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Poverty and Inequality in the UK: 2008

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The Institute for Fiscal Studies

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Preface

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- 2006–07 was another year of slow growth in average take-home incomes, with mean equivalised income in the UK growing by 0.8% in real terms (from £459 to £463 per week) while median income rose by just 0.5% (from £375 to £377). In Great Britain (i.e. excluding Northern Ireland), mean equivalised income grew by 0.8% in real terms, while median income rose by 0.4%.[1]
- This was the fifth year running in which mean household income has grown by less than 1.5% in real terms. This is in stark contrast to Labour's first term in office (1997 to 2001), during which mean income increased by 3.1% per year on average in real terms. Taking the period from 1996–97 to 2006–07 as a whole, however, living standards in Great Britain have risen on average by the equivalent of 2.1% per year at the mean and 1.9% at the median.
- Breaking income down by region, we find that median household income is highest in the South East, London and East of England, and lowest in the North East, West Midlands and Northern Ireland at about 91% of the UK median. Amongst the regions of Great Britain, the greatest real rise in median income from 1996–97 to 2006–07 was seen in London (28.3%), over double the increase in the region with the slowest growth, the West Midlands (13.9%). However, price differences between the regions may mean that regional living standards are less dispersed than these differences in income.

Inequality

- Real income growth throughout the bulk of the income distribution was close to zero between 2005–06 and 2006–07. Only incomes towards the top of the distribution showed positive (but not statistically significant) growth.
- Income inequality has risen for a second successive year, and is now equal to its highest-ever level (at least since comparable records began in 1961) as measured by the Gini coefficient.
- Taking the period 1996–97 to 2006–07 as a whole, incomes have grown fastest at the very top of the income distribution, as they did in the period of Conservative government that preceded it. However, income growth as a whole has been more equal under Labour than under the Conservatives, with income growth around the 15th percentile of the distribution stronger than growth in the bulk of the distribution higher up (though still slower than income growth at the very top of the distribution).

[1] Mean income is obtained by adding up all incomes and dividing by the total number of people in the population. It gives equal weight to all observations and can therefore be quite sensitive to very low and very high incomes. In contrast, the median is a measure of average that divides the population into two equally-sized groups. Half the population have incomes below the median and half have incomes above it. The median is not affected by the presence of very high and very low incomes in the distribution. It is because of the potential differences in these measures of average that it is useful to consider both.

- Middle incomes have kept pace with incomes *towards* the top of the income distribution (the ratio of incomes at the 90th percentile to incomes at the 50th percentile is unchanged since 1996–97). However, there is some evidence that incomes *at the very top* of the distribution (the 99th percentile) have been 'racing away' from incomes further down the distribution.

Income-based poverty

- Relative poverty in 2006–07 was 300,000 (BHC) or 400,000 (AHC) higher than in 2005–06, with the rise concentrated amongst pensioners. Although the rise is not statistically significant, this is the second year that relative poverty has risen, and the rise since 2004–05 is statistically different from zero.
- There was a small rise in poverty amongst families with children. As with overall poverty, this was not statistically significant, but it is the second year that child poverty has risen. It is now 100,000 higher than in 2004–05 using incomes measured BHC and 300,000 higher using incomes measured AHC, the latter increase being statistically significant. The rise in child poverty since 2004–05 has reversed about a fifth of the decline in poverty measuring incomes BHC and about two-fifths of the decline in poverty measuring incomes AHC between 1998–99 and 2004–05.
- Between 2006–07 and 2010–11, child poverty needs to fall by an average of 300,000 per year to meet the government's targets. Although Budget 2008 announced a £0.9 billion package of measures to reduce child poverty, additional spending of £2.8 billion will be required to have a 50:50 chance of meeting the target.
- IFS researchers had predicted a rise in pensioner poverty of approximately 100,000 in 2006–07 because of the abolition of age-related payments, but the actual rise of 300,000 (BHC) is both statistically significant and unexpectedly large, particularly given that pension credit is indexed with average earnings. Around one-third of the rise appears to be due to the abolition of age-related payments, although it also appears that the FRS recorded receipt of pension credit less well in 2006–07 than in previous years.
- Since 1996–97, regional poverty rates have converged. Poverty in the North, Scotland and Wales is overstated by using national price indices, whilst the opposite is true for London and the South East. In particular, London has by far the highest level of poverty amongst the regions of the UK once regional price differences are taken into account.

Material deprivation and poverty

- Child poverty has risen slightly since 2004–05 using income-based indicators, but it has fallen using the government's new combined low-income–material-deprivation indicator over the same period. Our own indicator of relative material deprivation is unchanged since 2004–05, showing that the living standards of poor families with children have risen since 2004–05 but have not caught up with those of richer families with children.

- Levels of material deprivation generally fall as incomes rise, but children in households with less than 40% of median income – so-called 'severe' poverty – are, on average, less deprived than those in households with between 40% and 60% of median income. This reinforces existing concerns that households with the lowest recorded incomes in HBAI are not those with the lowest living standards.
- On average, London has low levels of income-based poverty and Scotland, Wales and Northern Ireland have high levels, but this ordering is reversed with a material deprivation indicator. This reinforces other findings that it is desirable to account for regional differences in the cost of living when constructing measures of income-based poverty.
- Children in a working lone-parent family are less likely to be in income poverty than those in a one-earner couple family, but they are more likely to be in poverty using a material deprivation indicator. Also, they tend to have higher levels of deprivation than children in a one-earner couple family with similar levels of equivalised income. This means that the equivalence scales used in the official income-based measures of poverty overstate the extra resources needed by couples with children, relative to lone parents, to escape material deprivation. If the material deprivation indicator is a good measure of living standards, then this weakens the case for paying a higher level of working tax credit to couples on the basis that their costs are higher. There may, though, be other reasons to give this group higher entitlements to tax credits.
- Families with children and disabled adults are less likely to be in income-based poverty than those without disabled adults, presumably because many receive disability-related additions to state benefits. However, they are more likely to be in material deprivation poverty. This questions the implicit assumption in HBAI that state benefits paid explicitly to the long-term sick or disabled allow families to attain higher living standards. It suggests that the higher benefits instead compensate partly or wholly for extra needs.

1. Introduction

In this Commentary, we assess the changes to average incomes, inequality and poverty that have occurred under the first 10 years of the Labour government, with a particular focus on the changes that have occurred in the latest year of data. This analysis is based upon the latest figures from the DWP's Households Below Average Income (HBAI) series, published on 10 June 2008 (Department for Work and Pensions, 2008c). The HBAI series takes household income as its measure of living standards and is derived from the Family Resources Survey, a survey of around 28,000 households in the United Kingdom that asks detailed questions about income from a range of sources. Further details on the methodology of HBAI can be found in Appendix A, but a few key points are worth summarising here:

- It uses a household measure of income, summed across all members living in the same household. A household is not necessarily the same as a family; for instance, young single people living together are in the same household but not the same family, which we define here as a single adult or couple and their dependent children.
- Income is rescaled ('equivalised') to take into account the fact that households of different sizes and compositions have different needs.
- Income is measured after income tax, employee and self-employed National Insurance contributions and council tax.
- Income is measured both before housing costs have been deducted (BHC) and after they have been deducted (AHC).

The latest data are for 2006–07. Chapter 2 details the levels and trends in average living standards, and Chapter 3 looks in some detail at the trends in income inequality. Chapter 4 contains our analysis of the trends in the rate of poverty, and in particular focuses on the rates of child and pensioner poverty. Chapter 2 and Chapter 4 both contain another novel feature – an in-depth investigation of how living standards and the rate of poverty vary across the different parts of the country, and how differences in the cost of living affect our understanding of this. New to this year's report is an analysis of the government's material deprivation measure of poverty, which forms Chapter 5.

2. Living standards

Key findings

- In 2006–07, almost two-thirds of the UK population had incomes below the national average equivalised income of £463 per week. The income distribution was skewed by a relatively small number of people on relatively high incomes.
- 2006–07 was another year of slow growth in average take-home incomes, with mean equivalised income in the UK growing by 0.8% in real terms (from £459 to £463 per week) while median income rose by just 0.5% (from £375 to £377). In Great Britain (i.e. excluding Northern Ireland), mean equivalised income grew by 0.8% in real terms, while median income rose by 0.4%.[2]
- This was the fifth year running in which mean household income has grown by less than 1.5% in real terms. This is in stark contrast to Labour's first term in office (1997 to 2001), during which mean income increased by 3.1% per year on average in real terms.
- Taking the period from 1996–97 to 2006–07 as a whole, however, living standards in Great Britain have risen on average by the equivalent of 2.1% per year at the mean and 1.9% at the median.
- Breaking income down by region, we find that median household income is highest in the South East, London and East of England, and lowest in the North East, West Midlands and Northern Ireland, at about 91% of the UK median. The cumulative real increase in median income from 1996–97 to 2006–07 was greatest in London at 28.3%, over double the increase in the West Midlands, which, at 13.9%, was the lowest. However, price differences between the regions may mean that regional living standards are less dispersed than these differences in income.

In this chapter, we discuss how average incomes have changed in the most recent year of the HBAI data, 2006–07, and over the recent past, particularly since 1996–97. All monetary values in this chapter are expressed in average 2006–07 prices, and so all the differences we refer to are unaffected by economy-wide inflation. Since all incomes have been 'equivalised' (see Appendix A), all income amounts are expressed as the equivalent income for a couple with no children. Most of the analysis here and in Chapter 3, where we set out changes to inequality, is presented on a GB basis, to allow consistent comparisons over long periods of time. The only figures presented on a UK basis in these chapters are those surrounding Figure 2.1, which presents some facts about the UK income distribution in 2006–07.

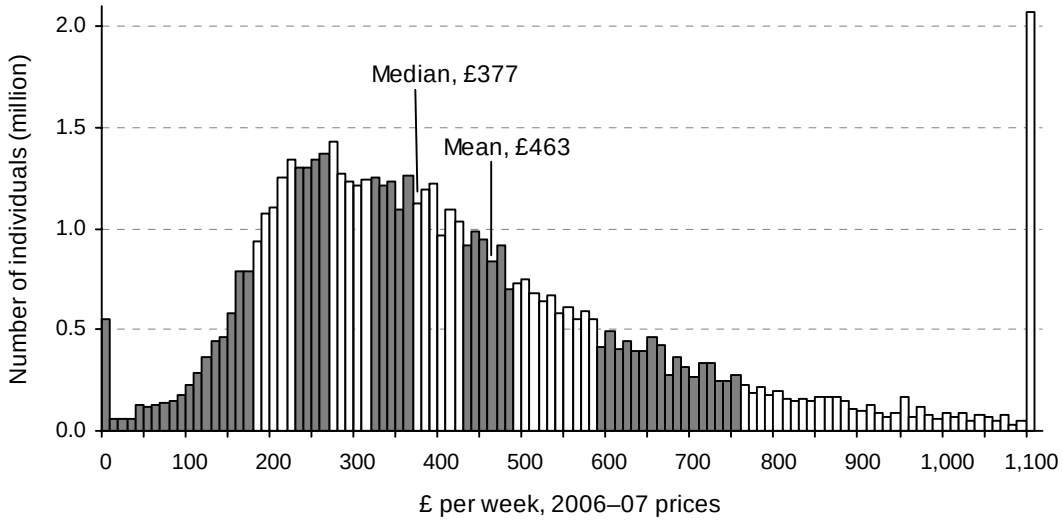
[2] Mean income is obtained by adding up all incomes and dividing by the total number of people in the population. It gives equal weight to all observations and can therefore be quite sensitive to very low and very high incomes. In contrast, the median is a measure of average that divides the population into two equally-sized groups. Half the population have incomes below the median and half have incomes above it. The median is not affected by the presence of very high and very low incomes in the distribution. It is because of the potential differences in these measures of average that it is useful to consider both.

The rest of this chapter proceeds as follows. Section 2.1 describes the income distribution and how it has changed since 1996–97. In Section 2.2, we analyse trends in mean and median incomes. Section 2.3 examines how living standards vary by region, while Section 2.4 summarises the analysis.

2.1 A picture of the income distribution in 1996–97 and 2006–07

Figure 2.1 shows the UK income distribution in 2006–07.[3] The graph shows the number of people living in households with different income levels, grouped into £10 income bands. The height of the bars represents the number of people in each income band. As can be seen, the current distribution is highly skewed, with 65% of individuals having household incomes below the national average. Furthermore, the final bar of the graph shows that more than 2 million individuals (out of a private household population of approximately 59 million individuals) have incomes above £1,100 a week. The graph also shows that there are approximately half a million individuals whose income is between zero and £10 a week. Such a discontinuity in the distribution arises because negative incomes have been set to zero. In the data, we observe over 500,000 individuals who have zero or negative income, which could be due to factors such as large self-employment losses or because of various outgoings (such as council tax or maintenance payments) that are deducted when calculating net income.

Figure 2.1. The income distribution in 2006–07 (UK)

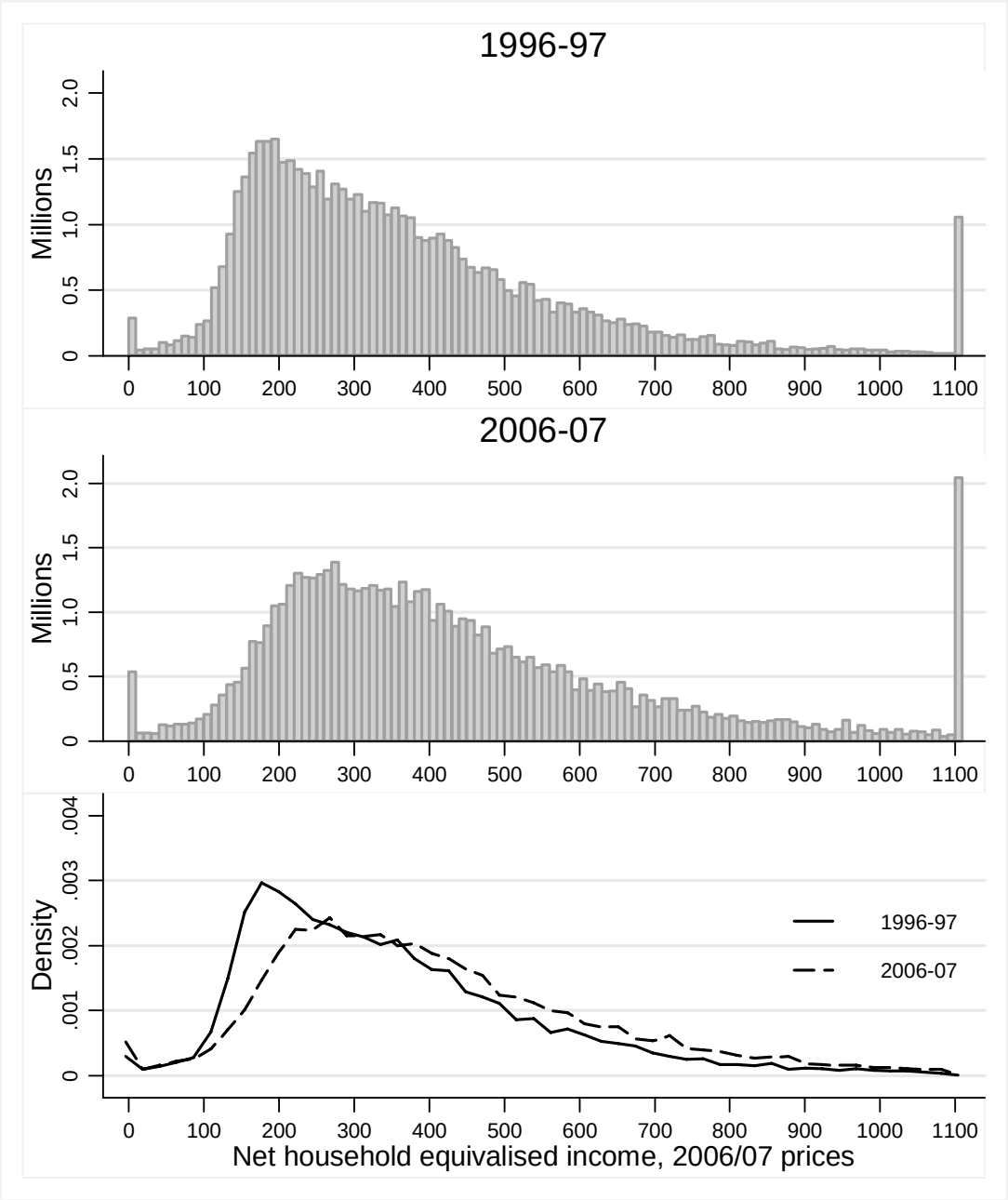


Notes: Incomes have been measured before housing costs have been deducted. The right-most bar represents incomes of over £1,100. The differently-shaded bars refer to decile groups.
Source: Authors' calculations using Family Resources Survey, 2006–07.

[3] Here, and throughout this chapter, we generally focus on income before housing costs have been deducted.

Figure 2.1 also divides the population into 10 equally-sized groups, called decile groups. The first decile group contains the poorest 10% of the population, the second decile group contains the next poorest 10%, and so on. In the graph, the alternately-shaded sections represent these different decile groups, and, as can be seen, the distribution is particularly concentrated within a fairly narrow range of incomes in decile groups 2 to 5. However, as we move further up the income distribution, a widening of the decile group bands can be seen. Note that the 10th decile group band is much wider than is shown in Figure 2.1 because those with incomes greater than £1,100 are shown together rather than in £10 bands.

Figure 2.2. The income distributions in 1996–97 and 2006–07 compared (GB)



Notes: Incomes have been measured before housing costs have been deducted. The right-most bar in the top two panels represents incomes of over £1,100.
Source: Authors' calculations using Family Resources Survey, 1996–97 and 2006–07.

Figure 2.2 shows how the income distribution has changed between 1996–97 and 2006–07. From now on, the focus will be on Great Britain rather than the United Kingdom, in order to allow us to make consistent comparisons of income distributions over time.

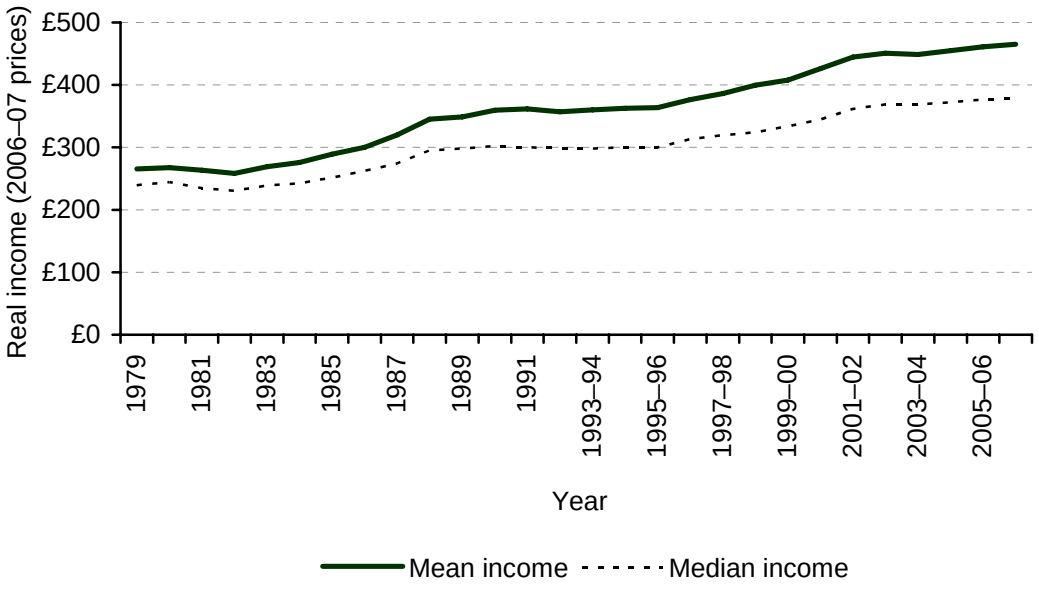
The first two panels of Figure 2.2 repeat the type of presentation used in Figure 2.1, showing the number of people in various income bands in each year. The third panel allows us to see more clearly how the shape of the income distribution has changed over time, by comparing 'kernel density' estimates of the shapes of the distributions. The units for these kernel density estimates are such that the total area under each plotted line is 1 rather than the size of the total population.

Looking at this lowest panel, comparing 1996–97 with 2006–07, the shape of the GB income distribution appears to have changed. First, there has been a rightward shift as a result of general growth in households' incomes. Second, the income distribution appears to have become somewhat flatter, with a less pronounced spike at the modal income.[4] Looking at the top two panels, it can be seen that almost twice as many individuals fall into the highest income band in 2006–07 as in 1996–97.

2.2 Changes in mean and median income

Trends in average (mean and median) incomes since 1979 are shown in Figure 2.3. The graph shows that over this period, average incomes have tended to rise, though the rate of growth has not been constant over time. Mean weekly BHC income in Great Britain has increased from £377 in 1996–97 to £465 in 2006–07. This corresponds to a real rise of around 23%, or

Figure 2.3. Average real incomes since 1979 (GB)



Note: Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

[4] Modal income refers to the income level possessed by the greatest proportion of the population.

2.1% on an annualised basis. Similarly, median income increased by 20% (1.9% when annualised), from £314 to £378.[5]

Appendix B shows how the changes to average incomes measured in HBAI compare with other measures from the National Accounts. The National Accounts measure of real household disposable income per head shows a very similar pattern of change to the HBAI measure since 1996–97, with a marked slowdown in income growth from 2002–03 onwards – despite the fact that overall GDP growth has remained robust over the same period.

The real percentage changes in mean and median incomes in each year since 1996–97 are shown in Table 2.1, together with the 95% confidence intervals for these changes. The table shows that in the last year of the data, mean income rose by 0.8% in real terms (or the equivalent of around £4 per week for a couple with no children), while median income rose in real terms by 0.4% (around £1 per week). Neither of these changes is statistically significantly different from zero.[6] It is noticeable that the annual growth in mean and median incomes has been markedly slower over the last five years (since 2002–03) than in earlier years of the Labour government. Mean net incomes grew by over 3% per year in real terms (on an annualised basis) between 1996–97 and 2001–02, but by just 0.9% per year between 2001–02 and 2006–07.[7]

Table 2.1. Real income growth and 95% confidence intervals (GB)

	Mean income			Median income		
	Lower	Point	Upper	Lower	Point	Upper
1997–98	0.9%	2.6%	4.0%	0.3%	1.8%	3.1%
1998–99	1.5%	3.5%	5.5%	0.3%	1.5%	3.1%
1999–00	–0.2%	2.1%	4.3%	1.7%	3.1%	4.6%
2000–01	2.4%	4.4%	6.6%	1.6%	3.1%	4.5%
2001–02	2.2%	4.4%	6.6%	3.6%	4.9%	6.2%
2002–03	–0.9%	1.3%	3.4%	0.8%	2.0%	3.4%
2003–04	–2.3%	–0.4%	1.8%	–1.1%	0.0%	1.2%
2004–05	–0.5%	1.4%	3.1%	–0.2%	1.0%	2.1%
2005–06	–0.7%	1.4%	3.4%	–0.2%	1.1%	2.3%
2006–07	–1.4%	0.8%	3.2%	–0.9%	0.4%	1.7%

Note: Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, various years.

Some commentators have suggested that this weaker income growth since 2001–02 can be attributed to tax increases under Labour. However, Figure 2.4 makes clear that incomes have been growing more slowly even *before* taxes and benefits are taken into account. The graph shows the real rate of growth in mean income since 1996–97, for both net income (after taxes

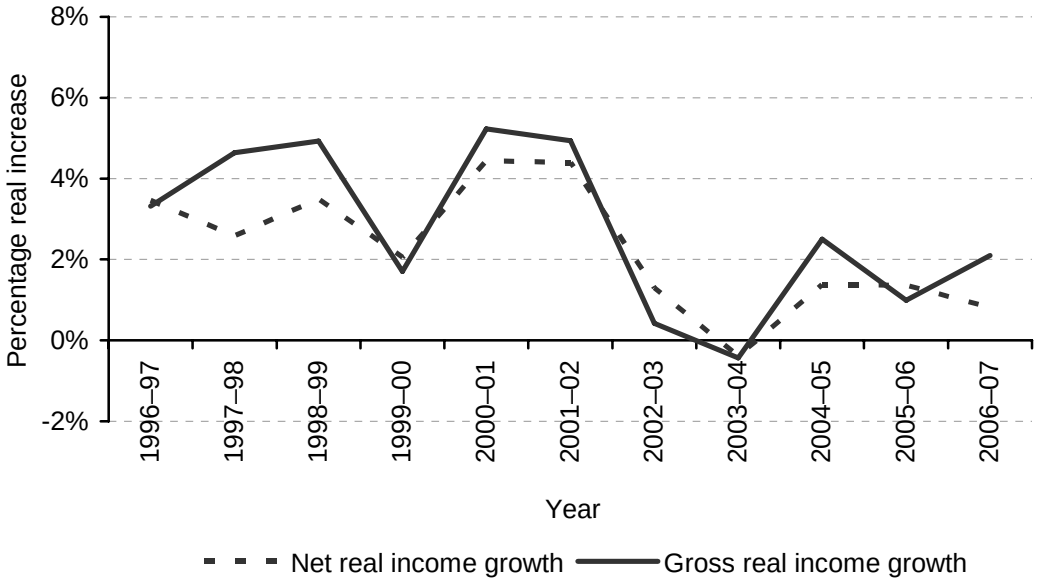
[5] The growth of income is slightly stronger when measured AHC rather than BHC: mean and median incomes increased between 1996–97 and 2006–07 by 32% and 28% respectively measured after housing costs.

[6] The mean and median income changes between 2005–06 and 2006–07 are not statistically significant; however, the increases between 2003–04 and 2006–07 in both the mean and the median are statistically significant.

[7] The point estimates of real mean income growth are identical if we use UK figures (where available, i.e. from 2003–04 to 2006–07) instead of the GB figures reported in Table 2.1. The point estimates of real median income growth in the UK are identical to the GB figures for 2003–04 and 2004–05 but slightly different thereafter, with growth of 0.9% in 2005–06 and 0.5% in 2006–07.

and benefits) and gross income (before taxes and benefits). The two lines follow each other reasonably closely, and during the period of relative stagnation since 2001–02, gross incomes have grown in real terms by just 1.1% per year – only slightly more than the 0.9% annual growth in net incomes over the same period.

Figure 2.4. Real growth in mean incomes since 1996–97 (GB)



Note: Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, various years.

We can also put this recent income growth into context, by comparing growth across periods of time defined by political events. In making these comparisons, it is important to realise that these periods cover different stages of various economic cycles, and income growth rates are very sensitive to this.

Bearing this in mind, we can see from Table 2.2 that average annual growth in mean income under the period of the Labour government as a whole is identical to that under the Conservative governments between 1979 and 1996–97 (though somewhat stronger than it was under Major and slightly slower than that experienced under Thatcher).[8] Table 2.2 also shows income growth for Blair's first and second terms in office, and in the first two years of Labour's third term (i.e. between 2004–05 and 2006–07, during which time Tony Blair remained Prime Minister). Average incomes, measured by both the mean and the median, clearly grew faster in the first parliament than in the second parliament of the Labour government. Indeed, the fastest income growth in the second parliament actually occurred in the very first year of the second parliament, i.e. between 2000–01 and 2001–02. Average annualised growth over the years of relative stagnation, from 2001–02 to 2006–07, has been just 0.9% per year (at both the mean and the median).

[8] However, before 2006–07, the average annual growth rate in real income under the Labour government had always been higher than the average annual growth rate in real income between 1979 and 1996–97.

Table 2.2. Annualised real average income growth (GB)

	Mean	Median
Conservatives (1979 to 1996–97)	**2.1%**	**1.6%**
Of which		
Thatcher (1979 to 1990)	2.8%	2.1%
Major (1990 to 1996–97)	0.8%	0.6%
Labour (1996–97 to 2006–07)	**2.1%**	**1.9%**
Of which		
Blair I (1996–97 to 2000–01)	3.1%	2.4%
Blair II (2000–01 to 2004–05)	1.7%	2.0%
Blair III (2004–05 to 2006–07)	1.1%	0.7%

Note: Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

It is interesting to place this relatively slow growth in average income in recent years in the context of the changes occurring in other countries. In particular, commentators in the US have paid considerable attention to the slow growth of middle incomes: it has been noted that the real weekly wage of the median worker has been falling in real terms in recent years.[9] Our analysis here relates to household income from all sources, measured after taxes and adjusted for household size, and so is not directly comparable to these findings. However, we can see that although there has been a slowing of the rate of growth in the median income in recent years, there is no sign of falling incomes in the middle of the distribution to date.

Why have incomes grown relatively slowly between 2005–06 and 2006–07?

In order to start to explain what factors lie behind the relatively slower growth in mean and median incomes in recent years that was highlighted in Tables 2.1 and 2.2 and Figure 2.3, Table 2.3 shows what has happened to the mean values of the sources of income making up household income, both in the last year and over Labour's period of government. The first row of the table shows that by far the biggest source of household income, across the whole population, is income from earnings, followed by income from state benefits and tax credits, self-employment income, and income from savings, investments and private pensions.

The relatively slow growth in mean income in the last year reflects widely-varying changes in different income sources. Average income from earnings has grown very little (just 0.3%) and income from savings, investments and private pensions has hardly grown at all (0.1%) in real terms. But there are two figures in Table 2.3 that stand out as particularly puzzling:

- *The fall in average income received from benefits and tax credits (of 3.3%),* which does not match administrative data from DWP and HMRC. This 3.3% fall is the result of a meagre nominal rise (0.2%), which becomes negative in real terms when deflated by RPI growth (3.7%). DWP and HMRC's administrative data show a far stronger 3.9% nominal increase in benefits spending (including tax credits) between 2005–06 and 2006–07.

[9] See 'Many workers are missing out on the rewards of globalization', *The Economist*, 14 September 2006.

DWP deflates its benefits series by the GDP deflator (2.7%) rather than the RPI, giving real-terms figures that are not directly comparable to HBAI's benefit income series. We therefore focus on the nominal figures when analysing this discrepancy below.

- *The rise in payments deducted from income (of 1.9%).* This figure seems odd because council tax, which is by far the largest component of these deductions, rose by only 1.5% in real terms in 2006–07. This was the smallest growth rate seen under this government, no doubt in part due to the decision in the 2004 Pre-Budget Report to give local authorities an additional £150 million in 2005–06 precisely to keep council tax rises down.

Table 2.3. Income sources: real year-on-year income growth and share of total income (GB)

	Source of income						Total	Total HBAI income
	Earnings	Benefits and tax credits	Self-employment	Savings, investments and private pensions	Other income	Payments		
Share of total income								
2006–07	66%	18%	10%	11%	3%	–8%	100%	n/a
Annual change								
2005–06 to 2006–07	0.3%	–3.3%	5.7%	0.1%	7.0%	1.9%	0.2%	0.8%
1996–97 to 2006–07	2.5%	1.3%	2.0%	1.6%	4.2%	6.3%	1.9%	2.3%

Notes: All sources of income have been equivalised and are measured at the household level.
The sum of all income sources is not exactly equal to household income under the HBAI definition, for two reasons. First, the incomes of the very richest households are adjusted within the HBAI definition to take into account potential undersampling or inaccurate reporting of income at the very top of the income distribution (the so-called 'SPI adjustment'). No such SPI adjustment is attempted on the individual sources of income. Second, negative household incomes are set to zero within the HBAI definition of income, but the component income sources have not been adjusted in this way.
The final two columns of this table show how the year-on-year change in mean income on the HBAI definition ('Total HBAI income') compares with the change in the mean of the total of all income sources ('Total').

