

9. Expenditure and consumption

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The analysis in this chapter shows that:

- On average, those aged 52 and over spend £45 per adult per week on food; this pattern is relatively constant across age groups.
- Food spending rises with wealth, particularly for food consumed out of the home. Spending on food out of the home is almost five times higher for those at the top of the wealth distribution than for those at the bottom.
- The level of spending on basics – food, fuel and clothing – increases with wealth, but the budget share falls, as would be expected for goods that are considered economic necessities.
- Nevertheless, even among the very poorest groups of the ELSA sample – low-wealth households aged 75 and over – spending on ‘basics’ accounts for less than 35% of disposable income.
- Transfers to people outside the household account for 4% of disposable income on average, and for as much as 7% amongst the wealthiest oldest households. For almost all groups, average transfers are greater than average spending on either clothing or leisure services.
- The percentage of the elderly spending more than 10% of their income on domestic fuel is 8.3% but this rate varies systematically by age, wealth, health and quality of life. Amongst the oldest old and the poorest groups, rates are higher (11½% for those aged 75 and over and 14% for the lowest wealth quintile).
- Consumption of services from durable goods owned by households is an important aspect of consumption for older households. Durable ownership rates are high and non-negligible even for the high-technology goods such as DVDs and personal computers.
- On average, 40% of the population aged 52 and over have adopted digital television in their household. Amongst those 75 and over, these rates are less than 30%; for women aged 80 and over, the rates are as low as 15%.
- The frequency with which durables are replaced varies across the wealth distribution, and the spending on each replacement rises sharply with wealth.
- Measures of durable ownership and durable replacement and expenditure-based poverty measures correlate with self-perceived measures of both social status and quality of life, which suggests an important role for consumption measures when thinking about broader social outcomes for the older population.

Standard economic models state that it is consumption of goods and services that provides individuals or households with utility. For many households, consumption will not be equal to income, and hence the two measures may provide different pictures of economic well-being. The elderly population is a group for which this is particularly relevant for two reasons. First, the ‘dissaving’ of any financial wealth accumulated over their previous lifetime provides an opportunity to consume a higher level of goods and services than that allowed by their pension annuities or earned income alone. Second, however, any uncertainties they might have about future needs (such as health care or long-term care costs) or even their remaining length of life may mean that people are unwilling to dissave so much, perhaps even consuming less than their pension income and choosing instead to add to their financial wealth.

The first wave of ELSA data collection concentrated on measuring income and wealth and contained only two very partial measures of household spending – housing costs and food expenditures. In wave 2, the questionnaire contained a more detailed set of questions on spending patterns and it is these we analyse here. It is important to note from the start that it is expenditure, not consumption, which is measured by the ELSA questionnaire (and indeed by related survey instruments such as the ONS Expenditure and Food Survey). Some forms of consumption services in any one particular time period can, of course, be obtained without associated spending in that period. This is the case for durable goods and housing, which both provide a flow of services to owners that negates the need for other expenditures in these dimensions. Consequently, we also include a complete discussion of durable ownership and replacement in what follows, although we make no effort to impute the levels of weekly consumption associated with these durables. This, along with the issue of housing, which is a topic in its own right, is left for future analysis.

It is well established that, on average, retired households in the UK, as in many places around the world, spend less than the regular ‘income’ that comes from their pensions, other annuities and any benefits they may receive. Banks, Blundell and Tanner (1998) discuss this issue with regard to the changing spending patterns around retirement, and Brewer, Goodman and Leicester (2006) show that poverty rates based on spending are much higher than those based on income for pensioners. Both of these studies are based on the official expenditure data in the UK – the Expenditure and Food Survey (EFS) and its previous incarnation, the Family Expenditure Survey (FES). These data are collected for an age-representative sample using a two-week diary method where respondents are asked to record all the purchases they make.

Such diary methods are generally considered too time-intensive for broader studies covering more dimensions, but recent developments have suggested that some degree of success in measurement of expenditures can be achieved by asking simple recall questions about monthly or weekly spending (see Hurd and Rohwedder (2006) or Browning and Madsen (2005)). The second wave of ELSA therefore included recall expenditure questions for food consumed in the home, food consumed outside the home, clothing, leisure expenditures and transfers to individuals outside the household. In addition, a battery of

questions on domestic fuel arrangements and bills were introduced to get a precise measure of spending on fuel.

The advantage of collecting such data in a general-purpose study is that expenditure and consumption choices can be analysed in the context of factors other than simply income – more notably, health and well-being, wealth and quality of life. In addition, the size of the ELSA sample and the fact that it comprises only individuals aged 50 and over mean that we have larger samples of potentially important subgroups (such as older single women – a particularly important group for policy) than we would by looking at EFS/FES data. This chapter therefore shows the main empirical patterns and relationships that emerge from such an analysis.

For the purposes of the tabulations here, the ELSA data are analysed at the individual level but expenditures are measured at the household level.¹ Since the ELSA measures of income and wealth are at the benefit-unit level,² we restrict our sample to only those individuals living in households in which every benefit unit contains an ELSA sample member. With this sample, we can sum incomes across all the benefit units to construct a household-level measure of income and wealth.³ Nevertheless, it should be borne in mind throughout this chapter that the analysis refers to those individuals in households in which all members were either age-eligible (i.e. 52 or over in 2004) or the spouse or dependent child of an age-eligible household member. As a consequence, weights are not used in our analysis here.

Finally, we restrict our sample to only those who provided a precise answer for each spending question.⁴ The final selected sample comprises 6,557 individuals (2,908 men and 3,649 women) in 4,295 households.

One common measure used by economists is the share of the total budget that is accounted for by a particular commodity or commodity group. Since the ELSA survey only measures a selection of items from the household budget and does not include a recall question on total monthly spending,⁵ we cannot compute such a measure. Nevertheless, some degree of adjustment both for household size and for the total spending power of the household is needed if

¹Although direct comparisons cannot be made from the tables, expenditure measured in ELSA generally compares well to that measured for comparable expenditure categories in the ONS Expenditure and Food Survey (Office for National Statistics, 2005). Relative to the EFS, ELSA appears to record higher levels of food prepared at home and lower levels of food prepared or eaten outside the home, but other items are comparable. However, if we compare relative spending across age groups, for example, the two surveys look broadly similar.

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

³The ELSA questionnaire does contain a small number of crude questions on the incomes of other household members that could be used to help estimate total household income for the remaining part of the sample, but this is not an approach we pursue here.

⁴As with all financial questions in ELSA, those replying ‘don’t know’ or refusing to reply are asked a few questions designed to elicit a broad range in which the true value lies. These data are not used here.

⁵See Browning, Crossley and Weber (2003) for a discussion of the use of and problems with such a question.

we are to compare households. As a result, we use a simple equivalence scale to adjust levels of expenditure for differences in household composition.⁶ In addition, we compute budget shares as a fraction of net disposable weekly income as opposed to total expenditure.

The income and wealth measures used in our analysis here refer to wave 2 income and wealth levels, and are computed as described in the Socio-economic Position chapter of the ELSA wave 1 report (Banks, Karlsen and Oldfield, 2003). All amounts are expressed in December 2005 prices.

A full breakdown of many of the relevant dimensions of spending and durable ownership by wealth, health and other measures of individual and household circumstances for the ELSA sample is provided in tables in the annex to this chapter. The text that follows refers briefly to some of those tables and focuses on a number of key findings that illustrate potentially important variation in circumstances and outcomes in the older population.

