

**The Material Well-being of older people in the UK in
comparative perspective: a review of the literature**

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I. Introduction

This paper compares the material well-being of older people in the UK and other OECD countries using a range of range of different indicators, including relative incomes, measures of inequality, and poverty rates. This is the first stage of a larger project to investigate the links between the life-course, social policies and income and wealth in later life in the British, German, Swedish, and American welfare states. These countries were selected because they fall at different points on a variety of policy continua and span most of the range on most outcome measures. For this reason, the discussion focuses on these four countries, although data for a larger number of OECD countries is presented in order to set this analysis into a broader international context.

This paper is essentially a review of recent international comparative studies. Most of these studies are based on data for the mid-1980s to the mid-1990s. Analyses of more recent UK data are used selectively to assess whether some of the trends observed in these studies have continued into the 2000s. This paper will help to contextualise and inform our own secondary analysis of international data in subsequent stages of the project. We will be using longitudinal data sets to examine certain issues that cannot be addressed using cross-sectional data, as well as updating the analysis up to the early 2000s.

Indicators of well-being

Most comparative studies of the living standards of older people employ a number of standard measures of economic well-being, including:

- The average disposable incomes of older people relative to the rest of the population;
- Income inequality: the spread of older people's incomes around the average, as measured by the Gini coefficient or other summary measures;
- Poverty rates: the proportion of older people below a given income threshold.

In addition, some studies also consider a broader concept of command over resources, including housing and other wealth, as well as income, although this data is less comprehensive and less reliable.

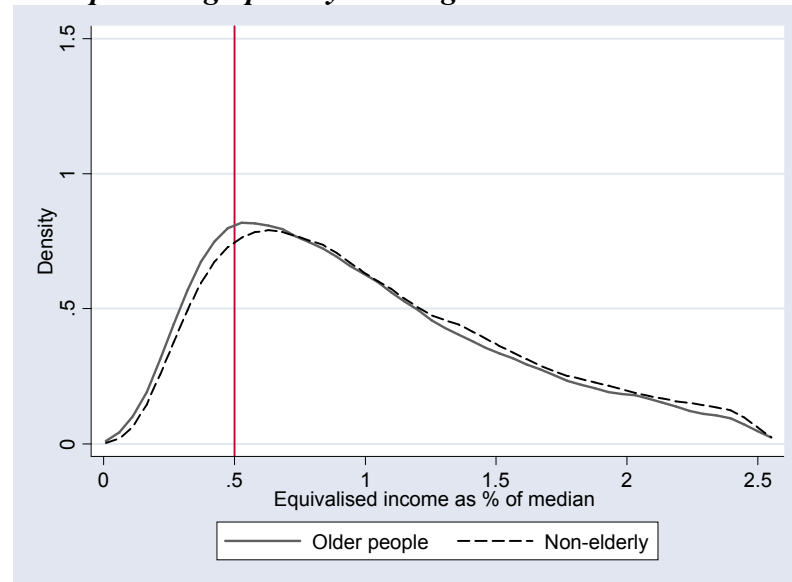
As well as examining the current levels of these indicators in different countries, many studies also look at how they are changing over time. Are the incomes of older people rising or falling over time relative to the rest of the population? Have rates of poverty been increasing or decreasing? Is the distribution of pensioners' incomes becoming more or less unequal? Are these trends mirrored across all or most other countries or are they specific to one or a small number of countries?

The general presumption is that high relative incomes, low inequality, and low poverty rates are desirable. These indicators are not necessarily correlated with one another, however. It is, for example, possible for the incomes of older people to be relatively high on average and for poverty rates among older people also to be high if incomes are unequally distributed (as in Example A in Figure 1). At the other extreme, it is possible to have low poverty rates among older people even if the average incomes of older people are low relative to the rest of the population, provided that the incomes of older people are more evenly distributed (Example B in

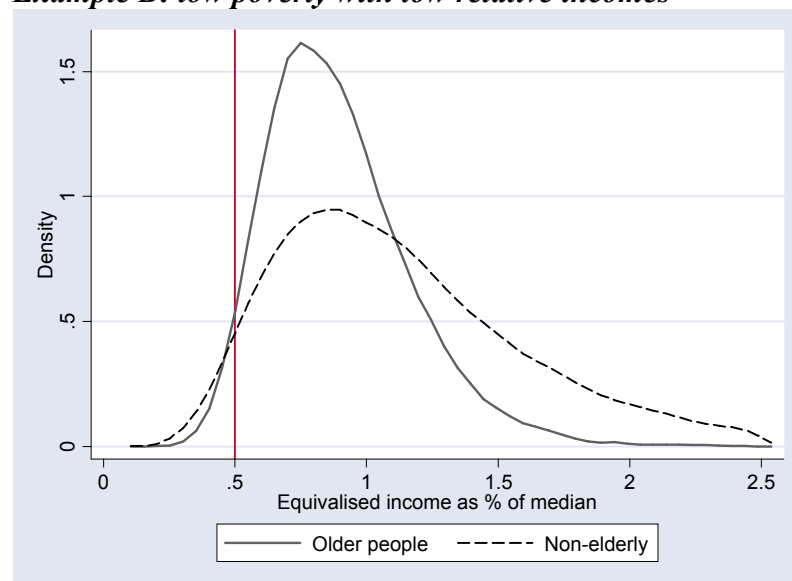
Figure 1). It is important, therefore, to consider these different indicators together, rather than focusing on any single indicator.

Figure 1: Illustrative income distributions

Example A: high poverty with high relative incomes¹



Example B: low poverty with low relative incomes¹



1. In Example A, the average incomes of older people are 95% of the population mean, the Gini coefficient for the elderly and non-elderly populations is 0.38 and the poverty rate among older people is 18%. In Example B, the average incomes of older people are 80% of the population mean, the Gini coefficients for the elderly and non-elderly populations are 0.17 and 0.25 respectively and the poverty rate among older people is less than 4%.

Measurement issues

Measuring the material well-being of older people raises many conceptual methodological issues, including:

- The income concept: people's living standards are normally measured by their disposable incomes, comprising earnings, public transfers, investment income, and private pensions net of direct taxation. Capital gains, lump sum receipts, imputed rents on owner-occupied housing, and benefits in kind (e.g. free or subsidised housing or health care) are typically omitted, whilst indirect taxes are not deducted. This may distort comparisons between countries where, for example, there are large differences in the share of revenues collected from indirect taxation, the amounts spent on public services, or home ownership.
- The definition of older persons: this may affect comparisons between countries, because retirement patterns vary significantly. If, as is commonly the case, an age cut-off is used to define the elderly population (e.g. all individuals aged 65 and over), the average incomes of older people will be lower, other things being equal, in countries where people generally retire earlier – but not so if, as in some studies, the definition is based on receipt of a pension or self-reported labour market status;
- Unit of measurement: most studies seek to measure incomes at the household level (assuming equal sharing between household members), but some analyses are based on the family or benefit unit (e.g. for Sweden, where tax records are often used in place of social surveys, which does not allow household units to be identified). In general, the smaller the unit of measurement, the larger is measured poverty and inequality. This is because older people who are living with their children will normally be better off if they are treated as part of a larger household¹.
- Equivalence scales: these are used to adjust incomes for differences in the size and composition of households, although there is no consensus regarding the appropriate equivalence scale to be used. Since a large proportion of older people live in small households (of one or two persons), the larger the economies of scale implied by the equivalence scale, the more likely it is that older people will be concentrated towards the bottom of the income distribution (and vice-versa). Indicators of the relative material well-being of elderly people (compared with the non-elderly) will, therefore, be sensitive to the choice of a particular scale, although this may not have a very significant impact on the ranking of countries.

