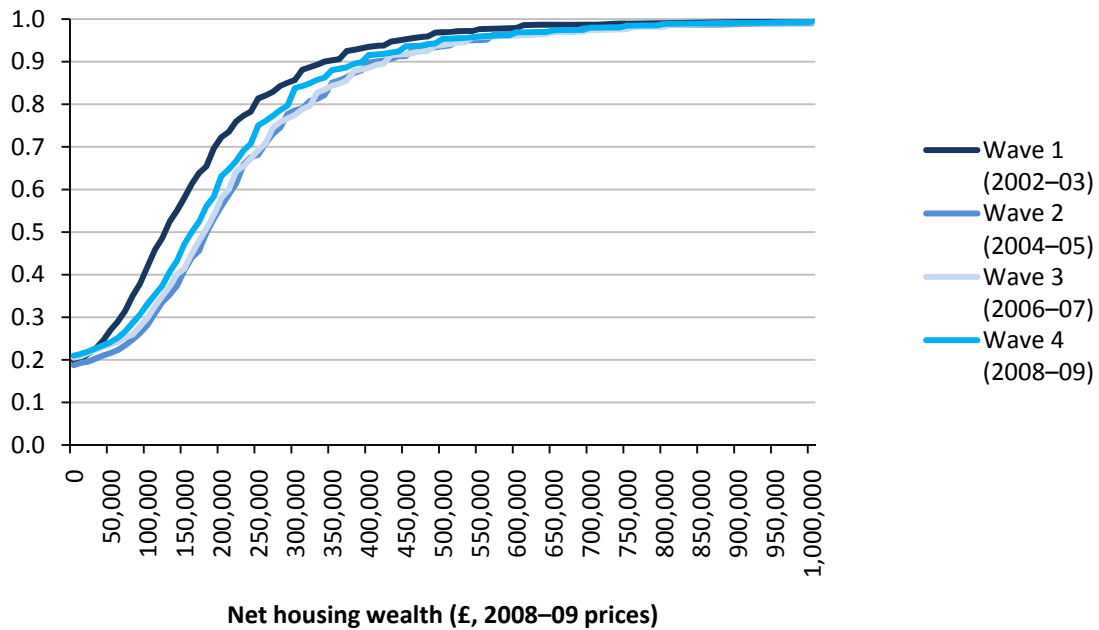
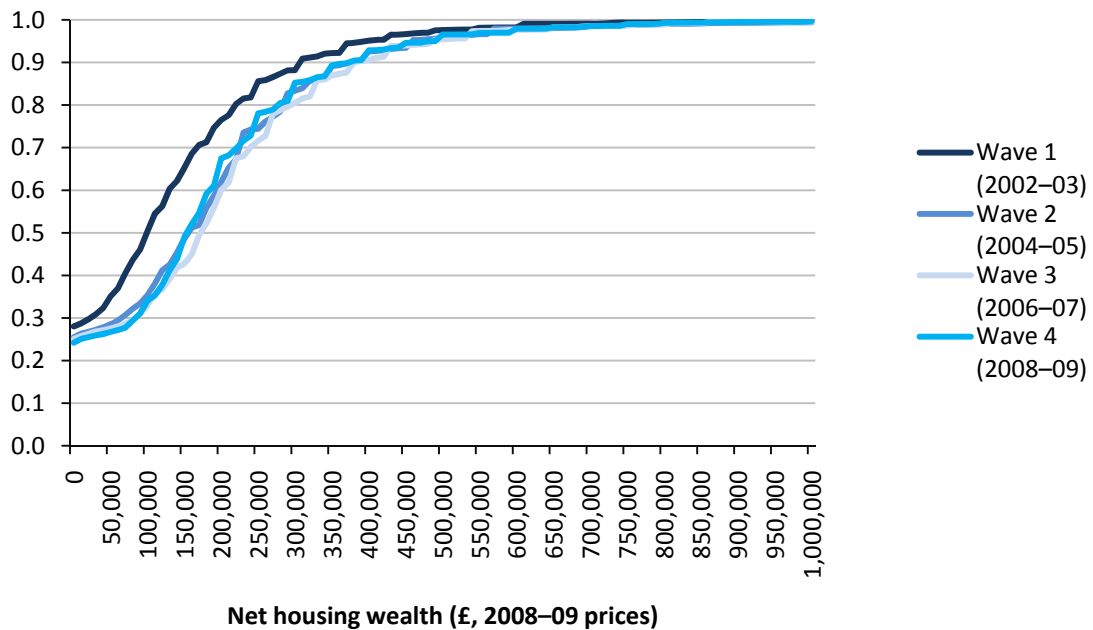


Figure 3.5B. Cumulative distribution of net housing wealth among individuals over the state pension age, 2002–03 to 2008–09



Notes: The sample is the cross-sectional sample in each wave as described in Section 3.2.1. The sample sizes for those below SPA in waves 1, 2, 3 and 4 are 4,861, 3,799, 3,610 and 3,697 respectively. The sample sizes for those above SPA in waves 1, 2, 3 and 4 are 6,330, 5,462, 4,964 and 5,908 respectively.

The lines in these figures show the fraction of individuals who have a given level of wealth or less. For example, the line for ELSA wave 1 in Figure 3.3A shows that half of individuals aged between 50 and the SPA had net total wealth of £175,000 or less in 2002–03. When these lines shift to the right (as they do in both figures), it means that individuals are getting wealthier, on average. The figures make clear that the largest shift in the wealth distribution occurred between 2002–03 and 2004–05, with comparatively little change thereafter.

It is worth considering which sources of wealth were responsible for the large increase in wealth between 2002–03 and 2004–05. Looking solely at the distribution of non-housing wealth, in Figures 3.4A and 3.4B, we see that it barely changed between 2002–03 and 2004–05, for both those above and those below the SPA. This suggests that the increase between 2002–03 and 2004–05 was driven by housing wealth – a possibility confirmed by Figures 3.5A and 3.5B. We see that housing wealth grew very strongly between 2002–03 and 2004–05 (across the distribution), but remained largely static thereafter. However, housing wealth fell slightly in real terms between 2006–07 and 2008–09, across most of the distribution, reflecting the recent decline in house prices across the country.

3.2.4 Income replacement rates and retirement

The panel nature of the ELSA survey allows us to look at more than just cross-sectional income and wealth distributions; we can also look at the evolution of respondents' financial circumstances over time, at the individual level. In this section, we consider the important question of how individuals' incomes change when they enter retirement.

After four waves, ELSA now includes over a thousand respondents who have been observed both before and after retirement. Taking as an initial sample the individuals who were in work in 2002–03 but no longer working in 2008–09, we are able to compare their pre-retirement (2002–03) net income with their post-retirement (2008–09) net income. Table 3.1 shows average pre-retirement and post-retirement incomes for this sample, as well as the distribution of 'replacement rates' – the ratio of post-retirement income to pre-retirement income. A replacement rate of less than 1 implies that an individual's income fell after retirement, while a rate of greater than 1 implies that their income increased. To avoid our results being driven entirely by outliers, we trim the top and bottom 1% of incomes in each wave before calculating replacement rates. As discussed under the heading 'Sample' in Section 3.2.1, we also remove individuals whose income sources have been subject to imputation without a definite upper bound ('open band' imputation), leaving a full sample of just over 600 individuals.

The first row of Table 3.1 shows average incomes (per week) and replacement rates for all retirees.⁹ It shows that, on average, pre-retirement incomes in ELSA are substantially higher than post-retirement incomes – around £389 per

⁹Defined simply as those who were in the labour force in 2002–03 but had left the labour force by 2008–09.

