Institute for Fiscal Studies

Poverty and Inequality in the UK:2009

IFS Commentary C109

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Preface

Contents

Executive summary

Living standards

- 2007–08 was the sixth consecutive year of slow growth in average take-home incomes, with mean equivalised income in Great Britain growing by just 1.1% in real terms (from £484 to £490), while median income was virtually unchanged (rising by less than £1 in real terms to a level of £394).

- These years of sluggish real income growth stand in stark contrast to Labour's first term in office (1997–2001), when mean income grew by an average of 3.1% a year.

- This slow growth in average incomes can be largely attributed to low earnings growth in recent years. Earnings are the largest component of household incomes (on average), but mean household earnings grew by just 0.7% a year between 2001–02 and 2007–08. This compares poorly with growth of 4.4% a year on average between 1996–97 and 2001–02.

- Taking the period from 1996–97 to 2007–08 as a whole, however, living standards in Great Britain have risen on average by the equivalent of 2.0% a year at the mean and 1.7% at the median.

- The most recent available data on trends in unemployment and earnings growth suggest a bleak outlook for income growth in the near future.

Inequality

- Income inequality has risen (on most measures) in each of the last three years and is now at its highest level since our comparable time series began in 1961.

- Real income growth was near-zero at almost every point of the income distribution last year, so that it would only be a slight exaggeration to say that we had the same income distribution in 2007–08 as we did in 2006–07. There was a small (but statistically insignificant) growth in incomes at the very top of the distribution, which explains the increase in inequality in an otherwise static income distribution.

- Taking the period 1996–97 to 2007–08 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 increasing in household income. However, income growth at the very top and very bottom of the 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.

- Considering each of Labour's three terms individually, however, shows a more complicated picture – with income growth relatively even in Labour's first term, unambiguously inequality-reducing in Labour's second term and very much inequality-increasing in Labour's third term.

- Given that individuals at the top of the income distribution receive a significant fraction of their income from savings and investments, and that a significant fraction of top earners work in the financial sector, the recent turmoil in financial markets is likely to significantly slow the growth in top incomes in the near future.

Poverty

- Relative poverty in 2007–08 was 300,000 higher than in 2006–07 measured before housing costs (BHC) and 200,000 higher measured after housing costs (AHC). Although the rise is not statistically significant, this is the third year in a row that relative poverty has risen, and the rise since 2004–05 is statistically significant.

- In the latest year of data, child poverty was unchanged measuring incomes BHC but increased by 100,000 measuring incomes AHC. Compared with 2004–05 (when child poverty reached its lowest level since 1987), child poverty in 2007–08 was 200,000 higher 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 quarter of the decline in poverty measuring incomes BHC and about a half of the decline in poverty measuring incomes AHC between 1998–99 and 2004–05.

- Between 2007–08 and 2010–11, child poverty needs to fall by 1.2 million to meet the government's 2010 target of halving child poverty. Before Budget 2009, IFS research estimated that, on current plans, the government would fall short of this target by 600,000 and that additional spending of £4.2 billion a year would be required to meet it. Given that Budget 2009 allocated less than £0.2 billion towards meeting the target, it seems highly likely that it will be missed, unless the government can find approximately £4 billion between now and the 2009 Pre-Budget Report.

- In 2007–08, pensioner poverty was unchanged using incomes measured both BHC and AHC. This follows rises of 300,000 (BHC) and 200,000 (AHC) in 2006–07. Pensioner poverty is still statistically significantly higher than its low in 2005–06, but it remains considerably lower than in 1998–99.

- Poverty amongst working-age adults without dependent children is now at its highest level since the start of our comparable series in 1961, with rises of 200,000 (BHC) and 100,000 (AHC) in the latest year of data.

- Looking to the future, falling levels of inflation in 2008–09 mean that most benefits and tax credits will grow in real terms over this period, and this seems likely to be the case in 2009–10 too. This would normally act to reduce relative poverty, depending on the relative growth in average incomes and the poverty line. Moreover, there were a number of discretionary measures aimed at low-income families with children, which should act to reduce child poverty.

- However, one also needs to take account of the potential impact of the current recession, which could both increase the number of low-income households and lower the poverty threshold. Previous work by IFS researchers has estimated that child poverty would still fall between 2006–07 and 2010–11.

- When looking at other groups, we can only speculate, but if previous experience of changes in relative poverty during recessions is anything to go by, then we would expect small reductions in overall levels of relative poverty, driven by a reduction in pensioner poverty. Relative to average incomes, there has been a decline in the generosity of out-of-work benefits for working-age adults without children over time, which has not occurred for pensioners or families with children. This group could thus fare worse this time round.

1. Introduction

In this Commentary, we assess the changes to average incomes, inequality and poverty that have occurred since Labour came to power in 1997, 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 7 May 2009 (Department for Work and Pensions, 2009). The HBAI series takes household income as its measure of living standards, and is derived from the Family Resources Survey, a survey of around 25,000 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. This is not necessarily the same as a family; for instance, young adults 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 2007–08. 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 5 offers some conclusions, and also some tentative thoughts on what the uncertain future might hold, given the current recession.

An accompanying Briefing Note (Muriel and Sibieta, 2009) illustrates in more detail how measures of living standards, poverty and inequality have evolved during past recessions, and what (if anything) this can teach us about how they might evolve during the current recession.

2. Living standards

Key findings

- 2007–08 was the sixth consecutive year of slow growth in average take-home incomes, with mean equivalised income in Great Britain growing by just 1.1% in real terms (from £484 to £490), while median income was virtually unchanged (rising by less than £1 in real terms to a level of £394).

- These years of sluggish real income growth stand in stark contrast to Labour's first term in office (1997–2001), when mean income grew by an average of 3.1% a year.

- This slow growth in average incomes can be largely attributed to low earnings growth in recent years. Earnings are the largest component of household incomes (on average), but mean household earnings grew by just 0.7% a year between 2001–02 and 2007–08. This compares poorly with growth of 4.4% a year on average between 1996–97 and 2001–02.

- Taking the period from 1996–97 to 2007–08 as a whole, however, living standards in Great Britain have risen on average by the equivalent of 2.0% a year at the mean and 1.7% at the median.

- The most recent available data on trends in unemployment and earnings growth suggest a bleak outlook for income growth in the near future.

In this chapter, we discuss how average incomes have changed in the latest year of the HBAI data, 2007–08, and over the recent past, paying particular attention to changes since 1996–97. All monetary values in this chapter are expressed in average 2007–08 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 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 2007–08, and some figures from the National Accounts. This chapter and Chapter 3 focus on income before housing costs have been deducted.

2.1 A picture of the income distribution in 1996–97 and 2007–08

Figure 2.1 shows the UK income distribution in 2007–08. 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. Mean income in the UK in 2007–08 was £487 per week (equivalised to the level for a couple with no children), while median income was almost £100 lower, at £393. 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 1.2 million individuals, out of a private household population of approximately 60 million individuals, have incomes above £1,500 a week. The graph also shows that

there are more than 600,000 individuals whose income is between zero and £10 a week (negative incomes are set to zero in the HBAI data). These zero or negative incomes 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. Box 2.1 discusses in more detail the living standards of families reporting low incomes.

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 6. 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 (by far the widest in the graph) is in fact even wider than is shown in Figure 2.1, because those with incomes greater than £1,500 are shown together rather than in £10 bands.

Figure 2.2 shows how the income distribution has changed between 1996–97 and 2007–08. (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.

Figure 2.1. The income distribution in 2007–08 (UK)
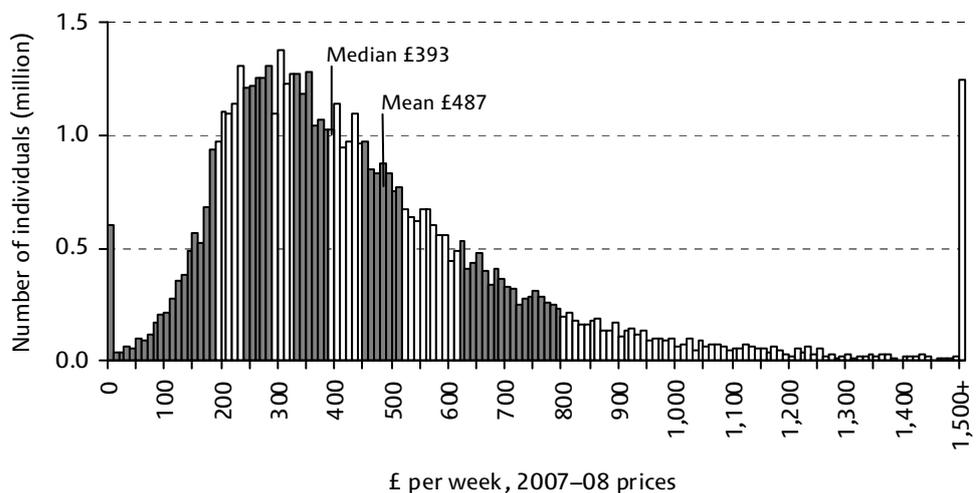
Notes: Incomes have been measured before housing costs have been deducted. The right-most bar represents incomes of over £1,500. The differently-shaded bars refer to decile groups.
Source: Authors' calculations using the Family Resources Survey, 2007–08.

Figure 2.2. The income distributions in 1996–97 and 2007–08 compared (GB)
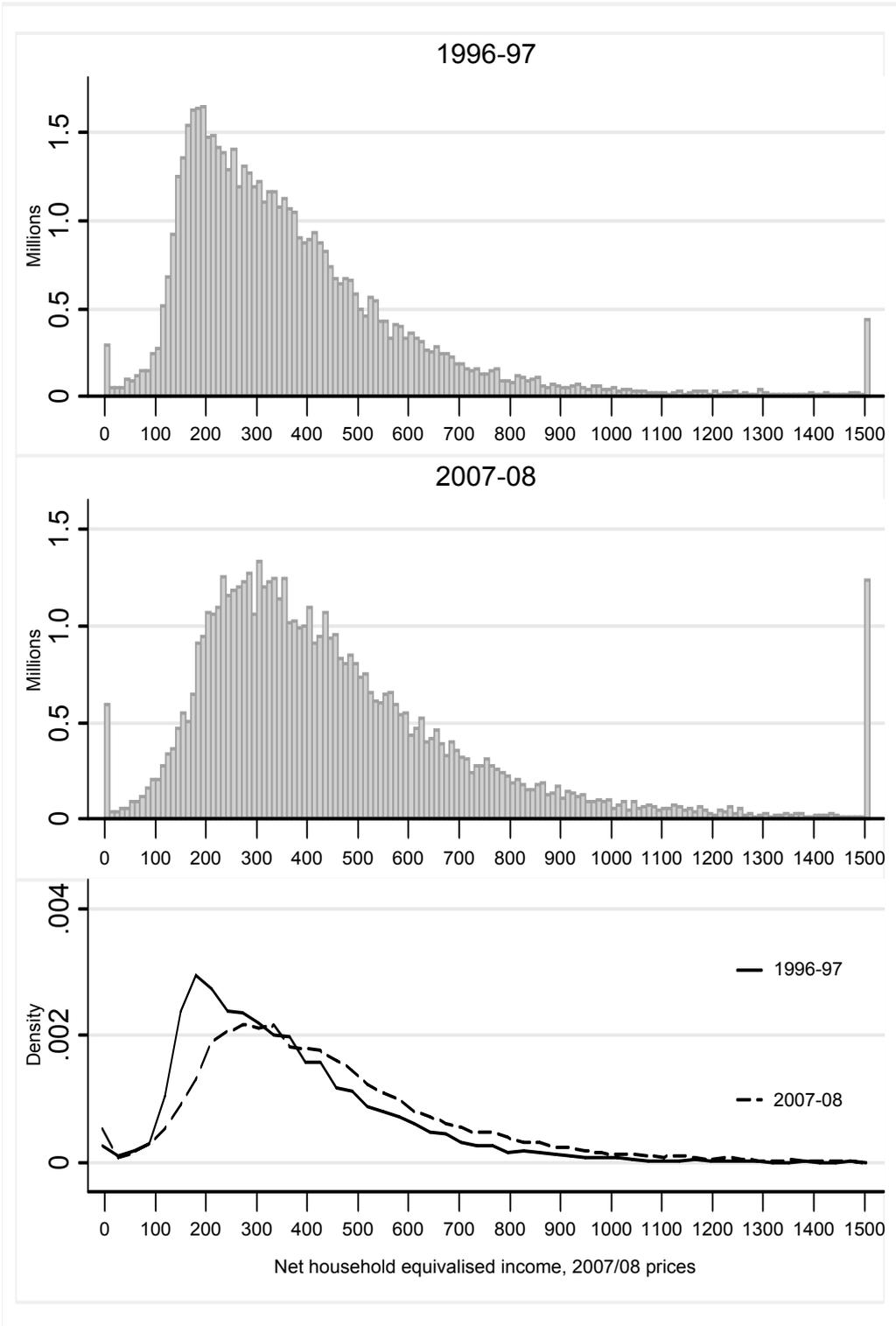
Notes: Incomes have been measured before housing costs have been deducted. The right-most bar in the top two panels represents incomes of over £1,500. Incomes above £1,500 have been excluded from the kernel densities in the final panel.