These and other issues have to be addressed in any analysis of the well-being of older people in the UK (or indeed any country), but the problems are compounded when comparisons are being made between countries (though developments in cross-national data sets made the task considerably easier). For this reason, the results of cross-country comparisons need to be treated with some caution.

A further limitation of most comparative studies is that they are based on cross-sectional data sets (i.e. snapshots of the population at different points in time), rather than longitudinal data sets (where the same group of individuals are tracked over an extended period of time). So, for example, changes in the relative incomes of

¹ This should have less of an impact on the Swedish data, because a much lower proportion of older people in Sweden live with their children (5% in ?), compared with the other study countries (all around 15%).

pensioners are assessed by comparing the average incomes of pensioners in one year with the relative incomes of pensioners, say, ten years later. The latter group will include many newly-retired pensioners who have become pensioners during the intervening period. Any improvement in the living standards of pensioners may be due to these newly-retired pensioners being better-off than their predecessors (a ‘cohort effect’) or to an increase in the incomes of those who were already retired (or some combination of the two). Both are important in ensuring decent living standards for older people, but with cross-sectional data it is not possible to disentangle the two. For example, a large cohort effect may disguise the fact that existing retirees may be getting worse off over time with implications for policies that seek to prevent pensioners from sliding into poverty as they grow older (Burkhauser, Cutts, and Lillard, 1999). Our own analysis using longitudinal or panel data sets will be able to overcome some of the problems inherent in the use of cross-sectional data.

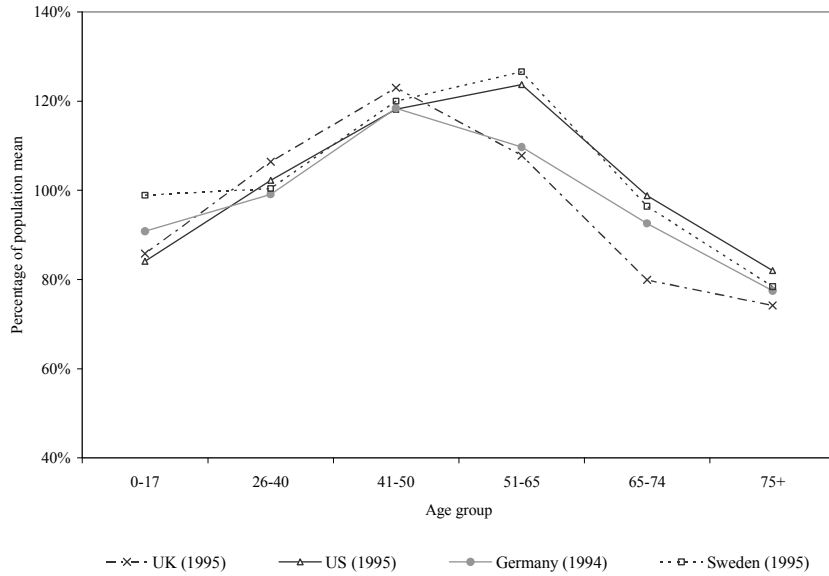
II. Relative incomes of older people

The most straightforward way of measuring the living standards of older people is to compare their average incomes with those of other age groups or the population as a whole. The most recent study of this kind covering all four of our study countries was carried out by the OECD using data for the mid-1990s. They calculated ‘quasi-replacement’ rates for a large number of OECD countries, by comparing the average disposable incomes of pre- and post-retirement age groups. Incomes comprise social transfers, earnings, occupational pensions, and other private sources of income and are measured on a household basis, adjusted for differences in household size and composition.

They found that the average disposable income of younger pensioners is just below 80% that of the pre-retirement age group in most OECD countries. This figure is slightly below-average in the UK (74%) and Sweden (76%) and slightly above-average in the US (80%) and Germany (84%). Given that older people generally have greater housing assets and lower work-related expenses, they conclude that the material living standards of older people are broadly comparable with the working age population in most countries.

This conclusion is based on comparing the incomes of those aged 65-74 with those aged 51-64, as the main purpose of this analysis was to examine how well the systems in different countries protect people against drops in their income when they retire. This particular statistic paints the UK in quite a favourable light, because the average incomes of the pre-retirement group (with which older people are being compared) are also relatively low by comparison with other countries. The relative position of different countries are sensitive to the choice of benchmark, because of differences in the pattern of incomes over the life-cycle, reflecting cross-country differences in retirement behaviour and/or the profile of earnings with age (see Figure 2). In the UK, for example, the (negative) pay differential between the oldest workers and prime-age workers is significantly greater than in other countries (Disney and Whitehouse, 2001).

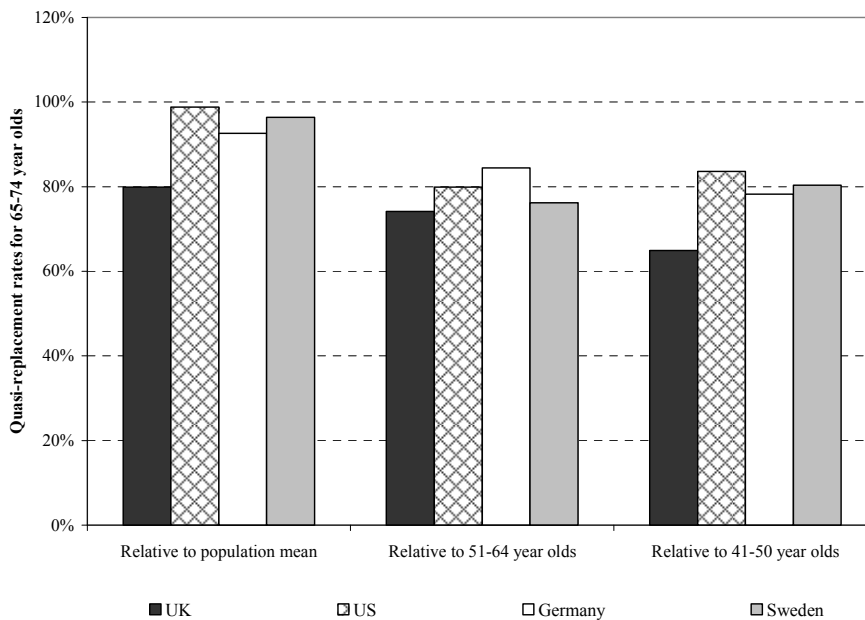
Figure 2: Average incomes over the life-cycle, mid-1990s



Source: own analysis based on data from Table 2.3 of Forster and Pellizari (2000).

If, instead, the incomes of older people are compared with the population average or with other age groups, then the gap between the UK and the other study countries is significantly greater (see Figure 3). For example, the average income of 65-74 year olds in the UK is 80% of the population mean, compared with 93% in Germany, 96% in Sweden, and 99% in the US.

Figure 3: Relative incomes of older people, mid-1990s



Source: derived from Forster and Pellizari (2000), Table 2.3

Table 1 present the results of similar analyses using data for the mid-1980s (Kennedy and Whiteford, 1995), the late-1980s (Tsaklogou, 1996), circa 1990 (Hauser, 1997), and circa 2000 (EC, 2003) on a comparable a basis, as far as possible. In all these studies, the relative incomes of older people in the UK are lower than in most or all of

the other OECD countries they are compared with.² Disney and Whitehouse (2002) conclude – somewhat more optimistically - that the UK is normally in the bottom half of the OECD distribution; they also note that the results of different studies are not strongly correlated with one another and that, as already noted, these estimates are particularly sensitive to the choice of comparison group.