Table 3.1. Income replacement rates among retirees

Group	Pre-retirement mean weekly income	Post-retirement mean weekly income	Replacement rates (post-retirement income/pre-retirement income)						
			Mean	10 th percentile	25 th percentile	Median	75 th percentile	90 th percentile	95 th percentile
All retirees	388.92	287.39	0.86	0.38	0.52	0.72	1.01	1.45	1.86
<i>of whom:</i>									
Men	392.10	286.80	0.86	0.36	0.52	0.72	1.04	1.51	2.01
Women	385.95	287.96	0.87	0.40	0.52	0.72	0.99	1.37	1.73
<i>By highest qualification:</i>									
Degree	595.91	466.44	0.75	0.36	0.51	0.71	0.88	1.23	1.52
A level	440.55	315.17	0.75	0.38	0.47	0.64	0.94	1.31	1.53
O level/CSE	348.41	277.18	0.95	0.37	0.53	0.74	1.16	1.62	2.06
<i>By age in 2008–09:</i>									
Above state pension age	432.33	317.12	0.88	0.28	0.45	0.71	1.15	1.82	2.33
Below state pension age	374.98	277.16	0.86	0.41	0.53	0.72	0.98	1.37	1.65
<i>Pre-retirement equivalised income:</i>									
<£150 per week	108.92	188.40	1.75	0.82	1.02	1.39	2.11	2.69	3.03
Between £150 and £250 p.w.	206.85	201.37	0.87	0.45	0.61	0.84	1.06	1.42	1.52
> £250 p.w.	487.01	330.78	0.71	0.33	0.46	0.64	0.83	1.15	1.30

Notes: Incomes are measured net of direct taxes and state benefits. Individuals whose incomes were imputed using ‘open band’ imputation in 2002–03 or 2008–09 have been excluded from the sample. Incomes are in real terms, 2008–09 prices. The sample is ELSA sample members who were in work in 2002–03 and who were still in the ELSA sample in 2008–09 but who were not working at this time. The sample size is 1,116.

week before retirement, but £287 after retirement (in real terms, constant 2008–09 prices). The mean replacement rate is significantly less than 1 (0.86), implying that post-retirement income is more than 10% lower than pre-retirement income, on average. The median replacement rate is lower still, at around 0.72, implying that the majority of retirees enjoy incomes less than three-quarters of their pre-retirement income.

The next rows of Table 3.1 show the same statistics for different subgroups of the population. We begin by separating men and women, but see little variation between the two – though this is likely to reflect the fact that men and women in couples are allocated the same family incomes, so that any differences would be driven by single men and women.

We next subdivide retirees up according to their level of education, and see that among lower-educated retirees (those with O levels or lower) replacement rates are substantially higher – close to 1 at the mean, with the top 5% of replacement rates being in excess of 2. Individuals with these replacement rates have substantially lower pre-retirement incomes, however, so even without significant private pension savings, their state pension and benefit entitlements may well be enough to replace much of their previous earnings.

We also divide retirees according to their age in 2008–09 – whether they were above or below the SPA. We see that retirees below the SPA (those who have, presumably, retired somewhat early) had lower average incomes, both before and after retirement, than those who were above the SPA in 2008–09. Replacement rates for the two groups, however, are not significantly different at the mean or median.

Finally, we divide retirees according to their pre-retirement income in 2002–03, using three categories: income below £150 per week (after adjusting for family size), income between £150 and £250 per week, and income above £250 per week. This division makes clear the extent to which low-income individuals can see their income increase after retirement. Among the low-income (<£150) group, replacement rates are very high (over 1.7 at the mean and nearly 1.4 at the median). These high replacement rates at the bottom of the distribution could partly reflect state entitlements, such as the state pension and Pension Credit, boosting the incomes of individuals with very low pre-retirement incomes. They may also, however, be due to measurement error in individuals' pre-retirement income, leading to 'reversion to the mean' (a statistical problem, in which an extreme measurement in one period – such as a very low income measurement – tends to be closer to the average when measured again at a later period). While we have taken many steps to minimise measurement error, such as trimming the income distribution and removing imputed incomes from the sample, we can never eliminate it entirely.

3.3 Consumption

So far in this chapter, we have looked at what has happened to income and wealth between 2002–03 and 2008–09. Income and wealth tell us about the levels of resources that individuals have available to allocate to consumption goods and services and to saving. Why might we be interested in consumption

in addition to income and wealth? Income, wealth and expenditure are clearly interrelated but they can tell us different stories about people's standard of living. Two individuals with the same income and the same wealth may have very different patterns of expenditure. Take two identical retired individuals as an example. The first may be drawing down their savings quickly in order to meet their consumption requirements, whereas the other individual may prefer to draw down their savings either not at all or more slowly and will therefore have lower consumption. Differences in the willingness to draw down savings may reflect differences in the levels of uncertainty regarding future circumstances or differences in life expectancy. Looking at levels and patterns of expenditure can inform us about individuals' welfare over and above simply looking at their income and wealth. This may be particularly true for elderly individuals, who may have low incomes but are using savings that they have accumulated over their lifetime in order to fund their consumption. Consumption often tells us more about long-term living standards than the shorter-term snapshot picture that income gives us.

Measures of expenditure have been included in all waves of ELSA. In wave 1 (2002–03), the main items of (non-housing) expenditure were food inside and outside the home and durable ownership, but since wave 2 (2004–05), additional measures on domestic fuel, clothing, leisure and durable purchase have also been included. These measures of spending are certainly not comprehensive and cannot compare to the measures obtained from specialist expenditure surveys such as the Living Costs and Food Survey (formerly the Expenditure and Food Survey and the Family Expenditure Survey). Detailed analysis of expenditure patterns of the elderly using the Expenditure and Food Survey has been carried out by, for example, Leicester, O'Dea and Oldfield (2009). However, the advantage of using ELSA to analyse spending is twofold. First, because the survey is longitudinal, it allows us to look at changes in spending at the individual level.¹⁰ Second, having a measure of spending in a multidisciplinary survey means that we can look at how spending is correlated with other aspects of well-being and outcomes.

In Section 3.3.1, we describe the measure of expenditure we have in ELSA. In Sections 3.3.2 and 3.3.3, we look at levels of expenditure and ask what happened to spending between 2004–05 and 2008–09, particularly in the light of large increases in the price of food and domestic fuel seen over this period. In Section 3.3.4, we look at the issue of spending around the time of retirement.

3.3.1 Methods

Measurement of expenditure in ELSA

Since wave 2 of ELSA (2004–05), information on a range of expenditure items has been collected. Food inside the home, food outside the home, domestic fuel, clothing and durable purchases were recorded in waves 2, 3 and 4. Expenditure on leisure and money given to people outside the home

¹⁰Although the British Household Panel Survey also contains measures of food spending and expenditure on domestic fuel, spending on food after the first wave is reported as a banded amount.

(including charity) were recorded in waves 2 and 4 (2004–05 and 2008–09). It is important to note that it is *expenditure* that is measured, not *consumption*. This is an important distinction because some items of expenditure provide consumption services over a longer period of time. From an economic point of view, it is consumption that provides households with welfare. As with all surveys, measuring consumption is very difficult. However, much of our analysis in this section is based on a measure of expenditure on ‘basics’ (food, fuel and clothing), and for food and fuel at least, the distinction between expenditure and consumption is less important since they are not typically stored over long periods.

Expenditure is collected at the household level. The expenditure items that are measured and used in this chapter are:

- *Food inside the home*: Respondents are asked how much they usually spend on weekly groceries, including all food brought into the home but excluding pet food, alcohol, cigarettes, takeaways and meals out.
- *Food outside the home*: Respondents are asked how much they usually spend in a month on takeaways and food consumed out of the home, including in restaurants and meals consumed at the workplace.
- *Clothing*: Respondents are asked how much they or members of their household actually spent in the last four weeks (whether for themselves or someone else) on clothes, including outerwear, underwear, footwear and accessories.
- *Leisure*: Respondents are asked how much they or members of their household actually spent in the last four weeks (whether for themselves or someone else) on leisure excluding eating out (respondents are told to include items such as cinema, theatre, sport, subscriptions, internet and television subscriptions, and TV licences).
- *Domestic fuel*: Respondents are asked a series of very detailed questions on fuel expenditure. The questions are designed to take account of the different ways that households pay for domestic fuel and the seasonal nature of spending on fuel.

For all items of expenditure, we use the information available and convert all values to a weekly equivalent.

Expenditure, like many of the monetary variables in ELSA (including income), is collected via a two-stage process. First, respondents are asked to report a precise value for each category of spending. Any respondent who either refuses to report or who does not know the exact amount is then asked a series of questions designed to elicit an upper and lower bound for their spending on that category. Over 98% of ELSA sample members reported a precise value for food in, food out, clothing or leisure in wave 4 (2008–09) and around 93% had a precise value for fuel spending. Where respondents have an upper and lower bound rather than a precise value, we calculate the mean value of expenditure within that band from the households that do report a continuous value and assign that value to the household with bounds. We exclude individuals living in households that have a completely missing value (that is, they refuse, or they report that they do not know even after completing

the questions designed to obtain an upper or lower bound, or they do not complete the set expenditure questions at all).