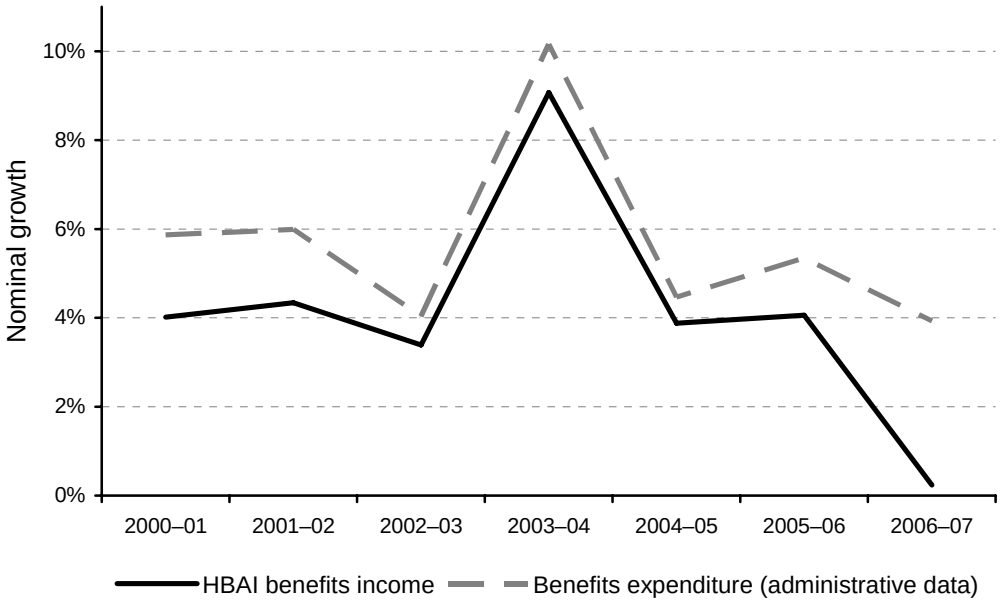
We now examine these discrepancies in more detail.

Figure 2.5 shows nominal growth in total benefits spending (including tax credits) as reported from administrative data by DWP and HMRC, compared with nominal growth in mean benefits income measured by HBAI.[10] The two series track one another fairly closely (within 2 percentage points) up to and including 2005–06, when they begin to diverge, so that in the current year the two differ by over 3 percentage points. One would typically expect administrative records to reflect more accurately the amount the government is spending on benefits and the numbers in receipt of them. This is because the FRS suffers a degree of error due to using only a sample of the population and also errors, omissions and misunderstandings amongst respondents in declaring their benefit receipts. Therefore, this increased divergence in measured benefits growth could be due to increased under-reporting

[10] Data are compared in nominal terms, rather than real terms, because the DWP's benefits spending time series is deflated by the GDP deflator while HBAI income is deflated by the RPI (less council tax), rendering the two series non-comparable in real terms.

of benefit income in the Family Resources Survey. Appendix C looks at this in more detail for tax credits – where we find little evidence of any change in under-reporting since 2003–04 – and for the pension credit in particular – where we find some evidence of increasing under-reporting since 2004–05; this suggests that under-reporting of other benefits must also have increased, although we have not been able to undertake a detailed investigation.[11]

Figure 2.5. Nominal growth in spending on benefits and tax credits: comparing HBAI and administrative data



Sources: HBAI benefits income from authors' calculations using Family Resources Survey, various years. Benefits expenditure (administrative data) from DWP benefit expenditure table 2 (http://www.dwp.gov.uk/asd/asd4/Table2.xls) and HMRC annual accounts, various years (available at http://www.hmrc.gov.uk/about/annual_reps.htm).

Leaving aside the question of under-reporting, however, there are two genuine factors that have acted to reduce growth in income from benefits and tax credits in 2006–07:

- Most benefits are increased in line with the rate of inflation in September of the previous year. But the rate of inflation in September 2005 was around 1 percentage point lower than subsequent annual inflation in 2006–07, meaning that the real value of most benefits was eroded. This issue is discussed in more detail in Section 4.2.
- An entire benefit (age-related payments for pensioners), worth £1.2 billion, was abolished in 2006–07.

Turning now to the anomalous growth in payments deducted from income, the main reason that overall payments have grown by more than council tax is that the FRS records a substantial real-terms increase (5%) in the amount that people are contributing to private pensions. This increase follows three years in which personal pension payments had fallen or

[11] We do not yet know for certain how much reforms to taxes and benefits affecting incomes in 2006–07 were responsible for the changes in mean and median incomes observed. These reforms included the abolition of age-related payments (previously given to pensioners alongside their winter fuel allowances) and uprating the pension credit guarantee in line with earnings.

remained static in real terms. Had personal pension payments remained constant in real terms (as they roughly did the previous year), then mean income in 2006–07 would have been 23 pence per week higher (giving mean income growth of 0.9% since 2005–06, instead of 0.8%).

Table 2.4 shows the evolution of measured weekly pension contributions for all households, for households containing a pensioner and for households in poverty containing a pensioner (on the 60% BHC median income measure). For all households, measured contributions increased by over 5% between 2005–06 and 2006–07, from £4.30 per week to £4.54 per week, after falling in real terms for two of the previous three years. However, this increase in contributions merely brings their level (in real terms) back to that seen in 2003–04.

Table 2.4. Average (mean) weekly private pension contributions, 2006–07 prices

	All households		Pensioner households		Pensioner households in poverty	
	Level	Growth	Level	Growth	Level	Growth
2002–03	£4.62	–	£0.91	–	£0.37	–
2003–04	£4.53	–1.88%	£1.21	33.71%	£0.48	29.91%
2004–05	£4.29	–5.22%	£0.98	–19.45%	£0.48	–0.47%
2005–06	£4.30	0.20%	£1.21	24.37%	£1.00	108.48%
2006–07	£4.54	5.46%	£1.63	33.88%	£1.95	95.88%

Note: Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, various years.

Box 2.1. Incomes, taxes, and tax and benefit reforms

This box brings together and summarises IFS analysis on how average incomes have changed since 1996–97, how tax and benefit reforms have affected average income, and what has happened to tax revenues over Labour's time in government.

- Mean household disposable income has risen in real terms by around 23% between 1996–97 and 2006–07, or 2.1% on an annualised basis. Median income increased by 20%, or 1.9% when annualised.
- Looking just at the effects on household incomes of tax, benefit and tax credit reforms implemented by Labour governments since 1997, IFS analysis suggests that they have resulted in a net revenue increase. In total, fiscal reforms from all of Labour's Budgets up to Budget 2008, together with above-inflation increases in council tax since 1997, have reduced mean household disposable income by £6.64 a week or 1.2%.[a]
- Tax revenues have gone up since 1996–97: total current receipts increased from 37.1% of national income in 1996–97 to an expected 39.0% in 2008–09. This is the equivalent of an increase in tax payments of approximately £890 per family in 2007–08 prices.[b]

[a] See Phillips (2008) for more information on the distributional effect of Labour's reforms.
[b] Update of table 2.1 in Chote, Emmerson and Tetlow (2008), using Budget 2008.

Contributions by households containing a pensioner increased more substantially (34%) – from £1.21 per week to £1.63 per week. While this increase is large compared with overall contributions, few pensioner households make contributions to pensions and this appears to be a volatile series. The increase seen in the latest year is only slightly larger than that seen in the previous year.

It is for households containing a pensioner where household members are considered to be in poverty (using the 60% of median BHC income measure) that measured pension contributions have increased most substantially – almost doubling from £1.00 per week to £1.95 per week in real terms. The result is that private pension contributions in poor pensioner households are now higher than contributions in other pensioner households. However, this series is even more volatile than contributions for pensioner households as a whole, and a doubling in contributions was also observed the year before.

2.3 Regional variation in living standards

This section looks at the trends in mean and median household income at the regional level for the whole population. (Section 4.3 looks at trends in poverty rates at the regional level.)

When looking at income *levels*, we would like to use regional price indices to account for the different costs of living in different parts of the country, but this is not possible due to a lack of consistent regional price indices. We therefore continue to use national price indices for calculating real incomes. This means that we are likely to be understating the real value of mean and median income somewhat in the cheaper regions of the country (for instance, the North and Wales) and overstating it for the more expensive areas (such as London and the East and South East), although the magnitude of these effects is unknown. (As housing costs are one of the major drivers of regional price differences, use of incomes measured AHC may partly overcome this problem.) However, if regional price differences have remained constant, *changes* in relative levels of income as measured using national prices should give a fairly good indication of the actual changes in relative living standards across the regions and nations of the United Kingdom.

Tables 2.5 and 2.6 show the regional median incomes measured BHC and AHC respectively relative to the median in the UK (since 2002–03) or GB (2001–02 and earlier). Sampling error is greater when looking at regional incomes, so we use two-year averages. Hence, instead of using 1996–97 as our baseline, we use an average for 1995–96 and 1996–97, the last two years of Conservative government. The final column of each table, however, shows the real growth in income measured between 1996–97 and 2006–07, the same time frame used in analysis at the national level. Sampling error may make mean income at the regional level volatile and unrepresentative, and therefore one should be wary of placing too much weight on numbers using the mean. However, where the results for mean income differ from those for median income, we report this.

Using incomes measured BHC, we find the following:

- In the two years 2005–06 and 2006–07, median household income was highest in the South East, London and East of England, and lowest in the North East, West Midlands and Northern Ireland at about 91% of the UK median.

Table 2.5. Relative income: regional median income relative to the GB/UK median (BHC) (%)

Region	1995–1997	2005–2007	Change	Real increase, 1996–97 to 2006–07
North East	85.4	90.9	+5.5	26.1
North West	94.2	92.9	–1.4	17.9
Yorkshire	92.9	93.7	+0.8	22.7
East Midlands	95.4	95.0	–0.4	17.9
West Midlands	96.5	90.8	–5.6	13.9
East of England	111.2	107.5	–3.7	19.6
London	106.6	112.7	+6.1	28.3
South East	118.0	116.6	–1.4	17.7
South West	97.8	100.8	+3.0	23.8
Wales	90.3	93.1	+2.7	21.7
Scotland	97.7	98.6	+0.8	20.9
Northern Ireland		90.9		
Total	100%	100%		20.1

Notes: The table uses a two-year average in order to 'smooth' noise generated by sampling error. Regions are defined as Government Office Regions.
Sources: Family Resources Survey, various years; authors' calculations.

Table 2.6. Relative income: regional median income relative to the GB/UK median (AHC) (%)

Region	1995–1997	2005–2007	Change	Real increase, 1996–97 to 2006–07
North East	86.4	92.3	+5.9	36.7
North West	95.6	94.3	–1.3	25.3
Yorkshire	94.7	94.2	–0.5	27.6
East Midlands	96.7	97.0	+0.3	26.1
West Midlands	97.3	90.8	–6.5	21.8
East of England	111.0	107.1	–3.9	26.4
London	100.2	105.9	+5.6	36.1
South East	116.0	113.7	–2.3	24.5
South West	98.2	101.2	+3.1	31.6
Wales	92.5	96.8	+4.3	31.1
Scotland	99.0	101.1	+2.2	30.4
Northern Ireland		94.2		
Total	100%	100%		28.2

Notes: The table uses a two-year average in order to 'smooth' noise generated by sampling error. Regions are defined as Government Office Regions.
Sources: Family Resources Survey, various years; authors' calculations.

- Since 1995–96 and 1996–97, the North East and London have improved their relative positions the most (by about 6 percentage points), followed by the South West and Wales. The West Midlands and the East of England have seen falls in their relative positions (by almost 6 and almost 4 percentage points respectively).
- The cumulative real increase in median income from 1996–97 to 2006–07 was greatest in London at 28.3%, over double the increase in the West Midlands, which, at 13.9%, was the lowest.

The pattern for mean income is fairly similar, although in this instance, the North East performs poorly and sees a slight decline in its relative position over the period analysed, as does the South West. There is greater dispersion in relative mean income, with the North East the lowest with approximately 85% of the UK mean and London the highest with mean income of 125% of the UK mean in 2005–07. The level and growth of mean income are greater in London than they are for median income, reflecting the high and increasing levels of inequality in the capital city and the city's status as the primary locale for rich individuals.[12]

Turning to incomes measured AHC, we find the following:

- In 2005–06 and 2006–07, median income was lowest in the West Midlands and the North East, and highest in the South East of England followed by the East of England and London.
- The disparity across regions is somewhat lower when using AHC incomes instead of BHC incomes, demonstrating the impact of housing costs on the regional cost of living. In particular, median AHC income in London, whilst still higher than the UK median, is not as relatively high, whilst regions outside of the South perform better when using AHC incomes.
- The pattern of relative change is very similar to that for income measured BHC, although the relative fall of the West Midlands and rise of Wales are more pronounced when using incomes measured AHC.
- Between 1996–97 and 2006–07, real growth of income measured AHC is greatest in the North East and London at about 36%, and lowest in the West Midlands at just under 22%.

When using mean AHC income, the pattern is similar, except (as for when income is measured BHC) the North East sees a small fall in its relative position, whilst London has the highest mean at almost 120% of the UK mean in 2005–07.

Table 2.7 shows the effect of taking regional price differences into account when calculating living standards. We use the Office for National Statistics (ONS) experimental regional price index (published for 2004, but not updated more recently) to adjust median income before housing costs in each region and nation of the UK. Because we only have the regional price index for 2004, we use the 2004–05 FRS to compute this table (but show incomes in 2006–07 prices, in line with all other numbers in this Commentary).

[12] See Brewer, Sibieta and Wren-Lewis (2008).

Table 2.7. Relative income: regional median income in 2004–05, using national and regional price indices (BHC, £ per week, 2006–07 prices)

Region	National prices	Rank	Regional prices	Rank
South East	£429	1	£407	1
London	£415	2	£378	4
East Anglia	£396	3	£392	3
South West	£377	4	£372	5
Scotland	£371	5	£393	2
East Midlands	£355	6	£364	6
North West	£352	7	£363	9
West Midlands	£347	8	£355	11
Yorkshire	£342	9	£363	8
Northern Ireland	£341	10	£356	10
Wales	£339	11	£364	7
North East	£330	12	£350	12
UK	£372		£374	

Notes: Regions are defined as Government Office Regions. Regional price levels are reported as an index with the UK average price as the base (i.e. UK=100). Regions with prices above the UK average have numbers in excess of 100, and vice versa. In order to find real income adjusted for regional price differences, we divide income by the region's index number/100. Hence, areas with prices higher than the UK average see a fall in their income once adjusted for regional prices, and vice versa for relatively cheap areas. BHC incomes are adjusted using the all-items RPI regional index.
Source: Authors' calculations using Family Resources Survey (2004–05) and ONS regional price indices (http://www.statistics.gov.uk/articles/economic_trends/ET615Wingfield.pdf).

The table makes clear how levels and rankings of living standards can change dramatically when regional prices are taken into account. Scotland, for example, sees its median income in 2004–05 increase from £371 per week to £393 when we take into account its lower price levels, causing it to rise from 5th highest to 2nd highest in the living standards table. A similar increase occurs in Wales, with median income increasing from £339 to £364 per week, raising Wales from 11th to 7th in the regional rankings. By contrast, high price levels in London reduce its living standards (from £415 per week to £378), causing London's ranking to slip from 2nd to 4th.

However, the regions with the very highest and very lowest living standards (as measured by median BHC income) are unchanged, even after regional price levels are taken into account. The South East retains its place at the top of the rankings, despite having price levels above the national average, while the North East, despite its lower-than-average prices, remains rooted to the bottom of the table.

2.4 Conclusion

Taking the period from 1996–97 to 2006–07 as a whole, living standards in Great Britain have risen on average by the equivalent of 2.1% per year at the mean and 1.9% at the median. Nonetheless, 2006–07 was a year of relatively low growth in average incomes (less than 1%) – continuing the trend of sluggish real income growth (for both gross and net incomes) that has persisted since 2002–03. Each year of below-average increases further dilutes the

government's record on income growth, and the average annual real increase in mean income is now for the first time no higher than that seen under the previous Conservative government.

The latest year of data also show a real-terms fall in average benefits income, further reducing average income growth. However, administrative data suggest that aggregate benefit spending grew in real terms between 2005–06 and 2006–07. This leads us to suspect that the reduction in observed benefit income is the result of under-reporting of benefit income in the Family Resources Survey.

Breaking income down by region, we find that median household income is highest in the South East, London and East of England, and lowest in the North East, West Midlands and Northern Ireland. Taking regional price variation into account alters the picture somewhat (with Wales in particular seeing a jump due to lower prices), but the regions with the very highest and very lowest living standards – the South East and North East respectively – are unchanged.

3. Inequality

Key findings

- Income inequality has risen (on a variety of measures) in each of the last two years, and is now back at its highest-ever level – last seen in 2000–01 – as measured by the Gini coefficient (at least since comparable records began in 1961).
- Real income growth throughout the bulk of the income distribution was close to zero between 2005–06 and 2006–07, and nowhere in the income distribution was year-on-year growth statistically significant. Only incomes towards the top of the distribution showed positive (though not statistically significant) growth.
- Taking the period 1996–97 to 2006–07 as a whole, incomes have grown relatively evenly across the bulk of the income distribution (in contrast to the period of Conservative government that preceded it, when income growth was unambiguously higher further up the distribution). However, income growth at the very top and very bottom of the income distribution looks more similar to the pattern seen under the Conservatives – with the lowest growth at the very bottom of the income distribution over this period, and the fastest growth at the very top.
- Middle incomes have kept pace with incomes *towards* the top of the income distribution (the ratio of incomes at the 90th percentile to incomes at the 50th percentile is unchanged since 1996–97). However, there is some evidence that incomes *at the very top* of the distribution (the 99th percentile) have been 'racing away' from incomes further down the distribution.

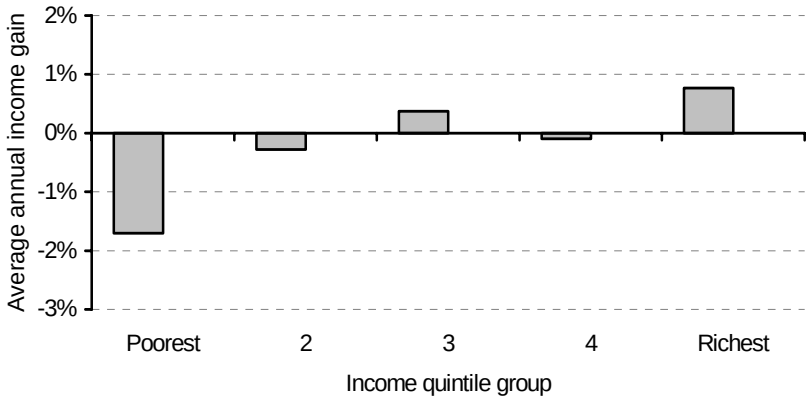
In the last chapter, we considered changes in average incomes. Here, we consider how equally (or otherwise) incomes are distributed, and how the degree of inequality has changed over the last year of data and over Labour's time in government. Section 3.1 examines income growth in each fifth of the population (quintile groups), while Section 3.2 considers income growth at an even finer level of analysis (percentile groups). Section 3.3 reports several summary measures of inequality, including the widely-used Gini coefficient. Section 3.4 considers the extent to which tax and benefit reforms have affected inequality and Section 3.5 concludes.

In our discussions of inequality, we will be adopting a relative notion of inequality. This means that should all incomes increase or decrease by the same proportional amount, we would conclude that income inequality had remained unchanged.

3.1 Income changes by quintile group

One common way to show how inequality has changed across the population is to consider average real income growth by quintile group (each quintile group contains 20% of the population, or around 11 million individuals).

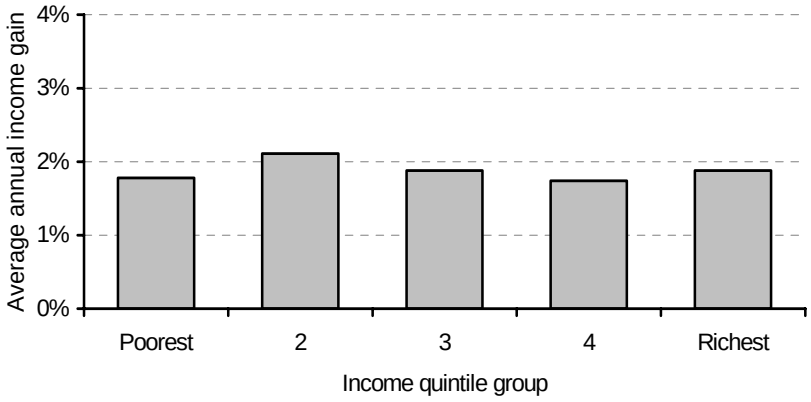
Figure 3.1. Real income growth by quintile group, 2005–06 to 2006–07 (GB)



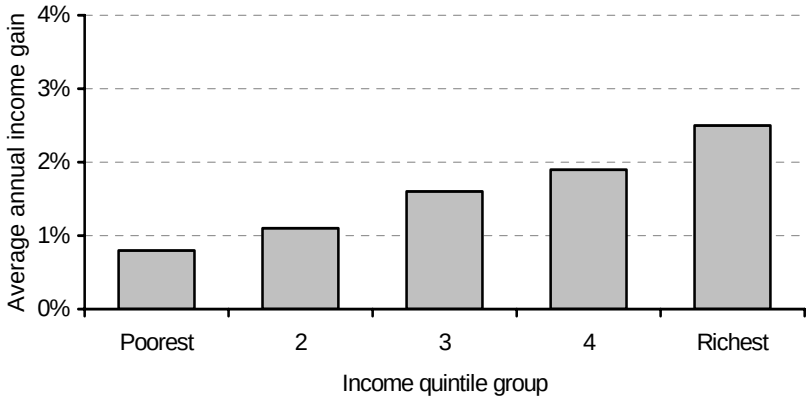
Notes: The averages in each quintile group correspond to the midpoints, i.e. the 10th, 30th, 50th, 70th and 90th percentile points of the income distribution. Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, 2005–06 and 2006–07.

Figure 3.2. Real income growth by quintile group (GB)

Labour: 1996–97 to 2006–07



Conservatives: 1979 to 1996–97



Notes: The averages in each quintile group correspond to the midpoints, i.e. the 10th, 30th, 50th, 70th and 90th percentile points of the income distribution. Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

As discussed in Section 2.2, between 2005–06 and 2006–07 mean income in Great Britain grew by 0.8%, while median income grew by 0.4% (the comparable figures for the UK are 0.8% and 0.5% respectively). Figure 3.1 shows the underlying pattern of this income growth by quintile group. It shows an uneven distribution of income growth, with the individual in the middle of the poorest fifth of the population typically seeing a fall in income in the last year, and only the top quintile seeing growth above 0.5% (though none of these changes is statistically significantly different from zero). The magnitude of these changes is small, but they imply if anything a small increase in overall income inequality in the last year, a point to which we will return when we consider recent changes in some summary measures of inequality, in Section 3.3.

Figure 3.2 looks at the changes over time as defined by political eras, showing how changes under the Labour government compare with what happened under the Conservatives between 1979 and 1996–97. It is important to remember again that the pattern of income growth is strongly influenced by booms and recessions, and that our comparisons across periods of government cover different stages of various economic cycles and will be affected by this.

Taking the period 1996–97 to 2006–07 as a whole, all quintile groups have experienced income growth in the region of 1.7–2.1% on an annualised basis. The second quintile group fared best, with annual income growth of 2.1%, but there is relatively little difference across quintile groups. This pattern taken alone would suggest little change in income inequality over Labour's time in government, again a point to which we will return in Section 3.3. This is very different from what happened under the previous Conservative governments, when over the period as a whole, income growth was stronger the richer the quintile group, a pattern consistent with strongly rising inequality.

Table 3.1 gives income growth by quintile separately for each of Labour's terms in office and also divides the Conservative era into the premierships of Thatcher and Major. It shows that during Labour's first term, robust annualised income growth of 2.4% or more per year was experienced across the distribution. In contrast, during Labour's second term, income grew

Table 3.1. Real income growth by quintile group, across parliaments and between 2004–05 and 2006–07 (GB)

	Income quintile group					Mean
	Poorest	2	3	4	Richest	
Conservatives (1979 to 1996–97)	**0.8%**	**1.1%**	**1.6%**	**1.9%**	**2.5%**	**2.1%**
Of which						
Thatcher (1979 to 1990)	0.4%	1.2%	2.1%	2.7%	3.6%	2.8%
Major (1990 to 1996–97)	1.7%	0.9%	0.6%	0.5%	0.7%	0.8%
Labour (1996–97 to 2006–07)	**1.8%**	**2.1%**	**1.9%**	**1.7%**	**1.9%**	**2.1%**
Of which						
Blair I (1996–97 to 2000–01)	2.4%	2.7%	2.4%	2.5%	2.7%	3.1%
Blair II (2000–01 to 2004–05)	2.6%	2.5%	2.0%	1.6%	1.4%	1.7%
Blair III (2004–05 to 2006–07)	–1.1%	0.1%	0.7%	0.6%	1.2%	1.1%

Notes: The averages in each quintile group correspond to the midpoints, i.e. the 10th, 30th, 50th, 70th and 90th percentile points of the income distribution. Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

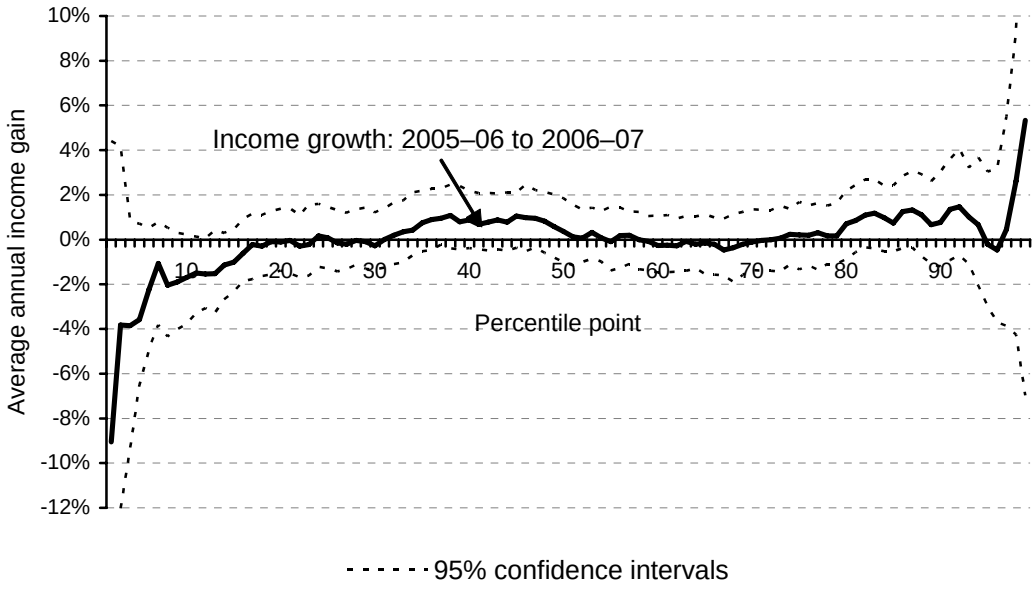
faster for poorer quintiles than for richer ones: income for the poorest quintile grew by 2.6% annualised, compared with 1.4% for the richest quintile.

Labour's third term to 2006–07 has seen lower growth (for every quintile) than either of its two previous terms, with mean income growth during this period only slightly higher than that seen under John Major's administration.

3.2 Income changes by percentile

While Figures 3.1 and 3.2 give us a reasonable impression of how incomes have been changing across much of the distribution, they do mask the changes at the extremes. In Figure 3.3, we show how incomes in Great Britain have changed right across the distribution between 2005–06 and 2006–07 – including those individuals at the 99th percentile point. This graph is similar to the 'quintile' chart in Figure 3.1, except that rather than presenting how incomes have changed in different quintile groups, we instead consider income growth at 99 percentile points in the income distribution.[13] In order to highlight the large degree of statistical uncertainty behind the estimated real change in income at each percentile point, we also show the 95% confidence intervals for these changes, which in all cases are very wide, but they are particularly wide at the lower and upper ends of the distribution.

Figure 3.3. Real income growth by percentile point, 2005–06 to 2006–07 (GB)



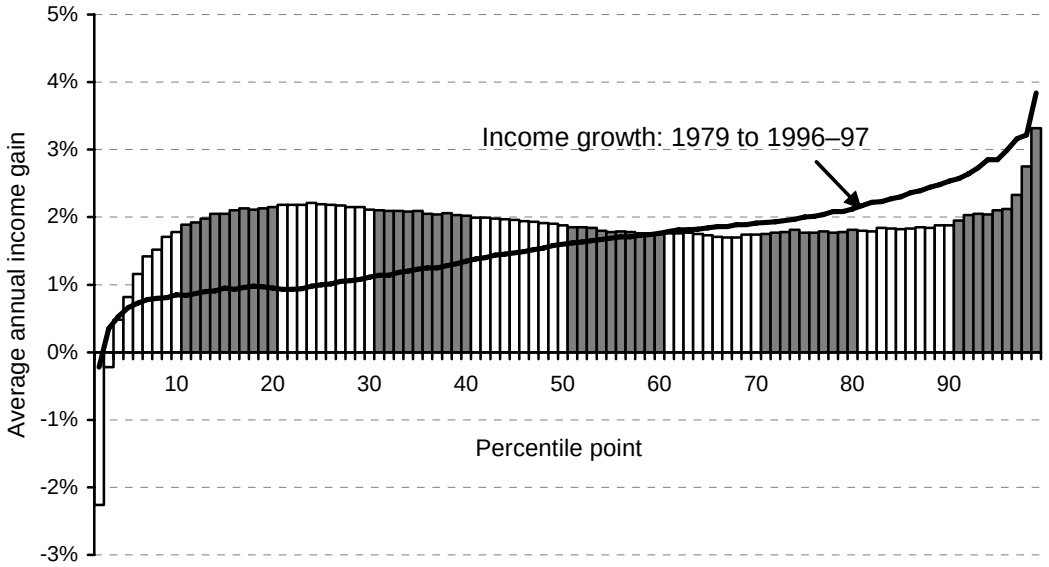
Notes: The change in income at the 1st percentile is not shown on this graph. Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, 2005–06 and 2006–07.

[13] In Figure 3.3, growth at the 1st percentile point has not been shown, in order to maintain a reasonable scale for the graph.

The graph shows that income growth between 2005–06 and 2006–07 has been almost non-existent for the bulk of the distribution. Nowhere in the income distribution is real income growth statistically significantly different from zero, and the point estimates of income growth are close to zero from the 20th to the 80th percentiles. At the tails of the income distribution, the point estimates suggest falling incomes for the bottom 20% and fast income growth for the top 1%; however, sampling error is a particular issue at the extremes of the distribution, so these changes are not statistically significant.

Figure 3.4 shows how incomes have changed across the distribution over the period of the Labour government as a whole. To place the changes in a historical context, we also show how this income growth compares with what was observed between 1979 and 1996–97 under the Conservative governments of the time, as illustrated by the superimposed line.

Figure 3.4. Real income growth by percentile point, 1996–97 to 2006–07 (GB)



Notes: The change in income at the 1st percentile is not shown on this graph. Incomes have been measured before housing costs have been deducted. The differently-shaded bars refer to decile groups.
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

Between about the 20th percentile point and the 90th percentile point, it is generally the lower parts of the distribution that have gained most over the period 1996–97 to 2006–07; by itself, this would be consistent with falling inequality. Below the 20th percentile point, however, the lower the income percentile, the lower the growth experienced – with real income falls in the very lowest part of the income distribution. Beyond the 90th percentile point, income growth is generally increasing in income, with a spike at the 99th percentile point. In previous years, we have pointed to the growth in the very top incomes as one driver of continued income inequality growth in recent years.[14]

[14] For example, see Brewer, Goodman, Shaw and Sibieta (2006) and Brewer, Sibieta and Wren-Lewis (2008). Note that data from the Survey of Personal Incomes, which arguably provides a much better picture of the trends in incomes of the very rich, are not yet available for 2005–06 or 2006–07.