Table 1: Ranking of countries by relative incomes of older people

Average equivalised incomes of older people relative to population mean^{1,2,3}

EC (2003) ⁵ c2000	%	Forster & Pellizari ⁴ (2000) Mid-1990s	%	Hauser (1997) ⁵ Around 1990	%	Tsakoglou (1996) ⁵ Late-1980s	%	Whiteford & Kennedy (1995) Mid-1980s	%
Lux'bourg	99	Canada	97	US	95	Spain	98	Neth'lands	103
Germany	98	US	92	France	94	Lux'bourg	96	France	101
Italy	97	France	90	Spain	94	Ireland	95	Germany	98
Neth'lands	94	Sweden	89	Neth'lands	93	France	95	US	97
Spain	93	Austria	87	Lux'bourg	93	Italy	91	Lux'bourg	93
France	92	Neth'lands	86	Canada	93	Neth'lands	90	Italy	92
Austria	87	Germany	86	Germany	89	Germany	90	Canada	89
Sweden	87	Italy	84	Belgium	88	Greece	88	Belgium	88
UK	82	Finland	79	Ireland	86	Portugal	78	Sweden	85
Finland	82	Belgium	78	Italy	79	Denmark	73	UK	84
Portugal	80	UK	78	Denmark	79	UK	70		
Belgium	80	Greece	77	UK	79				
Greece	78	Ireland	75						
Ireland	73	Denmark	73						
Denmark	72								

Source: own estimates derived from EC(2003); Forster and Pellizari (2000), Table 2.3; Hauser (1997), Table 4; Tsakoglou (1996), Table 1; Whiteford and Kennedy (1995), Table 3.3.

1. All persons aged 65 or over (EC, 2003; Forster and Pellizari, 2000; Tsakoglou, 1996), all persons living in households headed by someone whose main income is from pensions (Hauser, 1997), or all individuals who would be of pension age or over in the UK (60+ for women and 65+ for men) (Whiteford and Kennedy, 1995).
2. Incomes are equivalised using Buhman's scale with an equivalence factor of 0.5 (Forster and Pellizari, 2000), the new or modified OECD scale (EC, 2003; Hauser, 1997; Tsakoglou, 1996), and the McClements scale (Whiteford and Kennedy, 1995).
3. Including only those countries that appear in at least two of these studies.
4. Weighted average of 65-74 and 75+ age group, using information provided on the population shares of these age groups in each country.
5. Author's estimates are converted from a percentage of the non-elderly to a percentage of the whole population (Hauser, 1997; Tsakoglou, 1996) or of the population aged 15+ (EC, 2003), using information provided in these papers on the share of the elderly and non-elderly populations in each country.

² The results presented in Table 1 are for all older people, including those aged 75 and over, though the pattern is no different for the 65-74 age group on its own.

Older pensioners

Previous studies show that the incomes of older people decline with age in all or nearly all OECD countries, though the estimated rate of decline in individual countries varies significantly between studies. According to the OECD data for the mid-1990s, the decline with age is much steeper in the US, Sweden, and Germany (a drop of 15 per cent or more in average incomes between the 65-74 age group and the 75+ age group) than in the UK (an equivalent drop of 7 per cent). Whiteford and Kennedy (1995) also find a shallower age gradient in the UK than in the US and Sweden, though not Germany. Hauser (1997), on the other hand, finds almost exactly the opposite: a much steeper age gradient in the UK and Germany than in the US. Johnson (1998)³ finds quite a steep decline in incomes with age in all three countries.

The differences between studies almost certainly reflect differences in the datasets and methodologies employed, as well as the time period. These results are likely to be particularly sensitive to the choice of equivalence scale and the unit of analysis, because many more older pensioners are single and/or living alone.

The relative incomes of younger and older pensioners in different countries will be affected by the rules for adjusting old age benefits for price and wage changes and the policies that are in place to support widowhood. But, this is only part of the story as there are many other factors that affect the relative incomes of different age cohorts and whose impact is likely to vary between countries and over time:

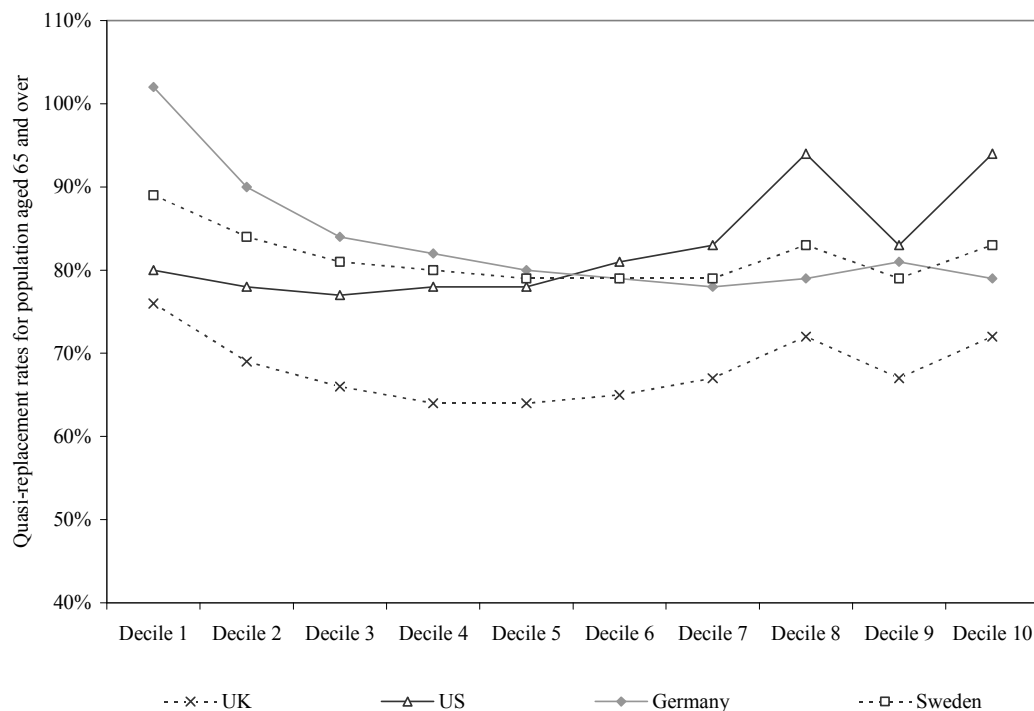
- younger cohorts have usually had higher real lifetime incomes than older ones;
- women live longer than men, so older pensioners are disproportionately female (and older women tend to be poorer than older men);
- where new more generous pension arrangements have been introduced in recent decades, older cohorts may not have accumulated full entitlements;
- the pattern of average incomes may be distorted by the significant minority of younger elderly who are still working, especially in the US;
- differential mortality across income groups means that 'survivors' will typically have greater financial, housing, and pension wealth, which will partly offset the other effects described above.

Relative incomes across the income distribution

The OECD report also examines the relative incomes of older people at different points in the income distribution. Comparing the incomes of older people in each decile group (of older people) with the incomes of their working-age counterparts, the authors found that replacement rates are generally higher for the lowest decile groups (i.e. the gap between the poorest pensioners and the poorest non-pensioners is smaller than the gap between well-off pensioners and well-off non-pensioners). The exception is the US, where the incomes of the richest pensioners are almost as high as the richest non-pensioners (see Figure 4). One of the implications is that the relatively high average incomes of older people in the US may be generated by the incomes of a small number of the richest pensioners rather than by the incomes of the majority.

³ Reported in Disney and Whitehouse (2000)

Figure 4: Relative incomes of older people by income decile, mid-1990s¹



Source: OECD (2001), Table 2.2

1. Average disposable income of the population aged 65 and over by income decile compared with population aged 18-64 in the same decile group.