As in our earlier analysis of incomes, we analyse our expenditure data at the individual level for the purposes of the tabulations and figures, even though expenditure is measured at a higher level (household level for expenditure, family unit level for incomes). This is partly driven by the fact that when we look at *changes* in spending, because a ‘household’ is a unit that can change across time, it becomes less meaningful to look at changes in the spending at the household level. In addition, when we are thinking about welfare, it matters how many people live in any particular household (if two individuals live in a household that has experienced a large increase in the share of income devoted to basics, we care about the welfare of both those individuals). This approach follows traditional analysis of poverty such as the ‘Households Below Average Income’ series.¹¹

Sample

For the purposes of our cross-sectional analysis, we use the wave 2 (2004–05) and wave 4 (2008–09) samples, choosing only core members of the study. For longitudinal analysis, we use core members interviewed in 2004–05 who also gave an interview in 2008–09. However, there are two further selection criteria that we also use to restrict our samples.

First, we restrict our sample to households in ELSA where all individuals are eligible for a full interview. The reason for this is that in the ELSA survey, only ELSA sample members and their partners are given a full interview. Any non-sample members living in the household do not complete an interview although information on the characteristics of the non-sample members is collected via the main interview. Because of the lack of detailed income information on non-eligible individuals, we cannot compute a *household*-level measure of income for households that have non-eligible individuals residing within them. Because expenditure is measured at the household level, it is important to take into account the household’s income rather than the income of the family (defined as either a single person or a couple). By restricting our analysis to households in ELSA where all individuals are eligible for a full interview, it is possible to use a household measure of income. This excludes around 18% of ELSA sample members in 2008–09 and 16% in 2004–05.

Second, we exclude individuals living in households that have a missing expenditure value. As described above, households that refuse to report or do not know how much they spend on any particular expenditure item are asked a set of questions designed to reveal an upper and lower bound. If a respondent is unable or unwilling even to provide an upper and lower bound, we exclude that household when we analyse that expenditure item. These make up a small percentage of respondents if we take any single item of expenditure (less than 4% for domestic fuel and less than 1% for the other items of expenditure). If we sum all items of expenditure together (food in, food out, fuel, clothing and leisure), the percentage of ELSA sample members living in households with missing spending is around 4%.

¹¹See Brewer et al. (2009).

To summarise, we have two basic samples:

- *Wave 4 cross-sectional sample*: ELSA sample members interviewed in wave 4 (2004–05) who (i) have a non-missing value for expenditure in wave 4 and (ii) live in households where all members of the household are ELSA sample members in wave 4.
- *Wave 2 to wave 4 longitudinal sample*: ELSA sample members interviewed in wave 2 (2004–05) and in wave 4 (2008–09) who (i) have a non-missing value for expenditure in waves 2 and 4 and (ii) live in households where all members of the household are ELSA sample members in waves 2 and 4.

Analysis

All analysis is carried out at the individual level although spending is defined at the household level. Any analysis that looks at changes in spending exploits the longitudinal nature of the data. Because of the additional sample selection criteria that we use in this section, all analysis is unweighted.

Most of the analysis in this section is based on longitudinal data. Individuals aged 50–53 in 2008–09 were not part of the ELSA sample in wave 2 (2004–05) because they were too young. For this reason, throughout this section, our youngest age group is those aged 55–59.

3.3.2 What has happened to levels of spending between 2004–05 and 2008–09?

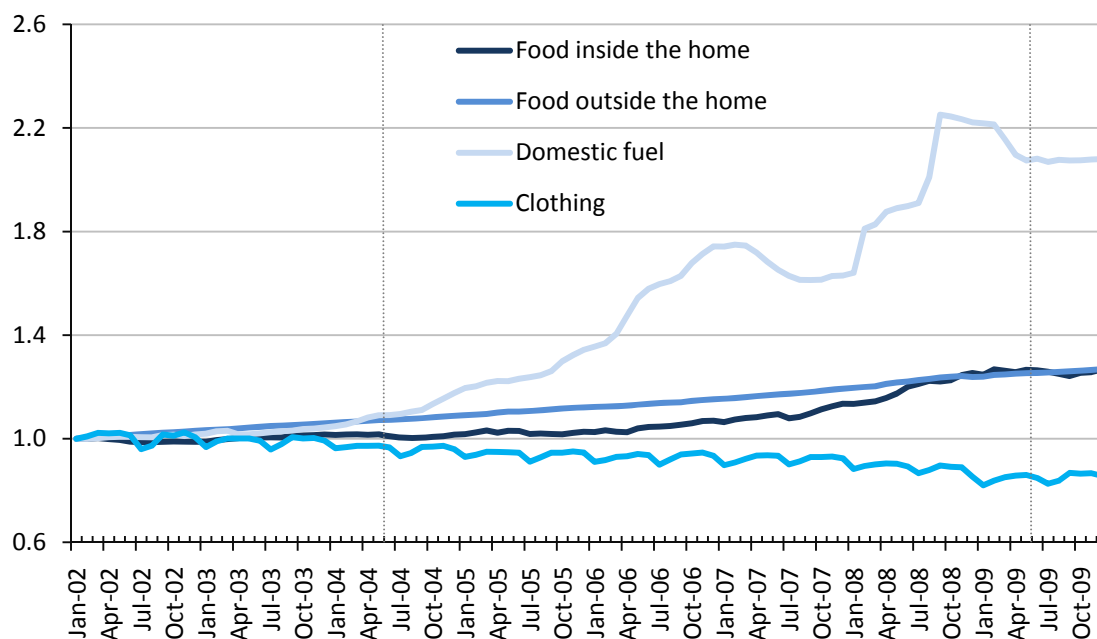
The amount that households spend and the pattern of their expenditure are determined by many different factors, including demographics, tastes and prices. Over the last few years, there have been steep rises in the prices of food and domestic fuel. These goods, which are deemed to be ‘necessities’, typically make up a larger proportion of the budget for poorer households than richer households and for elderly households than younger households.¹² This has led to concern over the impact of the price increases on vulnerable households. Leicester, O’Dea and Oldfield (2009) looked at the impact of price increases in domestic fuel using waves 2 and 3 of ELSA (2004–05 and 2006–07). They found that spending on fuel increased the most over that period for individuals living in households at the top and bottom of the income distribution. Since this study, we have an additional wave of ELSA data, which covers a period when there were further increases in the prices of both food and fuel. Using the retail price index (RPI),¹³ Figure 3.6 shows what has happened to the prices of food inside and outside the home, domestic fuel and clothing over the period from January 2002 to December 2009. The plotted lines show the monthly index for each of the four goods. The vertical lines show the start of the wave 2 ELSA fieldwork period and the end of the wave 4 ELSA fieldwork period. Over that period (June 2004 to June 2009), the price of food inside the home increased by 25% and the price of food outside the home increased by 17%. In the light of wholesale energy price increases, the retail price of domestic fuel increased by 91%. The price of clothes, on the

¹²This was first highlighted by Engel (1857).

¹³For more details, see <http://www.statistics.gov.uk/cci/nugget.asp?ID=21>.

other hand, fell by 12%. The all-items RPI increased by 14%. Taking into account the month in which each respondent was interviewed in waves 2 and 4 (roughly two years apart), the average price increase that ELSA respondents experienced between their two interviews for each of the four goods is shown in Table 3.2 both in nominal terms and in real terms.

Figure 3.6. Price indices of food, domestic fuel and clothing, January 2002 to December 2009



Source: Office for National Statistics, <http://www.statistics.gov.uk/statbase/tsdtables1.asp?vlnk=mm23>.

Table 3.2. Mean increase in price experienced by ELSA respondents between their wave 2 and wave 4 interviews

Expenditure item	% increase in price (nominal terms)	% increase in price above inflation (real terms)
Food in	22%	7%
Food out	14%	0%
Clothing	-9%	-20%
Domestic fuel	80%	59%

Notes: The sample is ELSA sample members living in households where all sample members are eligible in waves 2 and 4 as described in Section 3.3.1. Sample size = 4,603.