The superimposed line in Figure 3.4 shows that almost without exception over the period 1979 to 1996–97, income growth was increasing in the level of income. The graph also shows that compared with the period of Conservative government as a whole, the first six income deciles have seen stronger annual average income growth under the Labour government, whilst income growth among the top four income deciles has been slightly lower.

A number of recent newspaper articles have posited a growing sense of injustice among Britain's middle classes.[15] As one commentator rather starkly puts it (Woods, 2008), 'while the working class is topped up with family credits, and hedge fund managers cream off millions, it is Britain's beleaguered middle earners who are under siege'. The label 'coping classes' has been coined to describe those middle-class families feeling 'financially squeezed' by, among other things, rising fuel and food prices, house price inflation and an increased tax burden. Do the HBAI data support the idea that middle-income Britons are 'falling behind'?

Of course, the popular idea of 'middle Britain' often bears little resemblance to an objective assessment of middle incomes.[16] The commentator cited above, for example, suggests that a middle-class couple 'can easily earn £88,000 a year'. While such a couple may consider themselves 'middle-class', they are far from being middle-income (the Annual Survey of Hours and Earnings suggests that such earnings would put a couple among the top 10% of all earners). IFS maintains a website (http://www.ifs.org.uk/wheredoyoufitin/) allowing individuals to calculate where they lie in the income distribution. Most users are surprised to discover how far up the income distribution they really are.

This caveat aside, what can the HBAI data tell us about middle incomes in Britain? We focus on median income (the equivalised net household income of the middle individual in Britain's income distribution), because this measure – unlike mean income – is not skewed by high earnings at the top of the distribution. Median household income in Britain in 2006–07 was £378 a week (or roughly £19,700 a year) for a couple with no children, after all direct taxes and benefits. If only one member of the couple were working, this would correspond to gross earnings of around £28,500 per year – less than one-third of the £88,000 figure cited above.[17]

We already know from Figure 2.3 that median income is higher now in real terms than it was in 1996–97, having risen by 1.9% per year on an annualised basis. This suggests that individuals on truly 'middle' incomes really are better off in real terms than at any time in the recent past. But have middle incomes fared worse than incomes lower down, and higher up, the income distribution?

Figure 3.5 addresses this question directly, by showing how incomes in the middle of the distribution (as measured by the median) have fared since 1996–97 compared with incomes in other parts of the distribution. Explicitly, it looks at the ratio of median income to incomes towards the bottom (the 10th percentile), the top (90th percentile) and the very top (99th percentile) of the income distribution. The graph shows that incomes at the median have grown at almost exactly the same pace as incomes towards the bottom (10th percentile) and the top (90th percentile). That is, the 50:10 ratio and the 90:50 ratio are almost exactly the

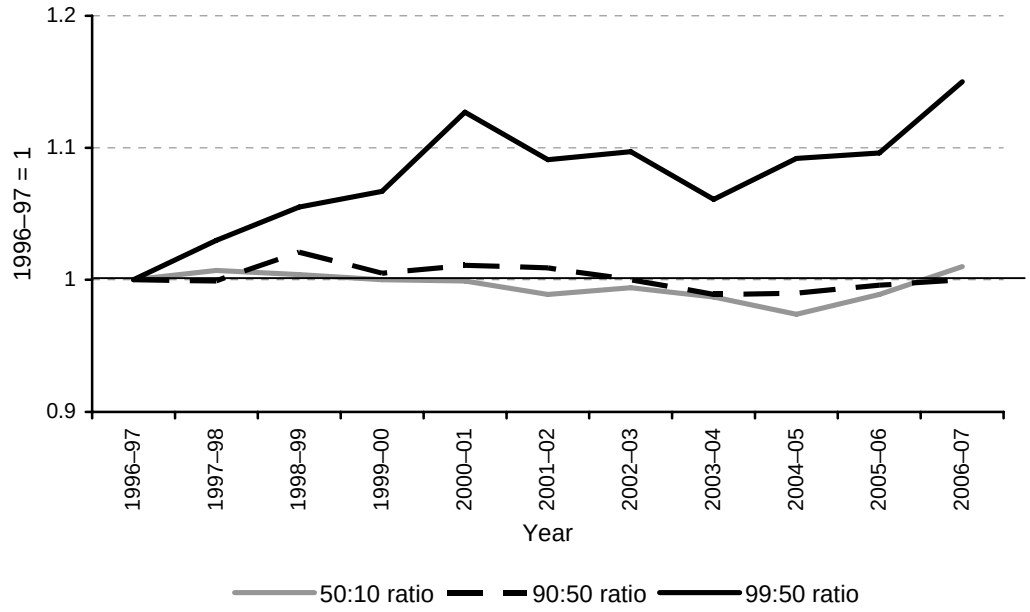
[15] See, for example, Guthrie (2008) and Woods (2008).

[16] This point is made forcefully in Wakefield (2003).

[17] Alternatively, if both members of the couple were working and earning the same wage, it would correspond to each earning around £13,000 per year.

same as they were when Labour came to power. On these measures, middle-income Britain is neither falling behind top incomes nor racing away from lower incomes – instead, incomes are growing at similar percentage rates at all three points of the income distribution. Perhaps it is little wonder, then, that individuals at the 90th percentile feel an affinity with 'middle-income' earners – over the past decade, they have shared remarkably similar fortunes.

Figure 3.5. Is middle-income Britain falling behind? The 50:10, 90:50 and 99:50 income ratios, 1996–97 to 2006–07 (GB)



Note: Measures have been calculated using incomes before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, various years.

This picture changes, however, when we look at the 99:50 ratio, measuring the size of income at the 99th percentile relative to income in the middle. This measure of dispersion has risen by over 15% between 1996–97 and 2006–07, suggesting that incomes at the very top of the distribution have grown faster than incomes in the middle (as already seen in Figure 3.4). This also means, of course, that incomes at the very top have been accelerating away from incomes at the 90th percentile (which have been growing at roughly the same rate as median incomes). This result may go some way to explaining the sense of injustice allegedly felt by the outwardly affluent 'coping classes'.

3.3 Summary measures of inequality

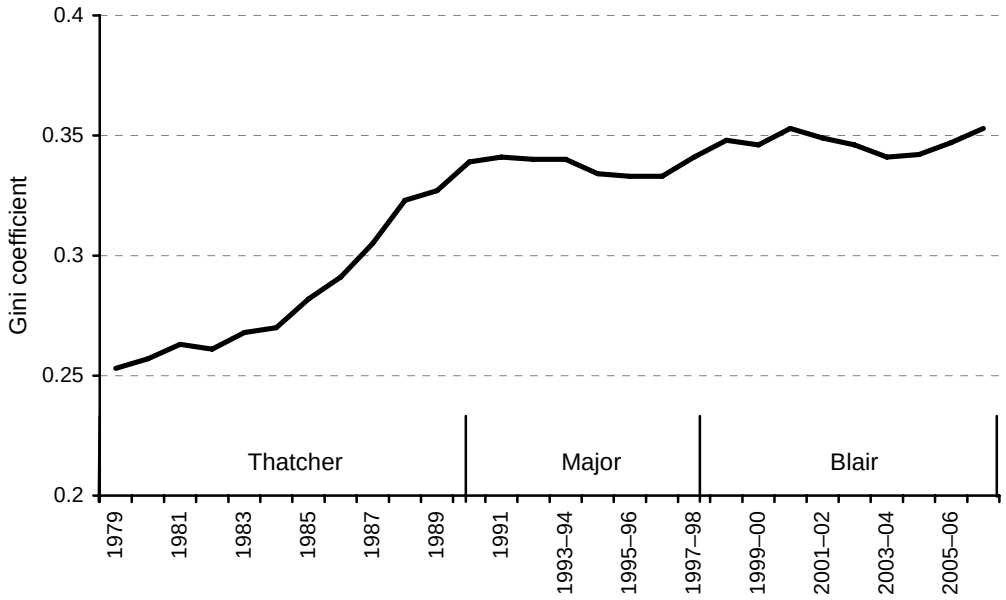
While Figure 3.4 gives a very detailed impression of how incomes have changed between specific years, it can also prove very useful to construct some summary measures of how inequality has evolved over time. This section discusses trends in various inequality measures.

The Gini coefficient

The Gini coefficient is a popular measure of income inequality that condenses the entire income distribution into a single number between 0 and 1: the higher the number, the greater the degree of income inequality. A value of 0 corresponds to the absence of inequality, so that having adjusted for household size and composition, all individuals have the same household income. In contrast, a value of 1 corresponds to inequality in its most extreme form, with a single individual having command over the entire income in the economy.[18]

Figure 3.6 shows the evolution of the Gini coefficient since 1979. Inequality rose dramatically over the 1980s, with the Gini rising from a value of around 0.25 in 1979 and reaching a peak in the early 1990s of around 0.34. The scale of this rise in inequality has been shown elsewhere to be unparalleled both historically and compared with the changes taking place at the same time in most other developed countries.[19]

Figure 3.6. The Gini coefficient, 1979 to 2006–07 (GB)



Note: The Gini coefficient has been calculated using incomes before housing costs have been deducted.
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

Since the early 1990s, the changes in income inequality have been less dramatic. After falling slightly over the early to mid-1990s, inequality rose again during Labour's first term, with the Gini coefficient reaching a new peak of 0.35 in 2000–01. During Labour's second term, however, the Gini fell, with the level of inequality in 2004–05 returning to that last seen in 1997–98. Over the first two terms of the Labour government, the net effect of these changes was to leave income inequality effectively unchanged and at historically high levels.

[18] See appendix C of Brewer, Goodman, Shaw and Sibieta (2006) for more information.

[19] See Goodman, Johnson and Webb (1997), Gottschalk and Smeeding (1997) and Atkinson (1999).

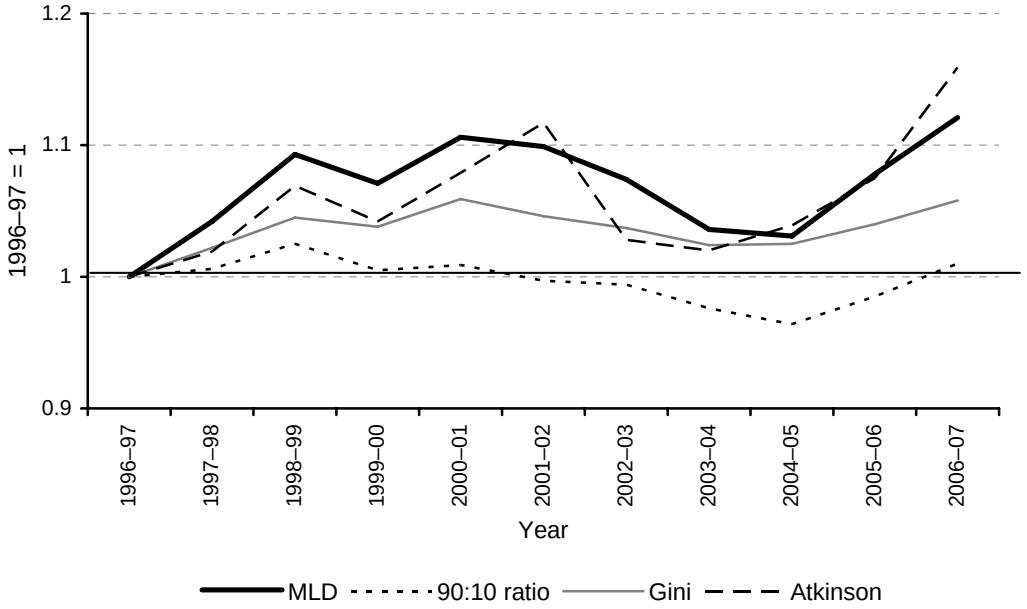
The most recent year (between 2005–06 and 2006–07) has seen a small increase in the Gini coefficient again, to reach a level only ever seen before in 2000–01, itself the highest since our comparable time series began in 1961. Though the rise in 2006–07 is small and not statistically significant, the level of inequality in 2006–07 is slightly higher (0.35 compared with 0.33) than when Labour came to power in 1996–97, and this increase is statistically significant.

Other summary measures of inequality

There are a wide range of other measures available to summarise income inequality, based on different definitions of income inequality.

Figure 3.7 shows the path of a selection of inequality measures, indexed so as to equal 1 in 1996–97. The 90:10 ratio is the simplest of these measures: it is the ratio of the income of the household at the 90th percentile point to that of the household at the 10th percentile point. Mean log deviation (MLD) measures the expected percentage difference between the income of a randomly selected individual and overall mean income. The Atkinson measure allows one to choose a value for society's aversion to inequality, defining the amount that society considers it necessary to give to a 'poor' person, having taken a given amount of income from a 'rich' person, in order to keep overall social welfare the same. The value we have chosen for this parameter reflects a society that considers it necessary to give £33 to a 'poor' person, having taken £100 from a 'rich' person, in order to keep overall social welfare the same (this

Figure 3.7. Summary measures of income inequality, 1996–97 to 2006–07 (GB)



Notes: Measures have been calculated using incomes before housing costs have been deducted. The Atkinson inequality measure is shown for an inequality aversion parameter, ε, of 1.5. This implies that society considers it necessary to give £33 to a 'poor' person, having taken £100 from a 'rich' person, in order to keep overall social welfare the same.
Source: Authors' calculations using Family Resources Survey, various years.

is a relatively inequality-averse society). This measure was discussed in more detail in appendix C of Brewer, Goodman, Shaw and Sibieta (2006).

Figure 3.7 shows that all of these measures have ticked up over the last two years, highlighting the fact that recent income growth has been consistent with a small, but in all cases statistically insignificant, rise in income inequality.

Over a longer period of time, we can see from Figure 3.7 that inequality as measured by the Gini coefficient, MLD and Atkinson measure all rose through the late 1990s, rising most strongly according to MLD. They then fell back by 2004–05 to levels just above those seen in 1996–97.

The 90:10 ratio has seen a slightly different pattern, as it generally fell between 1998–99 and 2004–05 and was at a lower level in 2004–05 than it was in 1996–97. This different pattern compared with those of the other summary measures of inequality reflects the fact that the 90:10 ratio only captures the changes in income at two specific points in the income distribution – the 90^{th} and 10^{th} percentile points. Since 2004–05, however, the 90:10 has started increasing again, returning to a value similar to that seen in 1996–97. Thus inequality measured by the 90:10 ratio is largely unchanged since Labour came to power.

Together with the pattern of change highlighted in Figure 3.4, one could conclude that it is the difference between income growth at the very bottom and very top of the distribution that is driving the rise in income inequality since 1996–97 as measured by the Gini coefficient, MLD and Atkinson measures.

3.4 Inequality and redistribution

Labour has introduced a package of redistributive tax and benefit reforms since 1997. Phillips (2008) sets out how fiscal reforms since 1997 have affected household incomes. He finds that tax and benefit reforms since 1997 have clearly been progressive, benefiting the less-well-off relative to the better-off.

Given the fact that Labour's tax and benefit reforms have tended to benefit poorer households at the expense of richer ones, it might seem surprising that income inequality is slightly higher on most measures than it was in 1996–97. One explanation for this pattern could be rising inequality in the underlying distribution of income, but this does not appear to have been the case. Goodman, Shaw and Shephard (2005) and Jones (2006) show how the Gini coefficient for 'gross income' – that is, income before benefits and tax credits are added and taxes deducted – has also remained at a fairly steady level over this period. This suggests that had the tax and benefit system remained unchanged since 1996–97, it would have become less redistributive over time, as a result of economic and demographic changes (such as falling unemployment). This is a subject to which we hope to return in future research.

The 'racing away' of incomes at the very top of the distribution (evident in Figure 3.4) has also contributed significantly to increased income inequality. However, income growth at the top of the distribution appears particularly vulnerable to economic conditions and the performance of financial markets. Brewer, Sibieta and Wren-Lewis (2008) find that top incomes fell during both 2002–03 and 2003–04, in the wake of the 'dot-com bust', with the greatest losses among the top 0.1%. Given the recent problems in the financial markets and

weaker economic outlook generally, we might expect lower (or negative) growth in top incomes to act as a force to reduce income inequality, or at least slow its rate of increase.

3.5 Conclusion

The changes in the distribution of income between 2005–06 and 2006–07 are sure to disappoint the government. Although patterns of year-on-year income changes are rarely statistically significant, the central estimates implied by the HBAI data are that income barely grew at all for the bulk of the income distribution, while at the extremes income grew rapidly for the rich and fell for the poor: incomes amongst the poorest fifth of the GB population fell by 1.7%, while median income grew by 0.4% and the incomes of the richest fifth rose by 0.8% (though none of these changes is significantly different from zero).

Nonetheless, the overall change in the income distribution since 1996–97 is little altered by one more year of data: broadly, the income distribution became more equal between around the 20th and 90th percentiles, but it has grown more unequal at the very top and the very bottom. Accordingly, a measure of inequality that gives the ratio of the 90th to the 10th percentile of the income distribution shows unchanged inequality since 1996–97, but measures that look at the whole distribution tend to show that inequality has risen, with the slight rise in the Gini coefficient (from 0.33 to 0.35) since 1996–97 once more being statistically significant. This overall small rise in inequality is much smaller in magnitude than the rise in inequality occurring during the 1980s: between 1979 and 1990, the Gini coefficient rose from a value of 0.25 to 0.34.

The fact that median income grew by more than the incomes of those at the bottom of the income distribution means that it is likely that measures of relative poverty rose on a number of different thresholds, measuring incomes AHC or BHC, and by an amount that is unlikely to reflect sampling error. We turn to this in the next chapter.

4. Poverty

Key findings

- Relative poverty in 2006–07 was 300,000 (BHC) or 400,000 (AHC) higher than in 2005–06, with the rise concentrated amongst pensioners. Although the rise is not statistically significant, this is the second year that relative poverty has risen, and the rise since 2004–05 is statistically different from zero.
- There was a small rise in poverty amongst families with children. As with overall poverty, this was not statistically significant, but it is the second year that child poverty has risen. It is now 100,000 higher than in 2004–05 using incomes measured BHC and 300,000 higher using incomes measured AHC, the latter increase being statistically significant. The rise in child poverty since 2004–05 has reversed about a fifth of the decline in poverty measuring incomes BHC and about two-fifths of the decline in poverty measuring incomes AHC between 1998–99 and 2004–05.
- Between 2006–07 and 2010–11, child poverty needs to fall by an average of 300,000 per year to meet the government's targets. Although Budget 2008 announced a £0.9 billion package of measures to reduce child poverty, additional spending of £2.8 billion will be required to have a 50:50 chance of meeting the target.
- IFS researchers had predicted a rise in pensioner poverty of approximately 100,000 in 2006–07 because of the abolition of age-related payments; the actual rises of 300,000 (BHC) and 200,000 (AHC) are both statistically significant and unexpectedly large. Around one-third of the rise appears to be due to the abolition of age-related payments (paid alongside the winter fuel allowance), although it also appears that the FRS recorded receipt of pension credit less well in 2006–07 than in previous years.
- Since 1996–97, regional poverty rates have converged. Poverty in the North, Scotland and Wales is overstated by using national price indices, whilst the opposite is true for London and the South East. In particular, London has by far the highest level of poverty amongst the regions of the UK once regional price differences are taken into account.

Reducing poverty amongst families with children was made a key element of the Labour government's agenda in 1999 following then Prime Minister Tony Blair's pledge to 'abolish child poverty within a generation'.[20] In addition, there has been considerable effort to raise the incomes of the poorest pensioners and tackle pensioner poverty. In this chapter, we summarise the trends since 1996–97 in some of the government's main income-based poverty

[20] Tony Blair, Beveridge Lecture, Toynbee Hall, London, 18 March 1999.

Box 4.1. Poverty definitions and the reporting of poverty

Unless stated otherwise, we measure poverty by counting the number of individuals whose household income is below 60% of that of the median individual (the median individual is in the middle of the income distribution).[a] This is one of the measures against which the government will assess progress towards achieving the relative poverty strand of its 2010–11 child poverty targets, and one of the indicators of poverty in *Opportunity for All* (*OfA*),[b] the government's annual audit of poverty. The indicator is a 'relative' measure of poverty because the poverty line moves with median income growth each year. This definition of poverty as a relative concept is in common with most of the rest of Europe but contrasts with, for example, the official measure of poverty used by the United States Census Bureau, which was initially based on the income required to purchase a fixed basket of food items and has since been uprated in line with price changes. Such measures are called 'absolute' measures of poverty, and we also report the number of people living in households with income below 60% of the median individual's income as fixed in 1996–97 (and 1998–99 for child poverty, representing the government's official measure of absolute child poverty).

Poverty rates can be measured using incomes before housing costs (BHC) or after housing costs (AHC) (see Appendix A). In *OfA*, the government presents relative poverty under both definitions, and we follow that practice here. However, for its child poverty target in 2010–11, the government has chosen to measure poverty using incomes measured BHC only.

The government reports the number of individuals in poverty rounded to the nearest 100,000, and likewise rounds changes in the number to the nearest 100,000. For consistency and ease of comparison, we also use this convention. Sometimes, this can lead to numbers that can be difficult to interpret and confusing.

For example, using the unrounded numbers, there were 3,060,077 working-age adults without dependent children in poverty in 2005–06 and 3,042,439 in 2006–07. Rounded to the nearest 100,000, these would be 3.1 million and 3.0 million respectively. Rounded to the nearest 100,000, the *change* in the number of working-age adults without dependent children in poverty between 2005–06 and 2006–07 (17,638) is zero, however. The level of poverty has fallen but the change in poverty was zero. To avoid confusion, we will point out such examples in the main text.

The government reports poverty rates rounded to the nearest full percentage point. Here we depart from its methodology and round percentages to the nearest point one (0.1) of a per cent. This allows us to be more precise and to report smaller changes in the proportion of people in poverty than the government.

[a] In this chapter, most estimates of poverty are presented on a GB basis up to and including 2001–02 and on a UK basis in 2002–03 and subsequent years. The size of the discontinuity caused by the inclusion of Northern Ireland is small: using a UK-wide poverty line, the risk of poverty in Northern Ireland in 2006–07 was 19.6% measuring incomes BHC, slightly higher than that in the rest of the UK (18.0%) (the opposite is true when measuring incomes AHC – 19.3% in Northern Ireland compared with 22.3% in the rest of the UK); but only 2.9% of individuals in the UK live in Northern Ireland.

[b] Most recently, Department for Work and Pensions (2007a).

indicators, all derived from HBAI data. The new material deprivation indicator of poverty is discussed and analysed in the next chapter.

As noted in Appendix A, figures are presented on a GB basis up to and including 2001–02 and on a UK basis from 2002–03 (i.e. in the same way as they are presented in HBAI). Due to this break in the series, and because the size of populations can change over time, we will focus on trends in poverty measured by the *fraction* of individuals that it affects rather than by the actual *number* of individuals. Nevertheless, most of the following tables present both the number of people who are poor and the percentage of the relevant population that this number represents. We also report estimates of whether changes in poverty are statistically significant.[21] Box 4.1 gives more details of how we measure and report poverty in this publication.

The rest of this chapter proceeds as follows. In Section 4.1, we analyse recent changes in relative poverty for the population as a whole. Section 4.2 focuses on subgroups of the population, examining poverty amongst the government's favoured target groups of children and pensioners, and amongst working-age adults without dependent children. Section 4.3 discusses how poverty varies across the UK nations and regions, whilst Section 4.4 analyses trends in absolute poverty (measured relative to median income in 1996–97). Section 4.5 summarises our analysis of poverty.

4.1 Poverty in the whole population

In the UK in 2006–07, there were 13.2 million individuals in relative poverty measuring incomes AHC and 10.7 million measuring them BHC, using a poverty line equal to 60% of median income. On this indicator, between 1998–99 and 2004–05, Labour oversaw the longest decline in poverty since the start of our consistent time series in 1961. However, this decline in poverty came to an end in 2004–05, and poverty has now risen for two consecutive years.

Between 2005–06 and 2006–07, poverty rose by 400,000 measuring incomes AHC and by 300,000 measuring incomes BHC, or by 0.6 and 0.4 percentage points respectively. This follows rises in the previous year of 800,000 and 400,000 over the level in 2004–05. The rise in poverty since 2005–06 is not statistically significantly different from zero (but it is *very* close to being so), but the rise since 2004–05 is statistically significantly different from zero.

To give more perspective, Figure 4.1 shows relative poverty in Great Britain between 1979 and 2001–02 and in the UK from 2002–03 onwards, measuring incomes AHC (Figure 4.1a) and BHC (Figure 4.1b) and under a range of poverty lines. (Note that the rest of this chapter will focus mostly on poverty lines defined as 60% of median income.) One can see from these graphs that poverty rates measured after housing costs tend to be higher than those measured before housing costs, because those on low incomes tend to spend a greater proportion of their incomes on housing than those on high incomes.

[21] These were calculated by bootstrapping the changes. This involves recalculating statistics for each of a series of random samples drawn from the original sample, as a way of approximating the distribution of statistics that would be calculated from different possible samples out of the underlying population. See Davison and Hinkley (1997).

Figure 4.1a. Relative poverty: percentage of individuals in households with incomes below various fractions of median income (AHC)

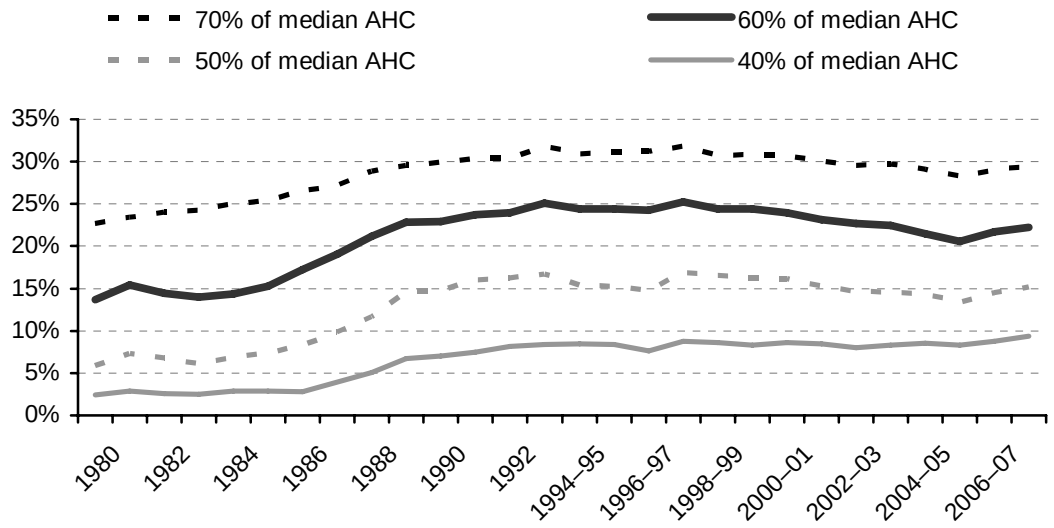
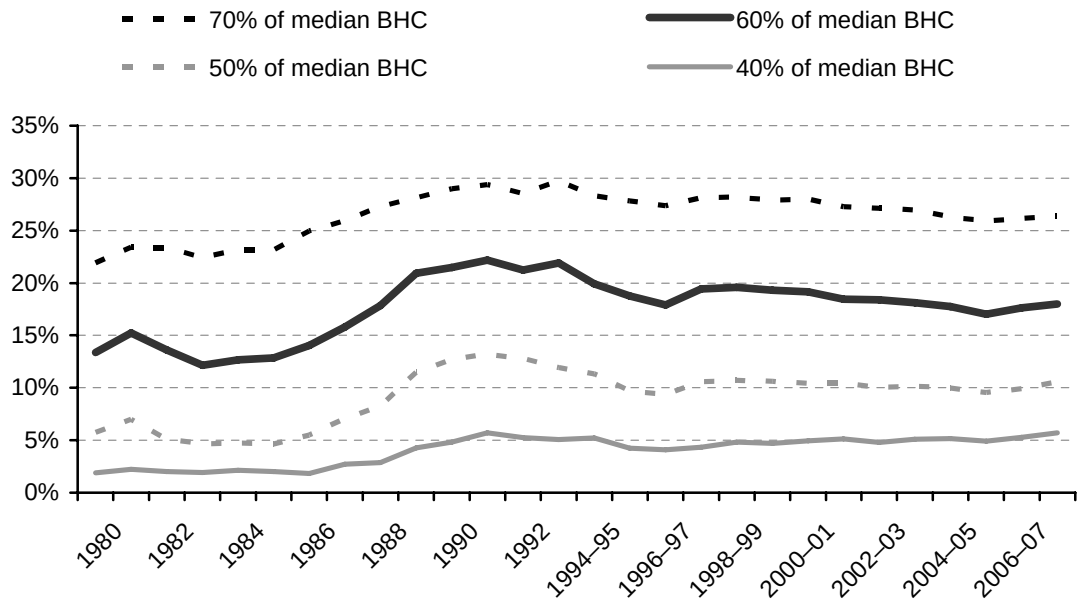


Figure 4.1b. Relative poverty: percentage of individuals in households with incomes below various fractions of median income (BHC)



Note: Figures are presented for GB up until 2001–02 and then for the whole of the UK from 2002–03 onwards.
Source: Authors' calculations based on Family Expenditure Survey and Family Resources Survey, various years.

Poverty rates increased dramatically during the mid- to late 1980s, more slowly in the early 1990s and then stabilised or fell from the mid-1990s. But the last two years of data put an end to the continuous decline in relative poverty that began around about the time the Labour government came to power. Of course, the second consecutive rise in poverty in 2006–07 makes little difference to the overall impression of the government's record: during Labour's

Box 4.2. Trends in 'severe' poverty

A number of recent papers have focused on the issue of 'severe' poverty, although definitions have differed widely by author. For instance, a 2006 policy paper released by the Conservative Party used a definition of a household with less than 40% of median income and found that under such a measure, 'severe poverty' rose between 1994–95 and 2003–04.[a] This is not the only possible definition of severe poverty: researchers at the Centre for Research in Social Policy have written two papers on 'severe' poverty; the latest (2007) uses a definition of less than 50% of median income *and* a material deprivation indicator, whilst its 2005 report uses a definition of less than 27% of median income for at least one year in the previous five. These two papers show little if any decline in severe poverty since the mid-1990s.[b]

Measuring incomes AHC, the risk of living in a household with less than 40% of median income increased from 8.4% in 1994–95 to 9.4% in 2006–07. Measuring incomes BHC, the rate of 5.7% in 2006–07 is higher than those in 1996–97 (4.3%) and in 1994–95 (4.2%). These figures represent relatively small changes, but they do stand in contrast to the declining proportion of individuals with incomes below higher fractions (i.e. 50%, 60% or 70%) of median income.

Whether this can be seen as a failure of the government's strategy to help the poorest is open to question. On the one hand, it is certainly the case that the incomes of some of the poorest have failed to keep pace with those of the rest of society as a direct result of government policy. For example, for those without children and out of work, the income-based jobseeker's allowance (JSA) entitlement for a single person over 25 with no children has only been indexed with prices, and it fell from around 39% of the median AHC income in 1996–97 to 30% of the median by 2006–07; for couples, the corresponding figures are 36% in 1996–97 and 28% in 2006–07.