Trends over time

The OECD report also looks at changes in the relative incomes of older people over time, using data for the mid-1980s and mid-1990s. This shows that pensioners' incomes increased faster than the population average in nine of the 13 countries included in this analysis.

The US is one of the exceptions (though American pensioners did experience a substantial rise in relative incomes during the preceding decade). Older people in the UK, Germany, and Sweden all experienced a large increase in their relative incomes – an increase of between 4-6 per cent. Almost all these gains were concentrated among younger pensioners (aged 65-74); older pensioners experienced only a small increase (or even a slight fall) in their replacement rate.

This growth in relative incomes among younger pensioners reflects at least in part the increase in private pension entitlements among recent retirees, as well as other cohort effects, although we might perhaps have expected there to be a cohort effect for the oldest age group, too.

III. Inequality in incomes of older population

The previous section looked at the average income of older people compared with the rest of the population. This section looks at the distribution of incomes among older people, as information on average incomes may disguise a large amount of variation in the incomes of individual pensioners. Income inequality can be measured in various ways. The most commonly used measure is the Gini coefficient, which measures inequality on a scale of 0 to 1. This is closely correlated with other possible measures of inequality, such as the 90/10 ratio. Measures of income inequality among pensioners show very similar patterns between studies, unlike measures of relative incomes or poverty rates.

Whichever measure of inequality is used, differences between countries are very large. In the US, the richest tenth of pensioners have incomes more than five times larger than the poorest tenth, whilst the ratio is around 2:1 in Sweden. The UK and Germany (both around 3:1) lie somewhere in the middle of this range. Table 2 shows the ranking of countries based on the Gini coefficient in two separate studies (and three sets of estimates). In each case, Sweden has the most equal distribution of older people's incomes and the US has the most unequal distribution. Again, Germany and the UK are in the middle of this range, though the UK moved down the rankings (i.e. towards being more unequal) between the mid-1980s and mid-1990s.

Table 2: Ranking of countries by inequality among older people

<i>Gini coefficient for older population</i> ^{1,2}					
Forster & Pellizari (2000) Mid-1990s		Forster & Pellizari (2000) Mid-1980s		Whiteford & Kennedy (1995) Mid-1980s	
Sweden	0.20	Sweden	0.18	Sweden	0.17
Netherlands	0.23	Netherlands	0.22	Netherlands	0.23
Australia	0.25	UK	0.25	Belgium	0.23
Belgium	0.25	Germany	0.27	UK	0.24
Germany	0.26	Italy	0.29	Germany	0.26
Canada	0.27	Canada	0.29	Australia	0.27
UK	0.28	Australia	0.30	Canada	0.27
France	0.28	France	0.32	France	0.27
Italy	0.30	US	0.35	Italy	0.27
US	0.36			US	0.35

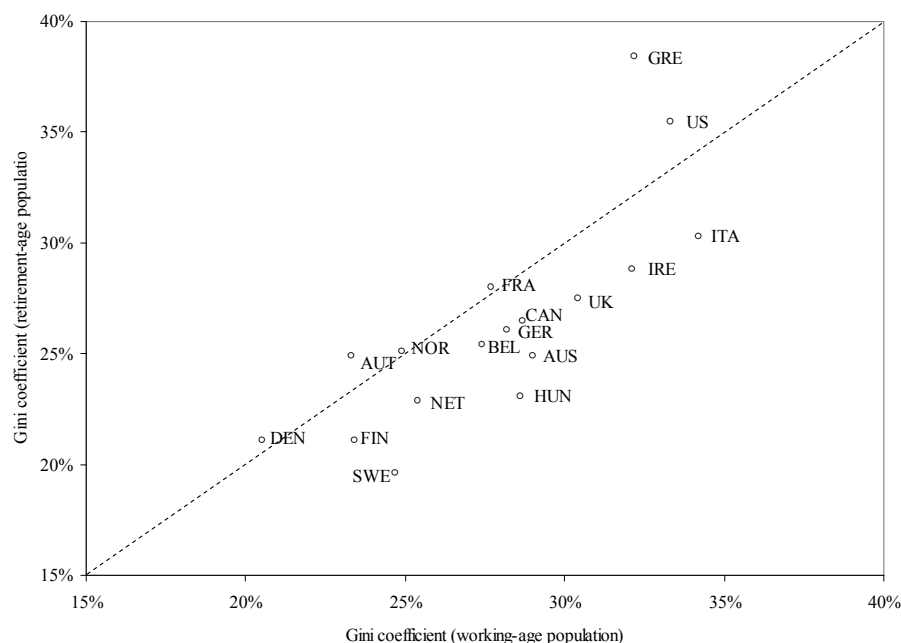
Source: Forster and Pellizari (2000), Table 2.2; Whiteford and Kennedy (1995), Table 3.7

1. All persons living in pensioner households headed by someone aged 65 or over (Forster and Pellizari, 2000) or all persons aged 65-74 (Whiteford and Kennedy, 1995).
2. Including only those countries that appear in both studies.

There is, as expected, a close relationship between income inequality among the working-age and retirement-age populations. The correlation is strong at +0.79 (see Figure 5). A natural conclusion is that the dispersion of earnings and incomes among people during their working life is continued into retirement, presumably because

unequal incomes among the working age population are reflected in differential entitlements to earnings-related pensions and differential accumulation of private wealth.

Figure 5: Inequality among working age and retired population, mid-1990s



Source: Forster and Pellizari (2000), Table 2.2

However, the relationship between pensioner and working-age inequality is mediated by the structure of pension systems in different countries. More redistributive pension systems might, other things being equal, be expected to result in a more compressed distribution of pensioner incomes, though other factors are also important. In the majority of these countries, there is less inequality among older people's incomes than among the working-age population. Sweden, in particular, has a much more equal income distribution among older people. The US (and Greece) are unusual in having a more *unequal* distribution of incomes among older people, as measured by the Gini coefficient. The data presented in Figure 6 is based on OECD data for the mid-1990s, though Whiteford and Kennedy (1995) reached a very similar conclusion using Luxembourg Income Study (LIS) data for the mid-1980s.

Trends in income inequality

Among the working-age population (and, on average, across the population as a whole), income inequality increased in most OECD countries between the mid-1980s and mid-1990s. The increases in the UK, Germany, and Sweden were among the largest – in each case an increase of between 2-3 percentage points in the Gini coefficient (though from a much lower base in Sweden).

In both the UK and Sweden, inequality also increased among the elderly population. Whilst the incomes of older people improved in real terms across all income groups in

these two countries, income growth was strongest among higher-income groups. However, in all countries, the trends among the retirement-age population were more egalitarian (or less inegalitarian) than among the working-age population. Inequality among the retirement-age group either increased by less (as in the UK and Sweden) or decreased (as in Germany). There was very little change in income inequality in the US over this period among either age group.

More detailed analysis of the official UK income data shows that inequality among pensioner incomes grew substantially during the 1980s, but that it has been relatively stable since about 1992, despite continuing growth in inequality among the non-pensioner population. Pensioner incomes in the UK are now significantly less unequal than non-pensioner incomes. This is unusual in a historical context – during the 1980s, pensioner incomes were as unequally distributed as non-pensioner incomes and prior to that they were more unequally distributed (Goodman, Myck, and Shephard, 2003).