The impact of these price changes will differ across households depending on the importance of each of the goods in their overall budget. Households that spend very little on fuel, for example, will be less affected than those that spend a large part of their budget on fuel. Typically, poorer and older households spend a larger share of their total budget on necessities. The Expenditure and Food Survey 2007 tells us that pensioner households, on average, spend 25% of their total budget on food inside the home, compared with 17% for non-pensioners. Similarly, pensioners spend 11% of their total budget on domestic fuel, compared with 7% for non-pensioners. In this

section, we look at what has happened to expenditures on four goods that we refer to as ‘basics’ (food in, food out, clothing and domestic fuel) between 2004–05 and 2008–09.

Typically, when the price of a good increases, the quantity consumed falls. However, the extent of this fall in demand will vary across households. If spending on the more expensive good increases after the price increase, households will have to reallocate spending from other goods and/or from savings. Each household’s response to the change in prices will be different depending on their observable characteristics and on their tastes. We will look at averages across subgroups to see how different types of households have responded to these price changes. Different responses may lead to differing levels of concern – consuming less fuel or food might be more worrying than eating out less, for example.

We look now at spending levels and changes in spending by age, before looking at spending levels and changes in spending by income. All changes in spending are calculated at the individual level using the longitudinal aspect of the data.

Spending levels and changes in spending by age

Table 3.3 shows spending on food inside the home, food outside the home, domestic fuel and clothing. For each good, we show the level of spending in 2008–09 and the mean change in spending¹⁴ between 2004–05 and 2008–09. All changes in spending are calculated at the individual level exploiting the longitudinal nature of the data. That is, for each individual, we take the difference in spending between 2008–09 and 2004–05 and express this as a percentage of spending in 2004–05. To calculate the mean percentage change in spending for each good, we include only individuals who had positive spending in both waves.¹⁵ The final two columns show total basics defined as the sum of food in, food out, fuel and clothing. All values are expressed in real terms (July 2009 prices) and are adjusted to take account of different household sizes and the economies of scale involved in living with additional people in a household using an equivalence scale. An equivalence scale estimates how much expenditure or income different household types need to be equivalently well off. We express values relative to a single-adult household and the equivalence scale uses a value of 0.5 for second and subsequent adults. This means that to convert the numbers to the equivalent amount that a childless couple spends, numbers should be multiplied by 1.5.

¹⁴Note that we calculate the mean of the changes, not the change in the mean. The calculation of percentage differences inevitably leads to some very large outliers, particularly for goods where spending can be rather low, such as food out and clothing. For this reason, the means in Tables 3.3 and 3.4 are trimmed to exclude households where spending on each good more than triples across waves. For goods other than food in, this represents around 5% of the sample. For food in, it represents less than 1% of the sample.

¹⁵Observations with zero spending in 2004–05 are necessarily excluded because the percentage change in spending is not defined because of the zero in the denominator. Including observations with zero spending in 2008–09 would lead to a downwards bias in the mean percentage change because these individuals can only have experienced a fall in spending. To overcome this, we exclude observations with zero spending in *either* of the two waves. In practice, this only has a noticeable effect for food out and clothing, where zero spending is more commonly observed.

Table 3.3. Real equivalised weekly spending in 2008–09 and changes in spending between 2004–05 and 2008–09, by age group

Age group (2008–09)	Food in		Food out		Domestic fuel		Clothing		Total basics	
	Spending in 2008–09, £	% increase in spending	Spending in 2008–09, £	% increase in spending	Spending in 2008–09, £	% increase in spending	Spending in 2008–09, £	% increase in spending	Spending in 2008–09, £	% increase in spending
55–59	45.86	5.8%	9.61	0.5%	16.10	32.9%	15.65	-12.7%	86.98	9.0%
60–64	46.75	3.5%	8.56	5.7%	16.25	40.4%	13.81	-5.7%	85.09	10.6%
65–69	45.37	3.5%	6.86	3.9%	15.60	32.7%	11.65	-15.7%	79.27	8.2%
70–74	43.25	5.2%	5.81	3.4%	15.46	37.8%	9.02	-9.5%	73.76	8.9%
75–79	41.05	5.1%	4.79	-3.0%	15.46	39.5%	7.93	-4.4%	69.31	9.9%
80–84	38.84	1.0%	4.34	5.4%	15.22	39.0%	4.98	-10.3%	64.11	8.9%
85+	36.81	2.2%	3.66	7.6%	14.83	37.7%	5.47	6.4%	61.85	9.9%
All	43.87	3.9%	6.89	3.2%	15.71	37.3%	11.03	-8.8%	77.66	9.4%
N	6,909	4,519	6,930	2,425	6,693	4,044	6,919	1,721	6,664	4,262

Table 3.4. Real equivalised weekly spending in 2008–09 and changes in spending between 2004–05 and 2008–09, by income quintile

Income quintile (2008–09)	Food in		Food out		Domestic fuel		Clothing		Total basics	
	Spending in 2008–09, £	% increase in spending	Spending in 2008–09, £	% increase in spending	Spending in 2008–09, £	% increase in spending	Spending in 2008–09, £	% increase in spending	Spending in 2008–09, £	% increase in spending
Lowest	38.17	3.7%	3.55	2.1%	14.91	34.2%	6.81	-13.6%	63.60	9.0%
2	40.30	3.7%	4.39	6.9%	14.32	34.3%	7.60	-1.7%	66.62	9.5%
3	42.38	2.9%	6.02	1.9%	15.11	41.2%	10.52	-9.9%	73.41	9.6%
4	46.72	4.8%	8.16	0.7%	16.04	37.9%	12.38	-6.9%	83.76	8.8%
Highest	52.74	4.7%	12.96	5.0%	18.44	39.9%	18.59	-12.8%	103.21	10.1%
All	43.87	3.9%	6.89	3.2%	15.71	37.3%	11.03	-8.8%	77.66	9.4%
N	6,909	4,519	6,930	2,425	6,693	4,044	6,919	1,721	6,664	4,262

Notes to Tables 3.3 and 3.4: The sum of food in, food out, domestic fuel and clothing does not exactly match total basics because of trimming. The sample for the levels of spending is the wave 4 sample as described in Section 3.3.1. The sample for the change in spending is the panel of households present in waves 2 and 4 that had positive spending on the relevant item in both waves, as described in Section 3.3.1.

We can see from Table 3.3 that average spending on food inside the home falls with age, with the youngest age groups spending around £46 per week on food and the oldest age groups spending around £37 per week – a difference of around 25%. It is also important to note that older individuals are, on average, poorer than their younger counterparts,¹⁶ which will also be driving the differences (along with many other factors). We look at spending by income in the next subsection. Spending on food inside the home has increased across the time period by 3.9% on average overall. Smaller increases have been seen by the oldest two age groups.

Average spending on food outside the home is much lower than average spending on food inside the home and this is particularly true for older households. Although the real price of food outside the home has remained constant on average for our ELSA sample, spending on it has risen on average by around 3.2% for those households that spend at least something on food outside the home in both 2004–05 and 2008–09.

Domestic fuel is where we have seen very dramatic increases in price. Spending on domestic fuel does not vary very much by age, although the oldest spent slightly less than younger households. All households in the sample on average have increased spending on fuel by 37%. Differences in the extent of increases in spending are not dramatic across the age distribution. If anything, there is a slight hump-shaped profile, where those in the middle age groups have increased their spending more than the youngest and oldest age groups. The fact that expenditure on fuel has increased by less than the increase in the price implies that, on average, households have cut back on the quantity of fuel that they purchase. It is important to remember that there are ways in which households can reduce their fuel consumption without any serious impact on their living standards. For example, households could remember to turn off lights or equipment or become more fuel efficient. However, the dramatic nature of the increase in the price and the subsequent fall in spending would suggest that it is very unlikely that the reduction in consumption could entirely be explained by small changes in behaviour around the home and it is highly likely that some households will have responded by reducing their fuel consumption to a level that means that their home is less warm.

The price of clothes fell over the period of our data and this follows a steady fall in prices over a much longer period of time. Spending on clothing, for those who spend at least something in each of the two waves, fell in all age groups except the oldest. The reduction in spending is less than the fall in price over the same period, suggesting that households are now purchasing more clothing items (and/or items of a higher quality).