On the other hand, it is generally accepted that, because the concept of income recorded in HBAI is a short-run, snapshot measure, amongst those people recorded as having very low incomes there will be some individuals who would not generally be considered poor but who do genuinely have few sources of income in the short run. For example, there are a disproportionate number of individuals who are self-employed at the very bottom of the income distribution, whose incomes tend to be erratic (and perhaps badly measured by the FRS). In addition, analysis of other surveys has shown that the average spending of the 2% of individuals with the lowest incomes is higher than that of individuals considerably further up the income distribution. For these reasons, it has been argued that a more reliable picture of who is genuinely poor, and of changes in the numbers of those who are genuinely poor, might be obtained by examining households at the bottom of the distribution of spending rather than income.[c] Similarly, analysis presented in Chapter 5 of this Commentary shows that the level of material deprivation for those with incomes below 40% of the median is lower than it is for those with incomes between 40% and 60% of median income.

[a] Social Justice Policy Group, 2006.
[b] Magadi and Middleton, 2005 and 2007.
[c] Brewer, Goodman and Leicester, 2006. See also Attanasio, Battistin and Ichimura (2005) and Chapter 5.

first term, overall poverty fell by 2.1 percentage points (AHC) and by 1.0 percentage points (BHC); it then fell slightly faster during the second term, falling by a further 2.6 percentage points (AHC) and 1.4 percentage points (BHC). All of these declines are statistically significant, and clearly much larger than the cumulative rises between 2004–05 and 2006–07 of 1.7 and 1.0 percentage points, AHC and BHC respectively.

When we look at trends using other poverty lines (40%, 50% and 70% of the median income), we see that poverty rates also increased during the 1980s using these poverty lines. Poverty has also fallen since the mid-1990s using the 50% and 70% thresholds. However, when we consider the 40% poverty line, we see that this measure of poverty has actually risen by 0.6 percentage points since 1996–97 measuring incomes AHC and by 1.3 percentage points measuring incomes BHC. These rises are both statistically significantly different from zero. (We discuss potential problems in using this threshold as a measure of poverty in Box 4.2.)

We explore other reasons for the rise in poverty in the next section, after first examining trends in relative poverty for different groups in society.

4.2 Relative poverty amongst different groups

This section examines poverty amongst the government's favoured target groups of children and pensioners, and amongst working-age adults without dependent children.[22]

Tables 4.1 and 4.2 contain more detailed information on relative poverty, using a 60% poverty line, since 1996–97 for the population as a whole (the last pair of columns) and for various subgroups (the other columns). They show that relative poverty rose between 2005–06 and 2006–07 for nearly all groups, except working-age non-parents (measured using AHC and BHC incomes) and working-age parents (measured using BHC incomes).

Using rounded numbers, the rise in overall poverty of 400,000 measuring incomes AHC comprises 100,000 working-age adults with children, 100,000 children and approximately 200,000 pensioners. Measuring incomes BHC, the net rise in overall poverty of 300,000 comprises 300,000 pensioners and changes amongst the rest of the population that largely offset each other.

The changes in poverty rates between 2005–06 and 2006–07 differ significantly from what we have become accustomed to over the last decade, during which time poverty fell for pensioners and families with children, but rose for working-age adults without children. There were substantial falls in relative poverty amongst children and pensioners between 1996–97 and 2004–05, measuring incomes both AHC and BHC. As with the whole population, the record on child and pensioner poverty is still one of a substantial decline in relative poverty since 1996–97. However, two years of increasing poverty have now reversed about one-fifth of the fall in child poverty using incomes measured BHC and about two-fifths of the fall using incomes measured AHC. For pensioners, the rise in poverty between 2005–06 and 2006–07 has undone about two-thirds of the fall in poverty using incomes measured BHC and about one-sixth of the more considerable fall using incomes measured AHC.

[22] We use the shorthand 'working-age adults without children' or 'working-age non-parents' to refer to 'working-age adults without dependent children'.

Table 4.1. Relative poverty: percentage and number of individuals in households with incomes below 60% of median AHC income

	Children		Pensioners		Working-age parents		Working-age non-parents		All	
	%	Million	%	Million	%	Million	%	Million	%	Million
1996–97 (GB)	34.1	4.3	29.1	2.9	26.6	3.3	17.2	3.5	25.3	14.0
1997–98 (GB)	33.2	4.2	29.1	2.9	25.9	3.2	15.9	3.3	24.4	13.6
1998–99 (GB)	33.9	4.3	28.6	2.9	26.3	3.2	15.5	3.2	24.4	13.6
1999–00 (GB)	32.7	4.2	27.6	2.8	25.5	3.1	16.1	3.4	24.0	13.4
2000–01 (GB)	31.1	3.9	25.9	2.6	24.7	3.0	16.2	3.4	23.1	13.0
2001–02 (GB)	30.8	3.9	25.6	2.6	24.5	3.0	15.6	3.4	22.7	12.8
2002–03 (UK)	29.8	3.9	24.2	2.5	24.1	3.0	16.5	3.7	22.4	13.1
2003–04 (UK)	28.7	3.7	20.6	2.2	23.5	2.9	16.6	3.7	21.5	12.6
2004–05 (UK)	28.4	3.6	17.6	1.9	23.0	2.9	16.1	3.6	20.5	12.1
2005–06 (UK)	29.8	3.8	17.0	1.8	24.9	3.1	17.6	4.0	21.7	12.8
2006–07 (UK)	30.5	3.9	18.9	2.1	25.2	3.2	17.6	4.0	22.2	13.2
Changes										
1996–97 to 2006–07	–3.6		–10.2		–1.4		(0.4)		–3.0	
2004–05 to 2006–07	2.1	0.3	1.3	0.2	2.2	0.3	1.5	0.4	1.7	1.2
2005–06 to 2006–07	(0.7)	(0.1)	1.9	0.2	(0.3)	(0.1)	(0.0)	(0.0)	(0.6)	(0.4)

Notes: Reported changes may not equal the differences between the corresponding numbers due to rounding. Changes in parentheses are not significantly different from zero at the 5% level. Because of the discontinuity in the series due to the inclusion of Northern Ireland from 2002–03, changes in the number of people in poverty since 1996–97 are not available. However, due to Northern Ireland's small population, and similar poverty rates, the changes in poverty rate reported should be accurate. All figures are presented using the modified OECD equivalence scale.
Source: Authors' calculations based on Family Resources Survey, various years.

Whilst other groups have seen falls in poverty rates since 1996–97, there has not been a consistent fall in relative poverty amongst working-age non-parents, a group not favoured by current government policy. Although this group has a lower-than-average risk of falling into poverty, this risk changed little over the first two terms of office of the current government; a large increase in last year's data meant that the risk was slightly higher as measured AHC in 2006–07 than in 1996–97, although this difference is not quite statistically significant. Measured BHC, the trends are even less favourable: the 1996–97 level of relative poverty has been exceeded in every year since 1999–2000 (see Table 4.2).

Section 2.2 identified a number of reasons for the relative low growth in mean and median income between 2005–06 and 2006–07, including weaker-than-usual growth in real earnings and income from savings and investment and a decline in the income received from benefits and tax credits. That last finding is at odds with administrative data on spending on benefits and tax credits, but what is unquestionably the case is that entitlements to some benefits and tax credits fell in real terms between 2005–06 and 2006–07; given that the majority of net income of individuals in the second and third deciles (roughly those just below and just above the poverty line) comes from state benefits and tax credits, this is a key determinant of what happens to relative poverty.

Table 4.2. Relative poverty: percentage and number of individuals in households with incomes below 60% of median BHC income

	Children		Pensioners		Working-age parents		Working-age non-parents		All	
	%	Million	%	Million	%	Million	%	Million	%	Million
1996–97 (GB)	26.7	3.4	24.6	2.4	20.2	2.5	12.0	2.5	19.4	10.8
1997–98 (GB)	26.9	3.4	25.3	2.5	20.4	2.5	11.9	2.5	19.6	10.9
1998–99 (GB)	26.0	3.3	26.8	2.7	19.6	2.4	11.5	2.4	19.3	10.8
1999–00 (GB)	25.6	3.3	25.1	2.5	19.8	2.4	12.1	2.6	19.2	10.7
2000–01 (GB)	23.3	3.0	24.8	2.5	18.1	2.2	12.8	2.7	18.4	10.4
2001–02 (GB)	23.1	2.9	25.1	2.5	18.3	2.2	12.5	2.7	18.4	10.4
2002–03 (UK)	22.6	2.9	24.4	2.5	18.0	2.2	12.7	2.8	18.1	10.6
2003–04 (UK)	22.1	2.9	22.9	2.4	17.9	2.2	12.8	2.9	17.8	10.4
2004–05 (UK)	21.3	2.7	21.3	2.3	16.9	2.1	12.6	2.9	17.0	10.0
2005–06 (UK)	22.0	2.8	20.8	2.2	18.2	2.3	13.4	3.1	17.6	10.4
2006–07 (UK)	22.3	2.9	23.2	2.5	17.9	2.3	13.2	3.0	18.0	10.7
Changes										
1996–97 to 2006–07	–4.4		–1.4		–2.2		1.2		–1.4	
2004–05 to 2006–07	(1.0)	(0.1)	1.9	0.3	(1.0)	(0.1)	(0.6)	(0.2)	1.0	0.7
2005–06 to 2006–07	(0.4)	(0.1)	2.4	0.3	(–0.3)	(0.0)	(–0.2)	(0.0)	(0.4)	(0.3)

Notes: Reported changes may not equal the differences between the corresponding numbers due to rounding. Changes in parentheses are not significantly different from zero at the 5% level. Because of the discontinuity in the series due to the inclusion of Northern Ireland from 2002–03, changes in the number of people in poverty since 1996–97 are not available. However, due to Northern Ireland's small population, and similar poverty rates, the changes in poverty rate reported should be accurate. All figures are presented using the modified OECD equivalence scale.
Source: Authors' calculations based on Family Resources Survey, various years.

To examine this point in detail, Table 4.3 shows year-on-year growth rates in entitlements to social security benefits and tax credits for some key family types likely to be in or close to poverty, and compares these with the year-on-year changes in the poverty line and prices. Numbers in bold in the table mark the instances where entitlements to benefits grew by more than inflation (the RPI). Shaded cells mark instances where entitlements to benefits grew faster than both the BHC and AHC poverty lines; considered in isolation, this would suggest a declining relative poverty rate for that family type in that year.[23]

[23] Some of these benefits are designed only to cover non-housing costs, and so it might be more appropriate to compare them with changes in the ROSSI index or growth in the AHC poverty line. For example, growth in the rate of JSA for a single adult has exceeded the change in RPI in only two years, but it has exceeded the change in ROSSI in seven years.

Table 4.3. Growth in entitlements to state support for certain family types

	Couple, 3 kids, not work	Lone parent, 1 kid, not work	Lone parent, 1 kid, p-t work	Single person, on JSA	Single person, on IB	Basic state pension (single)	Single pensioner entitled to means-tested benefits	Couple pensioner entitled to means-tested benefits	Poverty line (BHC)	Poverty line (AHC)	RPI	ROSSI
1997–98	2.6	2.1	2.0	2.6	2.1	2.1	2.6	2.6	5.0	3.8	3.3	2.4
1998–99	2.4	–3.8	–5.5	2.4	**3.6**	**3.6**	2.4	2.4	3.8	4.3	3.1	2.2
1999–00	**9.3**	**8.6**	**9.3**	**2.1**	**3.2**	**3.2**	**6.5**	**6.5**	5.0	5.5	1.6	1.7
2000–01	**13.4**	**8.8**	**18.1**	1.6	1.1	1.1	**4.6**	**4.6**	5.9	5.8	3.0	1.4
2001–02	**9.1**	**6.4**	**7.2**	**1.6**	**3.3**	**7.4**	**17.5**	**15.3**	6.3	7.5	1.5	1.7
2002–03	**4.1**	**3.2**	**4.2**	1.7	1.7	**4.1**	**6.5**	**6.6**	3.7	4.8	2.1	1.5
2003–04	**8.6**	**6.6**	**7.4**	1.3	1.7	2.6	**4.3**	**4.0**	2.4	2.4	2.8	1.7
2004–05	**6.0**	**4.6**	**5.0**	1.8	2.8	2.8	3.0	**3.3**	4.0	2.6	3.1	1.3
2005–06	2.5	2.0	**3.1**	1.0	**3.1**	**3.1**	**3.8**	**3.8**	3.5	3.2	2.6	1.9
2006–07	3.1	2.7	3.0	2.2	2.7	2.7	**4.2**	**4.2**	4.1	3.7	3.7	3.1
2007–08	3.7	3.3	3.7	3.0	3.6	3.6	**4.4**	**4.4**	n/a	n/a	4.1	2.8
2008–09	**6.9**	**5.4**	**6.2**	2.3	**3.9**	**3.9**	**4.2**	**4.2**	n/a	n/a	3.3	3.8

Notes: The table shows annual changes in maximum entitlements to benefits for various family types with no private income (except the working lone parent, who is assumed to earn an amount that is below the personal income tax allowance and the primary threshold for National Insurance contributions) ignoring housing benefit and council tax benefit. 'RPI' measures change in annual average of RPI all items index since the previous year (except 2008–09); 'ROSSI' measures changes in annual average of Rossi since the previous year (except 2008–09). For 2008–09, RPI and ROSSI show estimated annual growth in September 2008 as estimated in table C3 of Budget 2008. Values in bold are greater than the change in the RPI over the same period; shaded cells are greater than the change in both the BHC and AHC poverty lines. For further details, contact authors.

Source: Authors' calculations.

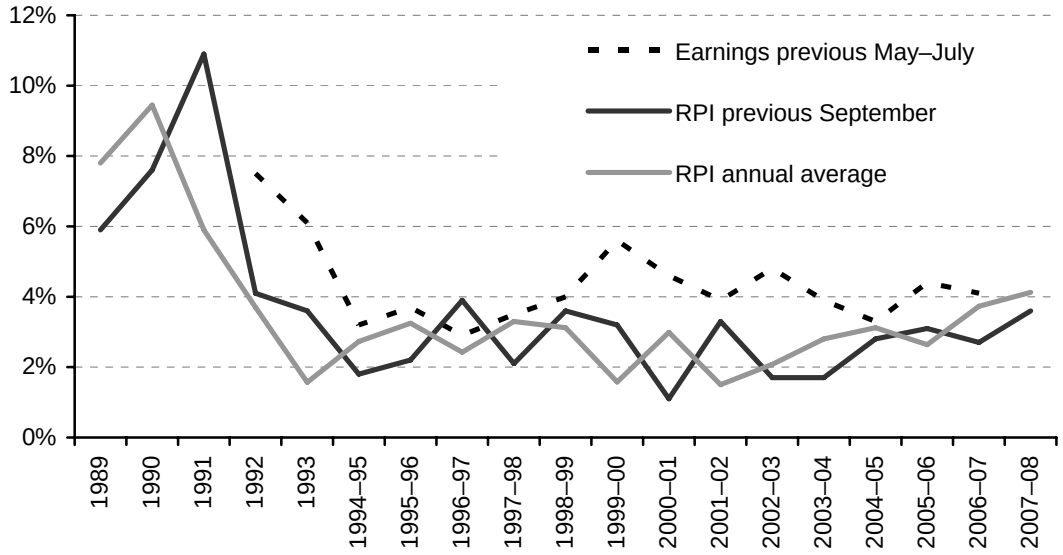
Table 4.3 shows the following:

- All the family types shown except those for adults aged 60 or over saw the real value of maximum entitlements to benefits and tax credits (where 'real' is defined using the RPI) decline in 2006–07.
- As the poverty line grew in real terms in 2006–07, the growth in maximum entitlements to benefits and tax credits for those same families in 2006–07 was below the growth in the poverty line for the second year running. Although many other things affect the level of incomes received by those around the poverty line, it is notable that child poverty has risen in the two years with particularly small rises in entitlements to benefits and tax credits.[24]
- Since 2000–01, the growth in maximum entitlements to benefits for pensioner families with no private income has exceeded the growth in the poverty line (measuring incomes AHC) in each year (and in each year except 2004–05 measuring incomes BHC). Since 2003–04, this has been because maximum entitlements to benefits rise each year in line with average earnings, growth in which has tended to be above the growth in median income (measuring incomes AHC). However, the difference between the growth in maximum entitlement to the pension credit guarantee and the poverty line measuring incomes BHC in 2006–07 is the smallest it has ever been (0.1 percentage points).
- The level of jobseeker's allowance (JSA) for a single unemployed person has risen more slowly than the poverty line (measuring incomes AHC or BHC) in every year since 1996–97; the same is true for the level of incapacity benefit (IB) – except in 2004–05 measuring incomes AHC. The rise in poverty amongst working-age non-parents over this period is therefore unsurprising.

One reason why some maximum entitlements to benefits and tax credits have either fallen in real terms or not kept up with the poverty line is that, during the period 2005 to 2007, inflation (measured by the RPI) was increasing. This affects the real value of benefits and tax credits even when those benefits are supposedly uprated by inflation. This is because most benefits and tax credits are uprated each April using the rate of inflation in the September of the previous year. Hence, benefits for the year 2006–07 were increased in April 2006 above the previous year's level by the rate of inflation prevailing in September 2005. Figure 4.2 shows that this rate of increase (2.7%) was lower than the subsequent annual average inflation rate during 2006–07 (3.7%), and this means that the real value of benefits linked to the RPI (such as the state pension) fell.

[24] The per-child element of the child tax credit has been increased at least in line with average earnings since 2004–05. However, a non-working family with children also receives income from child benefit (increased in line with RPI), income support (increased in line with ROSSI) and the family element of the child tax credit (frozen in nominal terms), so the total value of state support will increase by considerably less than average earnings. Working families with children do not receive income support, but they do receive working tax credit, which is increased in line with RPI.

Figure 4.2. RPI inflation in survey year compared with RPI in previous September and average earnings[a] in previous May–July



[a] Including bonus; seasonally adjusted.
Sources: ONS RPI inflation (CZBH) and average earnings (LNNC) series.

Similarly, pension credit (and its predecessor, the minimum income guarantee (MIG)) is uprated in each April by the growth in average earnings measured over the previous May to July. This series has been above the rate of inflation in every year since at least 1992, but the implied real rate of growth in the benefits has fluctuated; it was just 0.4% in 2006–07 (with the nominal rise only just greater than the nominal growth in the poverty line measuring incomes BHC), whilst it has averaged 1.5% between 1996–97 and 2005–06.

This reminds us that when inflation and earnings growth are volatile, the real value of benefits is likely to fluctuate year on year, and this will clearly affect the rate of poverty. In the long run, however, this effect should be close to zero, with small real rises in one year being balanced by small real falls in others. For example, the last time that rising inflation significantly eroded the real value of state benefits was in 2000–01, when benefits uprated using standard rules[25] were increased by 1.1% whilst inflation averaged 3%. However, in 2001–02, if benefits had been uprated using standard procedure, they would have increased by 3.3%, significantly greater than the 1.5% inflation rate.[26] Similarly, whilst overall inflation during 2007–08 (4.1%) was again above the increase in state benefits in April 2007 (3.6%), the divergence was less notable than in 2006–07, and inflation excluding housing costs (Rossi) was below the increase in benefit rates.[27] Looking ahead, inflation is predicted to fall back during 2008–09 and, together with the growth in entitlements in 2008–09 for families

[25] As seen in Table 4.3, there were, in practice, large increases to many benefits (particularly for families with children). The basic state pension was one notable case where standard uprating was applied, however.

[26] The 1.1% (75p) rise in the state retirement pension in 2000–01 was, in fact, followed by a 7.4% (£5) increase in 2001–02 following a degree of popular dissatisfaction with the previous 'low' increase.

[27] The last two rows of Table 4.3 show the projected nominal increase in entitlement for the various family types in 2007–08 and 2008–09. Since the annual average inflation rate (AHC) is not yet known, we use the Treasury's prediction for September 2008 (see Notes to Table 4.3).

with children (reflecting increases in the generosity of tax credits announced in the 2007 Budget and Pre-Budget Reports),[28] the prospects for poverty look better in 2008–09.

The changes in poverty amongst children, pensioners, and working-age adults without dependent children are now explored in more detail. We focus upon poverty rates derived using income measured BHC for children, as this is the indicator of relative low income used in the government's child poverty targets, and for consistency we use this measure in detailed analyses of other types of households. However, when measuring poverty, we often favour the use of AHC income as detailed in Appendix A, and poverty rates derived from income measured AHC are also provided for all population subgroups.

Child poverty

The numbers of children living in poverty in the UK in 2006–07 were 3.9 million (AHC) and 2.9 million (BHC), the former up 100,000 and the latter up by just over 50,000 (and therefore up by 100,000 according to the rounding conventions adopted by the DWP) from 2005–06 (rises of 0.7 percentage points (AHC) and 0.4 percentage points (BHC)).[29] Neither of these changes is statistically different from zero at the 5% level, but poverty measuring incomes AHC is statistically significantly higher in 2006–07 than it was in 2004–05, reflecting the combined impact of two consecutive increases in poverty. The latest year's data therefore confirm that the fall in child poverty seems to have come to an end in 2004–05, to be replaced by an upward trend.

A decomposition of the change in child poverty from 2004–05 to 2006–07 can help tell us why child poverty has risen, and Table 4.4 gives such a breakdown. The principle behind the table is to divide all children into nine family types (according to the number of adults in the family and their working patterns) and then divide all changes in poverty into incidence effects – which represent changes in the risk of poverty for particular family types – and compositional effects – which reflect changes in the distribution of children between these nine family types.[30] It should be pointed out, though, that even though the overall rise in child poverty was statistically different from zero, it is highly unlikely that the same is true for the estimated incidence and compositional effects in Table 4.4; they do, however, explain the *mechanics* of why child poverty has risen.

The bottom row of Table 4.4 shows that overall, the rise in child poverty is due to incidence effects (an increased risk of poverty for particular family types), with changes in the composition of families (mostly a decline in worklessness) acting by themselves to reduce

[28] See Phillips (2008).

[29] Note that the unrounded poverty numbers are, for AHC income, 3,813,705 in 2005–06 and 3,913,261 in 2006–07 (a rise of 99,556). For BHC incomes, the unrounded numbers are 2,814,460 in 2005–06 and 2,865,047 in 2006–07 (a rise of 50,587).

[30] For more details, see appendix D of Brewer, Goodman, Shaw and Sibieta (2006). The authors acknowledge that they were motivated to present these decompositions by the analysis in Sutherland, Sefton and Piachaud (2003).

poverty.[31] Poverty rose because the risk of poverty rose for some family types, although there is some difference between the changes in child poverty in lone-parent and couple families:[32]

- Since 2004–05, the risk of child poverty has remained virtually unchanged for lone-parent families (with small falls amongst working lone-parent families largely offset by small rises amongst non-working lone parents).
- However, there has been a large rise in the risk of poverty for children living in couple families, driven by those households where one adult worked full-time and the other did not work and by those households with no full-time workers. This may well be related to the slow or negative real growth in entitlements to benefits and tax credits between 2005–06 and 2006–07 shown in Table 4.3.

Manipulation of the numbers in Table 4.4 reveals that the fraction of children in poverty who live in couple families rose from 57.4% in 2004–05 to 59.6% in 2006–07, and the fraction in families with someone in work rose from 48.5% in 2004–05 to 52.1% in 2006–07. These

Table 4.4. Decomposition of the rise in relative child poverty (BHC), 2004–05 to 2006–07, by family type

	Poverty rate		Percentage of child population		Compositional effect	Incidence effect	Total change in poverty
	2004–05	2006–07	2004–05	2006–07			
Lone parents							
Full-time	9.9%	7.4%	4.7%	4.8%	–1,105	–15,460	–16,565
Part-time	19.7%	19.4%	6.9%	7.3%	–1,208	–2,962	–4,170
Workless	56.6%	57.5%	12.8%	12.6%	–9,104	15,856	6,752
All/Total			24.4%	24.7%	–11,417	–2,566	–13,983
Couples with children							
Self-employed	24.1%	23.4%	12.1%	12.1%	103	–11,731	–11,628
Two full-time earners	1.4%	2.4%	11.8%	12.7%	–23,071	15,213	–7,858
One full-time, one part-time	3.5%	3.2%	23.6%	22.2%	31,221	–11,369	19,852
One full-time, one not working	15.2%	20.2%	17.7%	18.2%	–2,605	113,472	110,868
One or two part-time	42.4%	46.6%	4.5%	5.1%	18,145	25,800	43,945
Workless	61.6%	68.1%	6.1%	5.0%	–56,559	46,772	–9,786
All/Total			75.6%	75.3%	–32,766	178,157	145,393
All children	21.3%	22.3%	100.0%	100.0%	–44,182	175,591	126,901

Notes: Poverty rates are measured as the proportion of the group with income below 60% of the population-wide BHC median income. The 'All children' total change includes an effect due to the size of the child population, and hence cannot be derived by simply summing the other totals.
Source: Authors' calculations based on Family Resources Survey, 2004–05 and 2006–07.

[31] Note that the relative importance of incidence and compositional effects is sensitive to the number and definition of family types used in the decomposition.

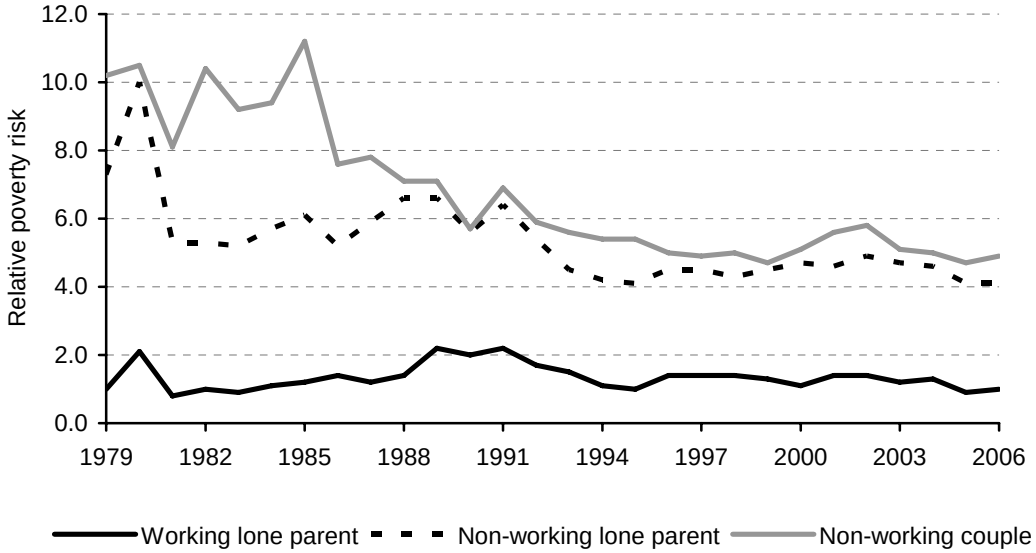
[32] Decomposition of poverty changes for each year individually (i.e. 2004–05 to 2005–06 and 2005–06 to 2006–07) shows that the risk of poverty for children living with lone parents fell and then rose (to remain broadly unchanged), whilst it increased for children living with couples in both years.

changes might result in a further shift of focus towards the problem of poor working (rather than non-working) parents and towards couples rather than lone parents (although our findings in Section 5.3 provide a counter-argument). However, the risk of poverty is still higher for children in lone-parent families than for those in couple families, and workless households still face a far greater risk of poverty than working households.

Given the changing pattern of poverty incidence across family types, it is worthwhile looking at the trends over a longer horizon. Figure 4.3, which goes back to 1979, shows the rate of poverty amongst children living with working lone parents, workless lone parents and workless couples relative to the rate of poverty in the majority group – children living with a couple with at least one worker. Hence, a value of 2 would indicate the risk of poverty for a child living in a particular type of family is twice as high as it is for a child living with a couple with at least one worker. The graph shows the following:

- Relative to children living in couple families with at least one adult working, the position of children living in workless families has improved considerably, although they still remain about 4.5 times more likely to be in poverty. Most of the reduction took place during the mid- to late 1980s and early 1990s.
- As in 1979, children living with working lone parents have a risk of poverty about equal to that for children living with working couple families. The risk of poverty amongst these children relative to those children living with working two-parent families rose through the 1980s, peaked between 1989 and 1991, and then declined fairly rapidly until 1994, since when it has remained relatively stable.

Figure 4.3. The relative risk of poverty for different children (relative to children living in couple families with at least one worker)



Notes: Years are financial years from 1994 onwards (e.g. 1998 refers to financial year 1998–99). Child poverty is defined as living in households in Great Britain with less than 60% of median household income using the modified OECD equivalence scale. Relative poverty rate calculated as group poverty rate divided by poverty rate for children living with parent couple with at least one worker.
Source: Authors' calculations based on the Family Expenditure Survey and Family Resources Survey, various years.

Two years ago, motivated by the failure of the government to hit its child poverty targets for 2004–05, we analysed how well the Family Resources Survey – the household survey that underlies HBAI – records tax credit receipt.[33] After two years in which child poverty has risen, it is worthwhile repeating this exercise, and we do this in Appendix C. To summarise, this re-investigation confirms the following:

- The FRS substantially under-records receipt of tax credits, but the degree of under-recording has not worsened noticeably over the last two years.
- It is not necessarily true that under-recording of tax credits would act to increase the estimates of child poverty because families with median income (and higher) are still entitled to tax credits, and seem even less likely than families around the poverty line to report receipt of tax credits in the FRS. Hence, median income, and therefore the poverty line, might increase more rapidly than the incomes of families close to the poverty line if tax credit receipts were better recorded. However, those families entitled to significant amounts of tax credits (who are likely to be in poverty or close to the poverty line) do seem to be under-reporting their total tax credit income as well.
- The government is paying tax credits and child additions in means-tested benefits to around 100,000 more lone parents than apparently live in the UK, a smaller discrepancy than in 2004–05, but entirely consistent with a new estimate from HMRC that 80,000 couples were wrongly claiming tax credits as lone parents. However, the implications of this for measured child poverty rates are not clear.

Child poverty targets

The government had a target for child poverty in Britain in 2004–05 to be one-quarter lower than its 1998–99 level. We discovered two years ago that this target had been missed by 100,000 measuring incomes BHC and by 300,000 measuring incomes AHC.[34] The target does not apply to 2006–07, and the government has since chosen a different way to measure child poverty for its future targets. However, the rise in child poverty between 2004–05 and 2006–07 means that the government is now short of its original 2004–05 target by 300,000 measuring incomes BHC or by 500,000 measuring incomes AHC, achieving reductions of only 16.0% and 12.0% respectively between 1998–99 and 2006–07 (all calculated using the McClements equivalence scale).

The government's next target is for child poverty in the UK in 2010–11 to be one-half its 1998–99 level. Progress will be assessed using three definitions of poverty – a relative poverty indicator, an absolute poverty indicator and a material deprivation indicator – all of which are different from the ones used for the target for child poverty in 2004–05.[35] Table 4.5 reviews progress to date.

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[33] See Brewer, Goodman, Shaw and Sibieta (2006) and also Brewer and Shaw (2006).

[34] See Brewer, Goodman, Shaw and Sibieta (2006). Note that this was measured using the McClements equivalence scale, rather than the modified OECD equivalence scale, so that the numbers presented above are different from those that were used to assess progress towards this target.