IV. Poverty rates among older people

One of the key objectives of retirement income systems is to minimise the risk of very low incomes in old age. The most common measure of poverty in international studies is the proportion of older people with incomes below some ratio of the average, typically 50 or 60% of the median disposable income adjusted for differences in household size and composition (although the choice of a particular low income cut-off is rather arbitrary). This is a measure of relative poverty, based on a poverty line that will tend to rise over time in line with general improvements in living standards in each country. This seems to be consistent with most people's notion of poverty (at least in the UK) and also avoids some of the problems in defining an absolute poverty line in cross-country comparisons. Most studies use a simple headcount measure of poverty; other more sophisticated measures (e.g. the poverty gap, FGT or Sen indices) have severe problems in a cross-national context and are very sensitive to the accuracy of the survey income measure at the very bottom of the income distribution.

Table 3 compares poverty rates among older people in six different studies covering the period from the mid-1980s to around 2000. In each case, the results are presented using a poverty line set at 50% of the average (mean or median) disposable income, though most of these studies also provide results using alternative cut-offs. Sweden is consistently found to have one of the lowest poverty rates internationally and the US one of the highest poverty rates, whilst Germany is towards the middle of the international rankings. The UK results are much more variable. In three of the studies, including the most recent set of estimates, it has among the highest poverty rates. In the other three studies, including the OECD report and the two earliest studies, its poverty rate is close to, or below, the OECD average and similar to the levels in Germany.

Table 3: Ranking of countries by relative poverty rates among older people

Proportion of older people with incomes below 50% of the average^{1,2,3,4}

Smeeding & Sandstrom (2004) circa 2000		Forster & Pellizari (2000) Mid-90s		Smeeding & Williamson (2001) Mid-90s		Hauser (1997) circa 1990		Atkinson et al (1995) Mid-1980s		Whiteford & Kennedy (1995) Mid-80s	
	%		%		%		%		%		%
Sweden	7.7	Neth'lands	1.9	Sweden	2.7	Neth'lands	5.1	Netherlands	2.5	Neth'lands	2.9
Canada	7.8	Canada	2.5	Canada	5.3	Denmark	9.0	Sweden	6.5	Sweden	4.9
Finland	8.5	Sweden	3.0	Finland	5.3	Belgium	9.6	UK	6.7	France	5.9
Germany	10.1	Finland	7.5	Neth'lands	6.4	Canada	10.3	France	7.2	UK	8.1
Italy	13.7	Denmark	9.2	Lux'bourg	6.7	Germany	10.8	Germany	8.5	Belgium	9.8
UK	20.9	Germany	10.4	Germany	7.0	Lux'bourg	11.1	Belgium	8.9	Germany	10.9
US	24.7	France	10.7	Switzerland	8.4	Ireland	13.4	Ireland	9.0	Canada	11.3
		UK	11.6	France	9.8	France	15.2	Finland	9.8	Lux'bourg	11.9
		Belgium	13.8	Austria	10.3	Spain	17.7	Canada	11.5	Italy	15.1
		Austria	14.9	Denmark	11.1	US	23.8	Luxembourg	11.7	US	25.2
		Italy	15.3	Spain	11.3	UK	31.9	Austria	14.2	Australia	30.0
		US	15.8	Belgium	12.1			Italy	15.5		
		Australia	16.1	Italy	12.2			Norway	15.6		
		Ireland	16.7	UK	13.7			Switzerland	15.7		
		Norway	19.1	Norway	14.0			Australia	18.7		
				US	20.7			US	20.7		
				Australia	29.4						

Source: Smeeding and Sandstrom (2004), Table 1; Forster and Pellizari (2000), Table 5.4; Smeeding and Williamson (2001), Table 1; Hauser (1997), Table 7; Atkinson, Rainwater, and Smeeding (1995), Table 7.2; Whiteford and Kennedy (1995), Table 3.14.

1. Individuals aged 65 and over (Smeeding and Sandstrom, 2004; Forster and Pellizari, 2000; Smeeding and Williamson, 2001), individuals living in households headed by someone whose main income is from pensions (Hauser, 1997), individuals aged 60 or over (Atkinson, Rainwater, and Smeeding, 1995), or individuals who would be of pension age or over in the UK (60+ for women and 65+ for men) (Whiteford and Kennedy, 1995).
2. Poverty line is assessed relative to the median income (Smeeding and Sandstrom, 2004; Forster and Pellizari, 2000; Smeeding and Williamson, 2001; Atkinson, Rainwater, and Smeeding, 1995; Whiteford and Kennedy, 1995) or mean income (Hauser, 1997).
3. Incomes are equivalised using Buhman's scale with an equivalence factor of 0.5 (Smeeding and Sandstrom, 2004; Forster and Pellizari, 2000; Smeeding and Williamson, 2001; Atkinson, Rainwater, and Smeeding, 1995), the "new OECD scale" (Hauser, 1997), or the McClements scale (Whiteford and Kennedy, 1995).
4. Including only those countries that appear in at least two of these studies.

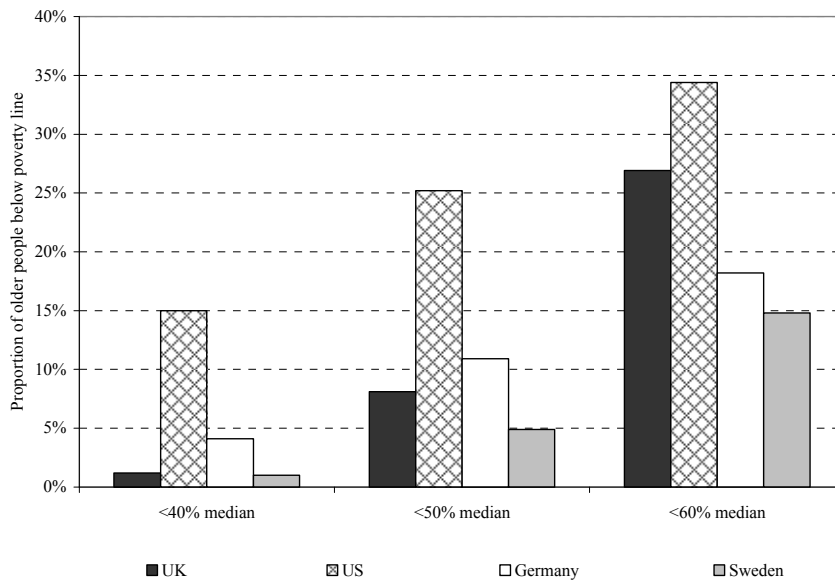
Pensioners' incomes in the UK and many other countries are heavily concentrated at or around the poverty thresholds typically used in these studies, which means that even relatively small differences in the way incomes are measured can translate into large differences in estimated poverty rates. Some of these differences between studies will be due to the methodologies used – studies use different definitions of older people (e.g. whether it is based on receipt of a pension or a standard age cut-off), different income definitions, and different equivalence scales.

Timing is also important, because there is a strong pro-cyclical pattern in pensioner poverty, at least in the UK (Goodman, Myck, and Shephard, 2003). Pensioner poverty in the UK has tended to rise quite sharply during periods of strong economic growth and then fall sharply during periods of recession. This is because pensioner incomes, which are largely composed of public and private pensions, do not typically move up and down with the economic cycle in the same way as the incomes of the working age population. Whilst the impact of the economic cycle on pensioner poverty has been noted in a British context, its impact on international comparisons does not appear to have been investigated. Pensioner poverty in the UK troughed in the early/mid-1980s, peaked around 1990 (at the end of the 1980s boom), and troughed again in the mid-1990s, which may account for the very high estimates of poverty found in the Hauser study. It is less clear why poverty rates are so high in the most recent LIS study by Smeeding and Sandstrom (2004) compared with the two studies using data for the mid-1990s, given that the official UK statistics show no change (or even a slight decline) in pensioner poverty during the latter half of the 1990s (DWP, 2003).