The final pair of columns in Table 3.3 show how spending on total basics (the sum of all food, domestic fuel and clothing) has changed over the period. Across the whole age range, spending on necessities has increased by 9.4%. There is no strong pattern across the age distribution.

¹⁶See, for example, Department for Work and Pensions (2010).

Spending levels and changes in spending by income

Table 3.4 shows levels and changes in spending by (2008–09) household income quintile. Table 3.5 shows average real equivalised household income in each income quintile. As in the previous subsection, the analysis of changes in spending is longitudinal.

Table 3.5. Mean real equivalised weekly household income by income quintile, 2008–09

Income quintile	Mean equivalised income
Lowest	£121
2	£194
3	£266
4	£372
Highest	£684

Notes: The sample is the wave 4 sample as described in Section 3.3.1. Sample size = 6,962.

We can see from Table 3.4 that spending on food inside the home increases with income, with the poorest spending an average of around £38 per week and the richest spending over £50. However, because food spending increases more slowly as we move up the income distribution than does income itself, this implies that the poorest spend proportionately more, on average, of their income on food in than the richest. Spending on food inside the home increased the most for those at the top of the income distribution. Spending on food inside the home has increased by less than the increase in price, which suggests that, on average, households have cut back their food consumption in terms of quantity and/or quality.

Spending on food outside the home increases steeply with income. For those who spent at least something in both periods, average spending on food outside the home rose between 2004–05 and 2008–09, with those in the second and richest quintiles increasing spending by the most.

Whilst spending on domestic fuel does increase with income, the richest group spends only around 24% more on fuel than the poorest group, despite average incomes being over five times greater at the top than the bottom. As with food, this implies that fuel expenditure makes up a much larger proportion of income at the bottom of the income distribution than at the top. The increase in spending over the period does not vary greatly over the income distribution. As with age, there is evidence of a slight hump shape whereby those in the middle of the income distribution have increased their spending by more than those at the top and the bottom.

Average spending on clothing is around two-and-a-half times higher at the top of the income distribution than at the bottom. Those at the bottom and top of the income distribution have reduced their spending on clothing by more than those in the middle.

Looking at total basics, we see that spending has increased on average across the whole income distribution but with no strong pattern across the quintiles.

3.3.3 What has happened to spending as a proportion of income between 2004–05 and 2008–09?

In this chapter, we focus mainly on expenditure on items that can be deemed to be ‘necessities’. As the total budget rises, households typically increase their spending on necessities by less than the increase in total budget. This means that spending on necessities as share of total spending (the ‘budget share’) can be used as a measure of welfare. We do not have a measure of total expenditure, but because total budget and incomes are closely related, we can use total income as a proxy for total expenditure. Using the share of income devoted to necessities as a measure of welfare, we might conclude that a household that experienced a large increase in the budget share of necessities between wave 2 and wave 4 could be considered to have become worse off (other things being equal).

In this section, we look at how spending on each of our four basic goods varies as a proportion of income across the age and income distributions. We then look at the extent to which spending on basics as a proportion of income has changed between 2004–05 and 2008–09. Using the share of income devoted to basics as a yardstick of welfare, we ask what factors are associated with a large increase in this share.

Spending as a proportion of income

Table 3.6 shows that spending on food inside the home represents, on average, 18% of income. This percentage is lowest (16%) for the youngest age group and tends to rise across the age distribution. If we look at how this ‘budget share’ varies with income (Table 3.7), the differences are very marked. Nearly a third of income, on average, is devoted to spending on food in the home for those in the poorest income quintile, but this falls to just 8.4% for the richest quintile.

Spending on food outside the home makes up 2.4% of total income and this percentage falls as we move up the current age distribution. Perhaps surprisingly (since food out is often thought of as a luxury), this percentage is slightly higher for the poorest income group than for the highest. Part of the explanation for this might be that food outside the home includes not just restaurant meals but also any food eaten or prepared outside the home, including meals eaten at work.

Nearly 7% of income is devoted to spending on domestic fuel. Whilst this proportion does not vary very much by age, we can see substantial differences by income, with the lowest income quintile spending 13.5% of their income on domestic fuel and the richest income quintile spending just 2.9%.

Overall, clothing takes up around 4% of income on average. There is a fair amount of variation by both age and income, with the youngest and the poorest having higher ‘budget shares’ than their older and richer counterparts.

Table 3.6. Real equivalised weekly spending as a percentage of income in 2008–09 and percentage point change in spending as a percentage of income between 2004–05 and 2008–09, by age group

Age group (2008–09)	Food in	Food out	Domestic fuel	Clothing	Total basics	
	Spending as a % of income	Spending as a % of income	Spending as a % of income	Spending as a % of income	Spending as a % of income	Percentage point change in spending as a % of income, 2004–05 to 2008–09
55–59	16.2	2.9	6.2	4.6	27.4	2.0
60–64	17.1	2.8	6.2	4.2	28.5	1.4
65–69	18.6	2.4	6.5	4.3	30.0	1.0
70–74	19.3	2.3	7.1	3.7	31.1	1.1
75–79	19.9	2.0	7.8	3.6	31.9	0.5
80–84	20.0	1.9	7.9	2.5	31.2	-0.6
85+	19.0	1.6	7.9	2.4	29.9	-1.8
All	18.2	2.4	6.8	3.9	29.7	0.7
N	6,870	6,928	6,691	6,910	6,525	4,155

Table 3.7. Real equivalised weekly spending as a percentage of income in 2008–09 between 2004–05 and 2008–09 and percentage point change in spending as a percentage of income between 2004–05 and 2008–09, by income quintile

Income quintile (2008–09)	Food in	Food out	Domestic fuel	Clothing	Total basics	
	Spending as a % of income	Spending as a % of income	Spending as a % of income	Spending as a % of income	Spending as a % of income	Percentage point change in spending as a % of income, 2004–05 to 2008–09
Lowest	32.5	3.3	13.5	5.4	48.3	12.5
2	20.9	2.3	7.5	3.9	34.4	2.2
3	15.9	2.3	5.7	3.8	27.6	-1.5
4	12.7	2.2	4.4	3.4	22.6	-4.1
Highest	8.4	2.1	2.9	2.9	16.4	-7.1
All	18.2	2.4	6.8	3.9	29.7	0.7
N	6,870	6,928	6,691	6,910	6,525	4,155

Notes to Tables 3.6 and 3.7: The sum of food in, food out, domestic fuel and clothing does not exactly match total basics because of trimming. The sample for the levels of spending is the wave 4 sample as described in Section 3.3.1. The sample for the change in spending is the panel of households present in waves 2 and 4 that had positive spending on total basics in both waves, as described in Section 3.3.1.

The final pair of columns in Tables 3.6 and 3.7 show the proportion of income that is devoted to total basics. On average, households devote around a third of their income to total basics and, whilst this proportion does not vary very much by age, we see a big difference across the income distribution. At the very bottom of the income distribution, on average, just under a half of income is devoted to spending on basics. At the top of the income distribution, we see that only 16.4% of income, on average, is devoted to basics.

How has spending as a proportion of income changed between 2004–05 and 2008–09?

The observation that the fraction of household budgets allocated to necessities falls with income led Engel (1857) to argue that the budget share of necessities, or more specifically food, can be used as a yardstick of living standards. Tables 3.8 and 3.9 show how the percentage of income devoted to basics has changed between waves 2 and 4 of ELSA (2004–05 and 2008–09), by age group and income quintile respectively. On average, across all households in our sample, the change in the share is very small (0.7 percentage points). However, this average number masks a distribution where some

Table 3.8. Percentage point changes in spending on basics as a percentage of income, by age

Age group (2008–09)	Mean	25 th percentile	Median	75 th percentile	N
55–59	2.0	–6.0	1.2	10.3	382
60–64	1.4	–7.1	1.6	10.4	850
65–69	1.0	–7.5	1.3	11.1	724
70–74	1.1	–7.4	1.2	10.9	802
75–79	0.5	–8.9	0.9	10.2	642
80–84	–0.6	–9.7	–0.9	9.0	427
85+	–1.8	–13.2	–1.2	10.1	328
All	0.7	–8.2	0.9	10.3	4,155

Notes: The sample is the panel of households present in waves 2 and 4 as described in Section 3.3.1. In addition, only those households that spent less than 100% of their income on basics in both waves are included.