9.1 Weekly spending patterns

In this section, we briefly describe the main differences that emerge when looking at spending patterns by age and sex. Tables 9A.1 to 9A.3 show mean and median equivalised weekly expenditures and budget shares for the six expenditure items we measure:

Food in: This represents spending on foodstuffs brought into, prepared and consumed at home, including meals on wheels but excluding pet food, alcohol and meals outside the home. What is asked for is a typical weekly spend by the household.

Food out: The question asks for a typical monthly spend, from which we derive a weekly value. It includes takeaway meals and meals eaten outside the home, including those at work.

Clothing: Households are asked to recall spending over the previous four weeks, from which we derive a weekly average value. It includes spending on outerwear, underwear, footwear and clothing accessories.

Leisure: Households are again asked about spending over the previous four weeks, from which we derive a weekly average. It includes spending on leisure activities other than eating out. A card is supplied to respondents to remind them what to include, which covers items such as cinema, theatre, sports, subscriptions to clubs, fees for classes, internet and television subscriptions and TV licences.

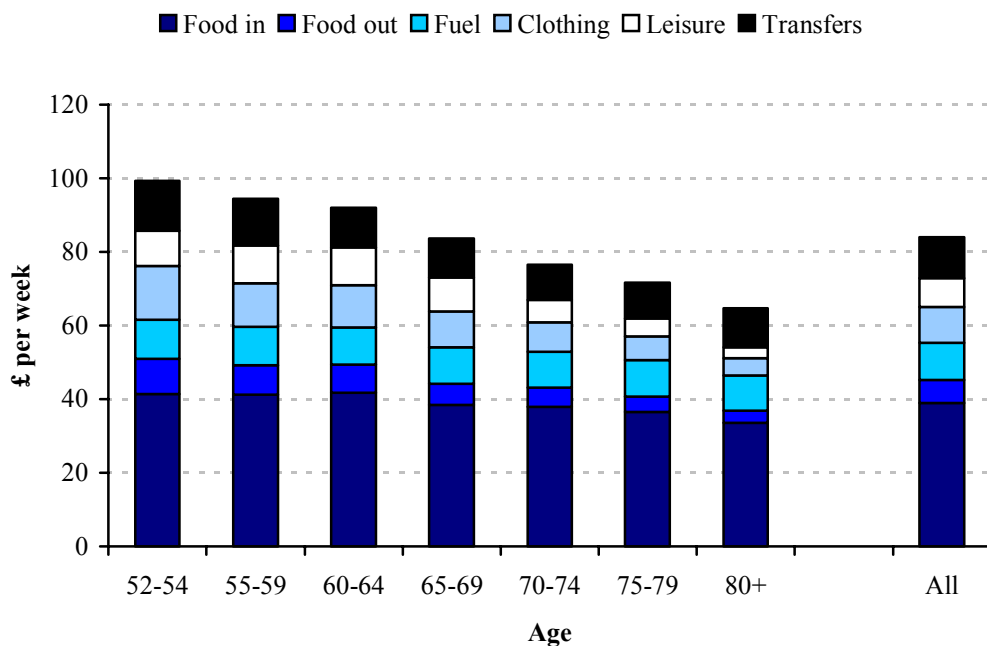
Transfers: Households are asked about the amount of money given to people outside the household, including charity donations, over the last four weeks. A weekly average is taken. It counts only money transfers for which nothing was received in return.

⁶The scale used is the modified OECD equivalence scale, first proposed by Haagenars, de Vos and Zaidi (1994). The scale gives a value of 1 to the first adult in the household, 0.5 to all other adults and 0.3 to all children.

Fuel: Households are asked about all fuel spending, such as on gas, electricity, coal, wood, oil and so on, including the method and frequency of payments and the amount of the last bill or direct debit where applicable. We use all this information to calculate weekly total spending on all sources of domestic fuel.

The analysis shows variation in both mean and median expenditures across age groups and, to a small extent, across sexes at the older ages. Gender differences will appear at older ages but not at younger ages as a corollary of our assumption on household sharing, which is that all spending is shared equally. Remember that we have household levels of spending which we allocate to each household member and we then conduct most of our analysis at the individual level. At older ages, there are likely to be many more single households, whose spending patterns will differ by sex according to preferences and needs. At younger ages, when a higher fraction of households are couples, any gender variation in consumption will not be observed since, in the absence of any specific (but arbitrary) assumptions on household sharing, both men and women in couples are assigned the average spending of their household.

Figure 9.1. Mean weekly expenditure, by age



The expenditures measured by ELSA account for around £80 per week on average across the whole sample. Table 9A.1 and Figure 9.1 show how this is distributed across categories for each age group. Perhaps as expected, spending on food per person stays approximately constant with age, although there is a small decline over the oldest groups. A similar result holds for transfers and domestic fuel. The reduction in total measured spending that occurs between the youngest and oldest age groups is instead due to food out, clothing and leisure expenditures, all of which decline with age.

Table 9A.2 shows the median value of expenditure on each item by age. For non-food items, the median tends to be lower than the mean, suggesting a

skewed distribution. An interesting point from this table is that more than half of the over-80s report no expenditure at all on clothing, leisure and food out. This may be a measurement problem – these households spend on these items but less frequently than once a month, say – or may reflect expenditures being more permanently concentrated amongst a relatively small number of households in this age group.

Note that we do not know what is happening to the residual components of consumption since we do not measure total spending or a complete set of individual spending items. We therefore do not know spending on items such as household goods and services, personal items and services, transport, alcohol and tobacco. And we have not analysed expenditure on housing services although it would be possible to do so.⁷ There is evidence, however, that total spending is substantially lower for older groups, which would be in accordance with the evidence here that only spending on necessities stays constant with age (see Office for National Statistics (2005), for example).

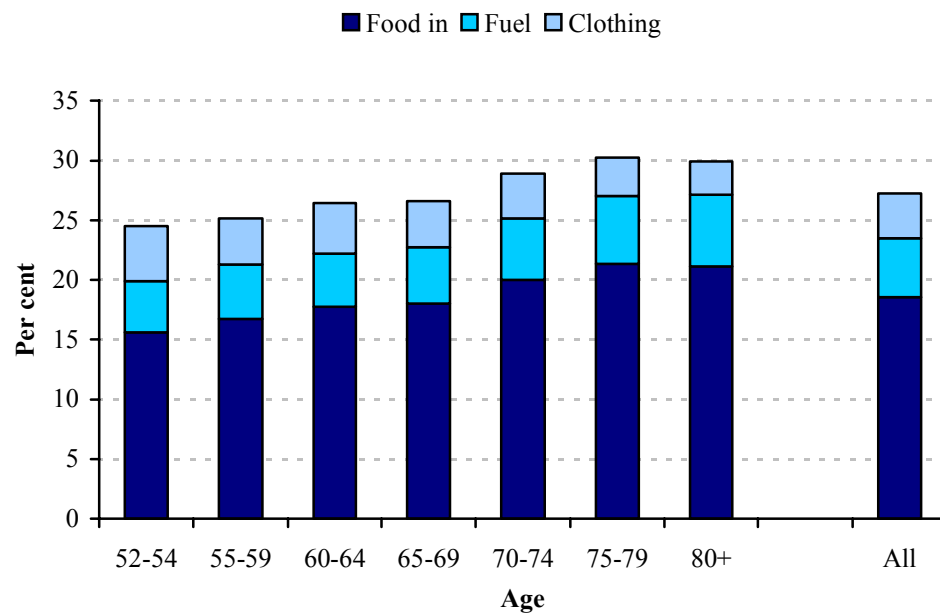
As well as looking at the levels of expenditure, it is interesting to examine how relative shares of spending on different goods vary. Rich households may spend absolutely more than poor households on food, for example, but it is likely to represent a smaller share of their overall budget. Indeed, the expenditure share on necessities, and particularly food in, has been used as an indirect (and inverse) measure of household welfare for precisely this reason.