Source: Authors' calculations using Family Resources Survey, 1996–97 and 2007–08.

Box 2.1. The living standards of families reporting low incomes

Brewer, O'Dea, Paull and Sibieta (2009) examine the relationship between income and other possible measures of living standards for families with children, including family expenditure, material deprivation scores and financial assets. They show that children from households with the lowest incomes do not have the lowest average living standards according to these other measures. Instead, loosely speaking, average living standards first fall as income rises, and then rise, creating a 'U-shaped' profile between income and other measures of living standards. An example of this pattern is shown in Figure 2.3. Note that a higher level of material deprivation indicates a *lower* standard of living, so the graph shows an inverted U-shape. A similar pattern has been shown to exist for all families, e.g. see Brewer, Goodman and Leicester (2006) or Brewer, Muriel, Phillips and Sibieta (2008).

Figure 2.3. Distribution of material deprivation by £25 income bands amongst families with children in the UK, 2004–05 to 2006–07
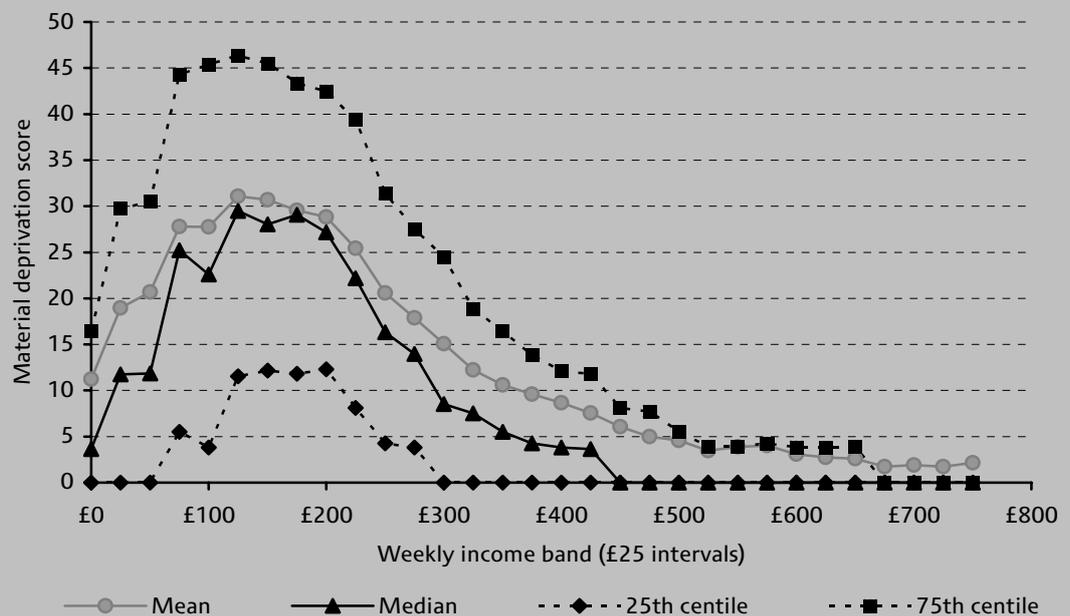
Note: Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, 2004–05 to 2006–07 (pooled).

To be precise, the roughly 1% of children living in households with incomes below £50 a week have average living standards comparable to those with incomes of £250 to £500 a week. The lowest average living standards are to be found amongst children living in households with equivalised incomes of £100 to £200 a week, which represents about 11% of all children and corresponds to roughly 30–50% of median income.

Brewer, O'Dea, Paull and Sibieta (2009) also show that among households with similar incomes, there are clear differences in living standards, on average, depending on the work status of the household. In general, self-employed families with children have higher living standards than employed families with children with similar incomes, who in turn have higher living standards than workless families with children with similar incomes.

Looking at this lowest panel, which compares 1996–97 with 2007–08, 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' real incomes. Second, the peak of the income distribution has become less distinct. Whereas in 1996–97 there was a pronounced spike at the modal income,[1] by 2007–08 there was a broader peak in the distribution between about £250 and £350. Looking at the top two panels, it can be seen that almost three times as many individuals fall into the highest income band in 2007–08 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 2.4. The graph shows that over this period, average incomes have tended to rise, though the rate of growth has not been constant over time (a point to which we return below). Mean weekly BHC income in Great Britain has increased from £392 in 1996–97 to £490 in 2007–08. This corresponds to a real rise of around 25%, or 2% a year on an annualised basis. Similarly, median income increased by 21% (1.7% when annualised), from £327 to £394.[2]

We can see from Figure 2.4 that real income growth has not been uniform over time – it has tended to come in 'spurts', such as in the mid-1980s and late 1990s, followed by periods of relative stagnation, such as the early 1990s. Income growth in recent years (since 2001–02 in particular) has also been slow relative to growth in the late 1990s.

Figure 2.5 shows average annual income growth in each of Labour's three terms of office since 1997. We observe rapid income growth in Labour's first term (more than 3% a year

Figure 2.4. Average real incomes since 1979 (GB)
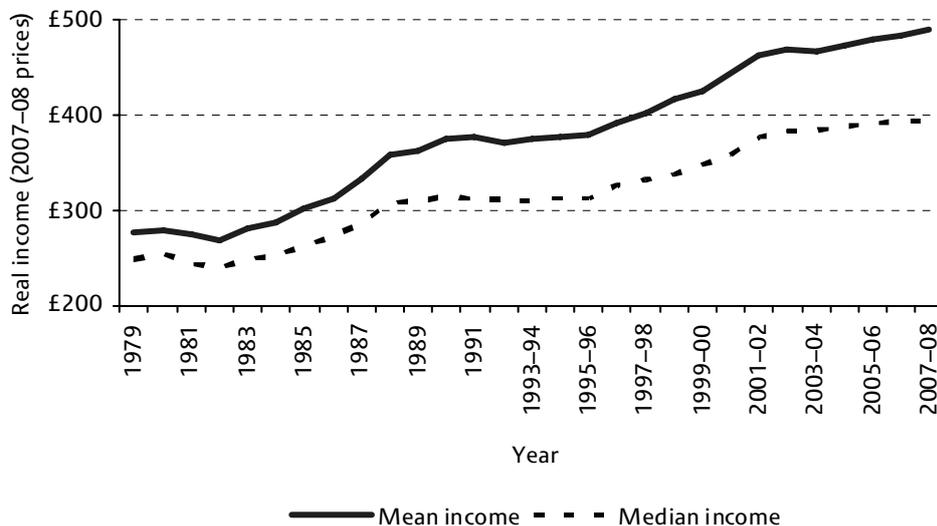
Note: Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

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

[2] The growth of income is rather stronger when measured AHC rather than BHC: mean and median incomes increased by 35% and 29% respectively, measured after housing costs, between 1996–97 and 2007–08.

Figure 2.5. Average annual income growth in Labour's three terms to date (GB)
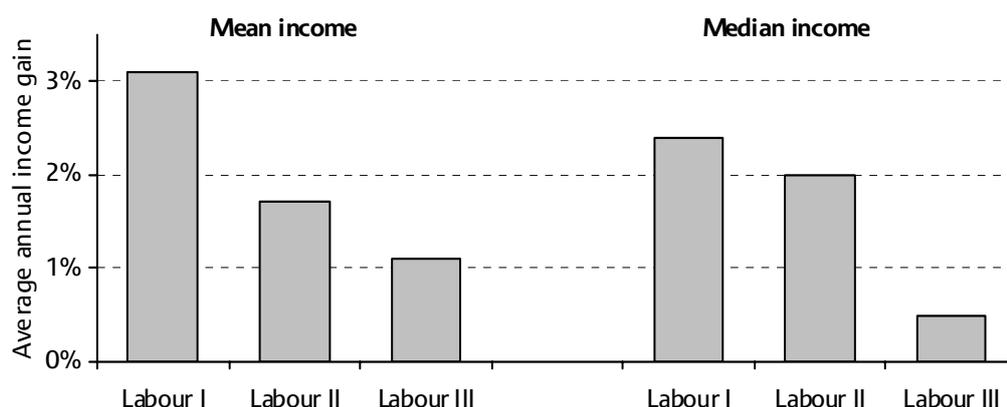
Note: Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, 1996–97 to 2007–08.

at the mean and nearly 2.5% a year at the median), but each subsequent term has seen slower annual income growth than the one before. 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. However, it is also worth emphasising that the latest household income data (from 2007–08) correspond to the period *before* the UK economy entered recession – we do not yet have data on household incomes since the recession began. Figure 2.5 therefore shows that income growth was sluggish in Labour's third term even before the UK economy started to contract.

How do these growth rates compare with those in previous administrations? Table 2.1 shows that annualised real income growth under the period of Labour government as a whole is very similar to growth 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). Looking at each Labour term individually, we note that Labour's first term (from 1996–97 to 2000–01) saw exceptionally strong average income growth – faster at both mean and median than growth under Thatcher or Major. Labour's second term (from 2000–01 to 2004–05) saw slightly weaker average income growth

Table 2.1. 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 2007–08)	**2.0%**	**1.7%**
Of which:		
Labour I (1996–97 to 2000–01)	3.1%	2.4%
Labour II (2000–01 to 2004–05)	1.7%	2.0%
Labour III (2004–05 to 2007–08)	1.1%	0.5%

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

Table 2.2. 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	−2.4%	−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	−0.8%	1.4%	3.4%	−0.2%	1.1%	2.3%
2006–07	−1.4%	0.8%	3.2%	−0.9%	0.4%	1.7%
2007–08	−1.6%	1.1%	3.4%	−1.3%	0.2%	1.6%

Note: Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, various years. Confidence intervals calculated using the bootstrap method, 500 iterations.

than under Thatcher, though growth was still stronger than it was under Major. In contrast, Labour's third term (from 2004–05 to the latest year of data in 2007–08) has seen average incomes growing at less than half the rate under Thatcher, at rates comparable to those experienced under Major.

The 'turning point' for income growth was not 2004–05, however. As Table 2.2 shows, average income growth appears to have started slowing between 2001–02 and 2002–03. The table shows real percentage changes in mean and median incomes in each year since 1996–97, together with the 95% confidence intervals for these changes. In the latest year of data (shown in the bottom row), we see that mean income rose by 1.1% in real terms (or the equivalent of around £5 per week for a couple with no children), while median income rose in real terms by 0.2% (less than £1 per week). Neither of these changes is statistically significantly different from zero.

During the period of strong income growth between 1996–97 and 2001–02, mean income growth was never less than 2% and median income growth never below 1.5%. After 2001–02, mean income growth has been less than 1.5% every year and median income growth has rarely been above 1%.

The level of mean income is not statistically significantly greater than it was in 2005–06, and the level of median income is not statistically significantly greater than as far back as 2004–05.

HBAI income compared with other measures of average income

It is useful to compare the HBAI estimates of changes in average income with estimates from other sources. Figure 2.6 compares average (BHC) income in the HBAI series with two alternative estimates of average income derived from the National Accounts: real gross domestic product (GDP) per head and 'real household disposable income per head' (which excludes the income of companies and the government). These National Accounts measures are for the whole United Kingdom, not just Great Britain, but the trends should still be broadly comparable.