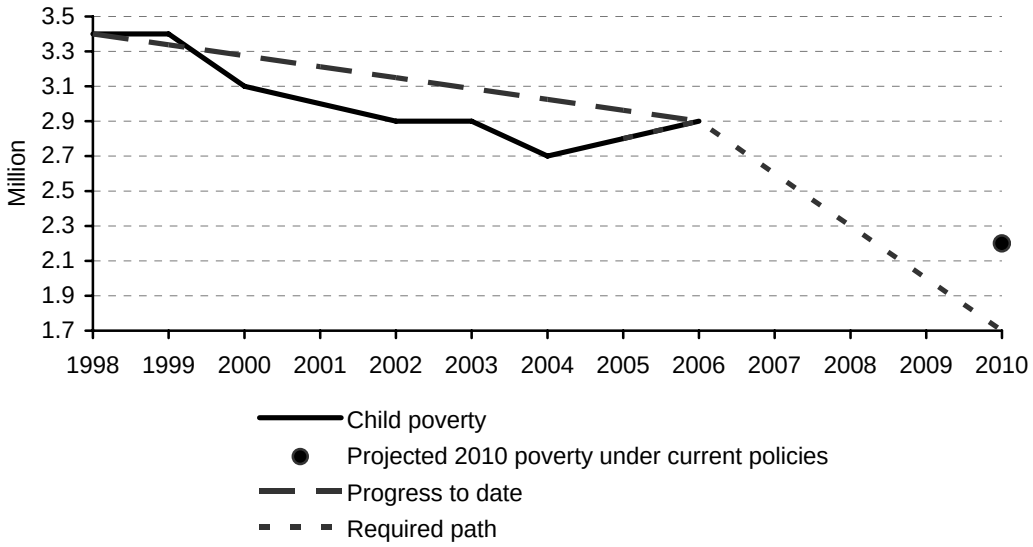
[35] See Department for Work and Pensions (2003).

Table 4.5. Progress towards halving child poverty in the UK by 2010–11

	Relative poverty, UK, modified OECD (BHC)		Absolute poverty, UK, modified OECD (BHC)		Material deprivation	
	%	Million	%	Million	%	Million
1998–99	26.1	3.4	26.1	3.4	20.8	2.6
1999–00	25.7	3.4				
2000–01	23.4	3.1				
2001–02	23.2	3.0				
2002–03	22.6	2.9	14.1	1.8		
2003–04	22.1	2.9	13.7	1.8		
2004–05	21.3	2.7	12.9	1.7	17.1	2.2
2005–06	22.0	2.8	12.7	1.6	16.3	2.1
2006–07	22.3	2.9	13.1	1.7	15.6	2.0
Change since 1998–99	–3.8	–0.6	–13.0	–1.7	–5.2	–0.6
Target for 2010–11		1.7				1.3

Notes: Reported changes may not equal the differences between the corresponding numbers due to rounding. The left-hand panel uses data for the UK and incomes equivalised using the modified OECD equivalence scale. For the purposes of the child poverty target in 2010–11, the DWP has had to estimate the level of relative child poverty in the UK in 1998–99 (Northern Ireland was first included in the official HBAI series in 2002–03) – see HM Treasury (2007).
Sources: Authors' calculations based on Family Resources Survey, various years; HM Treasury (2007).

Figure 4.4. Actual, required and projected path of child poverty, 1998–99 to 2010–11



Notes: Years are financial years (e.g. 1998 refers to financial year 1998–99). Child poverty is defined as living in households in the UK with less than 60% of median household income (BHC) using the modified OECD equivalence scale.
Source: Authors' calculations based on the Family Resources Survey, various years. 'Projected 2010 poverty under current policies' from update of Brewer, Browne and Sutherland (2006).

We have previously argued that the most binding of the government's three measures will be the pure relative poverty target, which is for child poverty in the UK in 2010–11 to be one-half lower than its level in 1998–99, using a poverty line of 60% of median BHC income and the modified OECD equivalence scale.[36] As we saw earlier, the number of children in poverty under this measure rose between 2005–06 and 2006–07 to reach 2.9 million. This means that child poverty has fallen by 600,000 to the nearest hundred thousand (or 17%) in the eight years since 1998–99 and needs to fall by a further 1.2 million in the remaining four years between now and 2010–11 to meet this element of the target: see Figure 4.4 and Table 4.5. Thus, child poverty needs to fall by an average of 300,000 per annum for the next four years, having fallen by an average 70,000 a year for the past eight years.

Following the Pre-Budget Report 2007 and Budget 2008 announcements, which should together cut child poverty by about 350,000, IFS researchers predict a fall in the numbers of children in poverty to 2.2 million (using incomes measured BHC) in 2010–11. However, this still means that the number of children in poverty in 2010–11 would exceed the government's target by 500,000. Furthermore, we estimate that additional spending of around £2.8 billion a year (on the per-child element of the child tax credit and a new supplement for children in large families) by 2010–11 would be needed for the government to have a 50:50 chance of meeting its target.[37] In a recent report, the Department for Work and Pensions (2008a) admitted that the target is 'unlikely to be fully met', and, writing before Budget 2008, the House of Commons Work and Pensions Committee (2008) argued that current policies will mean the 2010–11 target is missed by 'close to a million'.

The 2007 Comprehensive Spending Review – which set out departmental spending plans (for instance, for the NHS) for the period 2008–09 to 2010–11 – did not explicitly identify the source of additional resources required to meet the 2010–11 child poverty targets. Therefore, the extra money needed will require an increase in taxation, an increase in borrowing or savings from either other social security spending or other government programmes. The Treasury's forecasts for tax revenue and spending imply it is planning on the basis of having virtually no room to manoeuvre against either of its two self-imposed fiscal rules, giving very limited scope for additional borrowing. The government may delay earmarking the resources needed for meeting its child poverty targets to future years (although the latest it can wait to announce policies is Autumn 2009, when tax credits and benefit rates for April 2010 need to be set), hoping, perhaps, for its own forecasts of tax revenues and spending to prove unduly pessimistic.

Pensioner poverty

In contrast to the previous year, there was a large rise in pensioner poverty in 2006–07, as seen in Tables 4.1 and 4.2; indeed, this group made up well over half of the total rise in poverty. The poverty rate rose by 1.9 percentage points measuring incomes AHC, from 17.0%

[36] See Brewer, Goodman, Shaw and Shephard (2005a).

[37] Prior to the increase in tax credits and other changes announced by the government in the 2007 and 2008 Budgets, we had estimated that the government would miss its target by 1 million, and that £4.5 billion would be required to have a 50:50 chance of meeting the 2010–11 target. See Brewer, Browne and Sutherland (2006).

to 18.9%, and by 2.4 percentage points measuring incomes BHC, from 20.8% to 23.2%.[38] Both of these changes are statistically significantly different from zero. Figure 4.5 shows that the rise in poverty is not restricted to the 60% of median income measure: it is statistically significant with the 40%, 50% and 70% poverty lines too.

Figure 4.5a. Relative poverty: percentage of pensioners living in households with incomes below various fractions of median income (AHC)

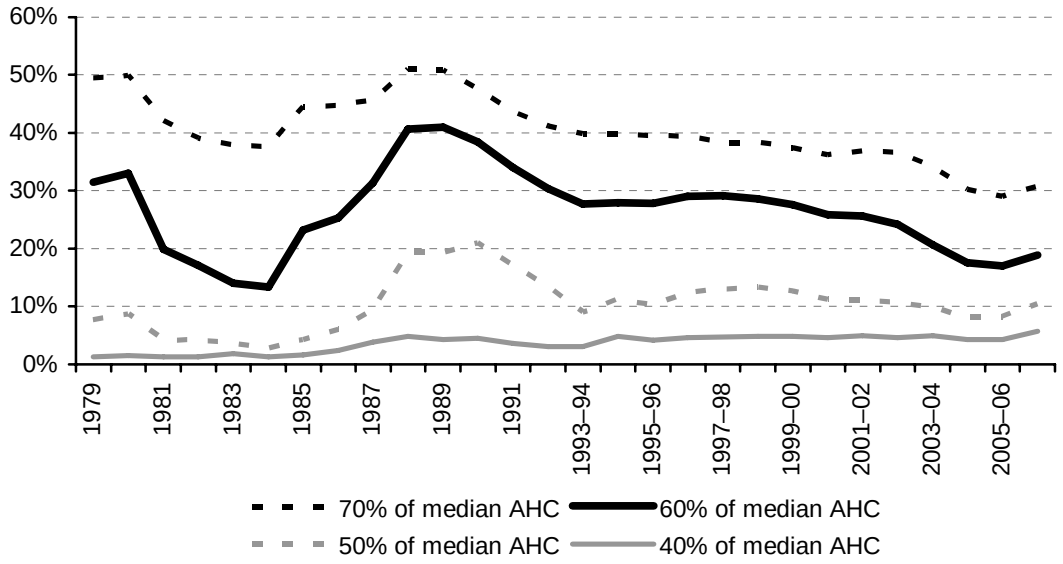
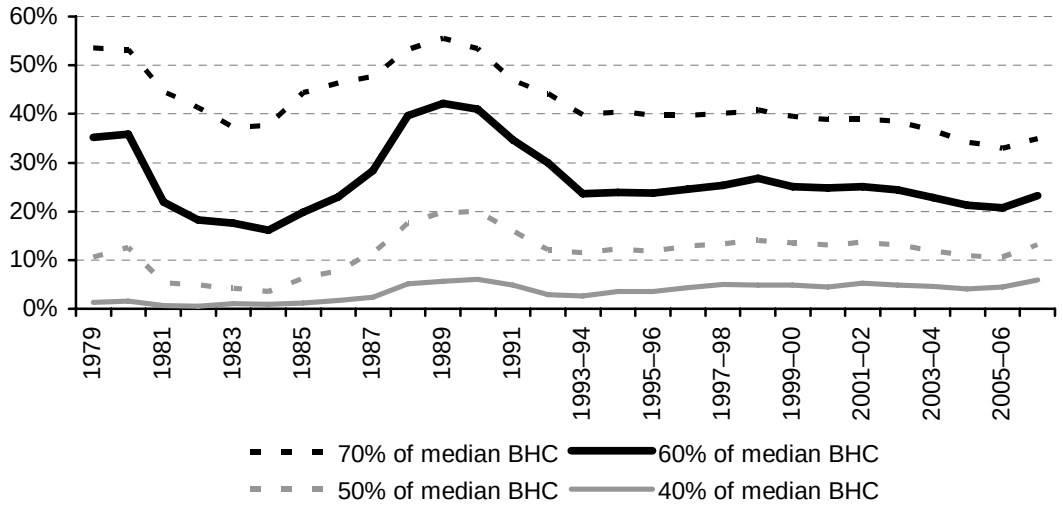


Figure 4.5b. Relative poverty: percentage of pensioners living in households with incomes below various fractions of median income (BHC)



Source: Authors' calculations based on Family Expenditure Survey and Family Resources Survey, various years.

[38] This is the poverty rate amongst individuals above the current pension age – 65 for men and 60 for women. Under the HBAI methodology, this depends on the combined income of the household, which may include working-age adults.

Using a poverty line of 60% median income, there are now 2.1 million pensioners in poverty measuring incomes AHC and 2.5 million measuring incomes BHC in the UK. Despite the rise in pensioner poverty, the rate of pensioner poverty measuring incomes AHC remains lower than the rate for the population as a whole.

Tables 4.1 and 4.2 set out poverty rates amongst pensioners since 1996–97. Measuring incomes AHC, pensioner poverty has declined extremely rapidly: the 10.2 percentage point fall since 1996–97 at 60% of median AHC income constitutes a cut in poverty of over a third. There has also been a fall in pensioner poverty measuring incomes BHC, by 1.4 percentage points between 1996–97 and 2006–07, but this is only barely statistically significant. These falls in pensioner poverty (BHC or AHC) tended to be concentrated during the current government's second term rather than its first term.

Figure 4.5 shows how pensioner poverty has evolved over a longer time frame (since 1979) with a variety of poverty thresholds. It shows that poverty rates amongst pensioners have fallen using a variety of thresholds measuring incomes AHC or BHC, although the latest year's data have done much to reverse the relatively modest decline in BHC incomes that has occurred since Labour came to power.[39]

In order to look more closely at the rise in pensioner poverty that took place between 2005–06 and 2006–07, we split pensioners into groups based upon their year of birth. We call these groups *cohort* groups. From this breakdown, we can see that the rise in poverty occurred across nearly all cohorts and is entirely driven by an increased risk of poverty, offset

Table 4.6. Decomposition of the rise in relative pensioner poverty (BHC), 2005–06 to 2006–07, by cohort

	Poverty rate		Percentage of pensioner population		Compositional effect	Incidence effect	Total change in poverty
	2005–06	2006–07	2005–06	2006–07			
Year of birth							
Before 1910	19.1%	35.9%	0.4%	0.2%	–1,115	5,855	4,740
1911 to 1915	21.6%	38.0%	2.1%	1.7%	–3,304	34,094	30,790
1916 to 1920	25.3%	28.8%	7.4%	5.7%	–9,245	24,350	15,106
1921 to 1925	23.8%	27.3%	15.6%	14.6%	–3,668	57,497	53,829
1926 to 1930	22.1%	29.4%	18.5%	18.0%	–1,947	144,791	142,844
1931 to 1935	20.5%	21.0%	22.0%	21.3%	1,000	11,475	12,475
1936 to 1940	17.7%	17.8%	23.7%	23.6%	804	4,225	5,029
1941 to 1945	18.4%	19.8%	10.3%	13.3%	–9,333	17,781	8,448
After 1945		13.8%		1.6%	–26,310	12,047	–14,264
All pensioners	20.8%	23.2%	100.0%	100.0%	–53,117	312,115	276,887

Notes: Poverty rates are measured as the proportion of the group with income below 60% of the population-wide BHC median income. The 'All pensioners' total change includes an effect due to the size of the pensioner population, and hence cannot be derived by simply summing the other totals.
Source: Authors' calculations based on Family Resources Survey, 2005–06 and 2006–07.

[39] Chapter 3 of Brewer, Goodman, Muriel and Sibieta (2007) showed how around one-quarter of the fall in relative poverty amongst pensioners (AHC) could be attributed to compositional effects, as new (and relatively well-off) cohorts of adults reach the pension age and older (and relatively poor) cohorts die.

somewhat by the changing composition of pensioners (younger pensioners are typically less poor). Table 4.6 shows such a breakdown using incomes calculated BHC (the picture using incomes calculated AHC is very similar; contact the authors for details).

The percentage increase in the incidence of poverty is most dramatic for those very few pensioner households where the head was born prior to 1915 (aged at least 91 in 2006–07) and the much more numerous group of pensioners born between 1926 and 1930 (aged 76 to 80 in 2006–07): the increase in the risk of poverty for the latter group accounts for over 45% of the total increase in the number of pensioners in poverty attributed to incidence effects. Between 1996–97 and 2005–06, it was the older pensioners who saw the largest falls in the incidence of poverty, but the rise in poverty in the latest year of data means that those born before 1915 and those born between 1926 and 1930 now have a higher incidence of poverty than in 1996–97, measuring incomes BHC.[40]

Why has pensioner poverty risen?

A precise analysis of the underlying causes of the increase in poverty is difficult because of the interaction between private incomes, taxes and state benefits. However, this Commentary has already highlighted a number of changes between 2005–06 and 2006–07 that help explain why the incomes of low-income pensioners have not kept up with the median:

- As mentioned in Section 2.2, age-related payments, which provided between £50 and £200 to individuals aged 60 or over in Winter 2005–06, were not repeated in Winter 2006–07. We estimate that if these payments had been repeated in Winter 2006–07, pensioner poverty would have been about 100,000 lower in 2006–07 than it actually was.
- As highlighted earlier in this section, inflation accelerated during 2006, meaning that the value of the basic state pension fell in real terms, and the value of the pension credit guarantee element, although rising in real terms, barely kept pace with the BHC poverty line.
- Finally, even after allowing for the abolition of age-related payments, there was a decline in the amount of state benefits that pensioners reported to be receiving in the 2006–07 FRS survey, reflecting a similar trend seen for the entire population (see Chapter 2 for details) and which is at odds with an equivalent estimate based on administrative data. In Appendix C, we discuss these issues in more detail and, in particular, show that the proportion of actual expenditure on pension credit (perhaps most likely to be omitted due to misunderstanding) recorded in the FRS fell between 2005–06 and 2006–07.

Working in the other direction, though, the number of pensioners living in households with low private incomes fell somewhat between 2005–06 and 2006–07, and there was a rise in the average private incomes of pensioners (mostly private pensions, investment income and employment income).

Overall, then, part of the measured rise in pensioner poverty likely arises only as a result of changes in the ability of the FRS to capture accurately the means-tested benefits received by

[40] This is particularly striking because the differential mortality between rich and poor pensioners should mean that those who have survived should have initially been the richer pensioners in these cohorts. A related decomposition shows that most of the rise in poverty was due to a higher risk of poverty for given pensioner household types. More details are available from the authors upon request.

pensioners. On the other hand, the rise in pensioner poverty in 2006–07 is broadly supported by other data sources and analyses:

- IFS researchers have previously predicted a rise in pensioner poverty of around 100,000 for 2006–07. This rise was mostly driven by the abolition of age-related payments, which we still think explains about 100,000 of the measured rise in pensioner poverty.[41]
- Data from the Expenditure and Food Survey 2006 suggest that there was a fall in the nominal average unequivalised incomes of pensioner couples dependent on state pensions from £234 per week in 2005–06 to £226 per week in calendar year 2006.[42] Although definitions and time frames are not directly comparable, this offers some support to our findings.

For these reasons – plus the fact that abolition of age-related payments and accelerating inflation both certainly acted to reduce the real income of pensioner households – we conclude that the rise in pensioner poverty found in the FRS in 2006–07 is likely to be real.

Poverty amongst working-age adults with no dependent children

Poverty among the remainder of the population – working-age adults – has changed little since 1996–97. Because income is measured at the household level, poverty among working-age parents is likely to follow a similar path to that among children, and for this reason it is informative to consider working-age adults without children separately from working-age parents, as was done in Tables 4.1 and 4.2 (this approach is different from what is done in *Opportunity for All*, which only presents poverty rates for working-age individuals as a whole).

Using a poverty threshold of 60% of the median, there are now 4.0 million working-age non-parents living in poverty in the UK measuring incomes AHC (3.0 million BHC). This was unchanged from 2005–06, although that year saw the largest annual rise since 1990 (assessed on unrounded numbers); measuring incomes BHC, there was also no change from 2005–06. The rates of poverty for this group are now 17.6% (AHC) and 13.2% (BHC), with the former being the joint-highest recorded poverty rate amongst working-age non-parents since the start of our consistent time series in 1961, and the latter just shy of the all-time high recorded for 2005–06. This is also true for a poverty line of 50% of median income (see Figure 4.6).

Table 4.7 decomposes the change in the rate of poverty amongst working-age non-parents since 1996–97, measuring incomes AHC, into changes in the *risk* of being in poverty for particular groups (the incidence effect) and the changing *composition* of the working-age non-parent population (the compositional effect). The table shows that the rise in relative poverty amongst working-age non-parents over this period is the product of two offsetting trends:[43]

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[41] Brewer, Browne, Emmerson, Goodman, Muriel and Tetlow, 2007.

[42] See Office for National Statistics (2007 and 2008).

[43] A decomposition of changes in relative poverty measuring incomes BHC (not shown, but available from the authors on request) reveals a larger (more positive) incidence effect, with all groups experiencing a rise in the risk of poverty. Focusing on the change between 2005–06 and 2006–07, the incidence of poverty fell for most groups of working-age adults without dependent children using both AHC and BHC incomes, aided by a beneficial change in the composition of families, with both fewer single adults and more couples having both partners working full-time. However, this is counteracted by a significant increase in the incidence of poverty for couples where neither partner

Figure 4.6a. Relative poverty: percentage of working-age non-parents living in households with incomes below various fractions of median income (AHC)

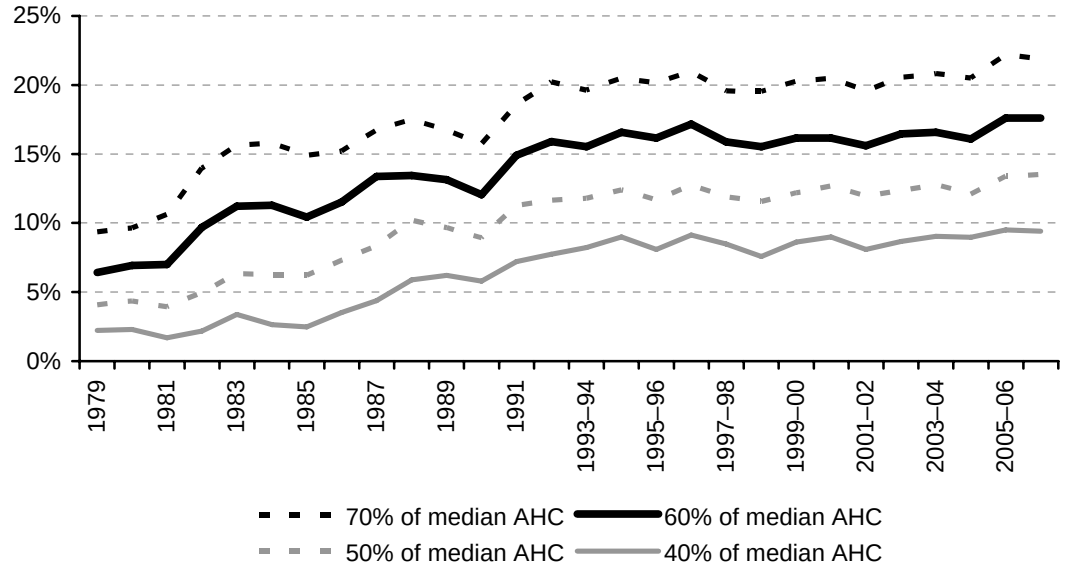
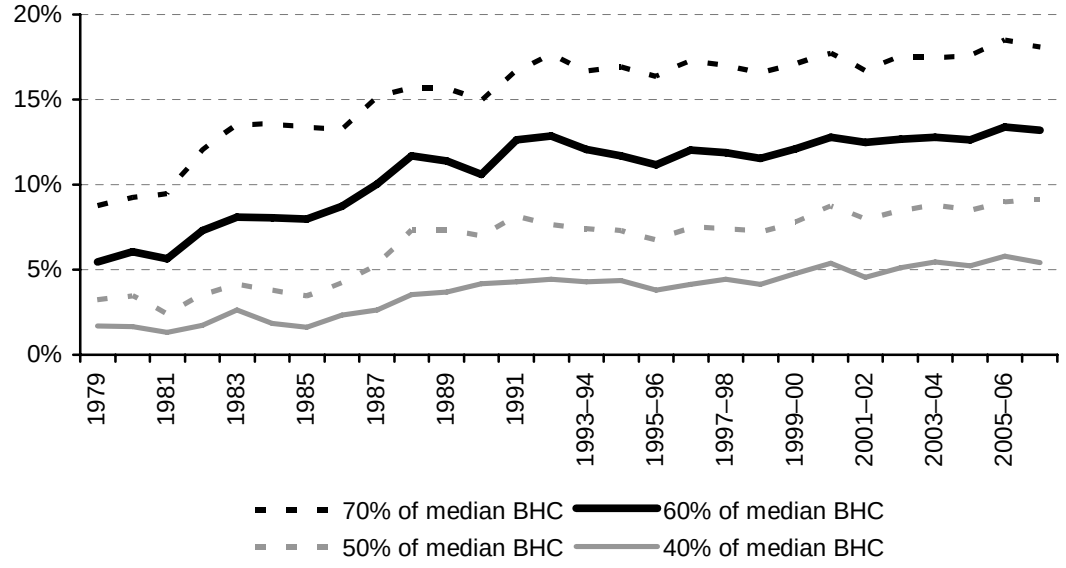


Figure 4.6b. Relative poverty: percentage of working-age non-parents living in households with incomes below various fractions of median income (BHC)



Note: Figures are presented for GB up until 2001–02 and then for the whole of the UK from 2002–03 onwards.
Source: Authors' calculations based on Family Expenditure Survey and Family Resources Survey, various years.

works and (for incomes measured AHC only) those where one partner works full-time and the other does not work. Further details are available from the authors on request.

Table 4.7. Decomposition of the rise in relative poverty amongst working-age non-parents (AHC), 1996–97 to 2006–07, by family type

	Poverty rate		Percentage of population		Compositional effect	Incidence effect	Total change in poverty
	1996–97	2006–07	1996–97	2006–07			
Single individuals							
Full-time	6.7%	8.0%	25.4%	25.4%	0.0%	0.3%	0.3%
Part-time	28.2%	25.5%	4.0%	5.4%	0.1%	–0.1%	0.0%
Workless	55.6%	51.7%	14.8%	14.7%	–0.0%	–0.6%	–0.6%
Couples, no children							
Self-employed	14.5%	15.1%	7.8%	7.1%	0.0%	0.1%	0.1%
Two full-time earners	0.3%	1.1%	18.9%	20.6%	–0.3%	0.2%	–0.1%
One full-time, one part-time	2.0%	3.6%	8.6%	8.8%	–0.0%	0.1%	0.1%
One full-time, one not working	10.1%	16.5%	8.7%	8.6%	0.0%	0.6%	0.6%
One or two part-time	21.0%	21.2%	4.1%	4.0%	–0.0%	0.0%	0.0%
Workless	39.2%	49.5%	7.7%	5.4%	–0.6%	0.7%	0.1%
All working-age non-parents	17.2%	17.6%	100.0%	100.0%	–0.8%	1.2%	0.4%

Note: Poverty rates are measured as the proportion of the group with income below 60% of the GB population-wide AHC median income for 1996–97 and the UK population-wide AHC median income for 2006–07. Because of the significant increase in population since 1996–97 (and the inclusion of Northern Ireland from 2002–03), we present results using percentage points rather than numbers.
Source: Authors' calculations based on Family Resources Survey, 1996–97 and 2006–07.

- Increased employment has led to compositional shifts towards family types with adults in work rather than not in work, and this leads to a beneficial compositional effect (having a minus sign in Table 4.7), acting to reduce relative poverty.
- On the other hand, the incidence effects have acted to increase relative poverty overall (being positive in the table), because most of the family types here have seen a rising risk of relative poverty over the period, with the most important (quantitatively) of these involving rises in the (already high) risk of poverty for workless couple households.

Under both income measures, poverty rates for working-age non-parents rose between 1996–97 and 2006–07, meaning that the reduction in poverty brought about by increased employment was insufficient to offset the rising risk of relative poverty for particular family types.

4.3 Regional trends in poverty

This section looks at the trends in poverty at the regional level across the UK for the whole population.[44] To calculate the number of individuals in poverty in a region, we simply count

[44] As with the regional analysis in Section 2.3, we use two-year averages because of the higher sampling error when looking at regional poverty rates. Even so, small sample sizes mean changes in poverty of less than about 2

how many individuals in that region live in households with equivalised incomes below 60% of the national median; in other words, we do not calculate a separate poverty line for each region on the basis of its median income.

When looking at regional poverty levels (just as with mean and median income in each region in Section 2.3), we should ideally use regional price indices to account for the different costs of living in different parts of the country. This is not possible for the period since 1996–97 due to a lack of consistent regional price indices, and we therefore use national price indices to calculate real incomes when discussing poverty *trends*. Note that this means that we are likely to be overstating poverty somewhat in the cheaper regions of the country (for instance, the North and Wales) and understating it for the more expensive areas (such as London and the East and South East), although the magnitude of these effects is unknown. If regional price differences have remained constant, however, the *changes* in poverty as measured using national prices should give a good indication of the actual changes in poverty accounting for the different costs of living in different regions. We do, however, have regional price indices for one specific year (2004–05) and later we present figures on the poverty rate for this year only using regional price indices.

Tables 4.8 and 4.9 show the rates of poverty calculated using income measured BHC and AHC respectively.

Table 4.8. Relative poverty: a regional comparison of trends (BHC)

Region	Average poverty rate in period			Change, 1995–1997 to 2005–2007
	1995–1997	2003–2005	2005–2007	
North East	24.6%	21.2%	20.1%	–4.5%
North West	20.3%	18.7%	20.7%	+0.4%
Yorkshire	22.1%	18.8%	20.2%	–1.9%
East Midlands	19.8%	18.6%	20.2%	+0.5%
West Midlands	20.3%	20.0%	20.8%	+0.5%
East of England	15.0%	14.5%	13.8%	–1.2%
London	17.7%	18.9%	17.2%	–0.5%
South East	13.2%	11.8%	13.6%	+0.5%
South West	17.0%	14.9%	15.5%	–1.5%
Wales	22.1%	20.8%	20.6%	–1.5%
Scotland	20.7%	17.9%	17.1%	–3.5%
Northern Ireland		20.5%	20.1%	
Total	18.7%	17.4%	17.8%	–0.9%

Notes: The table uses a two-year average in order to 'smooth' noise generated by sampling error. Regions are defined as Government Office Regions. The total given for 1995–1997 is for GB only.
Sources: Family Resources Survey, various years; authors' calculations.

percentage points are unlikely to be statistically significant, with smaller regions having larger margins of error and therefore requiring larger percentage point changes for statistical significance.

Using incomes measured BHC, we find the following:

- If we do not adjust for regional price variation, poverty averaged over 2005–06 and 2006–07 is highest in northern England, the Midlands and Wales, and lowest in the East, South East and South West, with Scotland and London somewhere in the middle.
- Since 1995–96 to 1996–97, poverty has fallen most (in percentage point terms) in the North East and Scotland, and by between one and two percentage points in Yorkshire, the East, the South West and Wales, whilst it has risen very slightly in four of the five remaining regions (the North West, East Midlands, West Midlands and the South East), by about half a percentage point in each case.
- The rise in poverty between 2004–05 and 2006–07 that occurred on average in the UK is largest in the North West, Yorkshire, the East Midlands and the South East (comparing 2003–2005 with 2005–2007). On the other hand, poverty declined over this period in the North East, the East, London, Wales, Scotland and Northern Ireland.

Table 4.9. Relative poverty: a regional comparison of trends (AHC)

Region	Average poverty rate in period			Change, 1995–1997 to 2005–2007
	1995–1997	2003–2005	2005–2007	
North East	29.7%	22.3%	23.4%	–6.3%
North West	26.0%	21.4%	24.0%	–2.0%
Yorkshire	25.7%	21.6%	22.2%	–3.5%
East Midlands	23.9%	21.0%	22.5%	–1.4%
West Midlands	24.4%	22.0%	24.4%	–0.0%
East of England	21.2%	18.4%	18.7%	–2.6%
London	30.2%	27.4%	27.5%	–2.8%
South East	20.0%	16.8%	18.3%	–1.7%
South West	23.6%	19.1%	19.6%	–4.0%
Wales	27.4%	22.1%	22.5%	–4.9%
Scotland	23.9%	19.9%	19.3%	–4.6%
Northern Ireland		20.8%	19.9%	
Total	24.8%	21.0%	22.0%	–2.8%

Notes: The table uses a two-year average in order to 'smooth' noise generated by sampling error. Regions are defined as Government Office Regions. The total given for 1995–1997 is for GB only.
Sources: Family Resources Survey, various years; authors' calculations.

Using incomes measured AHC, we find the following:

- Poverty averaged over 2005–06 and 2006–07 is highest in London (because of its higher housing costs). It is lowest in the East, South East, South West and Scotland, with other regions falling in between.
- Since 1995–96 to 1996–97, poverty rates have fallen fastest in the North East, South West, Wales and Scotland and by between two and four percentage points in the North West, Yorkshire, the East and London. The rate of poverty has fallen less quickly in the remainder of the country, although it has not risen in any region under this measure.

- The North West and West Midlands show the largest rises in poverty rate over the last two years of data, although there are rises for every region except Scotland and Northern Ireland.

Overall, the regional variation in poverty rates was less marked in 2005–06 to 2006–07 than it was in the period 1995–96 to 1996–97: Wales and northern regions of England have 'caught up' with the English midlands, whilst the South West and East have converged towards the low rates of poverty found in the South East of England. The standard deviation of regional poverty rates fell from 3.34% to 2.84% (BHC) and from 3.17% to 2.83% (AHC). London is particularly interesting, with the highest rate of poverty using incomes measured AHC but with poverty close to the UK average using incomes measured BHC.