Table 9A.3 shows budget shares on each spending item.⁸ Figure 9.2 plots budget shares on necessities – food consumed in the home, domestic energy and clothing – which is commonly taken to be a measure of well-being (although note again that we do not include housing costs here). The graph shows a rise in the budget share of necessities with age, predominantly driven by the rise in the budget share of food. This in turn indicates lower levels of economic welfare amongst the older households in our sample.

There is an important caveat here, however. Since Figure 9.1 shows a small fall in levels of food expenditures, the rise in the budget share is being driven by the fact that the older households in our sample have lower incomes than their younger counterparts (see Banks, Karlsen and Oldfield (2003) for detailed analysis of the wave 1 ELSA data on this). Care should be taken when interpreting these age patterns in the share on necessities as being ‘caused by’ individuals ageing, since both cohort effects (whereby older households in any one year come from cohorts that were poorer over their lifetimes) and differential mortality (whereby richer individuals within each cohort are more likely to live to older ages) will be affecting the age profile observed in our wave 2 data.

⁷Housing, however, needs to be treated more like a durable good in the sense that consumption services need to be imputed for owner-occupiers who own their houses outright. This is particularly important for the elderly population, where this group is largest.

⁸As discussed above, typically we think of expenditure shares out of total spending; since we do not observe total spending in these data, we instead look at the share of total *income* spent on the various goods.

Figure 9.2. Budget shares on necessities, by age

Other than this, there is relatively little variation in budget shares of the measured items by age, although the more detailed gender splits in Table 9A.3 show some variation in shares by sex at older ages. Indeed, women in the oldest three age groups have systematically higher budget shares on the three necessities, once again suggesting lower economic well-being for these groups.

One item of spending in Tables 9A.1 to 9A.3 has not been discussed so far, and that is transfers of money to people (or charities) outside the household. These tables show that transfers are proportionately highest amongst the oldest age groups and on average they account for around 4% of income, which is more than these households spend on clothing or on leisure.⁹ This is a potentially interesting finding, relating as it does to ‘intergenerational’ transfers to children and grandchildren, which are a key dimension to bear in mind when thinking about bequests, inheritance taxation and the effects of future changes to pension incomes. Hence the issue of transfers outside the household is one that we will discuss more in the next section when we look at spending patterns and how they vary by dimensions other than age and sex.¹⁰

Tables 9A.4 and 9A.5 repeat our analysis of mean expenditures and budget shares by broad age group and household type. These show the relatively small differences in expenditure patterns between single men, single women and couples, although some differences are apparent for budget shares as opposed to levels of (equivalised) weekly spending.

⁹Looking into the data in more detail, this result is partially driven by large transfers being highly concentrated within some households. If we look at individual households, only 38% spend more on transfers than on clothing and 42% spend more on transfers than on leisure.

¹⁰The FES/EFS also includes a measure of transfers defined as money outside the home, charity and ‘presents’, a measure that technically speaking should also include money sent abroad, which ours does not.

9.2 Spending patterns by wealth and health

The ELSA survey is the first survey with information on expenditures that also collects very detailed information on wealth and health for all respondents.¹¹ As such, it provides the first opportunity to look at how spending patterns vary across the wealth distribution. As argued above, wealth represents a better measure of the permanent economic status of older people than income, since it captures the stock of assets that they could use to finance consumption if necessary.¹² This is particularly true for individuals and households that have not yet retired and annuitised their wealth.

Tables 9A.6 to 9A.11 show mean expenditures and budget shares by wealth, general health status (as measured by self-reported health) and disability (as measured by self-reported limitations with activities of daily living (ADLs)).

As one would expect, spending patterns vary across the wealth distribution. Those aged 60–74 who are in the richest wealth quintile of benefit units (with a net non-pension wealth of more than £243,000) spend around £13 more per week on food in than those in the poorest quintile (net non-pension wealth of less than £25,000). But as a share of income, these poorer households spend 6 percentage points more than their richer counterparts. Expenditure shares of food in and fuel tend to fall across the wealth distribution, whilst shares of leisure, food out, transfers and clothing tend to rise.

Figure 9.3 pools numbers from Table 9A.7 to provide budget shares on necessities – food in, fuel and clothing – by wealth. The share typically declines with wealth within age groups; those in the poorest wealth quintile in each age group typically spend around 30% of their income on necessities. For the youngest age group, the distinction in the middle of the wealth distribution is very small but those at the top have a smaller necessities share. For the oldest age group, there is little difference in the necessities share until the very highest wealth quintile. Controlling for wealth, necessities shares tend to rise with age, as we would expect given Figure 9.2, with the important exception of the very poorest wealth quintile, where age seems not to influence the necessities share.

As noted in the previous section, expenditure on transfers outside the household seems large – it exceeds, on average, spending on clothing, on food out and on leisure for the ELSA sample. Although we do not know for whom these transfers are intended – children, grandchildren or charity, for example – this is a potentially important finding and one that warrants further investigation in the future with more detailed data. Figure 9.4 shows that there is a strong association between the share of income spent on transfers and wealth at all ages, with more than twice the fraction of income being devoted

¹¹The British Household Panel Survey collected summary information on financial wealth in 1995 and 2000 but no information on physical assets and has only limited information on food consumption and less detail on health than the ELSA instrument. The Expenditure and Food Survey contains very detailed measures of expenditure but no indicators of wealth or health.

¹²Even if an individual chose not to run down any accumulated housing wealth this should be seen as a choice to consume the consumption services that their housing wealth provides.

to transfers at the top of the wealth distribution as at the bottom. The transfer expenditure share also rises with age, on average, after age 60. Before age 60, the patterns by wealth are somewhat different.