Figure 2.6. Mean HBAI income compared with other measures
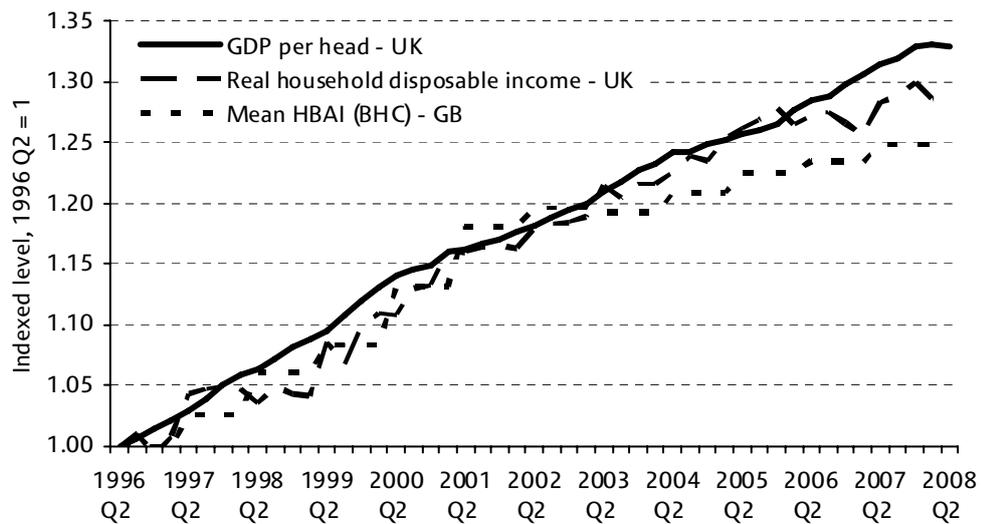
Note: Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using the UK National Accounts and Family Resources Survey, various years.

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.[3]

We can see from Figure 2.6 that the three series moved together for most of the late 1990s, so that by 2002 all series had grown by very similar amounts since 1996. After 2002, however, the series begin to diverge, with HBAI mean income lagging behind both the National Accounts measures. From 2006 onwards, real household disposable income also diverges from GDP per head, with the household income measure showing slower growth than the GDP measure.

Both the HBAI and household disposable income measures appear to suggest that robust economic growth since 2002 has not always translated directly into increased household living standards. The discrepancy between HBAI and National Accounts measures might be dismissed as due to measurement issues in the survey on which HBAI is based, but the divergence of the two National Accounts measures (GDP per head and real household disposable income) calls for explanation.

Further detail regarding the annual growth rates in these different measures of average income is given in Appendix B.

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[3] For example, the 'household sector' as defined in the National Accounts includes bodies such as charities and most universities, as well as families. Real household disposable income also includes imputed income from owner-occupation. 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.

Unemployment and the prospects for income growth

One of the more dispiriting facts about recent slow growth in incomes is that it has come at a time of comparatively low unemployment by historical standards. As shown in Figure 2.7, from 2001 until early 2008 the unemployment rate (using the International Labour Organisation definition) fluctuated around 5% of all economically active people in the UK. Unemployment rose by around 0.8 percentage points between mid-2005 and mid-2006, but then declined somewhat over the course of 2007.

Figure 2.7. Unemployment (seasonally adjusted), 1996 to early 2009 (UK)
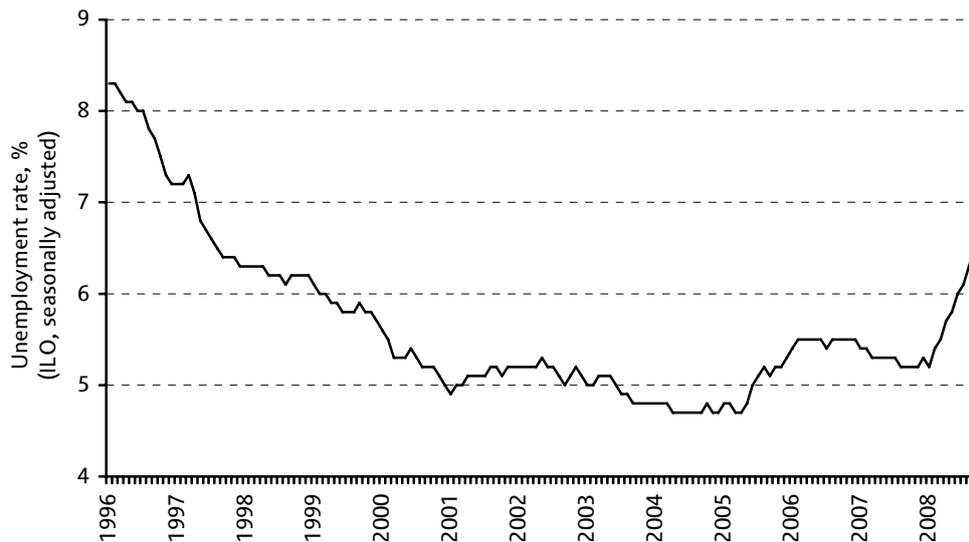
Source: Office for National Statistics, series MGSX (unemployment rate for all aged 16 and over); denominator is the economically active population.

However, as Figure 2.7 makes clear, unemployment has increased sharply since early 2008, and this upward trajectory shows no signs of abating in 2009. Since earnings from employment form by far the largest single source of income, on average, for households (see next subsection), and remembering that our latest year of household income data (for 2007–08) only capture the very beginning of this worrying unemployment trend, there are few grounds for optimism regarding income growth in the near future.

Examining different sources of income

In order to understand the slow income growth since 2001–02, it is helpful to break household income down into its component sources. To this end, Table 2.3 shows what happened to the mean values of household income's various sources, both in the last year and over Labour's period of government. The first row of the table shows how large each component is as a share of total income, making clear that the largest source of household income, across the whole population, is income from earnings (two-thirds of all income), followed by income from state benefits and tax credits, self-employment income and income from savings, investments and private pensions.

The next row shows how these income sources have grown under Labour to date. All sources of income have grown by more than 1% a year in real terms, with the largest component of income (earnings) growing by 2.4% a year. However, the deductions from

household income (payments such as council tax and private pension contributions) have also been growing fairly rapidly, at more than 5% a year on an annualised basis.

The final two rows of Table 2.3 break income growth under Labour into two periods – the rapid growth of 1996–97 to 2001–02 and the slower growth of 2001–02 to 2007–08. It is immediately apparent that earnings growth has been far slower since 2001–02, with earnings increasing by less than 1% a year, compared with more than 4% a year between 1996–97 and 2001–02. As earnings make up around two-thirds of household income (on average), it is clear that sluggish earnings growth in recent years can explain much of the slow growth in overall household incomes. Since earnings growth is so important to the overall trend in HBAI income, Box 2.2 examines whether earnings growth in the HBAI data matches that observed in the average earnings index – a broader measure of earnings growth in Great Britain.

For benefit income (the next largest source of income), in contrast, growth has been at a relatively constant rate over the two time periods – between 1.2% and 1.3% a year. In last year's poverty and inequality report,[4] we expressed concern about the low growth in benefits income found in the HBAI data, compared with the benefits spending reported by HMRC and DWP. However, as Appendix C makes clear, benefits income growth in the latest year of data closely matches growth in benefits spending from the administrative data.

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	Deductions from income (including council tax)		
Share of total income:								
2007–08	66%	18%	10%	11%	3%	–7%	100%	n/a
Annual change under Labour to date:								
1996–97 to 2007–08	2.4%	1.2%	1.3%	2.0%	3.4%	5.3%	1.9%	2.0%
Of which:								
1996–97 to 2001–02	4.4%	1.2%	2.0%	1.6%	4.6%	7.8%	3.1%	3.4%
2001–02 to 2007–08	0.7%	1.3%	0.7%	2.3%	2.4%	3.2%	0.9%	0.9%

Notes: All sources of income have been equivalised and are measured at the household level. Incomes have been measured before housing costs have been deducted. Shares in 2007–08 do not sum to 100% due to rounding. 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'; see Appendix A). 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').
Source: Authors' calculations using Family Resources Survey, various years.

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[4] Brewer, Muriel, Phillips and Sibieta, 2008.

Box 2.2. HBAI earnings compared with the average earnings index

Given the importance of earnings growth to overall household income growth, it is interesting to compare earnings growth in the HBAI data with the average earnings index (AEI), Britain's key indicator of how fast earnings are growing.

Figure 2.8 shows the AEI from 1996–97 to 2007–08, along with a cash-terms earnings index constructed from mean household earnings in the HBAI data. Both indices show how average earnings in different years compare with average earnings in 2000–01, so are calculated such that they are equal to 100 in 2000–01. The two series are not strictly comparable, because the AEI describes average individual earnings among all earners while the HBAI figures are for mean household earnings among all households. However, the levels of the two series give us an indication of whether HBAI earnings tend to track wider measures of earnings growth.

Figure 2.8. Earnings indices: HBAI versus average earnings index (GB)
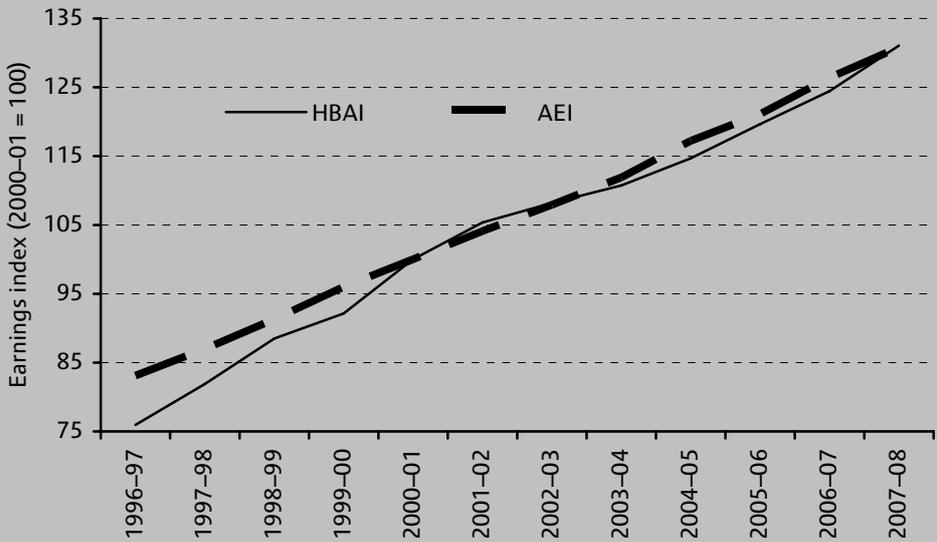
Sources: Office for National Statistics; authors' calculations using Family Resources Survey, various years.

The graph shows that mean earnings in HBAI have tracked the AEI very closely since 2000–01, although HBAI earnings in the late 1990s were somewhat lower, relative to earnings in 2000–01, than those in the AEI.

Given the relatively close match between recent earnings growth in HBAI and earnings growth measured by the AEI, it is worth noting another unsettling statistic from the most recent AEI data. In January 2009, the AEI (including bonuses) was lower than it was a year earlier – the first time that the AEI had fallen year on year since Labour came to power. With earnings growth so important to average household income growth, this is another reason to be pessimistic about the prospects for income growth in the near future.

Table 2.3 also shows that growth in income from self-employment slowed down after 2001–02 (though this tends to be a volatile series), while income from savings, investments and private pensions has actually grown slightly faster in the years since 2001–02. Deductions from income (of which council tax is the largest component) grew very rapidly between 1996–97 and 2001–02, at an annualised rate of nearly 8% a year. Since 2001–02, they have grown more slowly, at a rate of around 3% a year in real terms. This coincides with a period during which central government has moved to 'cap' increases in council tax, placing pressure on local authorities to keep increases low.

In summary, then, the slow growth in household incomes from 2001–02 to 2007–08 appears to have been largely due to slow growth in earnings over this period, with slower growth in self-employment income also contributing to the low overall growth rate.

2.3 Conclusion

2007–08 was the sixth successive year of comparatively weak growth in average incomes. The recent period of poor growth is in stark contrast to the robust growth seen between 1996–97 and 2001–02, and it is this early strong growth which leads to a relatively benign picture for Labour's time in office taken as a whole. Between 1996–97 and 2007–08, incomes in Great Britain have risen on average by the equivalent of 2.0% a year at the mean and by 1.7% a year at the median.