Table 3.9. Percentage point changes in spending on basics as a percentage of income, by income quintile

Income quintile (2008–09)	Mean	25 th percentile	Median	75 th percentile	N
Lowest	12.5	–2.3	11.3	25.5	827
2	2.2	–7.1	2.7	12.0	962
3	–1.5	–8.8	0.3	9.0	882
4	–4.1	–10.7	–0.9	5.3	809
Highest	–7.1	–12.7	–3.5	2.6	675
All	0.7	–8.2	0.9	10.3	4,155

Notes: The sample is the panel of households present in waves 2 and 4 as described in Section 3.3.1. In addition, only those households that spent less than 100% of their income on basics in both waves are included.

households have seen large increases in the proportion of their income devoted to basics. If we look at the mean change in the proportion of income devoted to basics by income (Table 3.9), we see that the very bottom of the income distribution has seen, on average, a 12.5 percentage point increase in the share of their income devoted to spending on basics. The top of the income distribution has seen a fall in the share of their income devoted to basics.

If we look at the 75th percentile point for changes in spending, we find that, overall, 25% of respondents saw at least a 10.3 percentage point increase in the share of income devoted to basics. If we look at the 75th percentile point by income quintile, we find that in the poorest group, 25% of individuals saw at least a 25.5 percentage point increase in the share of their income devoted to basics.

One important point to note, however, is that across the period, in addition to spending on basics having changed, households may also have seen changes in their income. Other things being equal, an increase in income will be associated with a fall in the share of income devoted to basics and a fall in income will lead to a rise in this share. One possible reason why some individuals at the top of the wave 4 income distribution have seen a fall in the share of income devoted to basics on average is that they may have seen a rise in their income over the period. Similarly, some individuals at the bottom of the income distribution may have seen an increase in their share of income devoted to basics because of a fall in their income over the period.

Table 3.10 uses multivariate analysis to analyse what factors are associated with a large change in the proportion of income devoted to basics. In doing so, we can look at each (observed) factor in isolation. For the purposes of our analysis, we divide households into two groups: those whose share of income devoted to basics increased by more than 10 percentage points (we refer to this as ‘a large increase’ for simplicity) and those who did not experience such a large increase. Overall, around 25% of our sample experienced a ‘large’ increase, according to this definition.

To investigate the characteristics that are associated with experiencing such a large increase in income share devoted to basics, Table 3.10 shows the results of an ordinary least squares (OLS) regression of a ‘large increase’ indicator variable on a set of observable characteristics that might be correlated with the budget share of basics, including controls for a change in income quintile (not reported). The resulting coefficients show the increase in the likelihood of experiencing a large increase in the income share devoted to basics that is associated with a given characteristic. For example, even after controlling for the change in income, we see a significant correlation with the initial level of income (defined in quintiles). Relative to the richest quintile, the poorest are 16.7 percentage points more likely to have seen a large increase in their budget share (and this is significant at the 0.1% level). There is no significant difference between the higher quintiles and the richest group in the likelihood of having seen a large increase.

Moving from being in a couple to being single (relative to remaining in a couple) leads to a 6.9 percentage point increase in the likelihood of seeing a large increase in the share of income devoted to basics. The only other factor that is significantly correlated with a large increase is the transition from

working to not working (retirement). Those who retire are 7.1 percentage points more likely to experience a large increase in the share of basics.

The issue of change in consumption upon retirement is an important and interesting issue and is one in which we turn to in the next section.

Table 3.10. Multivariate analysis of ‘large’ increase in the percentage of income devoted to basics

Dependent variable: >10 percentage point increase in the percentage of income devoted to basics	Coefficient	t-statistic
Age 55–59	reference	
Age 60–64	0.020	0.64
Age 65–69	0.003	0.11
Age 70–74	–0.003	–0.10
Age 75–79	0.007	0.27
Age 80–84	–0.003	–0.12
Age 85+	–0.019	–0.72
Income quintile		
Poorest	0.167	6.92‡
2nd	0.025	1.14
3rd	0.012	0.56
4th	–0.011	–0.53
Richest	reference	
Changes in household composition		
Couple–Couple	reference	
Couple–Single	0.069	2.31*
Single–Couple	–0.007	–0.11
Single–Single	–0.010	–0.77
Change in number of children in household	0.019	0.35
Work transitions		
Work–Work	reference	
Work–Not work	0.071	3.10†
Not work–Work	–0.022	–0.41
Not work–Not work	0.011	0.58
Education		
High education	reference	
Low education	0.007	0.51
Health		
Excellent or very good health	reference	
Good, fair or poor health	0.008	0.57
Constant	0.090	2.87†

Notes: Also included but not reported are controls for change in income quintile and dummies for missing education and missing health. Low education is defined as O levels/equivalent or below. The sample is the panel of households present in waves 2 and 4 as described in Section 3.3.1. In addition, only those households that spent less than 100% of their income on basics in both waves are included. Sample size = 4,155. Significance at 5%, 1% and 0.1% levels indicated by *, † and ‡ respectively.

3.3.4 Changes in spending around retirement

The issue of what happens to spending around retirement has attracted much research across the world.¹⁷ Retirement is a time of much change in an individual's life and can be associated with changes in living standards. There are (at least) two reasons that we might expect expenditure or consumption to change around retirement. First, according to the life-cycle model of consumption, individuals should allocate consumption across their lifetime in order to maximise lifetime welfare. Roughly speaking, this means that even though income typically falls on retirement, we do not expect to see a corresponding fall in consumption of the same magnitude. Whether or not consumption is smoothed across retirement is an issue on which there is mixed evidence. Some studies have found that consumption falls by more than can be explained by observed factors of the model (e.g. Bernheim et al., 2001). However, other studies argue that the fall in consumption can be explained by extensions to the life-cycle model (e.g. Hurd and Rohwedder, 2003). Because of the lack of panel data on consumption, much of the research on changes in consumption around retirement in the UK has been done using repeated cross-sections of expenditure data. ELSA will allow us to study this topic more directly. Here, we carry out some preliminary analysis which will provide the starting point for future in-depth research.

The second reason why we might expect to see changes in expenditure around retirement is that retirement is a time when individuals might change the allocation of their spending across different goods. When individuals stop work, they have additional leisure time, which means they may spend more on goods that are associated with having that increased leisure. For example, spending more time at home might lead to a higher proportion of the budget to be spent on domestic fuel and leisure goods and services. For food inside the home, it is not clear in which direction the effect of having more leisure would work. On the one hand, more may be spent on food inside the home simply because of being at home for more hours. But on the other hand, having more time to prepare food from scratch rather than consume pre-prepared meals might lead to lower expenditures and hence a smaller proportion of the budget being spent on food. In this subsection, in addition to the four basic goods that we have used so far (food in, food out, clothing and domestic fuel), we also analyse the change in the share of leisure, because of its complementarity with retirement.

In addition to these general reasons why we might expect to see changes in expenditure around retirement, in the light of the large price increases in food and fuel, analysing what happens to the share of income devoted to spending on our four basic items around retirement is an issue that is important from the point of view of living standards.

Changes in the share of spending out of income around retirement

Tables 3.11 and 3.12 show the results of a set of OLS regressions for each of the four basic goods, for total basics and for leisure. The idea behind these

¹⁷See, for example, Banks, Blundell and Tanner (1998), Bernheim, Skinner and Weinberg (2001), Ameriks, Caplin and Leahy (2002), Hurd and Rohwedder (2003) and Haider and Stephens (2004).

regressions is to look at what happened to the share of spending on each of the goods around retirement. For each of the goods, we take spending as a share of income in 2008–09 and spending as a share of income in 2004–05. We then take the difference between the two shares to obtain the ‘change in share’. A positive number would indicate that the share of spending out of income had increased. Table 3.11 takes the sample of workers only in wave 2 (the sample size varies slightly depending on which good we are looking at but is around 1,300). In the top section of the table, we regress the change in share on a retirement dummy with no further controls (except for age dummies and a dummy for each year/quarter, which are included in all regressions but not reported) so we can understand what happened to spending around retirement unconditional on any other characteristics. In the lower panel of the table, in addition to a retirement dummy, we also include a set of other controls. These include whether the individual had a partner who retired between waves, the change in income (in logs) and some controls for change in family composition.