Figure 9.3. Budget shares on necessities, by broad age and wealth

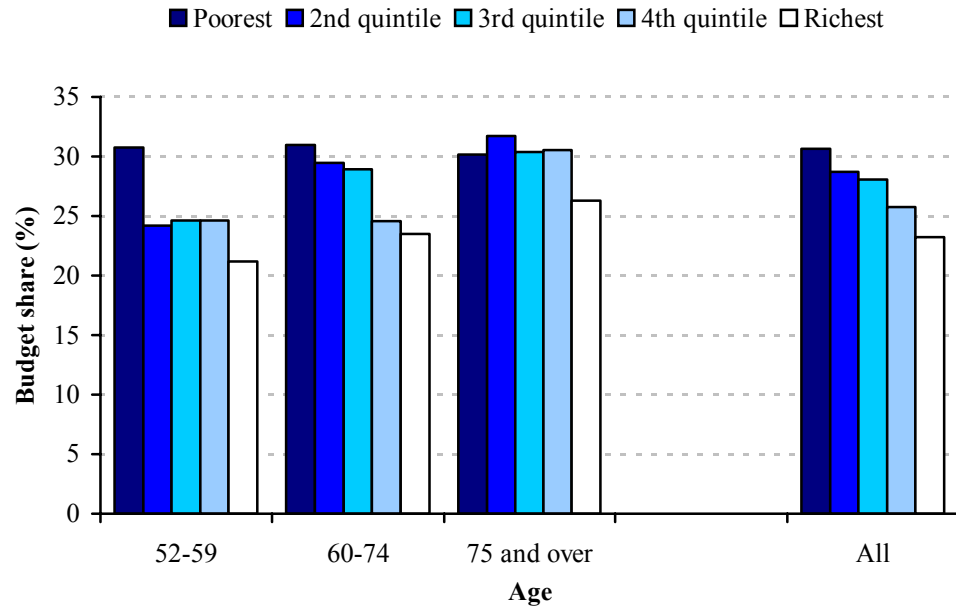
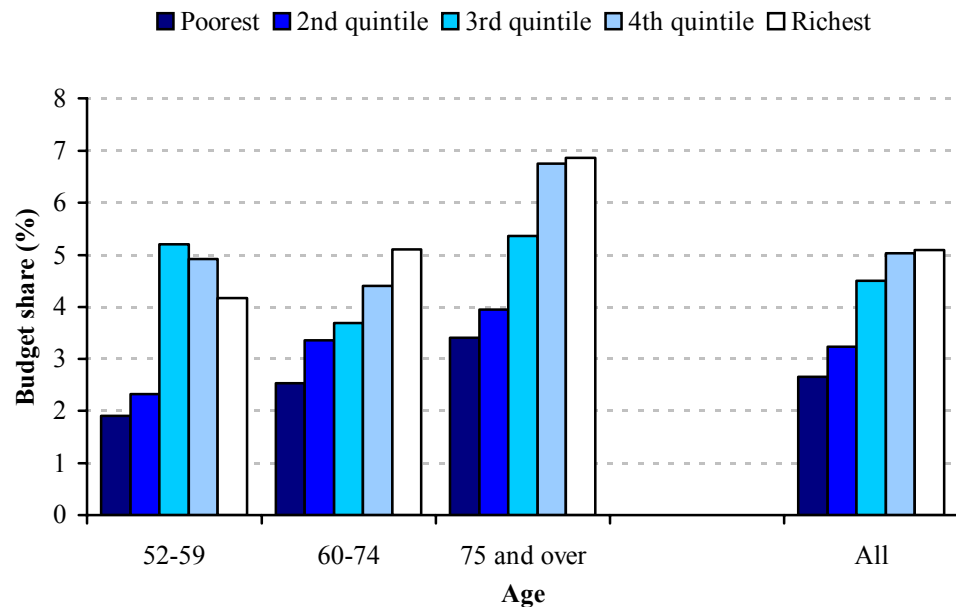


Figure 9.4. Transfers as a fraction of income, by broad age and wealth



In fact, these differences mask even more acute differences across the wealth distribution. Table 9.1 shows that the fraction of individuals giving any transfers also varies by wealth, as does the average amount (in pounds per week) for those that do give any transfers. For those in the poorest wealth quintile, a consistent finding across ages is that around half of households

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make transfers and the average transfer for these households is just over £9 per week. The prevalence of transfers and the average amount given then rise across the wealth distribution. Variation in both prevalence and generosity by age is smaller. However, the oldest and wealthiest group makes the largest average transfers, of just over £33 per week.

Table 9.1. Transfers, by broad age and wealth

	Poorest	2 nd	3 rd	4 th	Richest	All
Proportion making transfers, %						
Aged 52–59	50.0	58.7	71.2	80.0	75.2	68.1
Aged 60–74	49.8	60.1	71.1	72.3	78.1	67.2
Aged 75+	54.4	59.9	67.2	72.5	72.5	63.9
All	51.4	59.7	70.2	74.7	76.2	66.7
Average amount, £ per week <i>(those with transfers > 0 only)</i>						
Aged 52–59	9.3	12.1	18.9	22.7	24.6	19.0
Aged 60–74	9.1	10.6	11.1	17.6	24.4	15.6
Aged 75+	9.3	10.1	14.9	16.6	33.2	15.9
All	9.2	10.9	14.2	19.1	25.8	16.7

Note: Average amounts are per adult equivalent.

Transfers clearly play an important role in the budgeting decisions of elderly households. Intra-family income transfers are an important margin for income smoothing in the event of shocks, and indeed the flow need not be exclusively one from parent to child. Net transfers for elderly households may ultimately be negative in the event that children start to support parents who, say, have not saved sufficiently for their retirement or who suffer a negative health shock. It will be increasingly important to measure such mechanisms as the degree of private provision in retirement incomes increases.

Although transfers out of the household appear quite important for many elderly households, transfers *into* the household from outside, such as regular payments from relatives or ex-partners, appear to be an unimportant source of income for most ELSA respondents. Only around 1% of the sample report regular payments into the household from outside.

Finally, expenditures vary with self-reported health status in the way we might expect. Expenditure on each good declines with health status, both overall and within age groups, with the smallest declines observed for food in and fuel and the largest declines for food out, leisure, transfers and clothing (Table 9A.8). The relationship between the number of limitations in activities of daily living (ADLs) and expenditure is slightly less clear-cut: though a higher number of limitations tends to reduce expenditures on most items, for fuel the reverse is true (Table 9A.10). Given the strong correlations between health, wealth and other socio-economic variables presented in this volume and elsewhere, a full multivariate analysis would be required to really understand the relationships between health, expenditure and well-being.

9.3 Consumer durables

Although typically we use the terms ‘expenditure’ and ‘consumption’ interchangeably, durable goods provide one clear example of the distinction that should be made between the two. Imagine a household that purchases a TV at the start of the year for £500. A survey that records households’ expenditures week-by-week would record a pattern of £500, £0, £0, £0 and so on. However, the consumption flows the household receives from that TV would not follow the same pattern – the household would get some consumption benefits from the TV each week. Imagine the set was expected to last for 250 weeks before being replaced; one possibility is that we could say the consumption value from the TV would be £2 each week.

Durables also have an important role to play in terms of how consumers react to negative financial shocks in the face of liquidity constraints or limited financial resources (see Browning and Crossley (2004)). Consumers may decide either to delay or to forgo altogether the purchase of a new durable good that they had been saving for and instead use the savings to maintain their usual consumption of non-durables, for example.

Of interest is not just whether or not people own durables but also the quality, as this will affect the consumption benefits available from the good. Quality will be a function of the age of the good and the price paid.

Tables 9A.12 to 9A.20 provide a detailed breakdown of the ownership of 12 different durable goods asked about in ELSA: TV, video recorder (VCR), CD player, freezer (deep freeze or fridge/freezer), washing machine, tumble dryer (or washer/dryer), dishwasher, microwave oven, computer, digital/cable/satellite television, landline telephone and DVD player.¹³ The tables also show the percentage of people that own each durable who have either bought or replaced them during the last two years and the average price paid amongst those households that did so.

Overall, access to durables tends to be quite high for the ELSA sample: 99% have a television, 97% a landline phone, 96% a freezer, 92% a washing machine, 90% a VCR and 89% a microwave oven. On the other hand, just 56% have a dryer, 50% a computer, 47% a DVD player, 40% digital television and 35% a dishwasher.

As we would expect, ownership rates tend to be higher amongst younger sample members: three-quarters of the under-55s have a DVD player compared with just 14% of those aged 80 or more, for example. Typically, differences across the sexes are smaller – where there is a difference, ownership rates amongst males tend to be slightly higher.