Given that the recent period of weak income growth is largely due to slow earnings growth, and that it came during a period of historically low unemployment, we may worry that things will be even worse going forward. Unemployment has risen sharply in recent months, the average earnings index has fallen for the first time in decades and the economy has entered recession. The outlook for household income growth in the near future is almost certainly bleak.

3. Inequality

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Key findings

- Income inequality has risen (on most measures) in each of the last three years and is now at its highest level since our comparable time series began in 1961.

- Real income growth was near-zero at almost every point of the income distribution last year, so that it would only be a slight exaggeration to say that we had the same income distribution in 2007–08 as we did in 2006–07. There was a small (but statistically insignificant) growth in incomes at the very top of the distribution, which explains the increase in inequality in an otherwise static income distribution.

- Taking the period 1996–97 to 2007–08 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 increasing in household income. However, income growth at the very top and very bottom of the 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.

- Considering each of Labour's three terms individually, however, shows a more complicated picture – with income growth relatively even in Labour's first term, unambiguously inequality-reducing in Labour's second term and very much inequality-increasing in Labour's third term.

- Given that individuals at the top of the income distribution receive a significant fraction of their income from savings and investments, and that a significant fraction of top earners work in the financial sector, the recent turmoil in financial markets is likely to significantly slow the growth in top incomes in the near future.

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Chapter 2 considered changes in average incomes, without considering how evenly (or otherwise) these changes were distributed. In this chapter, we look at how income growth has varied across the income distribution, and how the degree of income inequality has changed over the last year of data and under Labour's time in government.

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 12 million individuals).

As discussed in Section 2.2, between 2006–07 and 2007–08 mean and median income grew in real terms by 1.1% and 0.2% respectively. Figure 3.1 shows the underlying pattern of this income growth by quintile group. It shows that there was almost no real income growth anywhere in the distribution, with growth less than 1% for all groups. The

individual in the middle of the poorest fifth of the population saw a statistically insignificant fall in income in the last year. 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 3.4.

Figure 3.1. Real income growth by quintile group, 2006–07 to 2007–08 (GB)
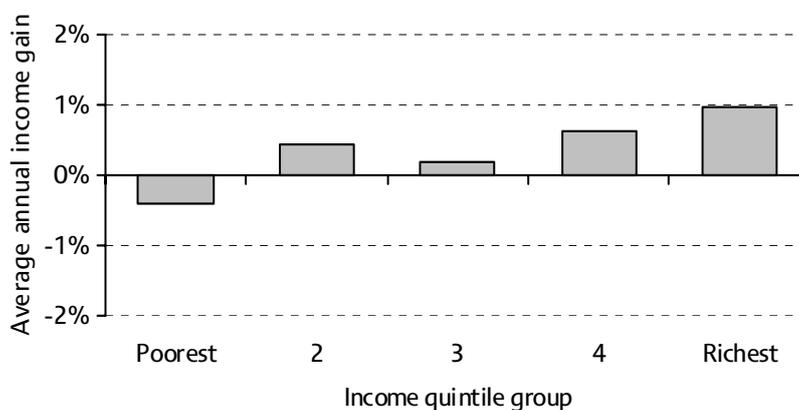
Notes: The averages in each quintile group correspond to the midpoints, i.e. the 10th, 30th, 50th, 70th and 90th percentile points of the income distribution. Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, 2006–07 and 2007–08.

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 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 2007–08 as a whole, all quintile groups have experienced income growth in the region of 1.6–2.0% on an annualised basis. The second quintile group fared best, with annual income growth of 2.0%, 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 3.4. This is very different from the experience under the previous Conservative governments, when 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 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.

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

Labour: 1996–97 to 2007–08
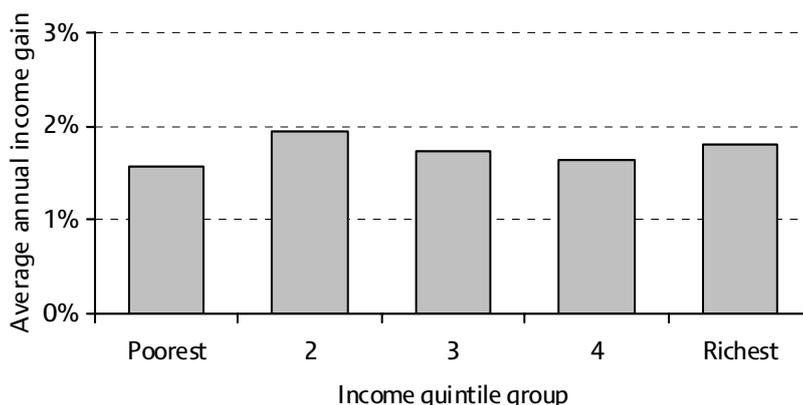
Conservatives: 1979 to 1996–97
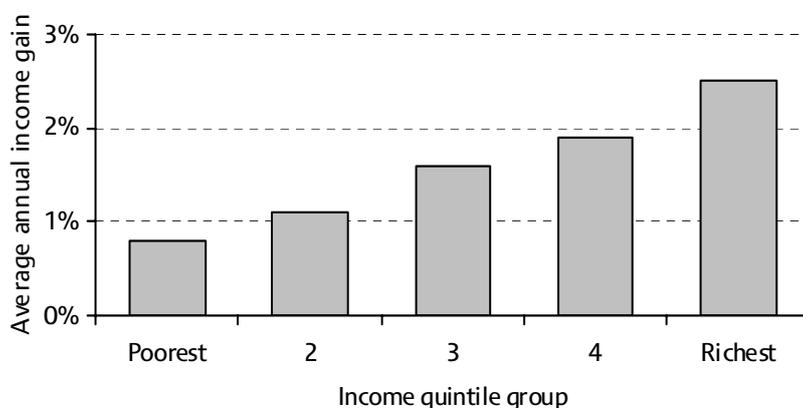
Notes: The averages in each quintile group correspond to the midpoints, i.e. the 10th, 30th, 50th, 70th and 90th percentile points of the income distribution. Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

Table 3.1. Real income growth by quintile group, across parliaments and between 2004–05 and 2007–08 (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 2007–08)						
Of which:						
Labour I (1996–97 to 2000–01)	2.4%	2.7%	2.4%	2.5%	2.7%	3.1%
Labour II (2000–01 to 2004–05)	2.6%	2.5%	2.0%	1.6%	1.4%	1.7%
Labour III (2004–05 to 2007–08)	–0.9%	0.2%	0.5%	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.

In Labour's third term, up to 2007–08, income growth has been lower for every quintile than in the previous two terms, and negative for the bottom quintile. In fact, income growth for the bottom quintile has been negative (year on year) for three consecutive years, making this the worst period for bottom incomes since the recession of the 1990s. Growth between 2004–05 and 2007–08 was strongest (relatively speaking) among the top quintiles, with only the richest group experiencing income growth of more than 1% a year.

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 between 2006–07 and 2007–08 right across the distribution, 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. We also show 95% confidence intervals for our estimates of income growth, to give us an idea of whether the estimated growth is statistically significantly different from zero.

Figure 3.3 makes clear just how static the income distribution was between 2006–07 and 2007–08. Nowhere in the income distribution has there been statistically significant real growth. Towards the very top of the distribution, we see some larger (but still insignificant) growth, meaning that income inequality increases between 2006–07 and 2007–08; but otherwise the 2007–08 income distribution is virtually unchanged from the previous year's.

Figure 3.3. Real income growth by percentile point, 2006–07 to 2007–08 (GB)
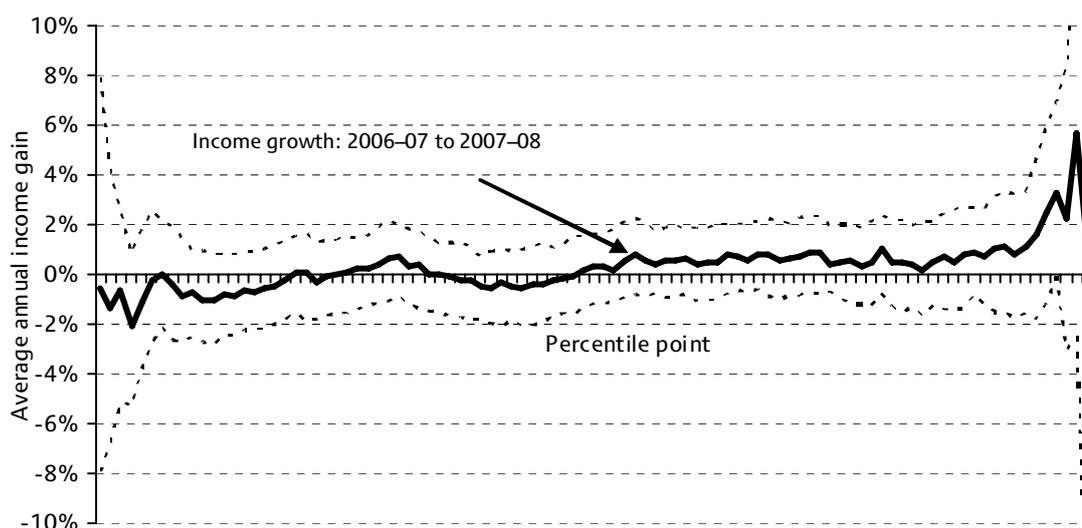
Notes: The changes in income at the 1st and 2nd percentiles are not shown on this graph. Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, 2006–07 and 2007–08.

Figure 3.4. Real income growth by percentile point, 1996–97 to 2007–08 (GB)
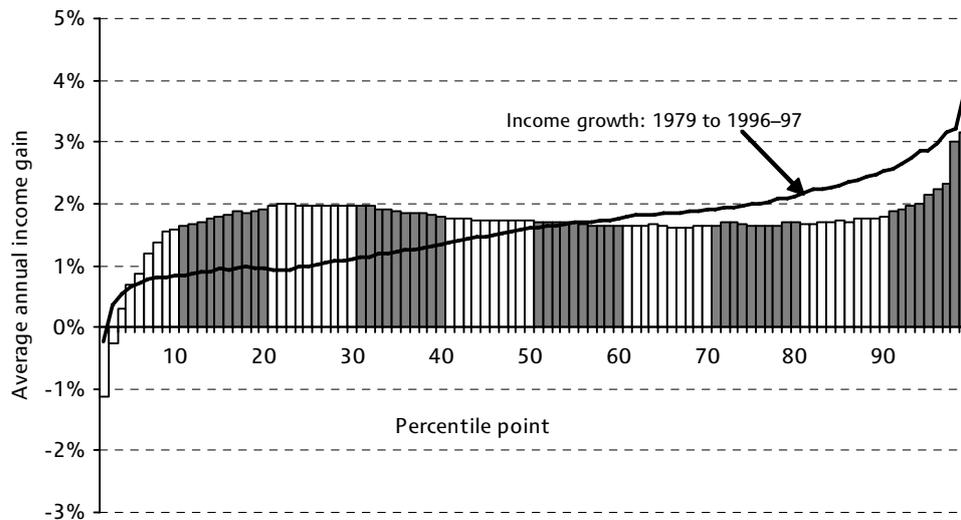
Notes: The change in income at the 1st percentile is not shown on this graph. Incomes have been measured before housing costs have been deducted. The differently-shaded bars refer to decile groups.
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

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.

Between the 20th percentile point and the 85th percentile point, it is generally the lower parts of the distribution that have gained most over the period 1996–97 to 2007–08; 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 falling in the very lowest part of the income distribution. Beyond the 85th percentile point, income growth is generally increasing in income, with a spike at the 98th and 99th percentile points. 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.[5]

The superimposed line in Figure 3.4, showing income growth under the previous period of Conservative government, makes clear that 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 five income deciles have seen stronger annual average income growth under the Labour government, whilst income growth among the top five income deciles has been slightly lower.

[5] For example, see Brewer, Muriel, Phillips and Sibieta (2008) and Brewer, Sibieta and Wren-Lewis (2008). Note that although data from the Survey of Personal Incomes are now available up to 2005–06, the analysis of Brewer, Sibieta and Wren-Lewis (2008) has not yet been updated.