As mentioned earlier, we are unable to use regional prices for all years but can do so for one year (2004–05) using information on regional price levels compiled by the Office for National Statistics (see Notes and Sources of Table 4.10 for more details).

Table 4.10. Relative poverty: using regional prices (2004–05) (BHC)

Region	Using national prices	Using regional prices	Regional ranking
North East	21.6%	18.0%	5
Northern Ireland	20.6%	18.4%	3
West Midlands	19.7%	19.0%	2
Wales	19.3%	15.3%	8
East Midlands	18.9%	18.2%	4
North West	18.4%	16.9%	6
London	18.2%	22.6%	1
Yorkshire	18.0%	15.1%	9
Scotland	17.2%	14.9%	10
South West	14.1%	15.5%	7
East of England	13.8%	14.6%	12
South East	12.2%	14.9%	11
Total	17.0%	17.0%	

Notes: Regions are defined as Government Office Regions. Regional price levels are reported as an index with the UK average price as the base (i.e. UK=100). Regions with prices above the UK average have numbers in excess of 100, and vice versa. In order to find real income adjusted for regional price differences, we divide income by the region's index number/100. Hence, areas with prices higher than the UK average see a fall in their income once adjusted for regional prices, and vice versa for relatively cheap areas. BHC incomes are adjusted using the all-items RPI regional index.
Sources: Family Resources Survey, 2004–05; ONS regional price indices available at http://www.statistics.gov.uk/articles/economic_trends/ET615Wingfield.pdf; authors' calculations.

Table 4.10 shows the effect of using regional price indices for one year of data only, 2004–05. Arranged with the region with the highest poverty rate using national prices first, the first two columns of numbers compare the rates of poverty using incomes measured BHC for national and for regional price indices, whilst the last column shows the regional ranking based on regional prices. The table shows that accounting for differences in prices across regions is potentially very important in poverty analysis. In particular:

- Accounting for regional price differences makes London's poverty rate increase considerably, going from mid-table to the highest in the country.

- Similar, although smaller, increases in poverty when accounting for regional price differences can be seen for the South East, East and South West of England.
- On the other hand, poverty is considerably lower in the North East, Yorkshire, Scotland and Wales when accounting for regional price differences. For instance, Wales improves its position from the fourth worst poverty rate to a position better than average, when accounting for price differences, and the North East from the highest to only the fifth highest.

Accounting for differences in prices across regions has such a significant impact on measured regional poverty that the regular calculation of regional prices should be considered, with the output of this being useful not only for poverty and household income analysis but also in other areas, such as the calculation of regional gross value added (a measure of net economic production).

4.4 Absolute poverty

All the poverty figures presented so far have been based on relative measures of poverty: that is, measures of poverty where the poverty line moves each year in line with median income growth. Tables 4.11 and 4.12 set out estimates of the number of individuals in poverty, where

Table 4.11. Absolute poverty: percentage and number of individuals in households with incomes below 60% of 1996–97 median AHC income

	Children		Pensioners		Working-age parents		Working-age non-parents		All	
	%	Million	%	Million	%	Million	%	Million	%	Million
1996–97 (GB)	34.1	4.3	29.1	2.9	26.6	3.3	17.2	3.5	25.3	14.0
1997–98 (GB)	32.4	4.1	27.7	2.8	25.1	3.1	15.4	3.2	23.6	13.2
1998–99 (GB)	31.7	4.0	26.0	2.6	24.4	3.0	14.8	3.1	22.7	12.7
1999–00 (GB)	29.0	3.7	21.1	2.1	22.6	2.8	14.4	3.0	20.7	11.6
2000–01 (GB)	24.6	3.1	16.2	1.6	19.6	2.4	14.0	3.0	18.0	10.1
2001–02 (GB)	20.7	2.6	11.6	1.2	17.1	2.1	12.1	2.6	15.0	8.5
2002–03 (UK)	18.2	2.4	9.7	1.0	15.4	1.9	11.9	2.7	13.6	8.0
2003–04 (UK)	17.4	2.3	8.6	0.9	14.9	1.9	12.2	2.7	13.3	7.8
2004–05 (UK)	15.9	2.0	6.8	0.7	13.6	1.7	11.3	2.6	12.0	7.1
2005–06 (UK)	16.4	2.1	7.0	0.8	14.5	1.8	12.3	2.8	12.7	7.5
2006–07 (UK)	17.2	2.2	8.8	1.0	14.9	1.9	12.2	2.8	13.2	7.9
Changes										
1996–97 to 2006–07	–16.9		–20.3		–11.7		–5.0		–12.1	
2004–05 to 2006–07	1.3	0.2	1.9	0.2	1.3	0.2	0.9	0.2	1.3	0.9
2005–06 to 2006–07	(0.9)	(0.1)	1.7	0.2	(0.4)	(0.1)	(–0.2)	(0.0)	0.7	0.4

Notes: Reported changes may not equal differences between the corresponding numbers due to rounding. Changes in parentheses are not significantly different from zero at the 5% level. Because of the discontinuity in the series due to the inclusion of Northern Ireland from 2002–03, changes in the number of people in poverty since 1996–97 are not available. However, due to Northern Ireland's small population, and similar poverty rates, the changes in poverty rate reported should be accurate. All figures are presented using the modified OECD equivalence scale.
Source: Authors' calculations based on Family Resources Survey, various years.

Table 4.12. Absolute poverty: percentage and number of individuals in households with incomes below 60% of 1996–97 median BHC income

	Children		Pensioners		Working-age parents		Working-age non-parents		All	
	%	Million	%	Million	%	Million	%	Million	%	Million
1996–97 (GB)	26.7	3.4	24.6	2.4	20.2	2.5	12.0	2.5	19.4	10.8
1997–98 (GB)	25.8	3.3	23.7	2.4	19.5	2.4	11.4	2.4	18.6	10.4
1998–99 (GB)	24.1	3.1	23.8	2.4	18.0	2.2	10.7	2.2	17.7	9.9
1999–00 (GB)	21.0	2.7	20.2	2.0	16.4	2.0	10.4	2.2	15.8	8.9
2000–01 (GB)	17.2	2.2	17.5	1.8	13.5	1.6	10.4	2.2	13.9	7.8
2001–02 (GB)	13.3	1.7	15.6	1.6	11.1	1.3	8.8	1.9	11.5	6.5
2002–03 (UK)	12.4	1.6	14.1	1.5	10.3	1.3	8.9	2.0	10.9	6.4
2003–04 (UK)	12.0	1.6	13.1	1.4	10.0	1.2	9.2	2.1	10.7	6.2
2004–05 (UK)	11.3	1.5	11.7	1.3	9.5	1.2	8.7	2.0	10.0	5.9
2005–06 (UK)	11.4	1.5	10.9	1.2	9.9	1.3	9.1	2.1	10.1	5.9
2006–07 (UK)	11.8	1.5	13.0	1.4	10.0	1.3	9.0	2.1	10.6	6.3
Changes										
1996–97 to 2006–07	–14.9		–11.6		–10.2		–3.0		–8.7	
2004–05 to 2006–07	(0.5)	(0.1)	1.3	0.2	(0.5)	(0.1)	(0.3)	(0.1)	0.6	0.4
2005–06 to 2006–07	(0.4)	(0.1)	2.1	0.2	(0.1)	(0.0)	(–0.1)	(0.0)	(0.5)	(0.3)

Notes: Reported changes may not equal differences between the corresponding numbers due to rounding. Changes in parentheses are not significantly different from zero at the 5% level. Because of the discontinuity in the series due to the inclusion of Northern Ireland from 2002–03, changes in the number of people in poverty since 1996–97 are not available. However, due to Northern Ireland's small population, and similar poverty rates, the changes in poverty rate reported should be accurate. All figures are presented using the modified OECD equivalence scale.
Source: Authors' calculations based on Family Resources Survey, various years.

the poverty line is fixed in real terms at 60% of 1996–97 median income, measuring incomes AHC and BHC respectively. The tables show poverty for the population as a whole, and separately for children, pensioners and working-age adults. The choice of a base year for an absolute poverty line is arbitrary, but 1996–97 is the one chosen by the government in *Opportunity for All*. Note that the absolute poverty tier of the government's child poverty target is assessed against 60% of median income in 1998–99.

In 2006–07, there were 7.9 million individuals (13.2% of the UK population) living in absolute poverty measuring incomes AHC, a statistically significant rise of 400,000 since 2005–06. Measuring incomes BHC, there were 6.3 million individuals in absolute poverty, a not statistically significant 300,000 higher than in 2005–06 (the rate of absolute poverty measuring incomes BHC and based on unrounded numbers rose from 10.1% to 10.6%).

This is the second consecutive year that the rate of absolute poverty has risen measuring incomes both AHC and BHC (using the 1996–97 median income as a poverty line). Prior to this, the average annual decline in absolute poverty measuring incomes AHC between 1996–97 and 2004–05 was 1.7 percentage points: this adds to the impression that income and poverty changes since 2004–05 have been quite unusual. Of course, the rapid decline in absolute poverty between 1996–97 and 2004–05 means that absolute poverty in 2006–07 remains considerably lower than the respective levels in 1996–97, and 60% of the 1996–97 median income now corresponds to 50% of median income in 2006–07.

There was also a small rise in absolute child poverty in 2006–07, of 0.9 percentage points (AHC) and 0.4 percentage points (BHC). These changes are not statistically different from zero, but they are unusual: it is only the second time that absolute child poverty on this measure has risen since 1992.

Pensioners saw a considerable rise in absolute poverty measuring incomes both AHC and BHC, with rises of 1.7 and 2.1 percentage points, respectively. Both of these changes are statistically different from zero and represent the first notable rise in absolute pensioner poverty since 1989, using incomes measured both AHC and BHC.

Unlike last year, trends in absolute poverty have been best for working-age non-parents, for whom the risk of falling into absolute poverty has fallen by 0.2 percentage points using incomes measured AHC and by 0.1 percentage points using incomes measured BHC. Neither effect is statistically significantly different from zero, but this reversal of the pattern whereby this group now does best is interesting.

4.5 Conclusion

For the second consecutive year, poverty has risen on both the relative measure and the absolute measure in 2006–07. Unlike 2005–06, when the increase in poverty was concentrated amongst working-age adults without children, in the latest year the rise was most evident for one of the government's favoured population groups – pensioners.

Pensioner poverty rose by about 200,000 using incomes measured AHC and by 300,000 BHC between 2005–06 and 2006–07. That the abolition of one-off age-related payments has increased pensioner poverty is unsurprising: in years of one-off payments to pensioners, their incomes will rise; but in the next year, their incomes will fall back and poverty will rise, other things being equal. In Budget 2008, the government announced additional one-off payments to pensioners in Winter 2008 (of £50 or £100). These payments will increase pensioner incomes and tend to reduce pensioner poverty in 2008–09. However, as in 2006–07, if these payments are not repeated, pensioner poverty may then increase the very next year. Pressure to 'do something' about a rise in poverty may put the government under pressure to make permanent supposedly one-off extra payments.

Together with the news that child poverty has risen (although insignificantly) for the second year in a row, this will surely be disappointing for the government. Looking forward, child poverty is likely to fall in 2008–09 and 2009–10 due to the reforms announced in Budget 2007 and Budget 2008, although even after these reforms, it is predicted that the government will miss its target by about 500,000 and that extra spending of around £2.8 billion a year is required to give the government a 50:50 chance of meeting its target.

The rate of poverty varies across regions, with it lowest in the South East (both AHC and BHC) and highest in the West Midlands (BHC) and London (AHC). Taking account of differences in prices across regions is important, however, reducing poverty in the relatively inexpensive parts of the country (such as Wales, Scotland and the North East of England), whilst leading to an increase in measured poverty in more expensive areas (particularly London and the South East).

5. Material deprivation

Key findings

- Child poverty has risen slightly since 2004–05 using income-based indicators, but it has fallen using the government's new combined low-income–material-deprivation indicator over the same period. Our own indicator of relative material deprivation is unchanged since 2004–05, showing that the living standards of poor families with children have risen since 2004–05 but have not caught up with those of richer families with children.
- Levels of material deprivation generally fall as incomes rise, but children in households with less than 40% of median income – so-called 'severe' poverty – are, on average, less deprived than those in households with between 40% and 60% of median income. This reinforces existing concerns that households with the lowest recorded incomes in HBAI are not those with the lowest living standards.
- On average, London has low levels of income-based poverty and Scotland, Wales and Northern Ireland have high levels, but this ordering is reversed with a material deprivation indicator. This reinforces other findings that it is desirable to account for regional differences in the cost of living when constructing measures of income-based poverty.
- Children in a working lone-parent family are less likely to be in income poverty than those in a one-earner couple family, but they are more likely to be in poverty using a material deprivation indicator. Also, they tend to have higher levels of deprivation than children in a one-earner couple family with similar levels of equivalised income. This means that the equivalence scales used in the official income-based measures of poverty overstate the extra resources needed by couples with children, relative to lone parents, to escape material deprivation. If the material deprivation indicator is a good measure of living standards, then this weakens the case for paying a higher level of working tax credit to couples on the basis that their costs are higher. There may, though, be other reasons to give this group higher entitlements to tax credits.
- Families with children and disabled adults are less likely to be in income-based poverty than those without disabled adults, presumably because many receive disability-related additions to state benefits. However, they are more likely to be in material deprivation poverty. This questions the implicit assumption in HBAI that state benefits paid explicitly to the long-term sick or disabled allow families to attain higher living standards. It suggests that the higher benefits instead compensate partly or wholly for extra needs.

Most of the statistics we have presented thus far in this Commentary have been based on a 'snapshot' measure of income, i.e. income assessed at a particular point in time. As indicated

in Appendix A, for some households such a measure of household income might not be an accurate representation of their living standard; such households include self-employed individuals with volatile income and temporarily unemployed individuals. Moreover, measures of poverty based on income might not capture all the aspects of poverty, such as quality of housing or access to public services.[45]

Such concerns motivated the government's announcement in 2003 that it would adopt three indicators of poverty to judge progress towards its 2010 target to cut child poverty by one-half compared with its level in 1998. Two of these are based on the measure of household income discussed in this Commentary up to now. However, the third encompasses an indicator of 'material deprivation'. Children are classed as living in material deprivation if their parents say they cannot afford certain items – for example, a birthday party or a family holiday.

Section 5.1 discusses the exact construction of the material deprivation indicator, together with its advantages and disadvantages. Next, Section 5.2 describes trends in the material deprivation indicator to date and compares these with trends in the other two purely income-based indicators of poverty for the 2010 target. Section 5.3 takes the analysis further by asking what else the material deprivation data can teach us about the living standards of families with children. For instance, what is the relationship between income and material deprivation, and does such a measure change who we class as living in poverty and the risk factors associated with poverty? Section 5.4 concludes.

5.1 The material deprivation indicator

This section discusses the construction of the material deprivation indicator, plus the advantages and disadvantages of such an indicator.

Constructing the material deprivation indicator

The material deprivation indicator is based on a set of 21 questions (11 based on the level of deprivation experienced by the adults in the family and 10 based on the level of deprivation experienced by the children).[46] The full set of questions are summarised in Table 5.1, which also shows the proportion of families who had access to these items in 2004–05. The questions were not asked of families without children, such as working-age adults without dependent children or pensioners without dependent children.

The 2007 Comprehensive Spending Review announced how these questions would be combined to form the material deprivation indicator. It was decided that families would lack an item, and so be classified as materially deprived on that question, if they lacked the item because they could not afford it. Families who lacked the item because they said they did not want or need the item would not be classed as living in deprivation for these items. This

[45] Some indicators of these aspects of poverty are provided in the government's annual audit of poverty, *Opportunity for All.*

[46] These questions were decided on following consultation and further analysis; see McKay and Collard (2003) for more details.

Table 5.1. List of items used to construct material deprivation indicator

Deprivation questions	Percentage with access to item
Adult questions	
A holiday away from home for at least one week a year, whilst not staying with relatives at their home	58.1%
Have friends or family around for a drink or meal at least once a month	59.8%
Two pairs of all-weather shoes for each adult	88.9%
Enough money to keep your home in a decent state of decoration	79.0%
Household contents insurance	76.1%
Regular savings of £10 a month or more for rainy days or retirement	55.5%
Replace any worn-out furniture	59.6%
Replace or repair major electrical goods such as a refrigerator or a washing machine, when broken	70.7%
A small amount of money to spend each week on yourself, not on your family	65.4%
Adult has a hobby or leisure activity	58.8%
In winter, able to keep accommodation warm enough	92.5%
Child questions	
A family holiday away from home for at least one week a year	64.5%
Enough bedrooms for every child of 10 or over to share their bedroom only with siblings of the same sex	85.1%
Leisure equipment such as sports equipment or a bicycle	84.8%
Celebrations on special occasions such as birthdays, Christmas or other religious festivals	93.4%
Swimming at least once a month	57.0%
Child has a hobby or leisure activity	73.7%
Friends around for tea or a snack once a fortnight	68.2%
Toddler group/nursery/playgroup at least once a week	64.8%
Go on school trips	88.7%
Outdoor space or facilities nearby to play safely	84.0%
Memo: maximum possible score	*15.286*

Notes: Percentages refer to percentage of all families with children who had access to this item. The maximum possible deprivation score is equal to the sum of the percentages (expressed as decimals, i.e. 0.581 + 0.598 + … + 0.840).
Source: Authors' calculations based on Family Resources Survey, 2004–05.

procedure is performed in order to take account of individual or cultural preferences against certain items and is said to isolate 'enforced hardship'.

A method known as prevalence weighting is then used to combine all 21 items. Under this approach, each item the family lacks is weighted by the proportion of families who had access to that item in 2004–05 (see Table 5.1) and then all the weighted items are summed together to form a material deprivation score. This weighting process implicitly assumes that 'People feel more deprived if they see many more haves than have nots for any event, when they are among the have nots themselves' (Desai and Shah, 1988). So, for instance, not being able to afford a birthday party would contribute more to material deprivation scores (93.4% of

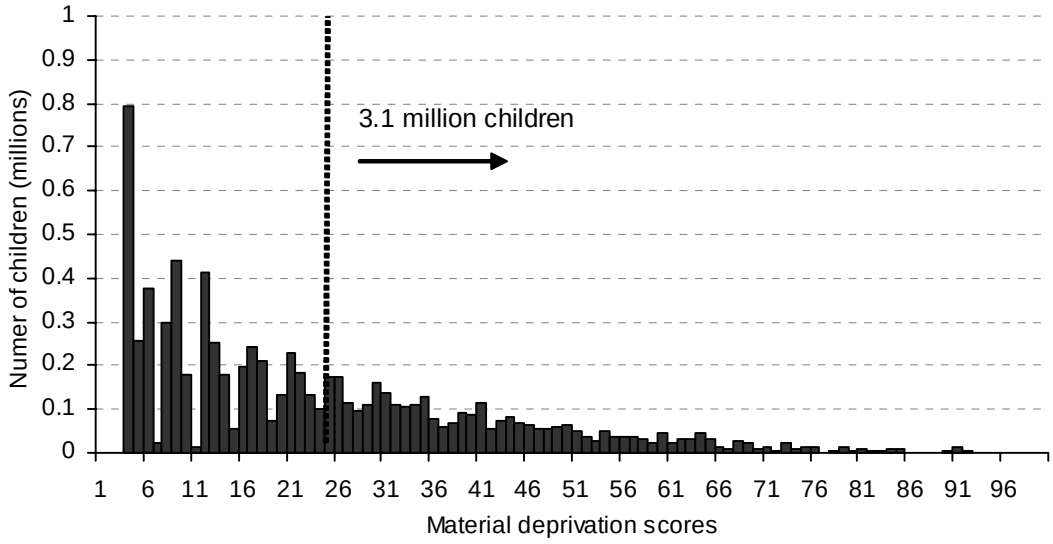
families had access to this item in 2004–05) than would an inability to afford to go swimming once a month (57% of families had access to this item in 2004–05).

In order to make the material deprivation score easier to interpret, it is divided by the maximum possible score (15.286 in 2004–05) and multiplied by 100. This gives each family with children a score between 0 and 100, with higher scores indicating higher levels of deprivation. Children are classed as living in material deprivation if they live in a family with a score greater than 25.

The combined indicator of material deprivation and relative low income is the number of children living in households with incomes below 70% of the contemporary median (BHC) and who live in families with material deprivation scores above 25. This combined indicator is the one that will be used to assess progress against the government's target to cut the number of children living in poverty by one-half in 2010–11 compared with the level in 1998–99.

Figure 5.1 shows the number of children living in families with material deprivation scores falling into ascending one-unit bands in 2006–07. Also shown on the graph is the number of children with material deprivation scores above the government's preferred threshold of 25 in 2006–07, approximately 3.1 million children, 2.0 million of whom also lived in households with incomes below 70% of the contemporary median (BHC). Not shown on the graph is the number of children who live in families with scores of exactly zero, which was approximately 4.7 million children in 2006–07. Finally, it should be noted that the lowest possible non-zero material deprivation score is 3.6, which explains why no one has a material deprivation score greater than 0 and less than 3.

Figure 5.1. Distribution of material deprivation scores in 2006–07



Note: Graph does not show the number of children with material deprivation scores of exactly zero in 2006–07, approximately 4.7 million children.
Source: Authors' calculations based on Family Resources Survey, 2006–07.

Advantages and disadvantages of the material deprivation indicator

The material deprivation score measures the number of items a family does not have because it cannot afford them, weighted by the proportion who could not afford them in 2004–05. This is a proxy for the family's consumption of goods and services. This may well be better than a snapshot of current income as an indicator of a family's long-run standard of living. However, there are a number of problems with using material deprivation scores as an indicator of living standards, and also with the specific material deprivation indicator the government has chosen to use.

Using material deprivation scores as indicators of living standards will conflate family preferences with their standard of living. The government has chosen a fixed or absolute threshold for classing families with children as materially deprived, yet a relative threshold would allow us to say whether the living standards of poor families with children are keeping up with average living standards. Moreover, setting the threshold for material deprivation at 25 is essentially arbitrary, yet trends in the indicator may be sensitive to the exact threshold chosen. Finally, there are other, potentially better and readily available, indicators of living standards (for example, family expenditure). We now discuss these four issues in more detail.

One problem with using material deprivation scores as a measure of living standards is that it will inevitably conflate living standards with family preferences. To demonstrate this point, imagine that two otherwise-identical, hypothetical families have exactly the same disposable income in a particular month and have spent all but their remaining £5 in exactly the same way. Assume that these two families are then faced with the following choice: 'Should we spend this remaining £5 a week on household contents insurance (on the list of survey questions) or should we spend it on more nutritious food (not on the list of survey questions)?'. The family that, on balance, preferred the more nutritious food is likely to have said that it wanted, but could not afford, household contents insurance. Therefore, using the government's chosen measure of material deprivation, the family that chose the more nutritious food will be classed as more deprived than the family that bought household contents insurance, simply because of its *preference* for nutritious food over household contents insurance. However, it is very difficult to argue that the two families have different standards of living – they just chose to spend some of their money in slightly different ways. It is then very easy to imagine generalising such problems to all the items on the list of survey questions and all those not on the list. It then seems certain that some families are classed as materially deprived simply because of the way they choose to spend their money.

It is important to note that attempting to isolate 'enforced hardship' by allowing families to say whether they could not afford or just did not want an item does not remove this problem. Moreover, indicators constructed on this basis are not as meaningful as one might desire. For instance, other research has shown differences by age and social class in terms of whether individuals count certain items as 'necessities' or 'luxuries'; see Myck (2005) and McKay (2004) for more details.

It could be argued that preference conflation problems are minimised by the large number of items on the list, i.e. such problems are less likely to occur with 21 items as opposed to two. Moreover, the set of questions was designed with the explicit purpose of identifying a set of

necessary items for families with children (see McKay and Collard (2003)). However, this point raises another set of potential problems. First, being able to identify such a set of items requires the government to invoke a certain degree of paternalism. Second, if the government feels it has identified a true set of items that families with children should not lack, then the natural policy response is to provide them (for example, free swimming pool passes and subsidised holidays). Either the material deprivation score is a proscribed list of items families should not lack – in which case the policy response is to provide the items – or the government intends it as an indicator of living standards (which we think more likely), in which case it will inevitably conflate preferences and living standards. (See Berthoud, Bryan and Bardasi (2004) for a more detailed discussion.)

It seems likely that the material deprivation score is at least a *proxy* for the absolute level of consumption of certain goods and services enjoyed by families with children in the short term, so that those with a score greater than 25 are those with consumption levels below some absolute threshold. However, this tells us little about whether or not the standards of living of this group are keeping pace with average living standards or about the potentially changing public perception of 'acceptable living standards'. These issues are particularly important as other research has shown that indicators of absolute levels of material deprivation decline much faster than one would expect, such that 'poverty measured as [absolute] deprivation will disappear altogether in less than a decade – without any improvement in the rate of poverty measured as low income' (Berthoud and Bryan, 2008).

In order to create *relative* levels of material deprivation, one needs either to update the list of items or to update the threshold for classing families with children as materially deprived. The government has indicated that it will try to refresh the list of items periodically (Department for Work and Pensions, 2003), but this will certainly not happen every year. However, such a procedure makes it difficult to interpret long-term trends in material deprivation scores. This is because periodic changes to the list of items will create inconsistencies over time, as well as 'jumps' for individual years, and it is difficult to know if one is comparing like with like if one compares material deprivation scores based on different sets of items. This contrasts with household incomes, adjusted for economy-wide inflation, which are fairly easy to interpret over long periods. In the next section, we will describe trends in the government's preferred indicator and also make an attempt to update the thresholds. For instance, we will class families with children as materially deprived if they have material deprivation scores above the contemporary mean score in individual years.

A third problem with the government's chosen material deprivation indicator is that a cut-off point of 25 for classing families with children as materially deprived is essentially arbitrary. We will therefore also test for sensitivity of the government's preferred indicator to different thresholds – for example, using a cut-off point for material deprivation of 15 or 35, as opposed to 25.

Lastly, it is important to note that material deprivation indicators are not the only alternative to income-based measures of poverty. Arguably, a better measure of living standards than either income or material deprivation scores would be family expenditure,[47] as has been used

[47] Note that expenditure and consumption are not the same thing. To see why, consider the fact that expenditure can sometimes be 'lumpy' – high in periods when consumers buy one-off durable goods but then low again when they do

in other studies (Attanasio, Battistin and Leicester, 2006; Blundell and Preston, 1998; Brewer, Goodman and Leicester, 2006). Expenditure varies less from year to year than does income and is perhaps a better proxy for a family's long-term living standards and financial circumstances because, for example, families with temporarily low income may draw on savings or borrow to finance expenditure in the short run. Moreover, such a measure is not sensitive to family preferences, as it takes account of expenditure on all items;[48] it thus takes a largely neutral view as to how families choose to spend their money. It can also be used to construct measures of relative poverty over a long time frame, with the threshold updated for trends in average expenditure. We will present measures of poverty based on family expenditure later in this chapter.

5.2 Child poverty target for 2010: progress to date

Following consultation (Department for Work and Pensions, 2002), the government announced that progress towards its 2010–11 target to cut child poverty by one-half, compared with its levels in 1998–99, would be assessed using three indicators (Department for Work and Pensions, 2003):

- a relative low-income indicator – the number of children living in households with incomes below 60% of the contemporary median;
- an absolute low-income indicator – the number of children living in households with incomes below 60% of the 1998–99 median income (uprated for inflation);
- a combined indicator of material deprivation *and* relative low income – the number of children with household incomes below 70% of the contemporary median *and* a material deprivation score greater than 25.

Table 5.2 shows the three indicators of child poverty used for assessing progress against the 2010 child poverty target, both in terms of the number of children and as a proportion of all children, but only for years for which exact data on these indicators exist.[49] Also shown in the table is a DWP estimate of each indicator in 1998–99, which is then used to calculate the level of each indicator required to meet the 2010–11 target. For instance, the material deprivation indicator is estimated to be 2.6 million in 1998–99, so the target level for 2010–11 is 1.3 million.

As has already been described in Chapter 4, the level of relative child poverty fell by 700,000 between 1998–99 and 2004–05, before rising by over 100,000 between 2004–05 and 2006–07. This means that relative child poverty will need to fall by 1.2 million between 2006–07 and 2010–11 in order to meet the target on this indicator.

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not buy these items. The fact that expenditure is 'lumpy' does not mean that consumption or living standards are 'lumpy', since consumers will derive benefits from these one-off purchases over a long period of time.

[48] The notable exception to this rule is expenditure on durable items, as measures of family expenditure often only cover expenditure on non-durable items in order to exclude high levels of expenditure on one-off items.

[49] The FRS only included Northern Ireland from 2002–03 onwards and the material deprivation questions were only included from 2004–05.

Table 5.2. Progress towards halving child poverty in the UK by 2010–11

	Relative poverty, UK, modified OECD (BHC)		Absolute poverty, UK, modified OECD (BHC)		Material deprivation	
	%	Million	%	Million	%	Million
1998–99 UK baseline	26.1	3.4	26.1	3.4	20.8	2.6
2002–03	22.6	2.9	14.1	1.8		
2003–04	22.1	2.9	13.7	1.8		
2004–05	21.3	2.7	12.9	1.7	17.1	2.2
2005–06	22.0	2.8	12.7	1.6	16.3	2.1
2006–07	22.3	2.9	13.1	1.7	15.6	2.0
Target for 2010–11		1.7		1.7		1.3

Notes: Incomes are measured on a UK basis between 2002–03 and 2006–07 and have been equivalised using the modified OECD equivalence scale. For the purposes of the child poverty target in 2010–11, the DWP has had to estimate the level of relative child poverty in the UK in 1998–99 (Northern Ireland was first included in the official HBAI series in 2002–03) – see HM Treasury (2007).
Sources: Authors' calculations based on Family Resources Survey, various years; HM Treasury (2007).

On the other hand, the level of absolute child poverty has fallen faster than relative child poverty, from 3.4 million in 1998–99 to 1.6 million in 2005–06, a fall of 1.8 million children. Although there was a slight rise in absolute child poverty in the latest year of data (2006–07), the level of absolute child poverty is already at the target level for 2010–11.

It is assumed that the material deprivation indicator saw the same proportionate fall as relative child poverty between 1998–99 and 2004–05, based on other data on material deprivation (Berthoud, Bryan and Bardasi, 2004). However, in contrast to the absolute and relative child poverty indicators, the material deprivation indicator declined by 100,000 in 2005–06 and a further 100,000 in 2006–07. This means that the government is currently about 700,000 short of its target on this indicator.

How can we reconcile the observation over the past two years of rising relative child poverty, stable levels of absolute child poverty and a falling indicator based on levels of material deprivation?

It is partly due to the use of a different income threshold in the combined indicator. Relative child poverty based on a threshold of 70% of contemporary median incomes (BHC) has not risen between 2004–05 and 2006–07, whilst it has risen by over 100,000 using a threshold of 60% of contemporary median income (BHC). Nevertheless, it remains fair to say that constant levels of income-based poverty and falling levels based on material deprivation scores may still seem odd at first glance.

In fact, these trends suggest that a constant number of children are living in relative poverty because their incomes have just about kept pace with median income. However, these same families have been able to afford more of the items presented in Table 5.1, because their incomes have still grown in real terms. This is a demonstration of the point, emphasised in Section 5.1, that the material deprivation indicator is a proxy for absolute levels of the consumption of certain goods and services enjoyed by families with children. It does not tell

us whether the living standards of poor families with children are keeping up with average living standards.