For some items, there are only small differences across the wealth distribution: 99% of people own a television in each wealth quintile, for example. For others, there are substantial differences: 40% of those in the poorest wealth quintile own a dryer, compared with 68% of those in the richest; 9% of people

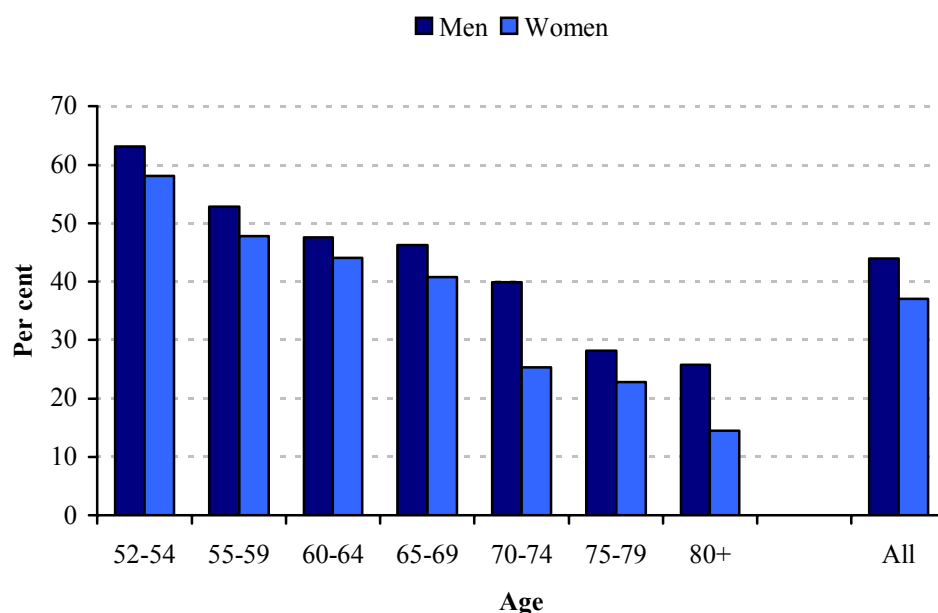
¹³Note that these results are at the individual level although the durable questions are asked at the household level; the figures therefore represent the percentage of people living in households that have access to each of the durable goods.

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in the poorest quintile own a dishwasher compared with 64% in the richest; and 25% of those in the poorest quintile own a computer compared with 76% in the richest.

Replacement/purchase rates for the durables tend to be lower. Not surprisingly, the greatest replacement rates are found for those goods that are more recent innovations, such as DVD players, or where quality changes are more frequent, such as computers: 44% of DVD player owners bought or replaced them in the last 2 years, as did 23% of TV and computer owners. Replacement rates tend to decline quite strongly with age, as we might expect, although interestingly there is no particular trend for people at the higher end of the wealth distribution to replace durables more frequently. However, when they are replaced, wealthier people do tend to purchase more expensive models (for example, the average replacement price for a computer is £532 for people in the poorest wealth quintile and £942 for those in the richest), so there is certainly a quality effect and consumption will be higher as a result. In addition, more expensive (and presumably higher-quality) durables may need to be replaced less frequently, which might explain the lack of association between wealth and replacement rates.

Figure 9.5. Percentage with digital television, by age and sex

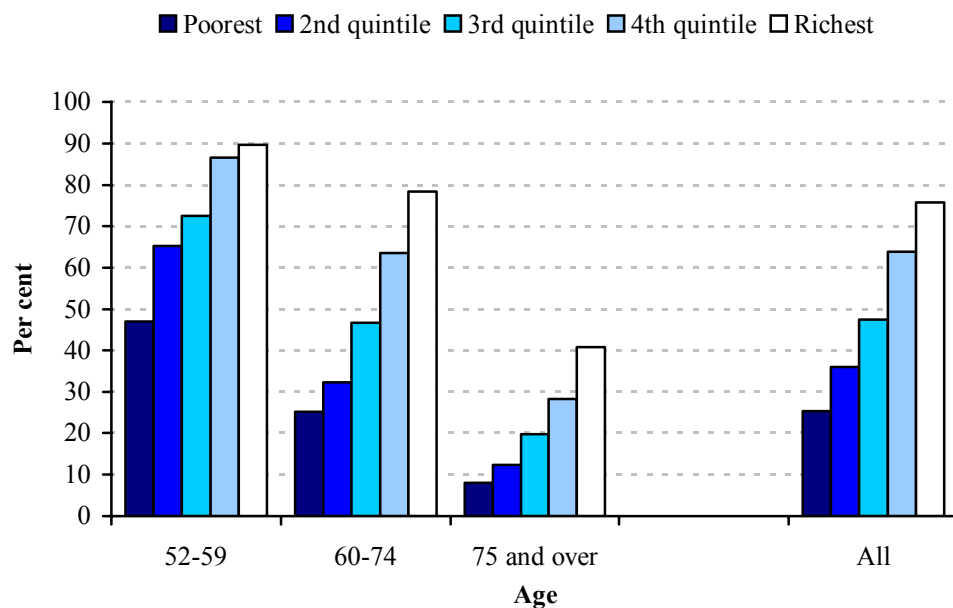


The rest of this section will focus on a couple of durables where overall ownership prevalence is lower and where there is some view that elderly households may be in some sense ‘behind’ their younger counterparts. For example, there is much concern about whether elderly will be left behind by the switch to digital television (see, for example, House of Commons Culture, Media and Sport Committee (2006)). We can look at this directly: less than half of those aged 60 or more had adopted digital television by wave 2 of

ELSA, and less than a quarter of those aged 75 or more had done so.¹⁴ Adoption rates appear particularly low for the most elderly women and Table 9A.15 shows that they are as low as 11.9% for single women aged 75 and over. There is a natural concern about the potential effects of the analogue switch-off starting in 2008.

Ownership of personal computers is quite high amongst younger groups of ELSA respondents, but there are strong differences across the wealth distribution. Just under half of those aged under 60 in the poorest wealth quintile have a computer in the household, compared with almost 90% of those in the richest quintile. For the oldest pensioners, ownership rates of a personal computer are particularly low, especially for the poorest pensioners, of whom less than 10% own one.

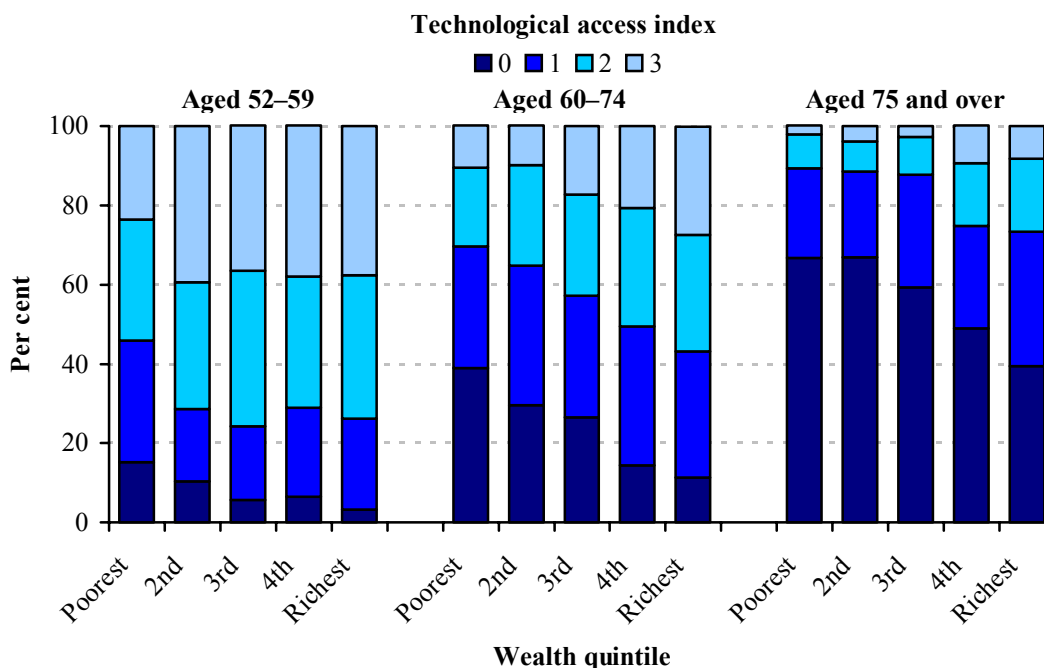
Figure 9.6. Percentage with personal computer, by broad age and wealth



One issue is whether ownership of durable goods tends to be clustered amongst the same households or not, i.e. do households tend to own most of the durables or none at all? In particular, this is of interest for what we might think of as the ‘high-tech’ durables of DVD player, personal computer and digital TV. Households without these items are typically seen as being left behind technologically. We construct an ad-hoc ‘technological access index’ which takes a value of 0 to 3 according to how many of these durables each household owns. Figure 9.7 plots this index by wealth and age group.