Figure 3.5. Percentile-point real income growth by parliament, 1996–97 to 2007–08 (GB)
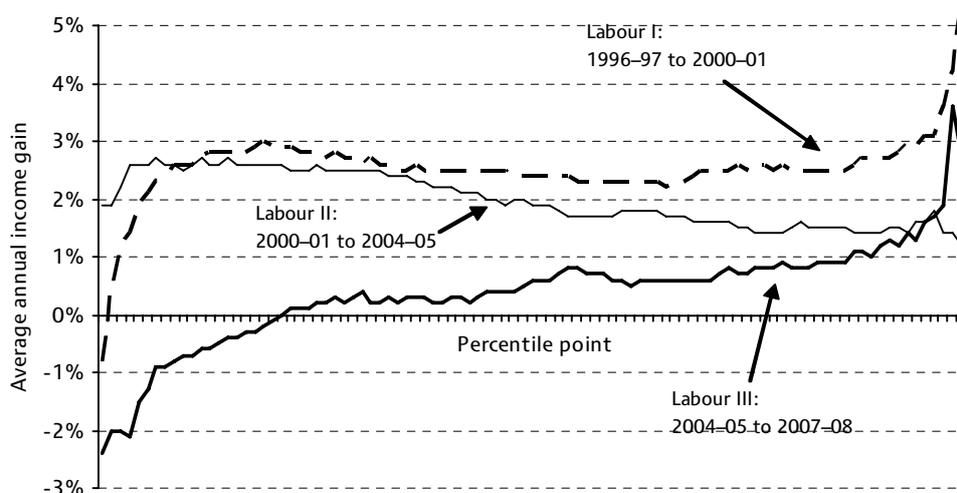
Notes: The changes in income at the 1st and 2nd percentiles are not shown on this graph. Incomes have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey, various years.

Whereas Figure 3.4 shows income growth under Labour's time in office taken as a whole, Figure 3.5 shows income growth separately for the three Labour parliaments since 1996–97. This makes clear that Figure 3.4 masks significant variation in income growth across the distribution in the different periods.

For the bulk of the income distribution, income growth was fastest in Labour's first term in office, between 1996–97 and 2000–01. Growth over this period is also inequality-reducing across most of the distribution, with the highest growth around the 20th percentile. However, the tails of the distribution are a different matter, with very fast growth for the top 5% and lower growth for the bottom 10%.

The period between 2000–01 and 2004–05 – Labour's second term in office – saw income growth which was unambiguously inequality-reducing. The highest income growth is seen at the very bottom of the income distribution, with lower growth the higher we move up the income distribution. For most points of the income distribution, growth is lower than in the previous four years, but still positive (and above 1%) everywhere in the distribution.

In stark contrast to this, income growth since 2004–05 has been lower than in previous parliaments for most of the income distribution (all bar the top 5%) and also almost uniformly inequality-increasing. That is, for most points of the income distribution since 2004–05, the higher up the income distribution we go, the higher the annual growth in incomes. Income growth has been negative for the bottom 20% of the income distribution over this time period, and below 1% everywhere except in the top 15%.

21

3.3 Top-income growth and financial markets

Brewer, Sibieta and Wren-Lewis (2008) note that growth in incomes at the very top of the income distribution tends to be correlated with growth (and contraction) in financial markets. This is not surprising, given that individuals in this group earn a larger fraction of their income from savings and investments than individuals further down the income distribution, and that a significant fraction of top earners work in the financial sector.[6] In particular, Brewer et al. note that top incomes fell in 2002–03 (a time when mean income was still growing) and that this fall coincided with a dramatic fall in share values.

In Figure 3.6, we show the real income levels of the top 1% and the top 0.1% (the very highest incomes) compared with the FTSE 100 index. All three series are shown relative to their level in 1996. The series for the top 0.1% was created by Brewer, Sibieta and Wren-Lewis (2008) and has currently only been constructed up to 2005–06 (although data for 2005–06 are now available).

The FTSE 100 index is by far the most volatile of the three series, rising dramatically in the late 1990s, and again from 2003 to 2007. In both cases, however, the market 'crashes', so that in mid-2002 and early 2009 the FTSE is no higher than it was in 1996. Top incomes (both the top 1% and the top 0.1%) don't 'crash' to anything like the same extent, but they do stop growing, or grow much more slowly, between 2000 and 2003, as the stock market slides. Given the turmoil in financial markets in recent months, we might well suspect that top-income growth will be somewhat moderated in the near future.

Figure 3.6. Top incomes and the FTSE 100 index
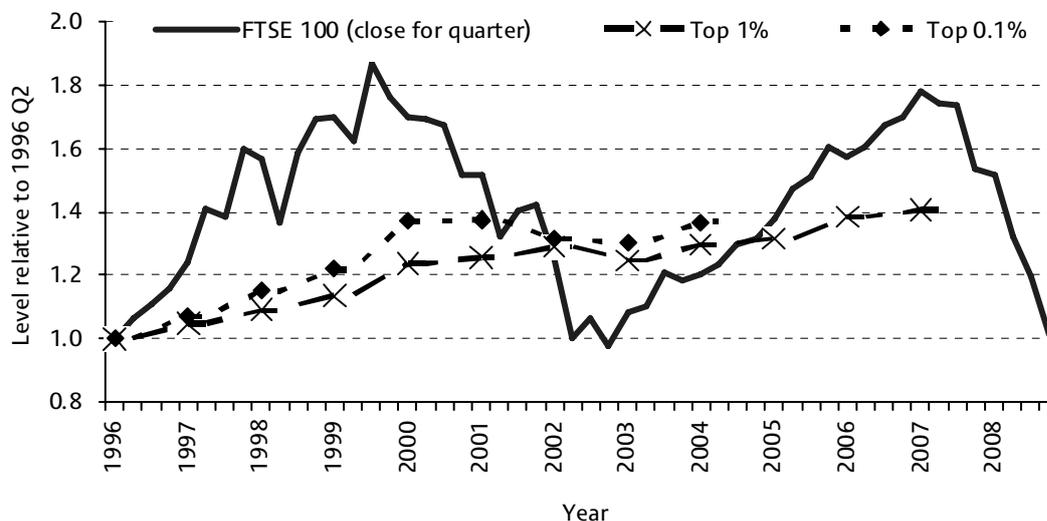
Notes: Incomes have been measured before housing costs have been deducted. Top incomes figures relate to Great Britain only.
Sources: Google Finance; Brewer, Sibieta and Wren-Lewis (2008); authors' calculations using the Family Resources Survey, various years.

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[6] Brewer, Sibieta and Wren-Lewis (2008) show that at the very top of the earnings distribution (the top 0.1%), 30% of individuals work in 'financial intermediation'.

3.4 Summary measures of inequality

While Figures 3.3, 3.4 and 3.5 give a very detailed impression of how incomes have changed between specific years, it can also prove 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.[7]

Figure 3.7 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.[8]

Figure 3.7. The Gini coefficient, 1979 to 2007–08 (GB)
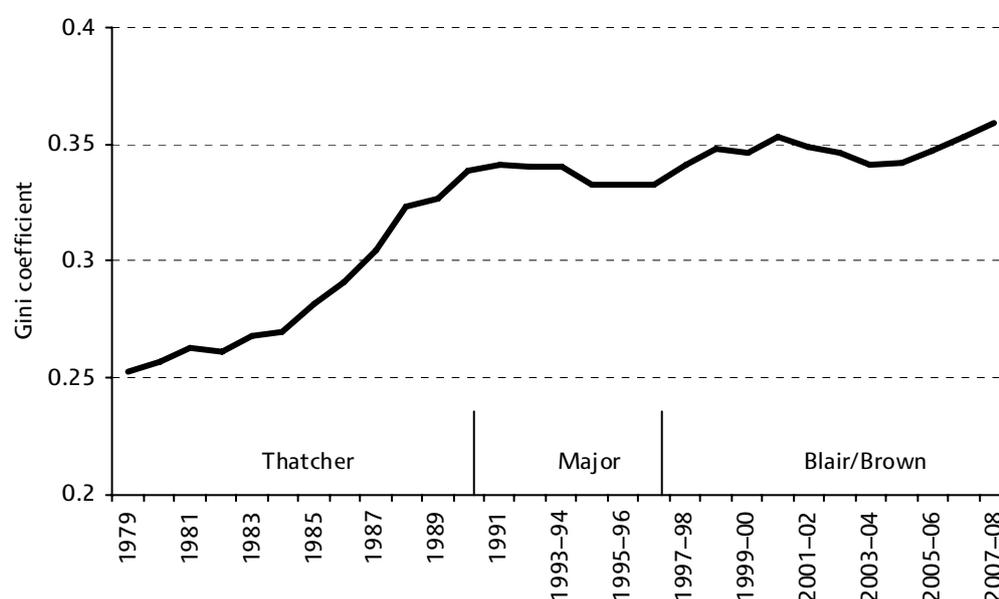
Note: The Gini coefficient has been calculated using incomes before housing costs have been deducted.
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

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

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

Box 3.1. UK inequality in international perspective

Income inequality in the United Kingdom remains above the OECD average, as shown in Figure 3.8. (Note that the measure of income used by the OECD is somewhat different from that used in this Commentary, so the Gini coefficient in Figure 3.8 is not directly comparable to that shown in Figure 3.7.)

Figure 3.8. The Gini coefficient, selected OECD countries
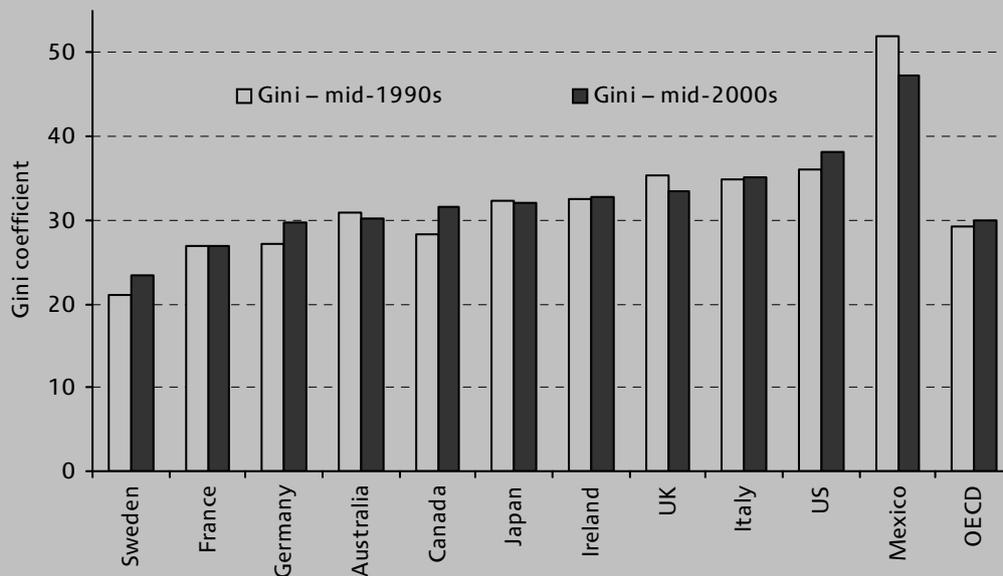
Source: OECD, 2008.

Looking at levels of inequality in the mid-2000s, countries such as Sweden stand out for their very low inequality, with Gini coefficients more than 20% below the OECD average. France and Germany also have Gini coefficients below the OECD average, though less dramatically so. Countries such as Japan, Ireland and the UK have income inequality above the OECD average, but by less than 12%, while Italy and the US have Gini coefficients exceeding the OECD average by more than 15%. The OECD countries with the highest levels of inequality – Mexico and Turkey (not shown) – have Gini coefficients exceeding the OECD average by more than 40%.

Although the UK's income inequality was higher than the OECD average in the mid-2000s, the UK was somewhat unusual among OECD nations in having *falling* income inequality between the mid-1990s and mid-2000s. As Figure 3.8 shows, on average OECD nations experienced rising income inequality over this period (with only Australia, Mexico, Greece and the UK experiencing statistically significant falls in inequality).

However, in comparing inequality in the mid-2000s with inequality in the mid-1990s, the OECD's choice of years was somewhat fortunate for the UK. As Figure 3.7 shows, the mid-2000s saw the lowest income inequality since the mid-1990s – and inequality has risen again since then, such that it is now higher than it was in the mid-1990s.

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.