Looking first of all at the unconditional effect of retirement on the change in the shares of each of the goods, we can see that, except for clothing and food out, there is a statistically significant increase in the share of all the goods on retirement. However, one of the biggest changes at retirement that will also affect the share of spending is change in income. If income falls, even if spending remains constant, we would see an increase in the share of spending out of income. In the lower section of the table, once we control for the other factors that influence the change in the shares of the goods, we can see that, in fact, for domestic fuel and for food out, there is a statistically significant *decline* in the share of spending out of income and that for the other goods there is no significant effect of retirement on the change in share. There is no significant change in the share of total basics on retirement. Using the share of spending on basics out of income as a yardstick of welfare, this suggests that there is no large change in this measure associated with retirement.

Not surprisingly, the largest single factor that affects the change in share is the change in household income that occurs on retirement. There are very few other observed factors associated with a change in any of the goods. Having a partner who retired between waves is significantly negatively correlated with the change in share of domestic fuel and significantly positively correlated with the change in share of leisure, while moving from being a couple to being single is significantly negatively correlated with the change in share of food inside the home.

Table 3.12 shows the results of a similar set of regressions but, instead of using the sample of those who were working in wave 2, we use the whole panel (subject to the selection criteria detailed in Section 3.2.1) regardless of whether they were working. Because there are other transitions into and out of work that might be correlated with the change in share, in addition to controlling for retirement we also include a control for moving into work (‘not work–work’) and being out of work in both waves (‘not work–not work’). The base group is those in work in both waves. As with Table 3.11, the top part of the table shows the unconditional effect of the work transitions on the share of each of the goods out of income and the lower panel shows the effect of the

Table 3.11. OLS regression results of the change in share of basics and leisure between 2004–05 and 2008–09: workers only in 2004–05

Dependent variable is the change in share of ...	Food in		Food out		Domestic fuel		Clothing		Total basics		Leisure	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Retired	5.54	6.61‡	0.56	1.87	1.60	4.08‡	0.74	1.11	9.50	8.37‡	1.57	2.76‡
Constant	12.83	0.80	0.65	0.11	7.59	1.13	12.64	0.93	34.48	1.81	2.42	0.24
<i>N</i>	<i>1,325</i>		<i>1,336</i>		<i>1,282</i>		<i>1,334</i>		<i>1,228</i>		<i>1,333</i>	
Retired	-0.45	-0.80	-0.71	-2.55*	-0.66	-2.09*	-1.16	-1.74	0.70	0.83	0.16	0.27
Partner retired	-1.08	-1.51	-0.60	-1.68	-1.03	-2.59‡	0.10	0.12	-0.57	-0.54	1.72	2.32*
Change in ln household income	-17.99	-43.44‡	-3.91	-19.45‡	-6.88	-30.57‡	-5.43	-11.46‡	-24.77	-35.13‡	-3.34	-8.01‡
Couple–Single	-4.15	-2.52*	-0.01	-0.01	0.57	0.61	1.85	0.94	1.17	0.47	-0.92	-0.54
Single–Couple	1.21	0.57	1.40	1.30	-0.96	-0.81	1.41	0.55	-1.01	-0.32	3.70	1.66
Single–Single	0.51	0.82	-0.04	-0.11	0.12	0.33	0.82	1.11	0.35	0.37	0.13	0.21
Change in no. of children in household	-1.12	-0.71	0.74	0.93	-0.83	-0.93	-0.50	-0.26	-0.22	-0.09	-2.05	-1.25
Constant	2.16	0.21	-1.23	-0.24	3.57	0.70	8.44	0.65	17.52	1.31	-1.31	-0.14
<i>N</i>	<i>1,325</i>		<i>1,336</i>		<i>1,282</i>		<i>1,334</i>		<i>1,228</i>		<i>1,333</i>	

Notes: Age dummies and year/quarter dummies are also included. Significance at 5%, 1% and 0.1% levels indicated by *, † and ‡ respectively.

Table 3.12. OLS regression results of the change in share of basics and leisure between 2004–05 and 2008–09: workers and non-workers in 2004–05

Dependent variable is the change in share of ...	Food in		Food out		Domestic fuel		Clothing		Total basics		Leisure	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Retired	5.59	6.75‡	0.44	1.57	1.55	3.52‡	0.73	1.13	9.33	7.91‡	1.44	2.63†
Not work–Work	-1.97	-1.00	-0.57	-0.85	-1.91	-1.83	0.40	0.26	-5.38	-1.90	-1.23	-0.96
Not work–Not work	-0.91	-1.33	-0.24	-1.03	-0.60	-1.64	-1.54	-2.89†	-2.25	-2.30*	-0.27	-0.60
Constant	-0.32	-0.05	-0.38	-0.18	0.23	0.07	4.32	0.92	-1.92	-1.06	-2.39	-0.60
<i>N</i>	4,528		4,584		4,328		4,569		4,155		4,573	
Retired	-0.78	-1.38	-0.60	-2.23*	-0.92	-2.46*	-0.90	-1.40	-0.35	-0.41	0.16	0.28
Not work–Work	2.96	2.25*	0.35	0.57	-0.22	-0.26	1.81	1.23	2.27	1.15	-0.38	-0.30
Not work–Not work	0.61	1.29	0.10	0.45	0.07	0.22	-0.95	-1.78	0.14	0.20	0.08	0.17
Partner retired	-1.11	-1.75	-0.65	-2.16*	-1.39	-3.35‡	-0.67	-0.93	-1.87	-1.97*	1.02	1.65
Partner not work–work	0.19	0.13	-0.08	-0.11	-0.11	-0.12	1.08	0.67	-0.24	-0.12	0.45	0.33
Partner not work–not work	0.69	1.39	-0.26	-1.10	-0.35	-1.08	-0.46	-0.82	-0.27	-0.37	-0.07	-0.14
Change in ln household income	-19.11	-74.68‡	-3.21	-27.66‡	-7.45	-45.55‡	-5.13	-18.55‡	-27.50	-65.86‡	-3.30	-13.77‡
Couple–Single	-1.42	-1.94	0.83	2.39*	2.11	4.36‡	1.03	1.24	3.21	2.89†	0.59	0.82
Single–Couple	0.29	0.17	2.15	2.60†	-1.12	-1.00	0.03	0.01	-1.08	-0.42	1.16	0.68
Single–Single	-0.32	-0.94	0.20	1.25	0.57	2.55*	0.29	0.76	0.49	0.97	0.49	1.50
Change in no. of children in household	-3.52	-2.57*	0.65	1.02	0.14	0.16	-1.71	-1.13	-2.21	-1.10	-1.92	-1.47
Constant	5.98	1.48	0.69	0.36	2.36	0.91	5.92	1.31	0.37	0.27	-1.96	-0.50
<i>N</i>	4,528		4,584		4,328		4,569		4,155		4,573	

Notes: Age dummies and year/quarter dummies are also included. Significance at 5%, 1% and 0.1% levels indicated by *, † and ‡ respectively.

work transitions after controlling for other changes that might be correlated with the change in share. The results are similar to what we found for the sample of workers only. Looking at the unconditional correlation of retirement with the change in share, we find a statistically significant effect for all goods except clothing and food out. However, once we control for the other factors, a statistically significant correlation remains only for domestic fuel and food out, where we see a decline in the share.

Having a partner who retired between waves has a negative effect on the share of domestic fuel and food out. Changes in family composition also appear to be correlated with changes in shares. Going from being in a couple to being single (relative to remaining in a couple) is associated with an increase in the share of food outside the home, domestic fuel and total basics. This is not surprising (particularly for fuel and total basics) given the economies of scale involved in living as a couple.

Overall, the results suggest that the reallocation of spending around retirement across different goods is minimal once we control for the changes in income and other factors that occur around the time of retirement. Whilst the regressions for the individual goods show how spending is reallocated across the basic goods, what matters most for welfare is spending on total basics. Whether we use the sample of workers (Table 3.11) or the sample of workers and non-workers (Table 3.12), we find that retirement is not a factor associated with changes in welfare, to the extent that welfare can be proxied by the share of spending on total basics out of income.