The concentration of older people's incomes at different points in the income distribution will affect the sensitivity of poverty estimates to the choice of a particular low income cut-off. In the UK in the mid-1980s, the highest degree of concentration of incomes of older people was between 50% and 60% of the median, whereas in Sweden and Germany the peak was between 70% and 90%, possibly because these countries' minimum benefit regulations provide benefits at around these levels. The pattern in the US was unique with a much flatter distribution and no peak (Whiteford and Kennedy, 1995). These differences in the distribution of incomes explain why the UK generally is lower down the poverty rankings when using a 60- or 70-per-cent of median threshold as opposed to a 50- or 40-per-cent-threshold. Figure 6 shows this most clearly using data for the mid-1980s at three alternative poverty thresholds. More recent studies have found a similar pattern (e.g. Hauser, 1997; Smeeding and Williamson, 2001).

Countries that have relative high rates of poverty among the population as a whole also tend to have relatively high rates of poverty among older people and vice-versa. In the UK and Germany (and, on average, across all OECD countries), pensioners are slightly under-represented among the poor (i.e. their poverty rates are lower-than-average) when using a low poverty standard (40 per cent of median income) and slightly over-represented among the poor when using a higher poverty standard (50- or 60-per cent of median). The implication is that most countries protect most older people against the risk of very low relative incomes (more so than for other sub-groups), but that pensioners in many countries are concentrated just below one of the higher poverty thresholds. The US is unusual in that older people are also disproportionately represented among those on very low (relative) incomes.

Figure 6: Proportion of older people below different poverty lines, mid-1980s

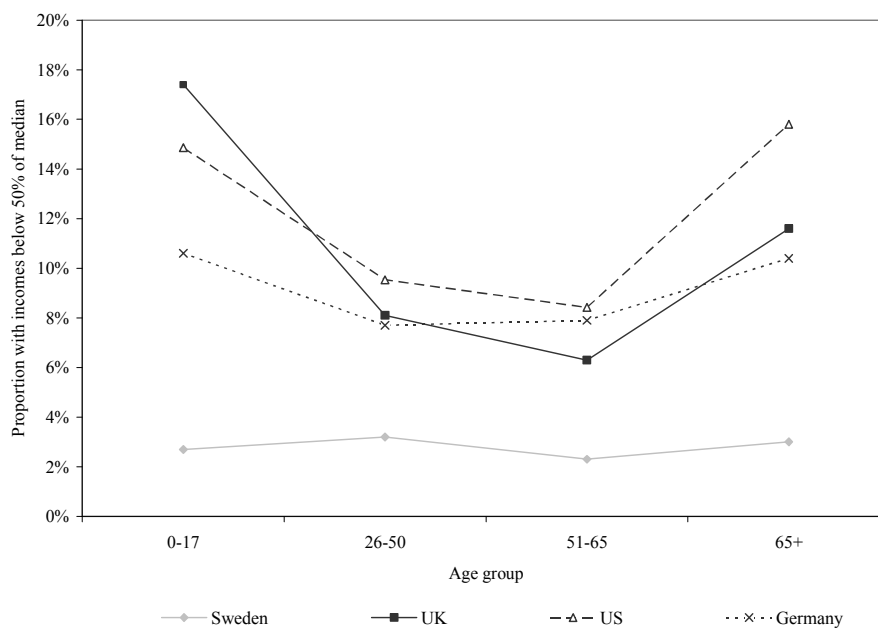


Source: Whiteford and Kennedy (1995), Table 3.14

Poverty by age and living arrangements

In most cases, poverty rates are highest among the young and the old. This U-shaped relationship between age and poverty seems to be more pronounced in the US and the UK than in Germany. Sweden is an exception with low poverty rates across the whole age range (see Figure 7).

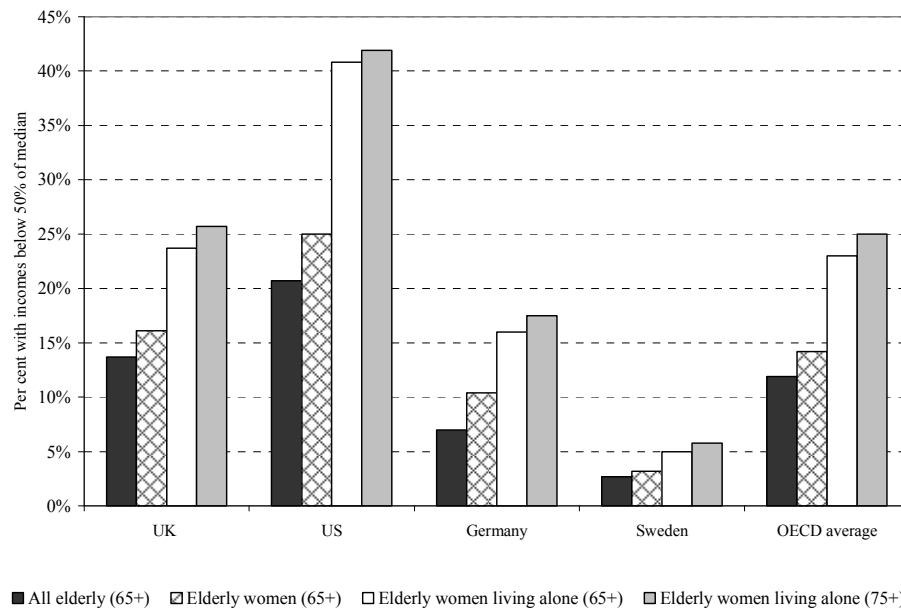
Figure 7: Poverty rates by age group, mid-1990s



Source: Forster and Pellizari (2000), Table 5.4

Among older people (aged 65 and over), being female, older, and living alone substantially increases poverty status in all countries, although the ranking of countries remains broadly the same. The biggest step increase in the risk of being in poverty is from living alone. These results (for the mid-1990s and using a 50% of median poverty line) show that rates of poverty are relatively low in Sweden even among the highest-risk group – women aged 75 and over and living alone (see Figure 8). A more recent study by one of the same authors (using data for circa 2000) shows a larger increase in the risk of poverty among elderly single women in all countries, including Sweden (Smeeding and Sandstrom, 2004).

Figure 8: Poverty rates among the aged: being old and being female, mid-1990s



Source: Smeeding and Williamson (2001), Table 2

More detailed analysis of UK data shows that, in addition to the very old, women, and those living alone, the poorest pensioners contain a disproportionate share of the following groups, all of whom are less likely to have accumulated rights to a decent second tier pension (DSS, 2000)

- carers who have been looking after children or for disabled relatives;
- ethnic minority groups, especially those who have come to this country in the middle of their working life;
- persistent low earners or long-term unemployed;
- people with a long-term illness or disability.