¹⁴This compares with an adoption rate of around 62% of all households as at 2005Q1 (Ofcom, 2005). Analysing the ELSA sample at the household rather than the individual level reveals that 37% of households in the ELSA sample used in this chapter had access to digital TV.

Figure 9.7. Number of types of high-tech consumer durables owned (DVD, PC, digital TV), by broad age and wealth quintile



There is considerable variation by both age and wealth. Around 40% of those aged under 60 and in the second or higher wealth quintile have all three items, compared with only 2% of those aged 75 and over in the poorest wealth quintile. Around half of the oldest group have none of the items at all, though this again varies with wealth. However, it is worth noting that there is a considerable spread of the population across all four possible values of the index; it is not necessarily the case that households that own some ‘high-tech’ items own all of them.

9.4 Expenditure-based poverty measures

The presence of expenditure on domestic fuel allows us to analyse one important measure of welfare that the government now explicitly targets, namely fuel poverty. Government policy is to ‘end fuel poverty for vulnerable households as far as is reasonably practicable by 2010’ (Department for Environment, Food and Rural Affairs, 2004). Vulnerable households include those with children, long-term disabled people and elderly people. Against a recent background of rising fuel prices, this measure of well-being may become a particularly important one, and potentially a challenging one to reduce.

In England, a household is officially classified as living in ‘fuel poverty’ if it is assessed as needing to spend more than 10% of its income on domestic fuel in order to maintain a satisfactory temperature in the home.¹⁵ Since we have

¹⁵See the DTI website at <http://www.dti.gov.uk/energy/fuel-poverty/index.html>.

measures of fuel expenditure and household income from ELSA, we can determine the proportion of our sample living in households that *currently* spend more than 10% of their income on fuel. For convenience, we will refer to these households as ‘fuel poor’, though in practice some of them may not *need* to spend as much and so would not officially be classified as fuel poor. Equally, some households that do not spend 10% of their income on fuel may *need* to do so and so would be officially classified as fuel poor. Since we have no way of knowing the fuel spending needed, we use the fuel spending observed, and this should be borne in mind throughout the discussion of these results.

Overall, 8.3% of the sample is fuel poor by our definition: 6.7% of men and 9.6% of women. Government figures for England for 2003 (Department of Trade and Industry, 2005) show that amongst households where the *youngest* household member is aged 60–74, fuel poverty rates were 8.2%; where the youngest household member is aged 75+, the fuel poverty rate was 15.9%. Our figures suggest that 7.1% of those aged 60–74 and 11.5% of those aged 75+ are currently spending more than a tenth of their income on fuel. If anything, we appear to obtain slightly lower rates by this measure than the government does by its definition, although the effects of real income growth between 2003 and 2004–05 and of the sample selections we use here remain to be quantified. However, the contribution of our analysis is less the overall prevalence but more the evidence on how fuel poverty covaries with other characteristics.

We also devise a more ad-hoc measure of poverty based on whether the share of income spent on basics (food in, fuel, clothing) exceeds 50%.

Tables 9A.21 to 9A.23 and Figures 9.8 and 9.9 show how these measures vary by age, sex, broad household type and wealth. A greater proportion of women than of men live in fuel poverty within each age group, and rates of fuel poverty increase with age (though not in a particularly smooth manner). As we would expect, the wealth gradient is steep, although there is non-negligible fuel poverty in the top quintile.¹⁶

Tables 9A.24 and 9A.25 show how these indicators vary by self-reported health and by disability measures respectively. We might be tempted to think about causality here, but this would be a step too far. Nevertheless, though, these do show higher rates of poverty amongst the more disadvantaged groups: 5% of those aged 60–74 who report ‘excellent’ or ‘very good’ health are in fuel poverty compared with 10% of those with ‘fair’ or ‘poor’ health. Interestingly, past the age of 75 the health gradient disappears, and this is true for both self-reported and ADL measures of health.

¹⁶Some of this may be due to imputation of the wealth variable. There is far less imputation required for income, which forms the denominator of fuel share, and even were income data to be missing for those households where wealth is missing, the imputations are made independently so the correlation between income and wealth is not ensured for these households. The pattern by wealth quintile, including the rather low prevalence of fuel poverty in the middle of the wealth distribution for the under-60s, is unaffected by whether we include or exclude the imputed observations.

Figure 9.8. Fuel poverty rate, by age and sex

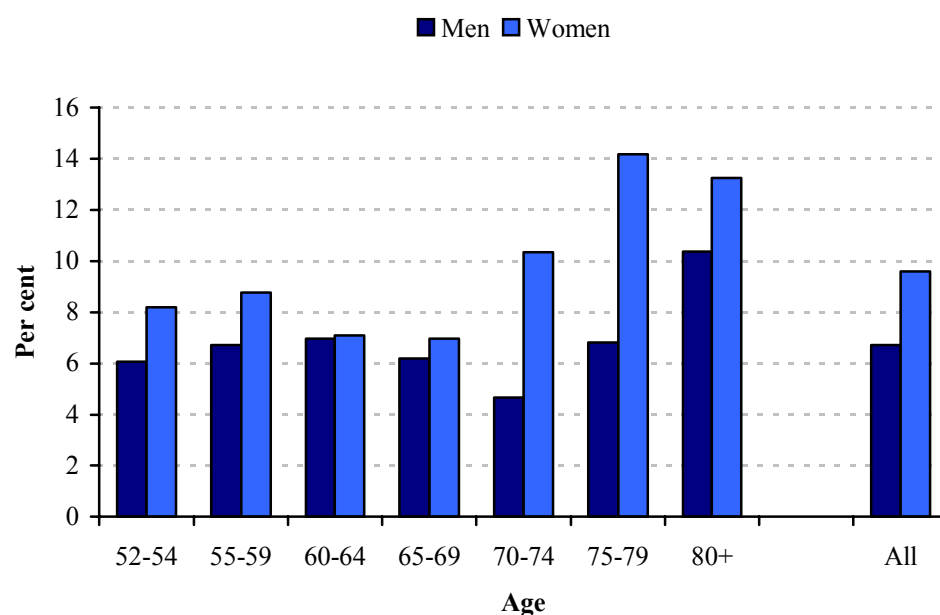
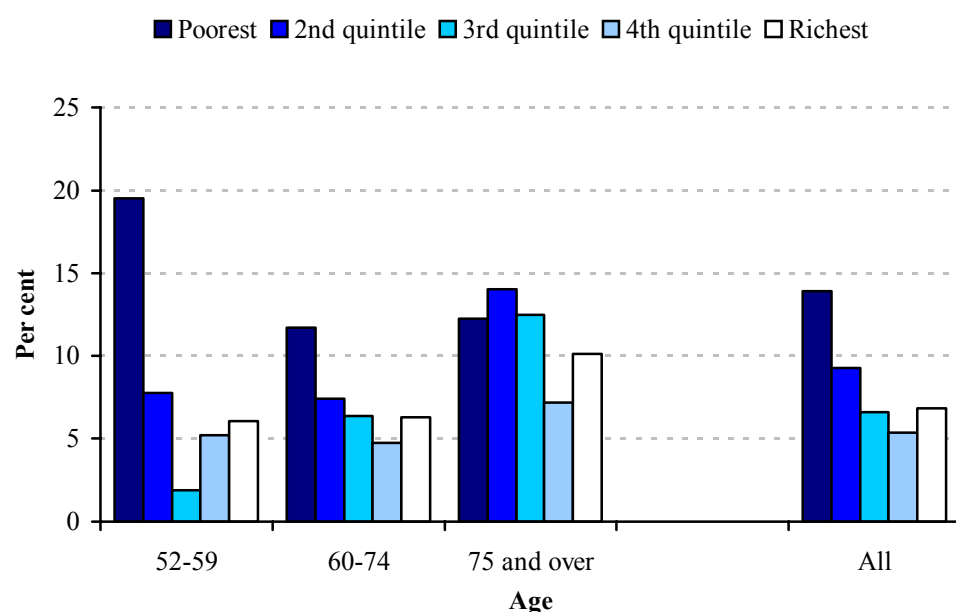