How much reassurance should we glean from the fact that whilst relative child poverty may be rising, the material deprivation indicator is falling? Unfortunately, the answer is 'not a great deal', as the absolute living standards of the poor tend to increase in most years, in the absence of negative economic shocks or downturns, due to long-run growth in real household incomes. Moreover, the decline in material deprivation is sensitive to the exact threshold chosen.

Table 5.3 shows the level of the government's preferred, combined indicator of material deprivation and relative low income. It also shows what the level of this indicator would be if 15 and 35 had been chosen as thresholds instead of 25. Naturally, if the government had chosen a higher threshold, the level of material deprivation would be lower, but the table shows that there would again have been a 100,000 per year decline in the indicator since 2004–05. If the government had chosen a lower threshold, more children would be classed as materially deprived, and on such an indicator there is virtually no decline since 2004–05. Therefore, it can be seen that the indicator is sensitive to the exact absolute threshold chosen.

One can also construct *relative* indicators of material deprivation that indicate whether living standards at the bottom of the income distribution (as measured by the material deprivation score) are keeping pace with average living standards. To do this, we need to update the threshold for classing families with children as materially deprived each year. A simple way to do this is to class families with children as materially deprived if they have material deprivation scores above the mean score for all families with children in each year (combined with a relative low income on the same basis as the government's preferred measure of material deprivation). Table 5.4 shows the trends in such indicators of *relative* material deprivation, as well as trends in the government's preferred indicator (a constant threshold of 25).

Table 5.3. Alternative absolute thresholds for material deprivation

	Lower threshold (15)		Current threshold (25)		Higher threshold (35)	
	%	Million	%	Million	%	Million
2004–05	26.8	3.4	17.1	2.2	11.9	1.5
2005–06	26.6	3.4	16.3	2.1	11.1	1.4
2006–07	26.7	3.4	15.6	2.0	10.4	1.3

Note: Incomes are measured on a UK basis and have been equivalised using the modified OECD equivalence scale.
Source: Authors' calculations based on Family Resources Survey, various years.

Table 5.4. Alternative relative thresholds for material deprivation

	Constant threshold (25)		Relative threshold (mean)	
	%	Million	%	Million
2004–05	17.1	2.2	21.9	2.8
2005–06	16.3	2.1	21.7	2.8
2006–07	15.6	2.0	21.5	2.8

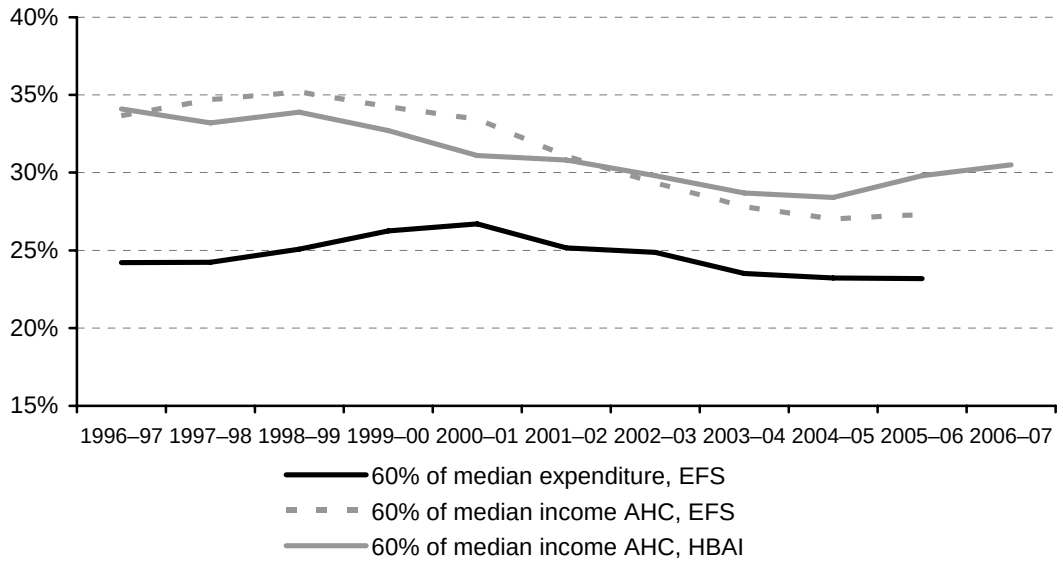
Note: Incomes are measured on a UK basis and have been equivalised using the modified OECD equivalence scale.
Source: Authors' calculations based on Family Resources Survey, various years.

As can be seen from the table, these indicators of *relative* material deprivation show virtually no decline between 2004–05 and 2006–07, as opposed to the decline of 100,000 per year under the government's preferred measure of material deprivation. It thus seems as though the absolute living standards of poor families with children are rising year on year (as measured by the material deprivation score). However, their incomes and their living standards are at best just keeping pace with average incomes and average living standards. These poor families with children are unlikely to be catching up with the rest of the population in any meaningful sense.

As discussed in Section 5.1, we can also measure living standards using family expenditure rather than material deprivation scores and current incomes. However, we must use a different survey in order to do so (the Expenditure and Food Survey, EFS), since the survey used for HBAI (the FRS) does not contain a measure of expenditure. Figure 5.2 shows the proportion of children living in households with weekly expenditure (excluding that on housing) below 60% of median expenditure (excluding housing). It also shows the level of relative child poverty, based on the measure of income (AHC) contained in the EFS rather than that contained in the FRS. As the sample sizes are relatively small in the EFS, we smooth both series by using a three-year moving average rather than the values for individual years. Also shown in the graph is the rate of child poverty based on incomes measured AHC from the FRS, as is presented in HBAI.

It can be seen that relative child poverty, based on the income measure in the EFS, shows a strong decline between 1998–99 and 2004–05. This can also be seen in the official series contained in HBAI. These trends compare with a much weaker net fall using expenditure (after rising between 1998–99 and 2001–02, it then fell between 2001–02 and 2004–05).

Figure 5.2. Relative child poverty using expenditure, 1996–97 to 2005–06



Notes: Incomes are measured on a UK basis and have been equivalised using the modified OECD equivalence scale. Expenditure measures weekly family expenditure (excluding housing) and has also been equivalised using the modified OECD equivalence scale. EFS data are presented as three-year moving averages.
Source: Authors' calculations based on Expenditure and Food Survey and Family Resources Survey, various years.

In 2005–06, there was little change in either indicator from the EFS (although there was a rise in the year-on-year values of these indicators, this was smoothed out in the three-year average). In the HBAI series, there were rises in both 2005–06 and 2006–07.

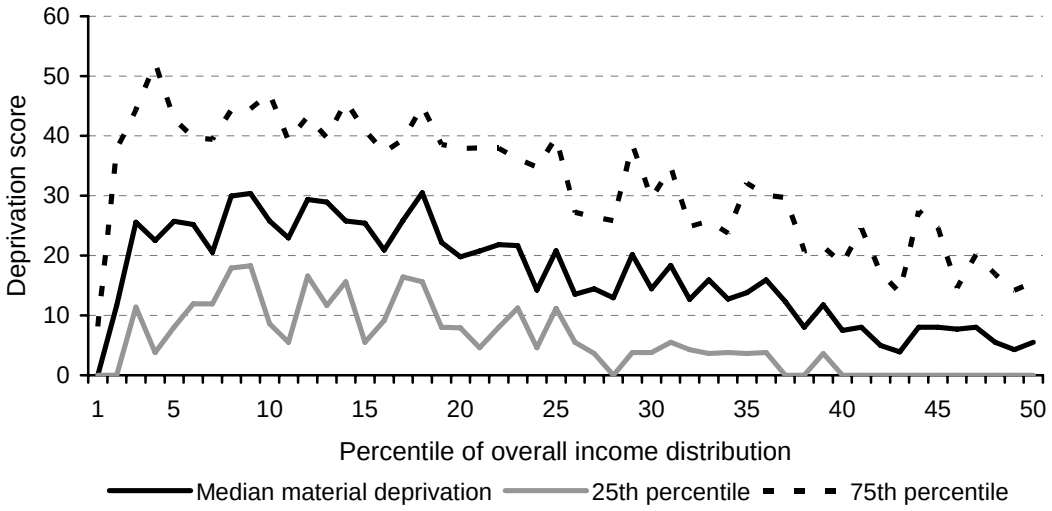
Are these trends in HBAI and the EFS consistent with each other? In terms of income, both the EFS and HBAI show that income-based relative child poverty fell between 1998–99 and 2004–05, before either a slight rise or no change in 2005–06. We also see that our indicator of relative material deprivation shows no change between 2004–05 and 2005–06, which is exactly what we see in terms of relative expenditure poverty over that year. Therefore we can say that the trends are consistent.

5.3 What else can the material deprivation indicator teach us about the living standards of families with children?

This section will ask whether the material deprivation score can teach us anything else about the living standards of families with children – for instance: the relationship between income and material deprivation; recent trends in 'severe' poverty; and whether such a measure changes who we class as living in poverty and the risk factors that are associated with poverty.

The material deprivation score provides us with an indication of whether household income as measured in HBAI is a good reflection of the living standards of families with children. Figure 5.3 shows the relationship between household income (as measured in HBAI) and material deprivation scores. Specifically, the black line shows the median material deprivation score for children living in households with similar equivalised household income (i.e. the median amongst all children in a given percentile) for the lower half of the income distribution. The grey line and the dashed line show respectively the 25th and 75th percentiles of material deprivation scores within these percentiles of household income.

Figure 5.3. Relationship between income and material deprivation



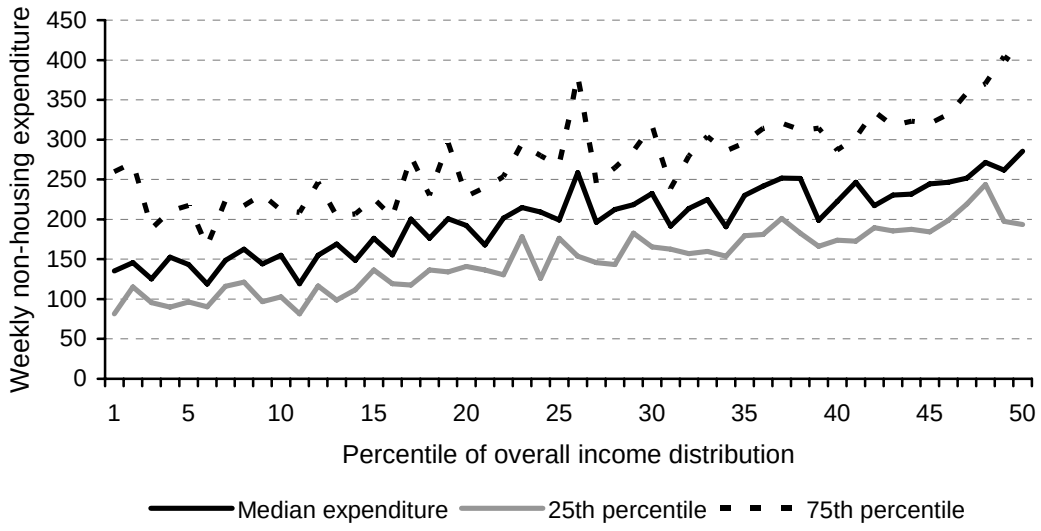
Source: Authors' calculations based on Family Resources Survey, 2006–07.

A striking feature is that material deprivation scores fall (meaning there is less deprivation) as income falls within the bottom five percentiles. This suggests that children in this part of the income distribution are more likely to have a temporarily low income than a permanently low income, since they seem able to maintain relatively high living standards despite their low level of income. This is particularly the case at the very bottom of the income distribution (i.e. in the 1st and 2nd percentiles), where median material deprivation scores are lower than anywhere else in the bottom third of the income distribution.

Between the 10th and 50th percentile points of the income distribution, material deprivation scores generally fall as income rises, suggesting that higher incomes in this part of the income distribution are indeed associated with higher living standards. However, the relationship is far from perfect, with considerable volatility in the pattern of material deprivation across income. Moreover, there is a wide variation in material deprivation scores for given incomes. For instance, between the 5th and 25th percentile points in the income distribution, around a half of all children in each percentile have material deprivation scores between about 10 and 40 (as indicated by the 25th and 75th percentile lines).[50]

Do we see a similar relationship between income and expenditure in the Expenditure and Food Survey for families with children? Figure 5.4 shows that there is indeed a positive relationship between income and expenditure between the 5th and 50th percentiles of the income distribution. There is also a high level of variation in levels of expenditure for given income levels. The graph also shows slightly higher levels of expenditure at the very bottom of the income distribution (i.e. 1st and 2nd percentiles) compared with households with slightly higher income levels. However, the difference between the very bottom and the rest of the bottom half of the income distribution is far less striking than it was in Figure 5.3 for material

Figure 5.4. Relationship between income and expenditure



Source: Authors' calculations based on Expenditure and Food Survey, 2004–05 and 2005–06.

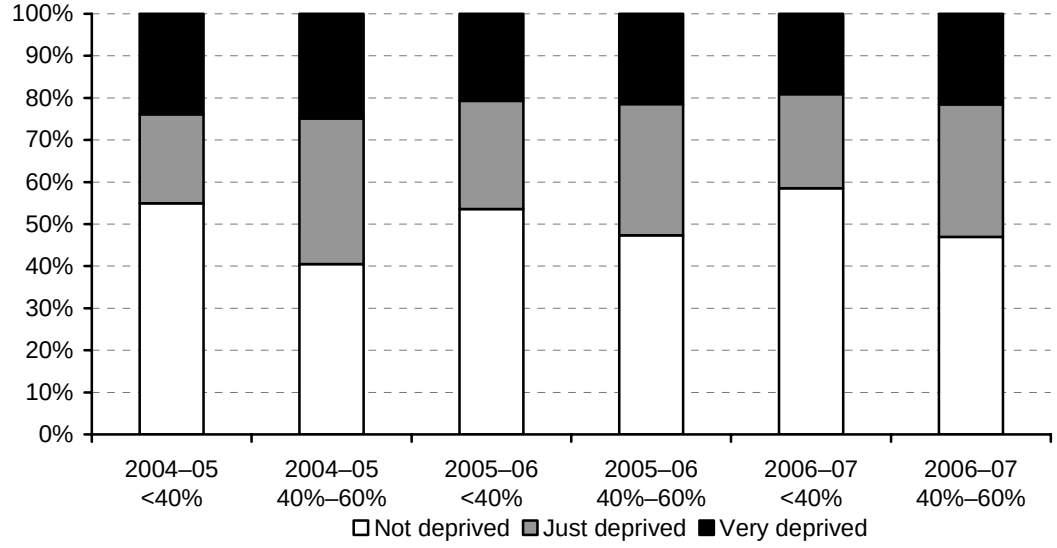
[50] Berthoud, Bryan and Bardasi (2004) suggest that the relationship between income and material deprivation for a sample of families in a given year overstates the relationship over time. In other words, though material deprivation declines quite quickly across the income distribution in 2006–07, material deprivation does not decline as fast for a particular family if its income rises.

deprivation. It is also less striking than in the same graph as published in Brewer, Goodman and Leicester (2006) for earlier years (which included families without children as well).

This analysis of the relationship between living standards (measured by either material deprivation or expenditure) and income suggests that those with very low recorded incomes seem to have higher living standards than those with slightly higher (but still low) income. This has strong implications for any analysis of the level of or trends in 'severe' poverty (sometimes defined as income below 40% of the contemporary median).

To investigate this in more detail, Figure 5.5 compares the material deprivation of children in families in 'severe' income poverty (i.e. with incomes less than 40% of the contemporary median) with that of children living in families with slightly higher incomes but still in relative income poverty (i.e. with incomes between 40% and 60% of the contemporary median). It does this by showing the proportions of these groups who are 'very deprived' (material deprivation scores greater than 35), 'just deprived' (material deprivation scores between 25 and 35) and 'not deprived' (material deprivation scores under 25). These are shown for 2004–05, 2005–06 and 2006–07.

Figure 5.5. Levels of deprivation for those in relative income poverty

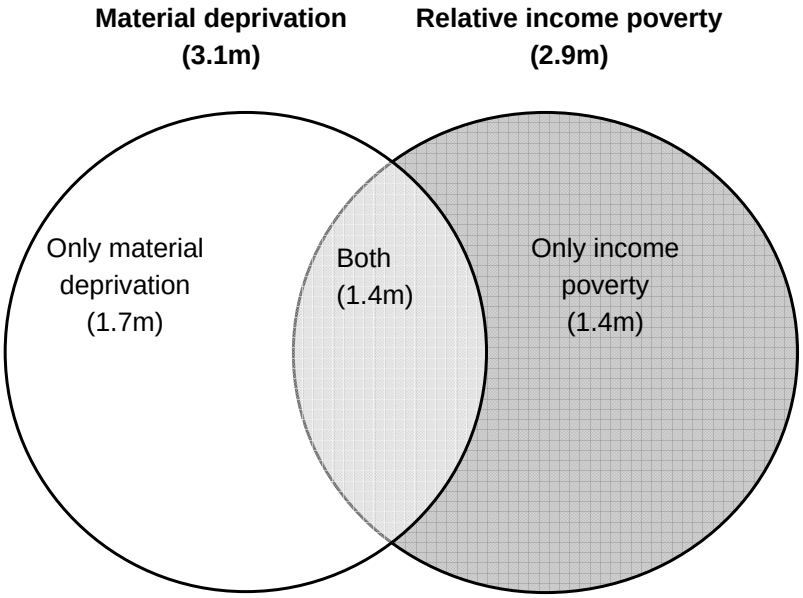


Source: Authors' calculations based on Family Resources Survey, various years.

The graph shows that similar proportions of children in these two groups are 'very deprived' for all years (though the proportions are lower year on year). However, in all three years, there is a higher proportion of 'not deprived' children in the 'severe' poverty group than in the slightly higher income group. For instance, in 2006–07, 59% of children in 'severe' poverty were 'not deprived', whilst only 47% of the slightly higher income category were 'not deprived'.

Such analysis does not imply that trends in 'severe' poverty should be ignored altogether, as clearly there are significant numbers of children in this category who seem to experience quite high levels of material deprivation. However, it seems highly likely that a significant proportion of this group have high living standards but, for whatever reason, their current, recorded income is quite low.

Figure 5.6. Number of children in relative income poverty and/or material deprivation, 2006–07



Notes: The measure of relative poverty is based on a threshold of 60% of contemporary median BHC income. The measure of material deprivation is based on having a material deprivation score above 25.
Source: Authors' calculations based on Family Resources Survey, 2006–07.

Figure 5.3 also suggested that there is not a perfect relationship between income and material deprivation scores. Given this conclusion, it is highly likely that the two indicators of living standards will disagree as to which families with children count as 'poor'. Figure 5.6 shows that 2.9 million children were counted as living in poverty based on the pure relative low-income measure (using a threshold of 60% of contemporary median BHC income) in 2006–07. It also shows that 3.1 million children had material deprivation scores above 25 in 2006–07.

It then shows the number of children counted as living in poverty on *both* measures (1.4 million), the number of children in poverty based on *only* the material deprivation indicator (1.7 million) and the number of children in poverty based on *only* the relative low-income indicator (1.4 million).[51] This means that only about half of the children living in income poverty are classed as living in material deprivation.

This suggests that whilst there is some overlap between the two indicators as to which children live in poverty, there is also considerable disagreement. There are 1.4 million children with relatively low incomes but not with high material deprivation scores. This is likely to include the children living in households with income in the 1st or 2nd percentile of the income distribution, who, as shown by Figure 5.3, have quite low material deprivation scores. However, there are about 1.7 million children with relatively high material deprivation scores but not with relatively low incomes. These might be children living in households with temporarily high income but relatively low living standards.

[51] These figures do not sum to the level of relative child poverty according to the government's preferred indicator (i.e. incomes below 60% of the contemporary median BHC) due to rounding.

Given that there is disagreement over who is in poverty based on household income and material deprivation scores, it is likely that there are differences in the risk factors associated with income poverty and with material deprivation poverty. Table 5.5 analyses the impact of different risk factors on the likelihoods of being in relative income poverty using the usual relative low-income indicator (income less than 60% of the contemporary median BHC income) and of having a pure material deprivation indicator (score greater than 25); we hereafter refer to both as measuring 'poverty'.

We will now go through each set of risk factors in turn. The impacts are generally estimated relative to the stated omitted category. All the estimated impacts are estimates of the effect of a particular characteristic on the likelihood of being in poverty, holding constant all other observable characteristics.[52]

- *Region*

  Holding other factors constant, including work and family status, it is estimated that, of all the regions, London has the lowest level of income-based poverty: all other regions are estimated to have much higher levels of income-based poverty. However, when we look at material-deprivation-based poverty, we see that London moves to have one of the highest levels of poverty and that the lowest levels can be found in Wales, Northern Ireland and Scotland, controlling for all other observable characteristics.[53] This contrasts with the relatively high levels of income-based poverty in these three regions.

  Such dramatic changes are likely to be due to differences in price levels across regions. For instance, children living in London may live in families with higher average incomes than those in other regions, leading to a lower risk of income poverty. However, their household may be able to afford fewer goods and services than in other regions due to a high cost of living in London, leading to a higher risk of material deprivation.[54] For a further discussion of regional levels of poverty, living standards and prices, see Sections 4.3 and 2.3.

- *Number of children*

  Controlling for other observable characteristics, there is only a slight difference between the estimated impacts of the number of children on the likelihood of being in poverty using these two measures. For both measures, having more children is estimated to increase the likelihood of being in poverty, but the pattern is slightly weaker for material-deprivation-based poverty.

[52] We conduct this analysis by creating two dummy indicators, one for income poverty and one for material deprivation. We then regress these dummy indicators in turn on all the characteristics listed in Table 5.5 using a probit regression, with each family weighted by the number of children in the UK population it is deemed to represent (i.e. number of children multiplied by family-level grossing factor).

[53] A similar reordering by regions occurs if we only include regional dummies. In other words, without controlling for other factors, London has a relatively low level of income poverty but a relatively high level of material-deprivation-based poverty.

[54] In principle, the differences could also reflect different policies affecting families with children in Wales, Scotland and Northern Ireland compared with England.

Table 5.5. Estimated impact of risk factor on the likelihood that children are in income poverty and material deprivation poverty, 2006–07

Risk factor	Impact	
	Income poverty	Material deprivation
Region		
London	[omitted]	
North East	0.124***	–0.028***
North West	0.081***	–0.014***
Yorkshire and Humberside	0.107***	–0.001
East Midlands	0.116***	0.073***
West Midlands	0.083***	–0.025***
Eastern	0.022***	–0.003***
South East	0.012***	–0.003***
South West	0.068***	0.042***
Wales	0.170***	–0.041***
Scotland	0.069***	–0.037***
Northern Ireland	0.086***	–0.040***
Number of children		
1 child	[omitted]	
2 children	0.025***	0.016***
3 children	0.095***	0.059***
4 children	0.167***	0.124***
5+ children	0.132***	0.194***
Multi-benefit-unit household	0.021***	–0.095***
Family type and economic status		
Couple with one worker	[omitted]	
Couple with no workers	0.316***	0.291***
Couple with two workers	–0.209***	–0.086***
In-work lone parent	–0.091***	0.151***
Workless lone parent	0.217***	0.376***
Ethnicity		
White	[omitted]	
Mixed	0.029***	–0.038***
Indian	0.119***	0.061***
Pakistani/Bangladeshi/Other Asian	0.226***	0.103***
Black	0.039***	0.167***
Chinese/Other	0.116***	0.044***
Housing		
Owner-occupied	[omitted]	
Social housing	0.129***	0.275***
Private rented	–0.040***	0.189***
Other	0.031***	0.219***
Disability		
Adult(s) has/have limiting condition	–0.023***	0.094***
Child(ren) has/have limiting condition	–0.075***	–0.002***
No. of observations	*7,937*	*7,937*

Notes to Table 5.5: *** indicates statistical significance at 1% level. Each observation has been weighted by the number of children in the UK population it is deemed to represent (i.e. number of children multiplied by family-level grossing factor). This means that the total weighted number of observations is approximately 12.8 million.
Source to Table 5.5: Authors' calculations based on Family Resources Survey, 2006–07.

- *Family type and economic status*

  The next group of risk factors relates to the estimated impact of being in one of four groups, defined by the number of adults and the number of workers in the family, relative to the baseline category of a couple with one worker. Holding other observable characteristics constant, we estimate that being a child in a couple family with no workers increases the likelihood of being in poverty on both measures by around 30 percentage points relative to a couple with one worker. As one might expect, there is a reduced likelihood of poverty for children living in a couple family with two workers, but the estimated impact is slightly weaker for material deprivation than for income. We estimate that living in a workless lone-parent family increases the likelihood of being in poverty on both measures, but the impact is much larger for material deprivation than it is for income (37.6% against 21.7%).

  Finally, and perhaps most interestingly, we estimate that, controlling for other factors, working lone-parent families are less likely to experience income-based poverty but are *more* likely to experience material-deprivation-based poverty than a one-worker couple family. This is a striking result as it suggests that although working lone parents are less likely to have low levels of equivalised household income than one-worker couple families, they are unable to afford as many goods and services. This echoes the findings in Berthoud, Bryan and Bardasi (2004). We discuss this point in more detail later in this section.

  Table 5.5 also shows that whilst children living in multi-benefit-unit households are slightly more likely to be in income poverty, they are less likely to be in material deprivation poverty (controlling for other observable characteristics). This may suggest that children in multi-benefit-unit households receive a greater share of resources than they would in a single-benefit-unit household.

- *Ethnicity*[55]

  Controlling for other observable characteristics, we estimate that ethnic minorities are significantly more likely to be in income poverty than whites and that children living in Pakistani, Bangladeshi or 'other Asian' families are the most likely to be in income poverty.

  In terms of material deprivation poverty, most children living in ethnic minority families are still more likely to be in poverty, but the effect is much reduced. However, for children living in black families, the effect is actually increased, such that children living in black families are the most likely to be in material deprivation poverty.

[55] Defined by the ethnicity of the head of the family.

- *Housing*

  Children living in social housing are more likely to be in income poverty than those in owner-occupied housing, controlling for other observable characteristics. This is not surprising since those in social housing are likely to have lower incomes and our controls for socio-economic factors are quite limited. The estimated impact of privately-rented housing and other housing types are quite small for income poverty.

  When we look at material deprivation poverty, we find that all three housing types are much more likely to be in poverty than those living in owner-occupied housing. Such a result could occur if those in these three housing types are more likely to be permanently poor and thus have lower living standards. This seems likely to be the case for those living in social housing.

- *Disability*

  The final set of results shows whether families containing one or more adults or children with a limiting disability are more or less likely to live in relative income poverty and material deprivation poverty, controlling for other observable characteristics. The table shows that families containing an adult or child with a limiting disability have a lower likelihood of being in relative income poverty. This is not altogether surprising since families with disabled adults or children receive extra amounts of state benefits and the HBAI methodology assumes that these extra levels of state benefits permit these families to attain a higher standard of living, rather than compensating for higher levels of need. However, the table also shows that families containing at least one adult with a limiting disability are *more* likely to be in material deprivation poverty. Having a child with a limiting disability has a much reduced effect, but still very slightly reduces the likelihood of being in material deprivation poverty.

  Together, these results question the validity of the assumption that extra amounts of state benefits for families containing disabled individuals permit these families to attain higher living standards. A better assumption might be that such higher levels of benefit compensate partly or wholly for higher levels of need, which would suggest that such income should be ignored in producing the HBAI statistics.

One of the key findings of this analysis was that whilst children living in families with a working lone parent are less likely to be in income poverty than those in couple families with one worker, they are more likely to be in material deprivation. This may suggest that the current method of accounting for different levels of need by family type (equivalisation through use of the modified OECD equivalence scale) is not sufficient.

To investigate this further, we use a similar methodology to Berthoud, Bryan and Bardasi (2004) to ask whether levels of deprivation are different for lone-parent and couple families, even after controlling for equivalised income (in a very flexible manner), employment patterns, region and other factors.[56] We also ask the same question for different numbers of

[56] We regress material deprivation on all the characteristics listed in Table 5.6 (including a flexible function of household equivalised income) using a Tobit model. Observations are weighted by the number of children in the UK each family is deemed to represent. Results look very similar if we instead use ordinary least squares (OLS). Further details are available on request.

children in the family. Our findings, shown in Table 5.6, are highly similar to those of Berthoud et al.

The results suggest that for similar levels of equivalised income, employment patterns and other factors, lone-parent families experience higher levels of deprivation than do couple families. This means that the equivalence scales used in calculating the official income-based measures of poverty overstate the extra resources needed by couples with children relative to lone parents to escape material deprivation. This could be because the material deprivation indicator, unlike a conventional income-based indicator, reflects the contribution made by a non-working adult to a family's living standards (something enjoyed by a one-earner couple but not by a working lone parent). Alternatively, it could be because the material deprivation indicator is better at capturing long-term living standards, and low incomes are more likely to be permanent for working lone parents than for one-earner couples.

A number of organisations have recently called for entitlements to working tax credit (WTC) to be increased for couples with children relative to lone parents.[57] One justification that is sometimes given is the need to help working couple families avoid poverty (which is essentially a statement about the insufficiently high equivalised incomes of working couple

Table 5.6. Relationship between family structure and material deprivation after controlling for income and other factors, 2006–07

Risk factor	Coefficient
Family type	
Lone parent	7.870***
Number of children	
1 child	[omitted]
2 children	0.197***
3 children	1.469***
4 children	4.979***
5+ children	9.357***
Controls included for:	
Multi-benefit-unit household	Yes
Number of workers	Yes
Equivalised income variables	Yes
Region	Yes
Ethnicity	Yes
Disability	Yes
No. of observations	*7,937*

Notes: *** indicates statistical significance at 1% level. Each observation has been weighted by the number of children in the UK population it is deemed to represent (i.e. number of children multiplied by family-level grossing factor). This means that the total weighted number of observations is approximately 12.8 million.
Source: Authors' calculations based on Family Resources Survey, 2006–07.

[57] At present, couples with children are entitled to the same amount of tax credits as lone-parent families with the same number of workers, the same number of children and the same pre-tax earnings.

families).[58] If the material deprivation indicator is a better measure of living standards than equivalised income, then this weakens this particular justification for higher WTC for couples with children relative to lone parents. However, other justifications are given for having a higher level of WTC for couples with children relative to lone parents about which this research on material deprivation says nothing:

- to strengthen the incentive for someone in a couple with children to be in work;[59]
- to reduce the incentive for co-resident couples to claim fraudulently that they are living apart, and to reduce the reduction in state support that two adults may experience if they start to live together and honestly declare this to the authorities (the so-called 'couple penalty');[60]
- to promote family situations that some commentators claim are more beneficial for children's outcomes.[61]

The results in Table 5.6 also suggest that even after controlling for equivalised income, employment patterns and other factors, each additional child increases deprivation levels. This means that the equivalence scales used in calculating the official income-based measures of poverty understate the extra resources needed to escape material deprivation as the number of children in a family increases.

5.4 Conclusion

Child poverty has risen slightly since 2004–05 using income-based indicators, but it has fallen using the government's new combined low-income–material-deprivation indicator over the same period. However, our own indicator of relative material deprivation is unchanged since 2004–05, showing that the living standards of poor families with children have risen since 2004–05 but have not caught up with those of richer families with children.

Further analysis of the material deprivation indicator suggests that those with very low incomes (below 40% of the contemporary median) do not appear to have any lower living standards than those with slightly higher incomes (between 40% and 60% of the contemporary median). In fact, a lower proportion of those with very low incomes are classed as being materially deprived than of those with slightly higher incomes. This suggests that being in 'severe' poverty is probably the wrong term to attach to those with incomes below 40% of the contemporary median.