Trends in poverty

According to the OECD data, poverty rates among older people fell between the mid-1980s and mid-1990s in nearly all the countries they looked at, including the US, Sweden and Germany, reflecting a general improvement in the relative incomes of older people. The UK is a notable exception, though pensioner poverty did not rise as

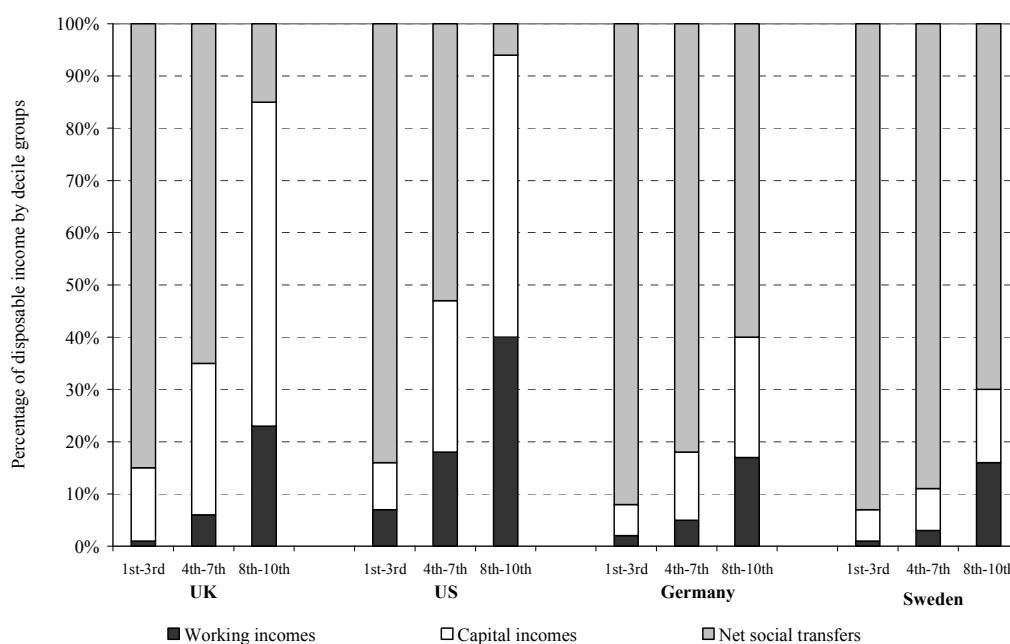
much as overall poverty - and, according to more recent UK data, has fallen since 2000.

As in the other countries in this study, there has been a long-term shift in the composition of poor from one that is disproportionately elderly to one that is more weighted towards younger households, in particular families with children. Smeeding and Williamson (2001) find that in many countries, elderly poverty rates moved in the opposite direction to changes in child poverty and overall poverty rates between the mid-1980s and mid-1990s.

V. Composition of older people's incomes

Among lower income groups, most older people are reliant on social transfers of one kind or another in all countries. Their standard of living is, therefore, largely determined by public sector income maintenance. Middle-income groups also rely heavily on public pensions, although other sources begin to become more important in some countries, especially in the UK and US. It is only among upper income groups, however, that the differences between systems really emerge. Among higher income groups (the 8th-10th deciles), social transfers are still the dominant source of income in Sweden and Germany, but not in the UK or the US. In countries such as the UK and the US, where public pensions provide relatively low replacement income for higher income groups, the gap is largely filled by private pensions, interest on savings, and earnings, which are an especially important (though declining) source of income in the US (see Figure 9). Older women look remarkably like all the elderly in terms of the composition of their income, though with an even greater reliance on social retirement and less reliance on earnings (Smeeding and Williamson, 2001).

Figure 9: Composition of older people's incomes by income group, mid-1990s



Source: OECD (2001), Chart 2.6.

Smeeding and Williamson (2001) provide a more detail breakdown of social transfer spending, distinguishing between social retirement benefits means-tested social assistance. Not surprisingly, social assistance is only significant for those at the very bottom of the income distribution - and even for the bottom decile group they constitute less than a fifth of their incomes in the US and Sweden and less than a tenth in the UK and Germany. Only in the UK do these benefits make a significant additional contribution to poverty reduction – and this role is likely to have increased substantially in recent years as the gap between the means-tested guaranteed minimum income and the basic state pension has widened. In Sweden and, to a lesser extent, Germany, large and inclusive social insurance schemes are sufficient to lift most elderly people above the poverty line. In the US the anti-poverty effect of social assistance is weak, because the level of benefits is so low.

Trends over time

The composition of income among lower income groups changed very little between the mid-1970s and the mid-1990s. Social transfers have been and remain the dominant source of income for the poorest elderly. Among the middle and, in particular, higher income groups the share of earnings in total incomes has declined substantially in all countries as a result of earlier retirement. In Germany and Sweden there has been a corresponding rise in the share of social transfers, presumably earnings-related public pensions. In the US and the UK, by contrast, private earnings have been largely replaced by an increase in the share of private capital income with little change in the share of social transfers.

VI. Income dynamics

Oxley, Dang, and Antolin (2000) examine poverty dynamics in six OECD countries, including the UK, US, Germany, and Sweden. Their analysis covers a six-year period in the early 1990s. Persistent poverty is defined as those individuals who are poor in at least five out of six years, where the poverty threshold is set at 50 per cent of the median equivalent household income. They found that persistent poverty was substantially greater in the UK and the US than in Sweden or Germany. Of those who experience poverty at some point over the six-year period in the UK or the US, around 30 per cent were persistently poor over the period as a whole, compared with 15 per cent in the other two countries.

Households headed by someone of retirement-age are over-represented among the longer-term poor in all four countries, though to a much greater extent in the UK than elsewhere. Older person households comprise 42% of the persistently fuel poor in the UK, but only 26% in Germany, 20% in Sweden, and 15% in the US. Female headed households, many of whom are elderly, also make up a disproportionate share of the longer-term poor, though much less so in Sweden (46% of the persistently poor, compared to 62% in the UK, 75% in the US, and 79% in Germany). It is not surprising that older people are more likely to experience persistent poverty than other poor households, because their incomes are more stable over time. However, it is less clear why the persistence of poverty among older people should be so much greater in the UK than in other countries, if indeed this is the case. It will be interesting to see

whether this result is confirmed using more up-to-date and more internationally comparable data.

VII. Financial and housing wealth

Standard measures of well-being are based on household income. Although this includes interest on savings, it does not allow for the fact that pensioners might finance some of their consumption from running down their financial assets. Nor does it take into account housing wealth, which provides a stream of services that should in principle be treated as a flow of income (or ‘imputed rent’), as well as an asset that could potentially be converted into cash through ‘downsizing’ or equity-release schemes (though is clearly less liquid than other types of assets). For many older people, wealth is an important resource for retirement and a buffer against unexpected developments. Even among low-income older people, levels of home ownership are very high in some countries. The economic position of older people may, therefore, be considerably better than is shown by income data alone.

As a form of compulsory savings, social insurance affects the choices made by individuals about their other forms of savings and the extent to which they have to make additional provision for their retirement. It follows that wealth is likely to play a more important role in countries with a less comprehensive public pensions system and that taking wealth into account may affect judgments about the comparative well-being of older people in countries with different pensions systems.

The OECD report provides some estimates of the value of financial wealth in relation to cash incomes, based on data for the mid-1990s. According to this study, older people in the US and UK have greater financial wealth than in Germany and Sweden. This suggests that, as anticipated, there may be a negative relationship between comprehensive public pensions systems and holdings of private wealth (Forssell, Medelberg, and Stahlberg, 1999). But, these results are not entirely consistent with other studies. The UK estimate is much lower in the study by Disney, Mira D-Ercole, and Scherer (1998), whilst the estimate for Sweden is much higher in the study by Whiteford and Kennedy (1995), though for different years. The US, however, is consistently high in the rankings (see Table 4).

In all these countries – and the UK in particular - financial wealth is heavily concentrated among high-income pensioners. Housing wealth, on the other hand, is more evenly distributed between income groups and, therefore, of greater importance to those on low incomes. OECD estimates of housing wealth are also presented in Table 4. Swedish pensioners have fewer housing assets than their counterparts in other countries. It is not obvious, though, why housing wealth is relatively high in Germany, given that owner-occupation rates are much lower than in the UK and the US.