Figure 9.9. Fuel poverty rate, by broad age and wealth quintile



A similar picture emerges when we switch attention from fuel poverty to a ‘high basics’ measure of poverty. The two measures have similar overall prevalences, with 8.3% of people spending more than 50% of their income on basics, the same share we observe for fuel poverty. This is not unexpected since, of course, fuel is one of the components of the basics measure and we would expect spending levels on different goods to vary systematically across households. However, it is interesting that the overlap between the measures is not as strong as one might expect. Of those who are fuel poor, only 44% also have a basics share in excess of 50%; of those with a high basics share, only 44% also live in fuel poverty. Taking both measures, 3.6% of people are in

poverty; 4.7% are fuel poor only; 4.7% have a high basics share only; and 87% of people are not in poverty on either measure.

The next section looks at how these expenditure-based poverty measures, along with the durable ownership rates that were considered previously, covary with individuals' subjective measures of their social status and quality of life.

9.5 Poverty indicators, durable ownership and subjective well-being

Another advantage of ELSA is the relatively good data on individuals' assessment of their own well-being and social status. Such dimensions might be thought to relate to consumption and poverty, and in this section we consider the empirical evidence for this.

As with all tables in this volume, caution should be taken in interpreting any cross-sectional correlation between variables as a causal relationship since causality could run either, neither or both ways. In the case where those who have low subjective measures of well-being tend to have lower levels of consumption and higher measures of consumption-based poverty indicators, this need not suggest that poor subjective well-being reduces consumption nor that low consumption causes poor subjective well-being. An alternative explanation is that, for example, people who have a low subjective measure of social status on the ladder score (see below) are people who have been excluded from society earlier in life through having no job or poorly-paid jobs, such that they both feel socially excluded and have a lower lifetime income from which to consume. Making causal statements about the relationships between health, well-being, social status and consumption requires careful empirical analysis to control for all relevant dimensions, and this is likely to be one of the key contributions of the ELSA data to the empirical literature.

Tables 9A.26 and 9A.27 detail poverty indicators by broad age and two measures of subjective well-being – the CASP-19 quality-of-life score (broken down into three equally sized groups, or tertiles)¹⁷ and the self-reported social status ('ladder') score, broken down into six groups.¹⁸ Those in the highest CASP grouping tend to have lower rates of the two poverty measures, particularly again amongst younger ages. Equally, those who view themselves nearer the top of the social ladder have lower poverty rates, with again a smaller gradient for the oldest age group. Figure 9.10 graphically illustrates this trend for fuel poverty by broad age group and CASP tertile. Fuel poverty falls from around 11% to 4% as we move from lowest to highest CASP tertile for the youngest group; for the oldest group, whilst there is still a decline in

¹⁷For details of CASP-19, see Netuveli et al. (2006).

¹⁸As in wave 1, and also in Marmot et al. (1991), individuals are asked to rank themselves on a simple 10-rung ladder representing where people stand in society. Data are then coded into 20 points: 5, 10, ..., 95 and 100. For the purposes of our analysis, we group the data into six groups: 0–30, 35–45, 50/55, 60/65, 70/75 and 80–100.

Figure 9.10. Fuel poverty rate, by broad age and tertile of CASP-19 score

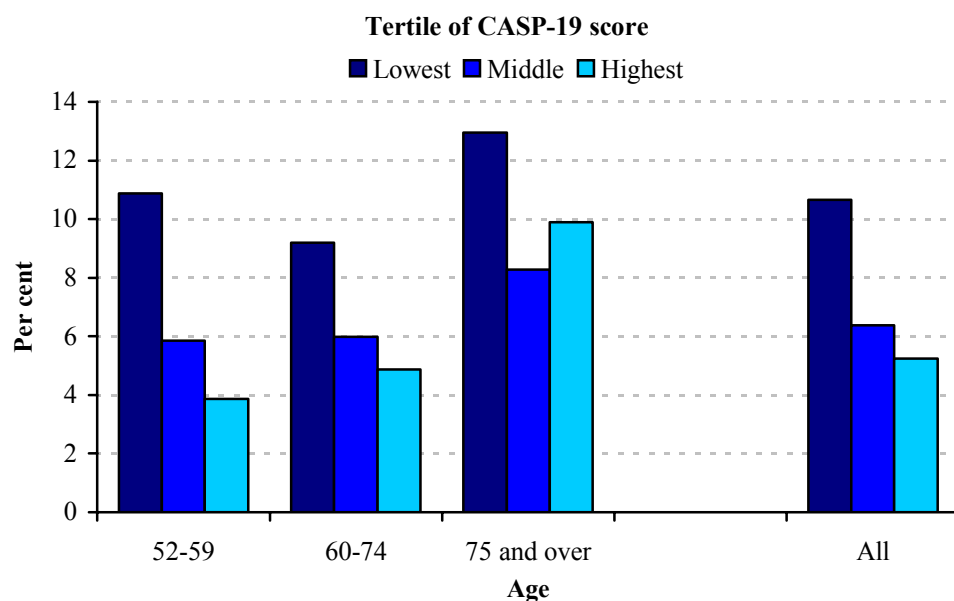
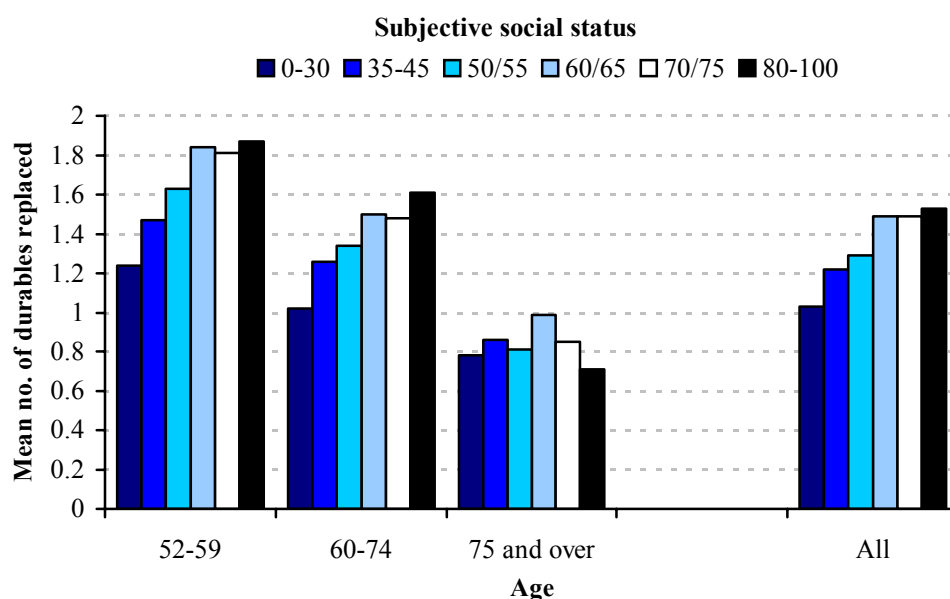


Figure 9.11. Number of durables replaced in last 2 years, by broad age and subjective social status



Note: Subjective social status measured by response to the ladder question (see footnote 18 or Marmot et al. (2003) for further details).

poverty from 13% to 10% across the CASP tertiles, those in the middle tertile actually have a slightly lower poverty rate, and the differences across CASP tertiles are much smaller.