Levels of income and levels of material deprivation are not perfectly correlated. Some individuals seem to experience quite low levels of material deprivation despite having low incomes. Therefore, income-based and material-deprivation-based measures of poverty give different answers as to exactly who is classed as living in poverty and what the risk factors

[58] See Cooke and Lawton (2008), Social Justice Policy Group (2007) and Field and Cackett (2007).

[59] See Cooke and Lawton (2008) and Brewer, Saez and Shephard (2008).

[60] See Field and Cackett (2007), Draper (2008) and Conservative Party (2007).

[61] See Social Justice Policy Group (2007) and Conservative Party (2007).

associated with poverty are. The most striking of these differences relate to three risk factors – region, disability status and family type.

Controlling for other factors, those living in London are less likely than most to live in income poverty but are more likely to experience material deprivation. Families with children and disabled adults are less likely to be in income-based poverty than those without disabled adults, presumably because many receive disability-related additions to state benefits. However, they are more likely to be in material deprivation poverty. This questions the implicit assumption in HBAI that state benefits paid explicitly to the long-term sick or disabled allow families to attain higher living standards. It suggests that the higher benefits instead compensate partly or wholly for extra needs.

Children in a working lone-parent family are less likely to be in income poverty than those in a one-earner couple family, but they are more likely to be in poverty using a material deprivation indicator. Also, they tend to have higher levels of deprivation than children in a one-earner couple family with similar levels of equivalised income. This means the equivalence scales used in the official income-based measures of poverty overstate the extra resources needed by couples with children, relative to lone parents, to escape material deprivation. If the material deprivation indicator is a good measure of living standards, then this weakens – but does not invalidate – arguments for higher working tax credit for couples with children relative to lone parents.

Appendix A. The Households Below Average Income (HBAI) methodology[62]

Income as a measure of living standards

Most people would consider that human well-being consists of more than a simple measure of material circumstances. However, even if we wanted to, it would be extremely hard to define an objective index of human well-being or happiness, let alone to measure it. The main approach to living standards taken in the HBAI document (and therefore in this Commentary too) is to focus solely on material circumstances, and to use income as a simple proxy for most of the analysis. New to this year's analysis of poverty is a 'material deprivation' indicator based upon both income and the inability of a family with children to afford specific goods and services; discussion and analysis of this new indicator can be found in Chapter 5.

Even as a measure of material well-being, the HBAI income measure has some important limitations. For example, the income measure here is a 'snapshot' measure – reflecting actual, or in some cases 'usual', income around the time of the FRS interview. Income measured in this way will reflect both the temporary and the long-run circumstances of individuals, although the latter would generally be regarded as a better measure of welfare. Income-based statistics will also attribute the same level of welfare to people with the same income, regardless of how much savings or other assets they have, or how much they spend. Consumption would arguably make a better measure of well-being, though reliable data can be harder to collect. Using consumption as our measure of well-being can change our interpretation of who is 'poor' and how rates of poverty have changed over time.[63]

The treatment of housing costs

The government's HBAI publications look at two measures of income. One measure captures income before housing costs are deducted (BHC) and the other is a measure after housing costs have been deducted (AHC). Initially, the government treated these as complementary indicators of living standards, presenting both in its HBAI publications and in its annual audit of poverty, *Opportunity for All*, but the government's 2010–11 target for child poverty is defined solely in terms of income measured BHC.

The case for using these different income measures arises from variation in housing costs. When deciding whether or not to measure living standards on an AHC basis as well as BHC, the main issues are whether people face genuine choices over their housing and whether housing cost differentials accurately reflect differences in housing quality.

It is often argued that some individuals do not have much choice over the type or cost of housing services that they consume, whereas they have considerably more choice over the purchase of other consumption goods (such as food or clothing). For these individuals, it

[62] Many of these issues are also discussed in Berthoud and Zantomio (2008).

[63] See Brewer, Goodman and Leicester (2006).

could be argued that an AHC measure is a more suitable measure of their well-being. However, for individuals who do exercise a considerable degree of choice over its cost and quality, housing can be seen more like a consumption good like any other, and a BHC income measure may therefore be preferable. Even if people do have choices over their housing, differences in housing costs between households may not reflect differences in housing quality, and this may also lead us towards measuring incomes AHC. Lack of choice over housing cost and quality is particularly important in the social rented sector, where individuals tend to have little choice over their housing and where rents have often been set with little reference to housing quality or the prevailing market rents.

Pensioners are another group for whom an AHC measure has often been considered appropriate. This is because around 70% of pensioners own their homes outright (most of the remainder are social renters). People who own their homes outright will be able to attain a higher standard of living than individuals with the same income level who have mortgage or rental payments, since housing is an asset that is of benefit to those who own their own homes. On a BHC measure, an individual who owns their own house will be treated as being as well off as an otherwise-identical individual who is still paying off a mortgage; an AHC measure, though, would indicate that the former was better off.[64]

For these reasons, commentators (including the authors of this Commentary) have often focused on AHC incomes when considering the living standards of individuals at the lower end of the income scale or when measuring poverty, but looked at incomes measured BHC when considering the entire income distribution.

Income sharing

To the extent that income sharing takes place within households, the welfare of any one individual in a household will depend not only on their own income but also on those of other household members. By measuring income at the household level, the HBAI statistics implicitly assume that all individuals within the household are equally well off and therefore occupy the same position in the income distribution. For some households, this assumption may provide a reasonable approximation – for example, some couples may benefit equally from all income coming into the household. For others, such as students sharing a house, it is unlikely to be appropriate. The assumption of income sharing within a household is by no means the only 'reasonable' one that we can make: for example, we could assume that there is complete income sharing *within* the different benefit units of a household but not *between* them. However, given the data available, it is one of the least arbitrary assumptions that can be made.

Comparing incomes across households

If household income is to reflect the standard of living that household members enjoy, and if we are to compare these incomes across different household types, then some method is required to adjust incomes for the different needs that different households may face.

[64] A better solution to this problem would be to impute an income from owner-occupation and add this to BHC income. Unlike the AHC measure, this would also capture the benefits to individuals living in better-quality housing than others.

Table A.1. OECD equivalence scales

	BHC equivalence scale	AHC equivalence scale
First adult	0.67	0.58
Spouse	0.33	0.42
Other second adult	0.33	0.42
Third and subsequent adults	0.33	0.42
Child aged under 14	0.20	0.20
Child aged 14 and over	0.33	0.42

The official HBAI income statistics currently use the modified OECD scale (shown in Table A.1) to adjust incomes on the basis of household size and composition, expressing all incomes as the amount that a childless couple would require to enjoy the same standard of living. For example, when income is measured before housing costs, the OECD scale implies that a single person would require 67% of the income that a childless couple would require to attain the same standard of living. This process is referred to as 'income equivalisation'.

The modified OECD scale does not take into account other characteristics of the household besides the age and number of individuals in the household, although there may be other important factors affecting a household's needs. An important example of these would be the disability or health status of household members. The conventional methodology in HBAI would place a household with additional income due to the receipt of disability benefits higher up the income distribution than an otherwise-equivalent household without such benefits. But if this higher level of income only compensates the household for the greater needs that it has or the extra costs that it faces, then the standard of living of this household may be no higher.[65]

Sample weighting, and adjusting the incomes of the 'very rich'

The incomes analysed in this Commentary are derived from the Family Resources Survey (FRS) and, prior to 1994–95, the Family Expenditure Survey (FES). These surveys are designed to provide a broadly representative sample of households in Great Britain until 2001–02, and in the whole United Kingdom from 2002–03 onwards. However, because they are voluntary surveys, there is inevitably a problem of non-response, which may differ according to family type and according to income. Such non-response bias is dealt with in two ways. First, weights are applied to the data to ensure that the composition of the sample (in terms of age, sex, marital status, region and a number of other variables) reflects the true UK population (see Department for Work and Pensions (2008c)). For example, if there are proportionately fewer lone parents in the sample than there are in the population, then relatively more weight must be placed upon the data from those who actually do respond.

Second, a special procedure is applied to the incomes at the very top of the distribution to correct for the volatility in reported incomes. This adjustment procedure uses projected data from HMRC's Survey of Personal Incomes (SPI) – a supposedly more reliable source of data

[65] See also Section 5.3 of this Commentary.

for the richest individuals, based on income tax returns. The very richest individuals, for whom the SPI adjustment is applied, are assigned an income level derived from the SPI survey. For the most recent year's data, this correction was made to the incomes of around the top 0.8% of the population (corresponding to around 475,000 individuals or 141 benefit units in the sample). The number of the richest individuals is then controlled for by a slight modification to the frequency weights that are applied. However, there is no corresponding correction for non-response, or for misreporting of incomes at the lower end of the income scale, meaning caution should be used when considering those with the very lowest incomes.

The income measure summarised

In the analysis in this Commentary, we therefore follow the government's HBAI methodology, using *household equivalised income after deducting taxes and adding benefits*, expressed as the equivalent income for a couple with no dependent children and in average 2006–07 prices, as our measure of living standards. For brevity, we often refer to this as 'income'.

Appendix B. A comparison with the National Accounts

It is useful to compare the HBAI estimates of changes in average income with estimates from other sources. The National Accounts have the advantage that they do not rely to the same extent on data gathered from samples, and so they are not subject to the same degree of statistical uncertainty as the HBAI data. However, they are quite limited in their use in analysing living standards, since they are only able to provide estimates of the mean; they do not allow us to assess the median or any other information about the distribution of income. It is also important to realise that the National Accounts do not allow us to measure living standards in exactly the same way as HBAI, so the change in average income they report is likely to differ from the HBAI series. One complication is that the 'household sector' as defined in the National Accounts includes bodies such as charities and most universities, as well as families. In addition, the HBAI measure of living standards adjusts for household size and composition in a different way from the 'per-head' estimates from the National Accounts.

Table B.1 gives growth rates since 1997–98 for a number of different series taken from the National Accounts, presented alongside mean BHC income growth in HBAI. Although not directly comparable, median BHC income growth in HBAI is included in the table for reference purposes.

The pattern of growth in mean GDP per head is broadly similar to that of mean HBAI income growth. Average annualised growth since 1996–97 (at 2.5% per year in real terms) and average growth across each of the first two Labour parliaments (at 3.0% and 2.2%

Table B.1. HBAI income growth compared with the National Accounts

	Mean HBAI BHC income (GB)	Median HBAI BHC income (GB)	GDP per head (UK)	Real household disposable income per head (UK)
1997–98	2.6%	1.8%	2.9%	4.5%
1998–99	3.5%	1.5%	2.9%	0.2%
1999–00	2.1%	3.1%	3.0%	3.9%
2000–01	4.4%	3.1%	3.1%	3.8%
2001–02	4.4%	4.9%	1.7%	3.0%
2002–03	1.3%	2.0%	1.9%	1.7%
2003–04	–0.4%	0.0%	2.6%	1.8%
2004–05	1.4%	1.0%	2.6%	1.2%
2005–06	1.4%	1.1%	1.8%	2.1%
2006–07	0.8%	0.4%	2.5%	0.0%
Labour (1996–97 to 2006–07)	**2.1%**	**1.9%**	**2.5%**	**2.2%**
Of which				
Blair I (1996–97 to 2000–01)	3.1%	2.4%	3.0%	3.1%
Blair II (2000–01 to 2004–05)	1.7%	2.0%	2.2%	1.9%
Blair III (2004–05 to 2006–07)	1.1%	0.7%	2.2%	1.1%

respectively) are very similar to those revealed in the HBAI data. There are, however, some sizeable divergences in particular years. This may not be surprising, however, since national income includes the income of companies and the government as well as the income of households.[66]

The series 'real household disposable income per head' from the National Accounts excludes the income of companies and the government.[67] Average income growth under this measure is also broadly similar to HBAI income growth, showing average annualised income growth since 1996–97 of 2.2% per year. For the latest year of growth (2005–06 to 2006–07), this series shows no real growth at all – a result similar to the slow growth seen in the HBAI income measure at both the mean and the median. The GDP-per-head measure, by contrast, shows robust real growth over the same period.

Despite differences between the series, all agree that income has grown by around 2.1–2.5% on an annualised basis over the period 1996–97 to 2006–07 as a whole. The National Accounts measure of real household disposable income per head also shows a marked slowdown in income growth from 2002–03 onwards – despite the fact that overall GDP growth has remained robust over the same period.

Further details of how the HBAI and National Accounts measures of income differ were provided in the appendix of Brewer, Goodman, Shaw and Shephard (2005b).

[66] HBAI data will contain the income of companies that is distributed in dividends to households, but not the income that is distributed to pension funds or that is retained.

[67] Real household disposable income per head in the National Accounts does differ from the HBAI income measure in several important ways. For example, it includes imputed income from owner-occupation from the National Accounts and income that can be attributed to non-profit organisations such as universities and charities.

Appendix C. Comparing the FRS with administrative data on benefit receipts

Two years ago, we highlighted the fact that the FRS was under-counting both the number of families in receipt of tax credits and the amount paid out. Furthermore, we noted that administrative statistics recorded more lone parents in receipt of tax credits and child additions to means-tested benefits than the Office for National Statistics believed lived in the United Kingdom, suggesting some couples were falsely declaring themselves as lone parents for tax-credit purposes.[68] Here, we update this work to take account of two more years of administrative and FRS data, and add an analysis of pension credit receipt in the FRS.

The child and working tax credits

Figure C.1 compares estimates of the number of families with children receiving tax credits or other child-contingent support derived from the FRS with those based on HMRC and DWP's administrative data. It shows the following:

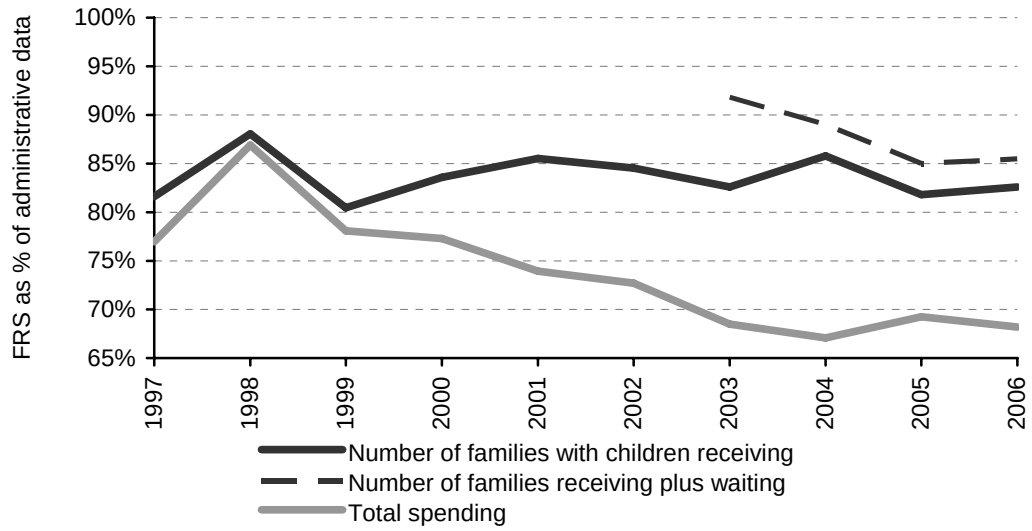
- The FRS has under-recorded both the number of recipients and expenditure since (at least) 1997–98.
- The extent to which the FRS under-records total tax credit spending has been increasing since 1998–99, although this decline has levelled off since 2003–04. Around a third of spending on tax credits is not recorded in the FRS.
- In addition, if we include in the total those families who were waiting to hear the outcome of a claim for tax credits, there has perhaps been a further increase in the extent of under-recording since 2003–04.[69]

The impact of the under-recording of tax credits on the measured numbers of children in poverty is not immediately obvious. Clearly, if a family whose income is genuinely just above the poverty line does not report income from tax credits to the FRS interviewer, they may appear to have an income below the poverty line. But the child tax credit is received by families with median incomes and above, and so the under-recording of tax credits might lead median income to be underestimated, thereby leading to the measured number of children in poverty to *understate* the true level of poverty.

[68] See Brewer, Goodman, Shaw and Sibieta (2006) and Brewer and Shaw (2006).

[69] Indeed, in Brewer, Goodman, Shaw and Sibieta (2006), we suggested that the increase in the discrepancy between the FRS and administrative data in 2003–04 may be the result of failure of the FRS to record one-off tax credit payments, typically made as a result of an underpayment. There were far more of these payments in 2003–04 than in subsequent years, so this cannot be an important determinant of the under-recording.

Figure C.1. Comparing estimates of tax credit receipts amongst families with children (GB until 2001–02, UK from 2002–03 onwards)



Notes: The graph shows estimates based on the FRS as a percentage of equivalent estimates based on administrative data. Years refer to financial years, so 1997 means 1997–98, for example. The series labelled 'Number of families with children receiving' measures the following: up to and including 2002–03, the estimated number of recipients of working families' tax credit or family credit in the FRS as a percentage of equivalent estimates from administrative data; from 2003–04 onwards, the estimated number of families with children receiving child tax credit or income support (IS) in the FRS as a percentage of the estimated number of families with children receiving child tax credit or the equivalent in out-of-work benefits from administrative data. The series labelled 'Total spending' compares estimated expenditure on tax credits (not out-of-work benefits) and family credit for families with children in the FRS as a percentage of equivalent estimates from administrative data.
Sources: Authors' calculations based on: Family Resources Survey (various years); Department of Social Security (various years); HM Revenue & Customs (2007b and earlier years) (spend on tax credits); HM Revenue & Customs (2008) and Inland Revenue (2003) (families receiving tax credits or equivalent in out-of-work benefits).

Table C.1 updates table 1 in Brewer and Shaw (2006) to compare the estimated number of families in receipt of different elements of the child tax credit and equivalent support payable through IS/JSA, separately for couples and lone parents. Overall, in 2006–07 the FRS recorded 16% fewer families with children in receipt of child tax credit than administrative records. This is largely (but not exclusively) due to under-counting the number of families in receipt of only the family element of the child tax credit or less (such families are very unlikely to be in poverty; however, this under-recording may affect the estimate of median income, as we discussed above).[70]

But Table C.1 also reveals an interesting pattern by family type: the FRS records 6% *more* couples receiving the working tax credit and 7% *more* couples receiving the child tax credit (more than the family element) than administrative data suggest; the equivalent figures for lone-parent families are 19% and 29% fewer.

[70] The pattern of under-recording of tax credits shown in Table C.1 is very similar to that for 2004–05, shown in Brewer and Shaw (2006), except that the number of couples with children recorded in the FRS as receiving the working tax credit (WTC) has risen dramatically over time with little change in the number of couples with children being paid the WTC; we strongly suspect this is because WTC was paid via employers in 2004–05 but paid direct to families in 2006–07, and this change has made it easier for the FRS to record its receipt.

Table C.1. Comparing estimates of the number of families receiving tax credits in 2006–07 (thousands)

	All families with children			Lone parents			Couples with children		
	Admin	**FRS**	**Shortfall of FRS**	**Admin**	**FRS**	**Shortfall of FRS**	**Admin**	**FRS**	**Shortfall of FRS**
Child tax credit (or equivalent): all	5,543	4,668	–16%	2,067	1,672	–19%	3,476	2,996	–14%
Child tax credit: more than family element plus equivalent through IS/JSA	3,551	3,299	–7%	1,958	1,596	–19%	1,593	1,703	+7%
Of whom: *Working tax credit*	*1,580*	*1,374*	*–13%*	*859*	*612*	*–29%*	*722*	*763*	*+6%*
Child tax credit: family element or less	1,992	1,369	–31%	108	76	–30%	1,884	1,293	–31%

Notes: Numbers have been rounded to the nearest 1,000 but percentages are based on unrounded numbers.
Administrative totals are the mean of those for April and December 2006.
Sources: Authors' calculations from various HBAI data-sets and HM Revenue & Customs (2008).

This pattern of under- and over-recording can be reconciled if there are some families who appear as couples in the FRS but are receiving child-related support as lone parents. Indeed, this hypothesis is supported by a simple comparison of other government statistics, which show that, in 2006–07, the government was paying child-related support to 100,000 more lone-parent families than the Office for National Statistics believe live in the United Kingdom: see Figure C.2 (which updates figure 1 in Brewer and Shaw (2006)).[71]

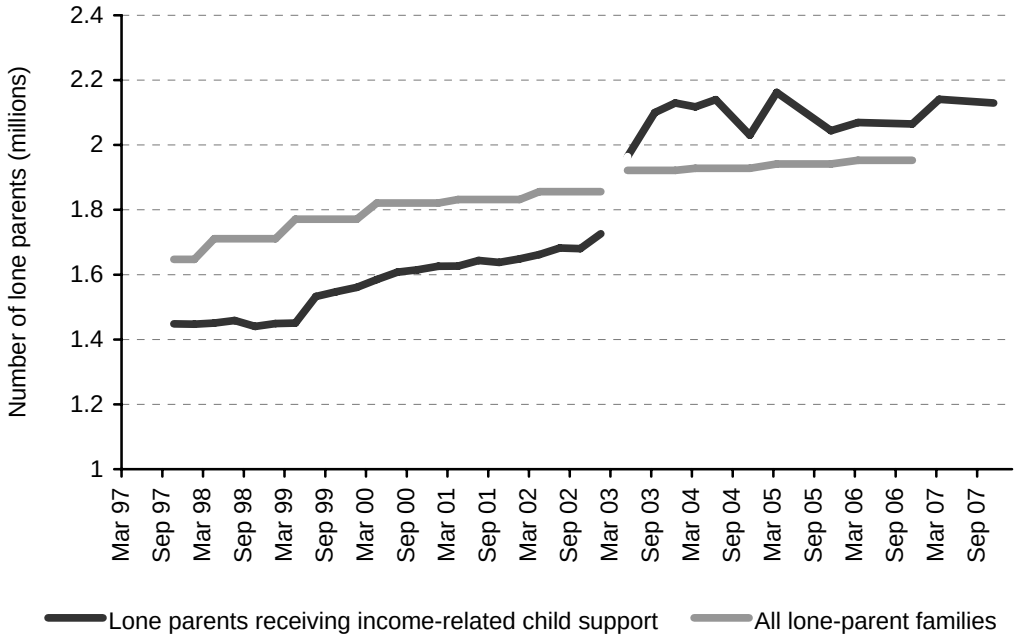
We first pointed out this discrepancy in Brewer and Shaw (2006). The response from the Treasury was:

> This is a wholly misleading piece of analysis which tries to draw conclusions by measuring very different things. Tens of thousands of people move in and out of the tax credits system every month. There are around 15,000 new lone-parent families every month, about 40,000 tax credit recipients' circumstances change every month. In a dynamic society where the situation for many thousands of families changes during the year, with around 300,000 marriages and 200,000 divorces each year, any comparison of two different points in time will of course show two different figures.[72]

[71] A very small number of lone parents will not be eligible for tax credits or means-tested benefits (those with gross incomes above £58,000), and so the number of lone parents receiving child-related support should always be less than the number of lone-parent families in the country. On the other hand, the estimates of the number of lone-parent families exclude those few lone-parent families not in private households.

[72] The Treasury's response was cited in full or part in: *Sunday Telegraph*, 12 March 2006, '"Phantom parents" claim £260m'; *Scottish Sunday Herald*, 12 March 2006, 'Benefits "paid out to 200,000 more single parents than actually live in the UK"'; and *Financial Times*, 13 March 2006, 'Doubts raised about tax credit system for lone parents'.

Figure C.2. Comparing estimates of the number of lone-parent families in GB/UK



Notes: Both series are for GB before April 2003 and for UK thereafter, hence the break in the series. *Lone parents receiving income-related child support:* Before April 2003, graph shows sum of lone parents in GB receiving working families' tax credit (WFTC) plus lone parents receiving any of income support (IS), jobseeker's allowance (JSA), incapacity benefit (IB) and severe disablement allowance (SDA) in GB; this will double-count a very small number of lone parents who were previously in work and receiving WFTC but have since stopped work and claimed IS or JSA. From April 2003 onwards, graph shows lone parents receiving the child tax credit plus lone parents receiving IS/JSA and not receiving the child tax credit in UK; there should be no double-counting.
Sources: *All lone-parent families:* Derived from grossing factors supplied with various years of HBAI data. *Lone parents receiving income-related child support:* HM Revenue & Customs (2008) (2003 onwards); Inland Revenue (2003) and authors' tabulation of DWP statistics (http://83.244.183.180/100pc/pc/tabtool_pc.html; contact the authors for precise detail) (before 2003).

It is our view that this response is, at best, irrelevant and, at worst, itself misleading. The estimate of the number of lone parents from the FRS represents an average across the financial year. The estimate of the number of lone parents being paid child-related support is an average of the numbers in receipt in April and December; unless there is incredible volatility in the total number of lone parents in each month, this is an entirely valid comparison.

Furthermore, since then, the government has estimated the amount of tax credits wrongly paid out due to fraud and error: in 2004–05, there were 80,000 families who were, through fraud or error, incorrectly receiving tax credits as a lone parent.[73] This provides a direct vindication of our hypothesis, and so we see no reason to alter our conclusion from two years ago:

[73] HM Revenue & Customs, 2007a. Department for Work and Pensions (2007b) estimates it wrongly paid out £85 million in means-tested benefits (October 2005 to September 2006, £72 million of which was ascribed to fraud) and HM Revenue & Customs (2007a) estimates it wrongly paid out £320 million in tax credits (2004–05) due to claimants not reporting the presence of a co-resident partner.

> We think it likely that these findings arise because the government is paying tax credits (or out-of-work benefits) to adults responsible for children whom the government thinks are lone parents but who are living as couples in the eyes of government statisticians. This could be because the adults in such couples do not consider themselves to be living together as husband and wife, or it could be because they have been co-residing for only a short while and have not yet informed HMRC, or it could reflect administrative error, claimant error or deliberate fraud.
>
> Incentives to commit fraud – as well as penalties for being caught – exist under all taxes and income-related benefits or tax credits. However, by extending the generosity of income-related tax credits that depend on the joint income of a couple, the government has increased the number of cohabiting couples with children who face a financial incentive to claim that they are not living together as husband and wife. Because it is very hard to produce an unambiguous definition of 'living together as husband and wife', it seems unlikely that such fraud can ever be eliminated, and it is a troubling aspect of the design of tax credits (and out-of-work benefits) that this ambiguity should exist when there are considerable financial penalties inherent in tax credits and out-of-work benefits to living together as husband and wife.
>
> Brewer and Shaw, 2006, p. 13

The Conservative Party has recently proposed to use the savings from welfare reforms to increase the working tax credit for couples with children in order to reduce the so-called couple penalty.[74] Certainly, the incentive for cohabiting couples with children receiving tax credits to claim that they are not living together as husband and wife would be reduced if the additional credit for couples in the tax credit system proposed by the Conservative Party were introduced; however, the incentive would not be eliminated, and such a change would also introduce a theoretical incentive for some lone parents to claim that they were living with a fictional adult as husband and wife in order to receive more tax credits. The only way to avoid giving tax credit recipients incentives to mislead HMRC over their family situation would be for the government to rely far less on income-related tax credits that depend on the joint income of a couple; such a policy, though, would make it more expensive for the government to deliver a given reduction in child poverty.

Pensioners' benefits and the pension credit

Chapter 2 contains a breakdown of income growth in 2006–07 by income component. One of the key (and surprising) findings is a 0.2% rise in reported nominal income from benefits (there was no change in the reported nominal income from benefits amongst pensioners) whilst the Department for Work and Pensions reports an increase in nominal spending of 3.9%.[75]

There are a number of possible causes for this discrepancy, including sampling error – the FRS happened to sample a group of pensioners with particularly low benefit receipts this year – or reporting/measurement error – respondents did not declare all benefits to which they were entitled or they under-reported amounts they received. Pension credit seems a likely

[74] See, for example, David Cameron, 'Making British poverty history', speech at Chance UK, 16 October 2007.

[75] Note that benefits income in HBAI includes tax credits and child benefit, which are not administered by DWP. Hence this comparison is only 'approximate'.

target for under-reporting: it is claimed by only about two-thirds of entitled pensioners,[76] suggesting that awareness and understanding of it are quite poor. Hence, here we look in more depth at the success of the FRS in capturing pension credit receipts.

Table C.2 shows the trends in the proportion of recipients of pension credit recorded in the FRS and the trends in an estimate of the proportion of expenditure recorded in the FRS, both compared with estimates from administrative data.[77]

Table C.2. Comparing estimates of pension credit receipts in the FRS and administrative data

	2004–05	2005–06	2006–07
Single pensioners			
% of recipients	64	64	64
% of average pension credit claim	94	88	85
% of total expenditure	60	57	54
Pensioner couples			
% of recipients	76	81	72
% of average pension credit claim	91	95	86
% of total expenditure	69	77	62
Total expenditure	64	64	57

Notes: The figures here show the estimates from the FRS of the number of pension credit recipients, average claim value and implied total expenditure as a proportion of the administrative record totals. Note that the administrative 'total expenditure' underlying this calculation is the average tax credit amount multiplied by the average number of recipients (from four snapshot measures during the year). The expenditure total calculated this way is less than that published by DWP at http://www.dwp.gov.uk/asd/asd4/medium_term.asp, as our method will miss those who received pension credit at some point during the year but not at the time the snapshots were taken. This means that HBAI picks up a slightly lower proportion of total expenditure than indicated above. Our method, however, is the only one that allows a breakdown of results by pensioner family type.
Sources: Authors' calculations from FRS (2004–05, 2005–06 and 2006–07) and authors' tabulation of DWP statistics (http://83.244.183.180/100pc/pc/tabtool_pc.html; contact the authors for precise detail).

The table shows that the FRS appears to be very poor at recording receipt of pension credit, with only around two-thirds of beneficiaries recorded (around 64% of single pensioner recipients and 70–80% of pensioner couple recipients). Whilst the FRS excludes the approximate 400,000–500,000 pensioners living in communal establishments (mostly care homes),[78] even if all these were receiving the pension credit we would still have a shortfall of almost half a million beneficiaries.

Additionally, the average amount received per claimant is less than that recorded in administrative data; this implies either that those failing to declare their receipts of pension credit to FRS interviewers are those with larger receipts or that a significant number of

[76] Table 2.1 of Department for Work and Pensions (2007c).

[77] Here, recipients refer to the total number of beneficiaries of pension credit (including spouses) as opposed to the number of claimants (only one partner in a couple can claim).

[78] Derived by comparing estimates of the pensioner population derived from projections using the 2001 census (which includes those in communal establishments) and the FRS pensioner total (which excludes those in communal establishments).

individuals who report receipt also under-report the amount they receive. Furthermore, it does not seem to be the case that interviewees are wrongly classifying their income from pension credit as another form of income, such as the state pension: the estimate from the FRS of total spending on the state pension (including SERPS) is a little lower than the administrative total (and accounting for those pensioners living in communal establishments would not likely overturn this finding).

Between 2005–06 and 2006–07, there was a fall in the proportion of beneficiaries recorded in the FRS, and a more significant fall from about 64% to 57% in the proportion of pension credit expenditure recorded in the FRS. This increased discrepancy may explain some of the measured rise in pensioner poverty, but we are unable to say how much because we do not know who is failing to report receipt of pension credit (or under-reporting the amount received). Clearly, though, this under-reporting of pension credit will lead pensioner poverty to be overstated if it is those pensioners whose true income places them just over the poverty line who are failing to report their receipts.[79]

[79] Note that the pension credit is only available to relatively poor pensioners, and so those on incomes close to the median are highly unlikely to receive it: unlike the child tax credit, under-reporting of the pension credit is therefore highly unlikely to result in an underestimate of the true pensioner poverty rate.

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