Over the first two years of Labour's third term, income inequality rose (as measured by the Gini coefficient). The most recent year (between 2006–07 and 2007–08) has seen a further small increase in the Gini coefficient, to reach 0.36 – the highest level since our comparable time series began in 1961. Though the rise in 2007–08 is small and not statistically significant, the level of inequality in 2007–08 is higher (0.36 compared with 0.33) than when Labour came to power in 1996–97, and this increase is statistically significant.

Box 3.1 compares inequality in the UK (as measured by the Gini coefficient) with inequality in other industrialised countries.

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

Inequality as measured by the Gini coefficient, MLD and Atkinson measures rose through the late 1990s, rising most strongly according to MLD. These measures 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 90th and 10th percentile points. Since 2004–05, however, the 90:10 has started increasing again, returning to an overall 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

Figure 3.9. Summary measures of income inequality, 1996–97 to 2007–08 (GB)
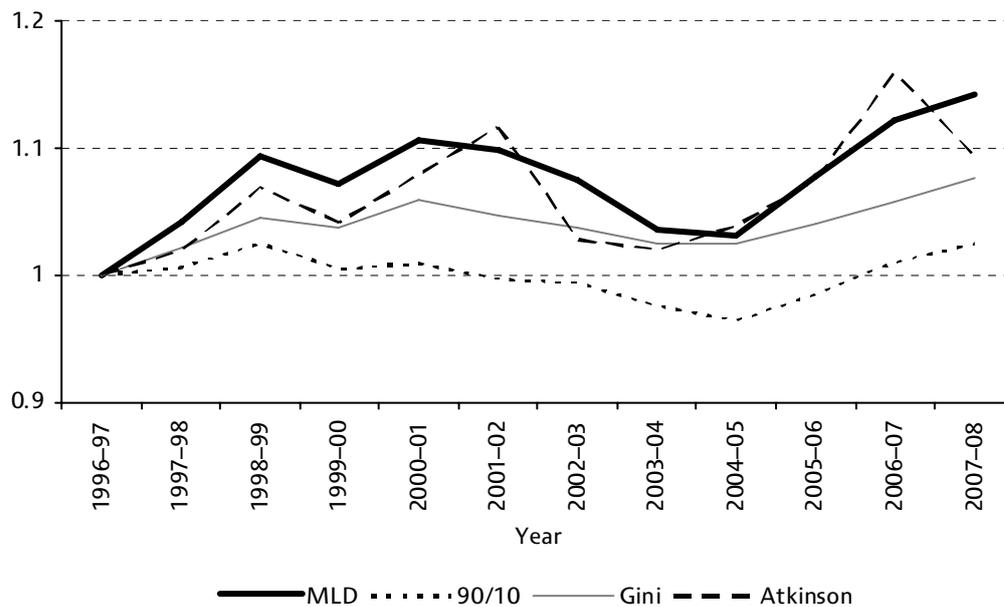
Notes: Measures have been calculated using incomes before housing costs have been deducted. The Atkinson inequality measure is shown for an inequality aversion parameter, ε, of 1.5. This implies that society considers it necessary to give £33 to a 'poor' person, having taken £100 from a 'rich' person, in order to keep overall social welfare the same.
Source: Authors' calculations using Family Resources Survey, various years.

distribution that is driving the rise in income inequality since 1996–97 as measured by the Gini coefficient, MLD and Atkinson measures.

One anomaly this year is that the Atkinson inequality measure has fallen between 2006–07 and 2007–08, while all other inequality measures have risen slightly (though the year-to-year change is not statistically significant for any measure, including the Atkinson measure). The Atkinson measure is now only slightly above where it was two years ago. This appears to be partly due to our choice of the degree of inequality aversion – for a slightly lower level of inequality aversion, the Atkinson measure becomes equivalent to the MLD, which rose between 2006–07 and 2007–08.[9] Given that there was almost no income growth anywhere in the income distribution in the latest year of data, this reduction in the Atkinson measure must be driven by very small changes in the distribution (with, for example, the 30th percentile catching up with the 40th percentile very slightly in the latest data, and the 98th percentile catching up with the 99th).

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.

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[9] Specifically, this is the case when $\varepsilon = 1.0$, as opposed to the value of $\varepsilon = 1.5$ shown in Figure 3.9.

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, Annan and Shah (2009) 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).

What future for inequality?

With income inequality at its highest level since at least the early 1960s, it is worth considering how we might expect it to evolve over the coming years. Unfortunately, predicting the future of income inequality is never easy, and it is rendered even more difficult this year, with the economy entering recession amid turmoil in world financial markets.

Muriel and Sibieta (2009) illustrate how inequality evolved during previous UK recessions, and make clear that there is no 'rule' for the behaviour of inequality during a downturn. Inequality fell during the recession of the mid-1970s, rose during the recession of the early 1980s and was more or less unchanged during the recession of the early 1990s. Clearly, history offers little guide as to what we can expect to happen to inequality during the current recession.

Given the large-scale job losses (and reduced bonuses) seen in the banking sector in recent months, accompanied by significant falls in financial markets, 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, in future years of data. Certainly, the findings of Brewer, Sibieta and Wren-Lewis (2008), discussed in Section 3.3, would lead us to expect such a moderation in top-income growth. However, Muriel and Sibieta (2009) point out that unemployment (in the latest available data) appears to be growing fastest among low-educated workers, suggesting that it may be the low-skilled (and low-earning) who suffer most. Thus it is far from obvious who will suffer most from the current recession.

To the extent that inequality can be changed by government tax and benefit policy, some measures targeted at low-income families have already been announced, which might serve to reduce inequality very slightly. These measures include increases in the child element of the child tax credit between 2008 and 2010 (over and above earnings indexation, which is the default rate of increase), and a commitment to increase the pension credit in line with earnings indefinitely.[10] However, a planned slowdown in the growth of public spending would seem to limit the government's ability to employ further discretionary measures aimed at low-income families.

Changes to the National Insurance system due in April 2011 are also somewhat redistributive. The changes will raise the rate of National Insurance by half a percentage point, but also increase the threshold at which employees start to pay National Insurance,

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[10] Though the latter announcement will only prevent the increase in inequality that would result if pension credit were increased less generously.

which benefits lower earners. Those earning less than about £20,000 are net gainers from this change (which also raises around £5 billion for the Treasury).

At the other end of the income distribution, as part of an effort to reduce government borrowing, the rate of income tax for the very rich will be increased in 2010, with a marginal rate of 50% on incomes above £150,000 and the gradual withdrawal of the personal allowance above £100,000. Taken alone, these measures will reduce the level of top incomes (and thus reduce income inequality). In 2011, tax relief on pension contributions will also be restricted for those with incomes above £150,000. The effect of this measure on top incomes, as measured by HBAI, is less certain.

These measures affect the richest 2% of individuals, but particularly the richest 1% of individuals, so the effects may be seen in the 98th and 99th centiles of our data in the future. The Treasury estimated in Budget 2009 that these measures will raise around £7 billion for the public finances, but there is huge uncertainty surrounding both this estimate and the overall effect of these measures on top incomes. The effect of these measures will depend, for example, on how affected individuals change their work patterns, pension contributions and use of tax avoidance schemes in response.[11]

It remains to be seen whether the gap between rich and poor will be a live issue in the coming general election. No government in recent UK history has explicitly targeted income inequality, though all three political parties have suggested in the recent past that inequality matters. The government set up a National Equalities Panel last year, charged with investigating the relationships between different aspects of inequality in the UK, and its report will be published early next year. The Chairman of the Conservative Party's Policy Review, Oliver Letwin, has publicly stated that a future Conservative government would tackle 'intolerable inequality' in wealth.[12] Meanwhile, the Liberal Democrats published a policy document in mid-2007, setting out a range of policies aimed at 'reducing poverty and tackling inequality in Britain'.[13]

3.5 Conclusion

It would scarcely be an exaggeration to say that the income distribution in 2007–08 was more or less the same as the distribution in the previous year. Income growth was near-zero at virtually every point of the income distribution, aside from small (and statistically insignificant) growth at the very top of the distribution, which has led to a small rise in overall inequality as measured by the Gini coefficient. Indeed, 2007–08 was the fourth successive year in which the Gini coefficient for Great Britain has increased.

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 85th 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 other measures that look at the whole distribution tend to show that inequality has risen,

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[11] For more details, see Brewer and Browne (2009).

[12] 'Letwin: we will redistribute wealth', http://www.telegraph.co.uk/news/uknews/1506160/Letwin-We-will-redistribute-wealth.html.

[13] Liberal Democrats, *Freedom from Poverty, Opportunity for All*, Policy Paper no. 80, 2007 (http://www.libdems.org.uk/policies/freedom-from-poverty-opportunity-for-all-all%3Bshow).

with the rise in the Gini coefficient (from 0.33 to 0.36) since 1996–97 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.

Given that individuals at the very top of the income distribution tend to receive a significant proportion of their income from savings and investments, the recent turmoil in financial markets is likely to significantly slow the growth in top incomes in the near future. All else being equal, this will tend to act as a force for reducing income inequality. It is too early to make firm predictions, however, as we do not yet know how the recession will affect incomes at other points of the distribution.

4. Poverty

Key findings

- Relative poverty in 2007–08 was 300,000 higher than in 2006–07 measured before housing costs (BHC) and 200,000 higher measured after housing costs (AHC). Although the rise is not statistically significant, this is the third year in a row that relative poverty has risen, and the rise since 2004–05 is statistically significant.

- In the latest year of data, child poverty was unchanged measuring incomes BHC but increased by 100,000 measuring incomes AHC. Compared with 2004–05 (when child poverty reached its lowest level since 1987), child poverty in 2007–08 was 200,000 higher 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 quarter of the decline in poverty measuring incomes BHC and about a half of the decline in poverty measuring incomes AHC between 1998–99 and 2004–05.

- Between 2007–08 and 2010–11, child poverty needs to fall by 1.2 million to meet the government's 2010 target of halving child poverty. Before Budget 2009, IFS research estimated that, on current plans, the government would fall short of this target by 600,000 and that additional spending of £4.2 billion a year would be required to meet it. Given that Budget 2009 allocated less than £0.2 billion towards meeting the target, it seems highly likely that it will be missed, unless the government can find approximately £4 billion between now and the 2009 Pre-Budget Report.

- In 2007–08, pensioner poverty was unchanged using incomes measured both BHC and AHC. This follows rises of 300,000 (BHC) and 200,000 (AHC) in 2006–07. Pensioner poverty is still statistically significantly higher than its low in 2005–06, but it remains considerably lower than in 1998–99.

- Poverty amongst working-age adults without dependent children is now at its highest level since the start of our comparable series in 1961, with rises of 200,000 (BHC) and 100,000 (AHC) in the latest year of data.

- Looking to the future, falling levels of inflation in 2008–09 mean that most benefits and tax credits will grow in real terms over this period, and this seems likely to be the case in 2009–10 too. This would normally act to reduce relative poverty, depending on the relative growth in average incomes and the poverty line. Moreover, there were a number of discretionary measures aimed at low-income families with children, which should act to reduce child poverty.

- However, one also needs to take account of the potential impact of the current recession, which could both increase the number of low-income households and lower the poverty threshold. Previous work by IFS researchers has estimated that child poverty would still fall between 2006–07 and 2010–11.

- When looking at other groups, we can only speculate, but if previous experience of changes in relative poverty during recessions is anything to go by, then we would expect small reductions in overall levels of relative poverty, driven by a reduction in pensioner poverty. Relative to average incomes, there has been a decline in the generosity of out-of-work benefits for working-age adults without children over time, which has not occurred for pensioners or families with children. This group could thus fare worse this time round.

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'.[14] 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 indicators, all derived from HBAI data.

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 first amongst children and pensioners – groups favoured by the current government's tax and benefit reforms – and then amongst working-age adults without dependent children, a group much less favoured by recent tax and benefit reforms. Section 4.3 discusses trends in absolute poverty and Section 4.4 concludes.

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.[15] Box 4.1 gives more details of how we measure and report poverty in this publication.

4.1 Poverty in the whole population

In the UK in 2007–08, there were 13.5 million individuals in relative poverty measuring incomes after housing costs (AHC) and 11.0 million measuring them before housing costs (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 three consecutive years.