Tables 9A.28 and 9A.29 show that durable ownership and replacement are also related to subjective social status, but they also show that variations in

durable ownership and replacement rates by CASP tertile are small. Those in the lowest well-being tertile own, on average, 8.5 durables from the list above and have replaced 1.3 in the last 2 years; those in the highest tertile own 9.3 and have replaced 1.5.

Figure 9.11 shows systematic differences in durable replacement by self-perceived social status for all but the oldest groups (where we know replacement is lower, due presumably to shorter horizons, as discussed above).

Clearly, as the discussion at the start of this section made clear, a fuller, multivariate analysis of the relationship between these factors will be required in future research, preferably making use of the longitudinal nature of the ELSA data. Are these observed correlations simply due to the fact that low-social-status individuals will typically be low-income/low-wealth individuals or is there some independent role for social status in determining consumption, poverty and durable ownership? Or is there a reverse relationship – is there an independent status-related role for durable ownership in creating perceptions about quality of life and social status that goes beyond income, consumption and wealth, for example? There are many such questions linked to the policy debates on well-being and the measurement (and even meaning) of poverty and deprivation. The analysis we have presented here is only a first step in the investigation of these issues.

9.6 Conclusions

Data on consumption expenditures and durable ownership provide key information on an important dimension of economic well-being that is not covered by either income or wealth. As well as reflecting individuals' permanent levels of well-being and providing information on the direct inputs into household utility and well-being, consumption data also tell us something about the way individuals view their own resources – uncertainty about the future, perhaps greater for some individuals than for others or perhaps more worrisome for some than for others, can cause individuals to underconsume relative to the financial or 'annuity' value of their resources. Similarly, individuals with a strong bequest motive may choose to spend less on themselves as they age.

The age patterns in consumption shown in this chapter are striking, particularly for non-necessary items and for durable replacement. Given that large components of income such as pensions and state benefits are typically indexed to inflation after retirement, this suggests a saving rate that rises with age after retirement, although further evidence on the other items of household budgets would be required to make such a finding absolutely concrete. Any possible cohort effects as well as the effects of differential mortality would also need to be investigated. If the conclusion holds up, as it is likely to, this provides food for thought with regard to the provision of retirement resources, since most retirement income institutions (state/private pensions and annuity products) are predicated around providing a (real) income stream that does not vary with age post-retirement. In general, a deeper understanding of the consumption preferences and needs of the older population, and how they change with age, is required.

Looking beyond age effects, once again the main message emerging is that the ELSA data reveal very strong positive correlations between various different dimensions of advantage – spending and consumption, wealth, health and subjective well-being – and this correlation varies within and between age groups.

All of our analysis in this chapter has been, by necessity, cross-sectional in nature as a result of the fact that wave 2 was the first occasion on which detailed information on consumption measures was collected in the ELSA interview. It will be important to collect longitudinal information in these dimensions, allowing us to unpack how all these dimensions evolve as respondents age. Even in isolation, understanding how consumption patterns change with age for individuals as they retire and then as they move into older ages, for example, will be extremely informative. Since annuity incomes are relatively constant over this time, changes in consumption are likely to reflect changing preferences and needs rather than changes to permanent or transitory resources. But coupled with the detailed measures repeatedly collected in other dimensions, the ELSA data will provide an unparalleled source of data for investigating the consumption and well-being of pensioners in England in the future.

References

- Banks, J., Blundell, R. and Tanner, S. (1998), 'Is there a retirement savings puzzle?', *American Economic Review*, 88: 769–788.
- Banks, J., Karlsen, S. and Oldfield, Z. (2003), 'Socio-economic position', in M. Marmot, J. Banks, R. Blundell, C. Lessof and J. Nazroo (eds), *Health, Wealth and Lifestyles of the Older Population in England: The 2002 English Longitudinal Study of Ageing*, London: Institute for Fiscal Studies (http://www.ifs.org.uk/elsa/report_wave1.php).
- Brewer, M., Goodman, A. and Leicester, A. (2006), *Household Spending in Britain: What Can It Teach Us about Poverty?*, Bristol: Policy Press.
- Browning, M. and Crossley, T. (2004), 'Shocks, socks and stocks: smoothing consumption over a temporary income loss', CAM Research Paper, Copenhagen.
- Browning, M., Crossley, T. and Weber, G. (2003), 'Asking consumption questions in general purpose surveys', *Economic Journal*, 113: 540–567.
- Browning, M. and Madsen, E. (2005), 'Consumption', in A. Börsch-Supan, A. Brugiavini, H. Jürges, J. Mackenbach, J. Siegrist and G. Weber (eds), *Health, Ageing and Retirement in Europe: First Results from the Survey of Health, Ageing and Retirement in Europe*, Mannheim: MEA.
- Department for Environment, Food and Rural Affairs (2004), *Fuel Poverty in England: The Government's Plan for Action*, London: DEFRA (http://www.defra.gov.uk/environment/energy/fuelpov/pdf/fuelpov_actionplan.pdf).
- Department of Trade and Industry (2005), *The UK Fuel Poverty Strategy: 3rd Annual progress report*, London: DTI (<http://www.dti.gov.uk/files/file10717.pdf>).
- Haagenars, A., de Vos, K. and Zaidi, M. A. (1994), *Poverty Statistics in the Late 1980s: Research Based on Micro-Data*, Luxembourg: Office for Official Publications of the European Communities.
- House of Commons Culture, Media and Sport Committee (2006), *Analogue Switch-off: A Signal Change in Television (Volume 1)*, London: TSO.

- Hurd, M. and Rohwedder, S. (2006), 'Some answers to the retirement-consumption puzzle', RAND Working Paper WR-342 (http://www.rand.org/pubs/working_papers/2006/RAND_WR342.pdf).
- Marmot, M. G., Davey Smith, G., Stansfield, S., Patel, C., North, F. and Head, J. (1991), 'Health inequalities among British civil servants: the Whitehall II study', *Lancet*, 337: 1387–1393.
- Marmot, M., Banks, J., Blundell, R., Lessof, C. and Nazroo, J. (eds) (2003), *Health, Wealth and Lifestyles of the Older Population in England: The 2002 English Longitudinal Study of Ageing*, London: Institute for Fiscal Studies (http://www.ifs.org.uk/elsa/report_wavel.php).
- Netuveli, G., Wiggins, R. D., Hildon, Z., Montgomery, S. M. and Blane, D. (2006), 'Quality of life at older ages: evidence from the English Longitudinal Study of Aging (wave 1)', *Journal of Epidemiology and Community Health*, 60: 357–363.
- Ofcom (2005), *Digital Television Update Q1 2005*, (http://www.ofcom.org.uk/research/tv/reports/dtv/dtu_2005_q1/261567/).
- Office for National Statistics (2005), *Family Spending: A Report on the 2003–04 Expenditure and Food Survey*, London: ONS (http://www.statistics.gov.uk/downloads/theme_social/Family_Spending_2003-04/FamilySpending2003-04.pdf).