Changes in the level of spending on basics around retirement

Changes in the share of spending out of income are interesting both as a measure of welfare and as an indication of how spending is reallocated on retirement. In this subsection, we turn to the issue of the path of expenditure around retirement. To do this, we use the change in level of spending (in logs) as our dependent variable and estimate a simple OLS regression. As in Tables 3.11 and 3.12, we include indicators of retirement to understand what happens to spending on basics around retirement. If individuals did smooth expenditure across retirement, we would expect to see no significant effect of retirement on the change in the level of consumption on basics. The results are shown in Tables 3.13 and 3.14. As before, the top part of each table shows the effect of retirement without controlling for any other factors (except age dummies and year/quarter dummies, which, again, are included in all regressions) and the bottom panel shows the effect of retirement after controlling for other factors. In addition to the controls that we included in Tables 3.11 and 3.12, we also include some controls that are designed to differentiate between different types of retirement. The first is whether the individual retired before the state pension age. This coefficient will pick up any differential effect of retiring before the SPA. The second is the retirement dummy interacted with high education (defined as any qualification higher than O levels or equivalent). This will pick up whether individuals with higher education who retire smooth their consumption across retirement more or less than those with low education.

Table 3.13. OLS regression results of the change in level (ln) of spending on basics between 2004–05 and 2008–09: workers only in 2004–05

Dependent variable is the change in the ln of spending on ...	Total basics	
	Coeff.	t-statistic
Retired	0.01	0.29
Constant	0.03	0.07
<i>N</i>	1,277	
Retired	0.04	1.32
Retired before SPA	-0.02	-0.55
Retired × High education	-0.07	-1.51
Post SPA at wave 2	0.00	-0.07
Partner retired	-0.02	-0.51
Change in ln household income	0.03	1.42
Couple–Single	-0.33	-4.42‡
Single–Couple	0.37	3.94‡
Single–Single	0.03	0.94
Change in number of children in household	0.21	2.98†
Constant	0.08	0.20
<i>F-tests</i>		
Retired + Retired before SPA + Retired×High education = 0		1.13
Retired + Retired before SPA = 0		0.37
Retired + Retired×High education = 0		0.42
<i>N</i>	1,277	

Notes: Age dummies and year/quarter dummies are also included. High education is defined as having qualifications higher than O levels or equivalent. Significance at 5%, 1% and 0.1% levels indicated by *, † and ‡ respectively.

Table 3.13, which is based on the sample of workers only at wave 2, shows that, unconditionally, retirement is not significantly associated with a change in the level of spending on total basics. Once we control for other factors, we still find no significant effect of retirement on the change in the level of spending on basics. We also find no differential effect of the different types of retirement. Carrying out a joint test of significance of different combinations of the retirement dummies (for example, for someone who retired after state pension age but with high education, we would need to sum the coefficients on Retired and Retired×High education), we also find no statistically significant effect of retirement on the change in the level of spending on basics.

The only factors that are associated with a change in the level of spending on basics are changes in family composition. Going from being a couple to being single is associated with a fall in spending on total basics and the opposite is true for forming a partnership. A decrease in the number of children in the household is associated with a decrease in spending on basics.

Table 3.14. OLS regression results of the change in level (ln) of spending on basics between 2004–05 and 2008–09: workers and non-workers in 2004–05

Dependent variable is the change in the ln of spending on ...	Total basics	
	Coeff.	t-statistic
Retired	0.01	0.27
Not work–Work	0.14	2.44*
Not work–Not work	0.01	0.42
Constant	0.28	1.66
<i>N</i>	4,305	
Retired	0.04	1.38
Not work–Work	0.13	2.21*
Not work–Not work	0.01	0.56
Retired × High education	–0.03	–0.83
Retired before SPA	–0.07	–1.52
Post SPA at wave 2	0.00	–0.06
Partner retired	–0.01	–0.50
Partner not work–work	0.06	0.91
partner not work–not work	0.01	0.42
Change in ln household income	0.02	1.51
Couple–Single	–0.33	–10.44‡
Single–Couple	0.32	4.37‡
Single–Single	0.02	1.01
Change in number of children in household	0.16	2.81†
Constant	0.26	1.56
<i>F-tests</i>		
Retired + Retired before SPA + Retired×High education = 0		1.59
Retired + Retired before SPA = 0		0.32
Retired + Retired×High education = 0		0.13
<i>N</i>	4,305	

Notes: Age dummies and year/quarter dummies are also included. High education is defined as having qualifications higher than O levels or equivalent. Significance at 5%, 1% and 0.1% levels indicated by *, † and ‡ respectively.

Table 3.14 shows the results of an OLS regression of the change in the level of spending on basics for the whole of the sample present in waves 2 and 4 regardless of whether they were working in wave 2. Again, we find no significant effect of retirement either individually or using joint tests. We do find a significantly positive effect of returning to work on the change in the level of spending on basics. As with the sample of workers only, we find significant effects of changes in family composition (couple–single, single–couple and change in the number of children).

Finding no association of retirement with the change in the level of spending on basics is consistent with the life-cycle model of consumption whereby

individuals (broadly speaking) smooth their consumption across retirement.¹⁸ However, this analysis is descriptive and further, more structural research in this area would be desirable in order to investigate these conclusions further.

3.4 Conclusions

The analysis in this chapter has shown that average income and wealth increased among older people in England between 2002–03 and 2008–09. At the same time, however, the prices of items that make up a large share of pensioners' expenditure – especially domestic fuel – increased well above the rate of inflation. It is important, therefore, to consider both income and expenditure information when attempting to understand whether older people were 'better off' in 2008–09 than they were in 2002–03, when the ELSA survey began.

Looking at the income distribution (separately for ELSA respondents above and below the state pension age), we see that average incomes increased and income inequality rose somewhat (in both age groups) between 2002–03 and 2008–09. For individuals aged between 50 and the SPA, income from employment has become a more significant source of income towards the bottom of the income distribution, but a smaller share of income for those towards the top. Among individuals above the SPA, income from private pensions has grown in importance right across the income distribution – although income from the state (in the form of benefits and the state pension) remains the largest source of income for most pensioners.

Turning to the wealth distribution, we see most changes in households' real wealth being driven by changes in their housing wealth. During the 'boom' years (and especially between 2002–03 and 2004–05), we see significant increases in housing wealth driving an increase in total net wealth across the distribution. However, recent declines in house prices have started to reverse this trend (though average wealth levels remain substantially higher in 2008–09 than they were in 2002–03). The distribution of non-housing wealth has changed little over the four waves of the ELSA survey.

Focusing on individuals who have retired over the course of the ELSA survey, we see that most people experience a significant drop in income on entering retirement. However, individuals with low pre-retirement incomes (less than £150 per week) actually tend to see an increase in their income on entering retirement, perhaps as a result of state support for pensioners on low incomes (such as the Pension Credit) and the state pension.

Turning to the consumption expenditure of older people, we begin by noting the significant increases in prices (over and above inflation) of goods that typically make up a large portion of elderly households' budgets: food and domestic fuel. The average real-terms prices of these goods rose by 7% and 59%, respectively, between the 2004–05 and 2008–09 ELSA interviews. Because these goods make up a large part of elderly households' budgets, any

¹⁸Provided that there are no preference changes at retirement and if there are no links (or 'non-separabilities') between labour market participation and consumption expenditures in people's preferences.

price increases are likely to have a large impact on the well-being of these households.

Looking at spending on ‘basics’ (food, domestic fuel and clothing), we find that mean spending went up by 9.4%, while spending on domestic fuel increased by 37.3% between 2004–05 and 2008–09. Spending on basics as a percentage of income (which can be used as a measure of welfare) has stayed the same at the mean, but this disguises the fact that 25% of households experienced a 10 percentage point or more increase in the share of their income devoted to basics.

Individuals in the bottom income quintile (after controlling for other factors) are 17 percentage points more likely to experience an increase of more than 10 percentage points in the share of their income devoted to basics than those in the top income quintile. If we choose to use spending on basics as a percentage of income as a yardstick of welfare, this implies that the poorest have been affected the most by the rise in prices.

We then examined whether retirement is associated with a significant change in consumption, by comparing the shares of income devoted to spending on basic goods and on leisure before and after retirement. Once other factors (such as changes in income) have been accounted for, we find no significant association between these changes in shares and retirement.

Taken together, then, our results suggest that most individuals experience a fall in income on entering retirement, but that the share of their income they devote to spending on basics, which is sometimes considered as a measure of household welfare, does not change.

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