Table 4: Ranking of countries by financial wealth of older people^{1,2}

<i>Ratio of wealth to annual income</i>							
<i>Housing wealth:</i>				<i>Financial wealth</i>			
OECD (2001) Mid-1990s		OECD (2001) Mid-1990s		Disney, Mira d'Ercole & Scherer (1998) Early/mid-90s		Whiteford & Kennedy (1995) Mid-1980s	
Japan	8.9	Japan	3.6	Australia	5.0	Australia	5.5
Germany	4.5	UK	3.3	Japan	3.8	US	5.3
UK	3.9	US	2.9	France	3.7	France	2.9
Finland	3.2	Italy	2.5	US	3.2	Sweden	2.8
US	3.0	Germany	1.2	Italy	2.8	UK	2.7
Italy	3.0	Neth'lands	0.9	UK	1.3	Germany	1.9
Sweden	1.7	Finland	0.7	Germany	1.2	Italy	1.1
Netherlands	1.6	Sweden	0.7	Neth'lands	0.9	Neth'lands	0.7
				Sweden	0.7		

Source: OECD (2001), Table 2.6; Disney and Whitehouse (2002), Table 8; Whiteford and Kennedy (1995), Table 4.11

1. All persons living in pensioner households headed by someone aged 65 or over (OECD, 2001), persons aged around 67 (Disney, Mira d'Ercole and Scherer (1998), or all individuals who would be of pension age or over in the UK (60+ for women and 65+ for men) (Whiteford and Kennedy, 1995).
2. Including only those countries that appear in at least two of these studies.
3. Both financial wealth and incomes are measured in gross terms.

VIII. Overall assessment

A recent report for the Department of Social Security in the UK concluded that “there is no consistent evidence that pensioners in the UK are better or worse off than their counterparts overseas” (Disney and Whitehouse, 2001). An earlier study by Hauser (1997) using very similar criteria arrived at a much more negative conclusion, placing the UK in a group with Greece, Italy, and Portugal as a country with low average level of well-being for its pensioners, high inequality, and also high poverty. Clearly, this kind of assessment is to some extent influenced by the personal judgments of the reviewer (e.g. the weight given to different criteria), as well as the data and methodology used and the selection of comparator countries.

Table 5 summarises the ‘performance’ of each of the four study countries against some of the key indicators of well-being for older people discussed in this paper. Against these criteria, Germany performs worse (or no better) than Sweden and the UK performs worse than either Germany or Sweden. Whilst older people in the US have relatively high incomes on average, this appears to be heavily influenced by a relatively small number of pensioners on very high incomes. There is greater inequality, more poverty, and less protection against factors that increase the risk of poverty in the US than in the UK, Germany, or Sweden. The ranking of these four

countries appears to be fairly robust to methodological differences between studies, although the UK's ranking is more variable than that of other countries.

Table 5: Indicators of the material well-being of older people in the four study countries

	US	UK	Germany	Sweden
Relative incomes	Good (flat)	Fair/poor (rising)	Fair (rising)	Fair? (rising)
Inequality	Poor (flat)	Fair/poor (rising/flat)	Fair (falling)	Good (rising)
Poverty rates	Poor (falling)	Fair/poor (rising)	Fair (falling)	Good (falling)
Protection for high-risk groups ¹	Poor	Poor	Fair/poor	Good

Source: own assessment based on Tables 1-3 and Figure 7.

1. "Good" broadly corresponds to the top third of OECD countries, "fair" to the middle third, and "poor" to the bottom third on each criteria i.e. higher replacement rates, lower inequality, lower poverty, and less differential between lower- and higher-risk groups.
2. Based on poverty risk for older women living alone.

This conclusion is subject to two important qualifications. Firstly, as pointed out by Whiteford and Kennedy (1995), simple comparisons based on a limited number of indicators are potentially misleading, because the determinants of older peoples' living standards are complex and may differ significantly between countries. They argue that differences in outcomes across countries are substantially reduced when living standards are defined more broadly to include the value of in-kind benefits and, less convincingly, that the UK has among the lowest proportion of older people in (relative) poverty once appropriate adjustments are made.

Secondly, in spite of the differences observed in standard measures of economic well-being, there is much less variation in retirement income outcomes than structural differences in pension systems might imply – what the OECD has described as 'convergent outcomes, divergent means'. More redistributive and/or less generous public schemes leave space for the development of private pension plans and the accumulation of housing and other wealth, which substitutes for publicly provided benefits, especially for those on higher incomes.

Much of the rest of this project will be seeking to verify and explain differences in outcomes between the four study countries using longitudinal data to provide a more dynamic and longer-term perspective on incomes in later life. Key research questions will include:

- To what extent do inequalities among the working age population perpetuated in old age and how does this vary between countries?

- What are the financial consequences in later life of key demographic and labour market events earlier in life? How are demographic and labour market trends among the current working-age population in different countries likely to affect the distribution of incomes amongst pensioners in the future?
- How do different welfare regimes compensate or penalise certain lifetime trajectories? Looking over the lifetime, what is the impact of potential redistributive mechanisms, such as the formulae for calculating state pension entitlements?

January 2005

References

- Atkinson, A., Rainwater, L. and Smeeding, T. (1995), *Income Distribution in OECD Countries: Evidence from the Luxembourg Income Study*, Social Policy Studies No. 18, OECD: Paris.
- Burkhauser, R., Cutts, A. and Lillard, D. (1999), 'How Older People in the United States and Germany Fared in the Growth Years of the 1980s: A Cross-Sectional Versus a Longitudinal View', *Journal of Gerontology*, Vol. 54B, No. 5, S279-290.
- Disney, R. and Whitehouse, E. (2001), *Cross-country Comparisons of Pensioners' Incomes*, Department of Social Security Research Report No. 142.
- Disney, R. and Whitehouse, E. (2002), *The Economic Well-Being of Older People in International Perspective: A Critical Review*, Luxembourg Income Study Working Paper No. 306.
- DSS (2000), *The Changing Welfare State: Pensioner Incomes*, Department of Social Security Paper No.2.
- Forssell, A., Medelberg, M., and Stahlberg, A. (1999), 'Unequal Public Transfers to the Elderly in Different Countries – Equal Disposable Incomes', *European Journal of Social Security*, Volume 1/1, p 63-89.
- Forster, M. and Pellizari, M. (2000), *Trends and Driving Factors in Income Distribution and Poverty in the OECD Area*, Labour Market and Social Policy Occasional Papers No. 42, OECD: Paris.
- Goodman, A., Myck, M. and Shephard, A. (2003), *Sharing the Nation's Prosperity? Pensioner Poverty in Britain*, Institute for Fiscal Studies Commentary 93.
- Hauser, R. (1997), *Adequacy and Poverty Among the Retired*, Ageing Working Paper No. 3.2, OECD: Paris.
- OECD (2001), *Ageing and Income: Financial Resources and Retirement in 9 OECD Countries*, OECD: Paris.
- Oxley, H., Dang, T. and Antolin, P. (2000), *Poverty Dynamics in Six OECD Countries*, OECD Economic Studies No. 30, OECD: Paris.
- Smeeding, T. and Sandstrom, S. (2004), *Poverty and Income Maintenance in Old Age: A Cross-National View of Low Income Older Women*, unpublished mimeo.
- Smeeding, T. and Williamson, J. (2001), *Income Maintenance in Old Age: What Can be Learned from International Comparisons*, Luxembourg Income Study Working Paper No. 263.
- Tsakloglou, P. (1996), 'Elderly and Non-Elderly in the European Union: A Comparison of Living Standards', *Review of Income and Wealth*, Series 42, Number 3.
- Whiteford, P. and Kennedy, S. (1995), *Incomes and Living Standards of Older People*, Department of Social Security Research Report No. 34, HMSO: London.
- Williamson, J. and Smeeding, T. (2004), *Sliding into Poverty? Cross-National Patterns of Income Decay in Old Age*, unpublished mimeo.