Between 2006–07 and 2007–08, poverty rose by 300,000 measuring incomes BHC and 200,000 measuring incomes AHC, or both by 0.3 percentage points. Combining these with rises in the two previous years means that since 2004–05, poverty has risen by 1.0 million or 1.3 percentage points (BHC) and by 1.4 million or 2.0 percentage points (AHC). The rise in poverty since 2006–07 is not statistically significantly different from zero but the increase since 2004–05 is.

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.) We can see from these graphs that poverty rates measured AHC tend to be higher than

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

[15] These were calculated by bootstrapping the changes using 500 iterations. 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).

those measured BHC, because those on low incomes tend to spend a greater proportion of their incomes on housing than those on high incomes. In 2007–08, for instance, poverty measured AHC was 22.5% whilst the rate was 18.3% for poverty measured BHC.

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 line with those used in most of the rest of Europe but contrasts with, for example, the official measure of poverty used by the United States Census Bureau. Its measure 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 – although this terminology is not intended to suggest that it measures a more severe state of poverty than relative 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 numbers 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 tenth (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.

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[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 2007–08 was 20.3% measuring incomes BHC, slightly higher than that in the rest of the UK (18.3%) (the opposite is true when measuring incomes AHC – 21.1% in Northern Ireland compared with 22.5% 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).

Figure 4.1a. Relative poverty: percentage of individuals in households with incomes below various fractions of median income (AHC)
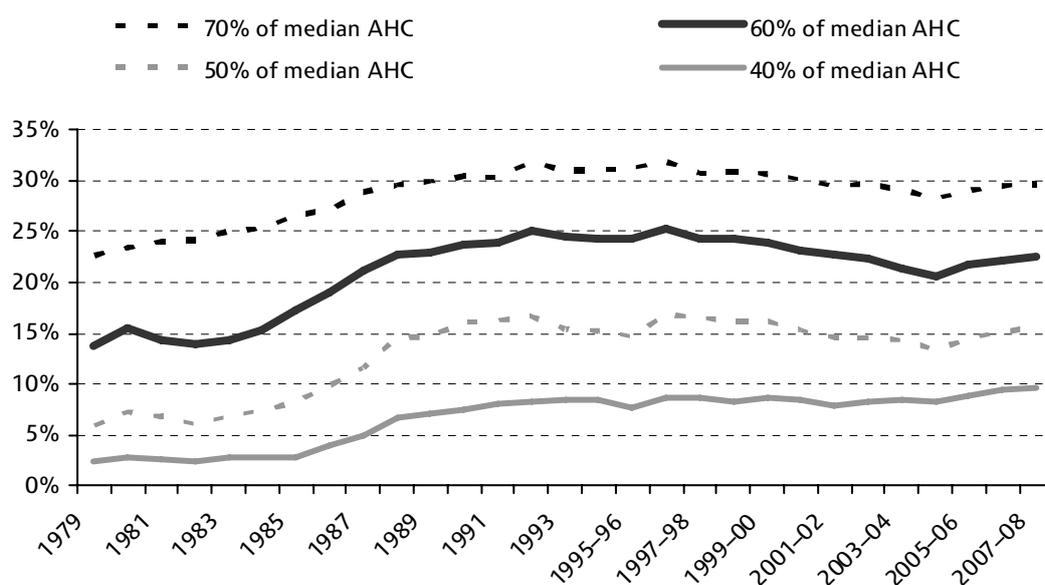
Figure 4.1b. Relative poverty: percentage of individuals in households with incomes below various fractions of median income (BHC)
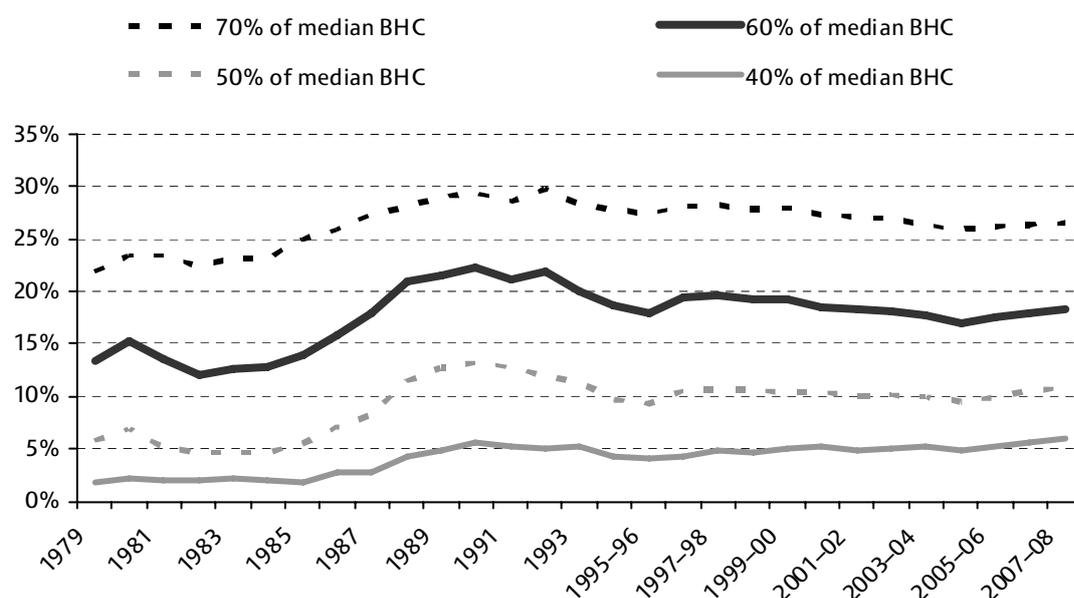
Note: Figures are presented for GB up until 2001–02 and for the whole of the UK from 2002–03 onwards.
Source: Authors' calculations based on Family Expenditure Survey and Family Resources Survey, various years.

Poverty rates increased dramatically during the mid- to late 1980s and more slowly in the early 1990s, and then stabilised or fell from the mid-1990s onwards, at about the same time that the current Labour government came to power. To be more specific, in Labour's 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. The last three years of data put an end to this continuous decline in relative poverty, with cumulative rises between 2004–05 and 2007–08 of 2.0 and 1.3 percentage points, AHC and BHC respectively. Although the rise in relative poverty between 2004–05 and 2007–08 has not completely undone the progress on reducing poverty in Labour's first two terms, poverty is now higher than it was in 2002–03.

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 fallen or stabilised 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 since 1996–97, by 0.8 percentage points measuring incomes AHC and by 1.7 percentage points measuring incomes BHC. These rises are both statistically significantly different from zero.

A number of commentators have expressed concern at this increase, referring to those with current incomes less than 40% of the contemporary median as living in 'severe' or 'deep' poverty.[16] However, as we noted in Box 2.1, those with the lowest incomes are not necessarily those with the lowest living standards. Of the 3.6 million individuals with incomes less than 40% of the contemporary median (BHC), nearly 1 million have recorded incomes less than about £50 per week. At first glance, this would seem to indicate that 'severe' poverty really is 'severe'. However, other work has suggested that people in this group have, on average, living standards equivalent to those with much higher incomes (where living standards are measured by expenditure/consumption and/or material deprivation).[17] It could be that such people have only temporarily low incomes (due to temporary unemployment or low self-employment income, for instance), and are able to use their savings or borrow to fund higher living standards until their incomes rise again. It could also be that these people have their incomes measured with error. Since this group represents a relatively large proportion of those with current incomes less than 40% of the contemporary median, we believe that it is unhelpful to refer to those with incomes less than 40% of the contemporary median as living in 'severe' or 'deep' poverty.

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 children and pensioners (the two groups targeted by tax and benefit reforms to date under the present government) and amongst working-age adults without dependent children (who have been much less favoured).[18] Tables 4.1 and 4.2 contain more detailed information on relative poverty, using a 60% poverty line,

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[16] See Conservative Party (2008) or Hunt and Clark (2007).

[17] See Attanasio, Battistin and Ichimura (2005), Brewer, Goodman and Leicester (2006) or Brewer, O'Dea, Paull and Sibieta (2009).

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

since 1996–97 for the population as a whole (the last pair of columns) and for various subgroups (the other columns).

Using rounded numbers, the rise in overall poverty of 200,000 measuring incomes AHC comprises 100,000 working-age adults without children, 100,000 with children, 100,000 children and approximately 100,000 fewer pensioners in poverty. Measuring incomes BHC, the net rise in overall poverty of 300,000 comprises 200,000 working-age adults without children and small rises amongst the rest of the population (except for pensioners, where there is virtually no change).

These figures contrast with those observed last year, when it was pensioner poverty that rose the most. Both child poverty and pensioner poverty remain above their recent lows in 2004–05 and 2005–06, respectively. 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, three years of increasing poverty have now reversed about one-quarter of the fall in child poverty using incomes measured BHC and about one-half of the fall using incomes measured AHC.

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
2007–08 (UK)	31.1	4.0	18.1	2.0	25.6	3.3	18.1	4.2	22.5	13.5
Changes										
1996–97 to 2000–01	–3.0		–3.2		–1.9		–1.0		–2.1	
2000–01 to 2004–05	–2.8		–8.3		–1.6		–0.1		–2.6	
2004–05 to 2007–08	2.7	0.3	(0.5)	(0.1)	2.6	0.4	2.0	0.5	2.0	1.4
2006–07 to 2007–08	(0.6)	(0.1)	(–0.8)	(–0.1)	(0.4)	(0.1)	(0.5)	(0.1)	(0.3)	(0.2)

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.

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
2007–08 (UK)	22.5	2.9	22.7	2.5	18.1	2.3	14.0	3.2	18.3	11.0
Changes										
1996–97 to 2000–01	–3.4		0.1		–2.0		0.7		–1.0	
2000–01 to 2004–05	–2.0		–3.5		–1.2		–0.2		–1.4	
2004–05 to 2007–08	(1.2)	(0.2)	(1.4)	(0.2)	(1.2)	(0.2)	1.4	0.4	1.3	1.0
2006–07 to 2007–08	(0.2)	(0.0)	(–0.5)	(0.0)	(0.2)	(0.0)	(0.8)	(0.2)	(0.3)	(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.

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 adults without children, a group not favoured by tax and benefit reforms under Labour to date. Although this group has a lower-than-average risk of falling into poverty, this risk changed little over Labour's first two terms of office. Having increased since 2004–05, the risk of poverty for this group was slightly higher using incomes measured AHC in 2007–08 than in 1996–97. 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).

Level of benefits and tax credits over time

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. Changes in the entitlement to state benefits and tax credits are therefore likely to be a key determinant of what happens to relative poverty. Table 4.3 shows year-on-year growth rates in entitlements to social security benefits and tax credits in cash terms 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 in prices. Numbers in bold in the table mark the instances where entitlements to benefits grew by more than inflation (as measured by RPI). Shaded cells mark instances where entitlements to benefits grew faster than both the BHC and

Table 4.3. Growth in nominal entitlements to state support for certain family types (%)

	Couple, 3 children, not working	Lone parent, 1 child, not working	Lone parent, 1 child, part-time 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**	4.3	3.4	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	3.0	4.4
2009–10	**6.3**	**6.1**	**5.5**	**6.3**	**6.4**	**5.0**	**4.8**	**4.8**	n/a	n/a	–3.0	0.3

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 and the value of free school meals for families with children. 'RPI' measures change in annual average of RPI all-items index since the previous year (except 2009–10); 'ROSSI' measures change in annual average of ROSSI since the previous year (except 2009–10). For 2009–10, RPI and ROSSI show estimated annual growth in September 2009 as estimated in table C1 of the 2009 Budget. 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 the authors.

Source: Authors' calculations.

AHC poverty lines; considered in isolation, this would suggest a declining relative poverty rate for that family type in that year.[19]

Table 4.3 shows the following:

- All the family types shown, except those for adults aged 60 or over entitled to means-tested benefits, saw the real value of maximum entitlements to benefits and tax credits decline in 2007–08 (where 'real' is defined after accounting for economy-wide inflation as measured by the RPI). RPI growth averaged 4.1% for that year, whilst the remaining family types saw cash increases in entitlement of between 3% and 3.7% that year.[20]

- Given that the poverty line grew in real terms in 2007–08, the growth in maximum entitlements to benefits and tax credits for those same families in 2007–08 was below the growth in the poverty line for the third 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 three years with particularly small rises in entitlements to benefits and tax credits.[21]

- 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).

- 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 and 2007–08 measuring incomes AHC. This seems to have contributed towards the rise in poverty amongst working-age adults without children over this period.

One reason why some maximum entitlements to benefits and tax credits have fallen in real terms is that, during the period 2005 to 2008, inflation (measured by the RPI) was generally increasing.[22] 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 2007–08 were increased in April 2007 above the

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[19] 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.

[20] It should be noted that if one used ROSSI (which is after housing costs) as the measure of inflation, all family types would see an increase in cash benefit entitlements greater than this rate of inflation (2.8%). ROSSI may be the more appropriate measure for those households entitled to housing benefit (who make up a substantial subset of the poor).

[21] 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 receive working tax credit, which is increased in line with RPI.

[22] If private incomes respond to changes in the rate of inflation more rapidly than state benefits (as seems likely), accelerating inflation may also erode the value of benefits relative to the poverty line.

previous year's level by the rate of inflation prevailing in September 2006. Figure 4.2 shows that this rate of increase (3.6%) was lower than the subsequent annual average inflation rate during 2007–08 (4.1%), and this means that the real value of benefits linked to the RPI (such as the state pension) was lower in 2007–08 than in 2006–07.

Similarly, pension credit (and its predecessor, the minimum income guarantee (MIG)) and the child element of the child tax credit are uprated in each April by the growth in average earnings measured over the previous May to July. This series was above the rate of inflation in every year between 1992 and 2006–07, but the implied real rate of growth in the benefits has fluctuated. However, in 2007–08 there was a real-terms fall of –0.2%, the implied real rate of growth having averaged 1.5% between 1996–97 and 2006–07.

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[23] 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.[24]

Figure 4.2. RPI inflation in survey year compared with RPI in previous September and average earnings[a] in previous May–July
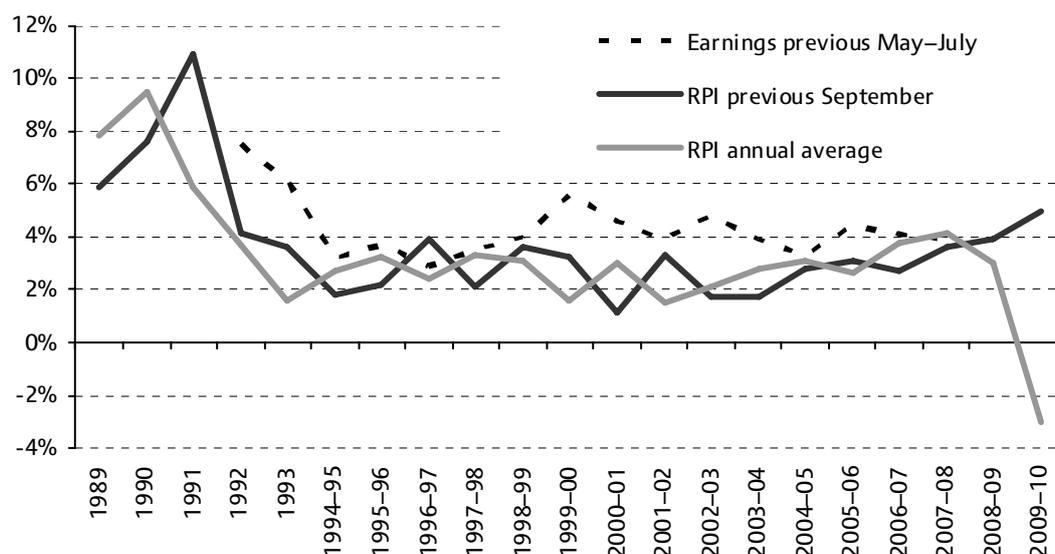
^a Including bonus; seasonally adjusted.
Sources: ONS RPI inflation (CZBH) and average earnings (LNNC) series; Budget 2009.

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[23] 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.

[24] 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.

The prospects for poverty

We now look to how poverty will have evolved during 2008–09 and how it is likely to progress further into the future.

Due to falling levels of inflation, most benefits and tax credits grew in real terms in 2008–09, and this seems likely to be the case in 2009–10 too.[25] This would normally act to reduce relative poverty, depending on the relative growth in average incomes and the poverty line. Moreover, there were a number of discretionary measures aimed at low-income families with children that would normally act to reduce poverty amongst these groups.[26] However, one also needs to take account of the potential uncertainty generated by the current recession.

There are two main effects to bear in mind when thinking about relative poverty during recessions. First, increasing levels of unemployment seem likely to lead to falls in household incomes, thus leading to greater numbers of individuals being classed as living in relative poverty. Second, these falls in income will also lead to falls in median income, which on its own would tend to reduce relative poverty, as the threshold for classifying people as living in relative poverty will also fall. Therefore, in principle, the likely effects of the recession on relative poverty are uncertain.

In the case of child poverty, we can, however, be slightly more certain that it will fall during the coming years. Brewer, Browne, Joyce and Sutherland (2009) estimate that child poverty will fall by 600,000 between 2006–07 and 2010–11, even after accounting for likely falls in earnings and employment. Such exercises have not been repeated for other groups in society.

Muriel and Sibieta (2009) examine how poverty has evolved during previous recessions. They show that during these past recessions, there were falls in overall levels of relative poverty, driven by a large reduction in pensioner poverty. The fact that pensioner poverty has fallen during recessions should come as no surprise as this group is much less likely to be affected by rising levels of unemployment. If past experience is anything to go by, we might thus expect falls in pensioner poverty over the coming years. Relative to average incomes, there has been a decline in the generosity of out-of-work benefits for working-age adults without children over time, which has not occurred for pensioners or families with children. This group could thus fare worse this time round. Whether this will further increase poverty amongst this group seems more uncertain.

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; for consistency, we use this measure in detailed analyses of other types of households. However, poverty rates derived from income measured AHC are also provided.

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[25] The last two rows of Table 4.3 show the nominal increase in entitlement for the various family types in 2008–09 and the projected increase in 2009–10. Since the annual average inflation rate is not yet known for 2009–10, we use the Treasury's prediction for September 2009 for 2009–10 (see Notes to Table 4.3).

[26] See Phillips (2008).

Child poverty

The numbers of children living in poverty in the UK in 2007–08 were 4.0 million (AHC) and 2.9 million (BHC), the former up 100,000 and the latter up by just over 20,000 (and therefore unchanged according to the rounding conventions adopted by the DWP) from 2006–07.[27] These correspond to rises of 0.6 percentage points (AHC) and 0.2 percentage points (BHC). Neither of these changes is statistically different from zero at the 5% level, but poverty measuring incomes AHC is statistically significantly higher in 2007–08 than it was in 2004–05, reflecting the combined impact of three consecutive increases in poverty. The latest year's data therefore confirm that the fall in child poverty came 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 2007–08 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

Table 4.4. Decomposition of the rise in relative child poverty (BHC), 2004–05 to 2007–08, by family type

	Poverty rate		Percentage of child population		Compositional effect	Incidence effect	Total change in poverty
	2004–05	2007–08	2004–05	2007–08			
Lone parents							
Full-time	9.9%	10.2%	4.7%	5.1%	–6,023	1,897	–4,126
Part-time	19.7%	21.6%	6.9%	6.6%	413	16,552	16,965
Workless	56.6%	55.0%	12.8%	12.1%	–32,019	–24,850	–56,868
All/Total			24.4%	23.8%	–37,629	–6,400	–44,029
Couples with children							
Self-employed	24.1%	22.8%	12.1%	12.3%	372	–20,562	–20,190
Two full-time earners	1.4%	2.1%	11.8%	12.9%	–28,402	11,191	–17,210
One full-time, one part-time	3.5%	3.7%	23.6%	22.2%	30,996	3,889	34,885
One full-time, one not working	15.2%	18.1%	17.7%	18.0%	–2,174	66,235	64,062
One or two part-time	42.4%	54.3%	4.5%	4.5%	2,586	68,854	71,439
Workless	61.6%	68.2%	6.1%	6.3%	13,059	52,412	65,470
All/Total			75.6%	76.2%	16,437	182,019	198,456
All children	21.3%	22.5%	100.0%	100.0%	–21,192	175,619	153,328

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 2007–08.

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[27] Note that the unrounded poverty numbers are, for AHC income, 3,913,261 in 2006–07 and 3,991,373 in 2007–08 (a rise of 78,112). For BHC incomes, the unrounded numbers are 2,865,047 in 2006–07 and 2,889,625 in 2007–08 (a rise of 24,578).

between these nine family types.[28] It should be pointed out that because the overall rise in child poverty (BHC) since 2004–05 was not statistically different from zero, it is highly likely that the same is true for the estimated incidence and compositional effects in Table 4.4. The decomposition does, 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 amongst lone parents and increases in the number of two full-time worker couples) acting by themselves to reduce poverty.[29] Poverty rose because the risk of poverty rose for some family types, although there is some difference in child poverty changes between lone-parent and couple families:

- Since 2004–05, the risk of child poverty has remained virtually unchanged for lone-parent families (with small falls amongst non-working lone-parent families largely offset by small rises amongst 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 there is either only one full-time worker, part-time workers only or no workers. This may be related to the slow or negative real growth in entitlements to benefits and tax credits between 2005–06 and 2007–08 shown in Table 4.3, although it is perhaps surprising that lone parents have not seen a similar rise in poverty, as they also rely on benefits and tax credits for a significant part of their income.

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 61.8% in 2007–08 (although this is partly due to a rise in the proportion of all children in couple families and not simply an increase in their relative risk of poverty[30]) and that the fraction who live in families with someone in work rose from 48.5% in 2004–05 to 51.4% in 2007–08. 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 those in work.[31]

Three 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.[32] Appendix D repeats this analysis. To summarise:

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[28] 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).

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

[30] This increase in the proportion of children living with couples (and corresponding decrease in the estimated number of lone parents) is an artefact of the DWP's decision to update its demographic model of families with children. The new model, predicting more couples and fewer lone parents, is being used for 2007–08 onwards but is not being applied to previous years of data.

[31] Those interested in the changing pattern of poverty risk across family types for a longer time series are advised to read last year's poverty and inequality report (Brewer, Muriel, Phillips and Sibieta, 2008).

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

- The FRS substantially under-records receipt of tax credits, but the degree of under-recording has not worsened noticeably over the last three 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 200,000 more lone parents than apparently live in the UK, a similar discrepancy to those seen in recent years but somewhat higher than estimates 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 three years ago that this target had been missed by 100,000 measuring incomes BHC and by 300,000 measuring incomes AHC.[33] The target does not apply to 2007–08, 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 2007–08 means that the government is now short of its original 2004–05 target by 300,000 measuring incomes BHC or by 600,000 measuring incomes AHC, achieving reductions of only 16.0% and 9.0% respectively between 1998–99 and 2007–08 (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 low income indicator, an absolute low income indicator and a combined relative low income and material deprivation indicator. For the target in 2004–05, only a relative low income indicator was used to measure progress, with slight differences in the measure of income used.[34] Table 4.5 reviews progress to date.

The most watched of these three measures is 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. As we saw earlier, the number of children in poverty under this measure was unchanged in 2007–08 at 2.9 million. This means that child poverty has fallen by 500,000 to the nearest hundred thousand (or 17%) in the nine years since 1998–99 and needs to fall by a further 1.2 million in the remaining three years until 2010–11 to meet this element of the target: see Figure 4.3 and Table 4.5. Thus, child poverty needs to fall by an average of 400,000 a

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[33] See Brewer, Goodman, Shaw and Sibieta (2006). Note that this was assessed using the McClements equivalence scale, rather than the modified OECD equivalence scale now used, so that the numbers presented in this paragraph differ from those in the rest of this chapter and are not directly comparable to future targets in 2010 and 2020.

[34] See HM Treasury (2007).

year for the next three years, having fallen by an average 60,000 a year for the past nine years.

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 and relative low income	
	%	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
2007–08	22.5	2.9	13.4	1.7	17.1	2.2
Change since 1998–99	–3.6	–0.5	–12.7	–1.7	–3.7	–0.4
Target for 2010–11		1.7		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 levels of relative child poverty in the UK in the years 1998–99 to 2001–02 (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 4.3. Actual, required and projected path of child poverty, 1998–99 to 2010–11
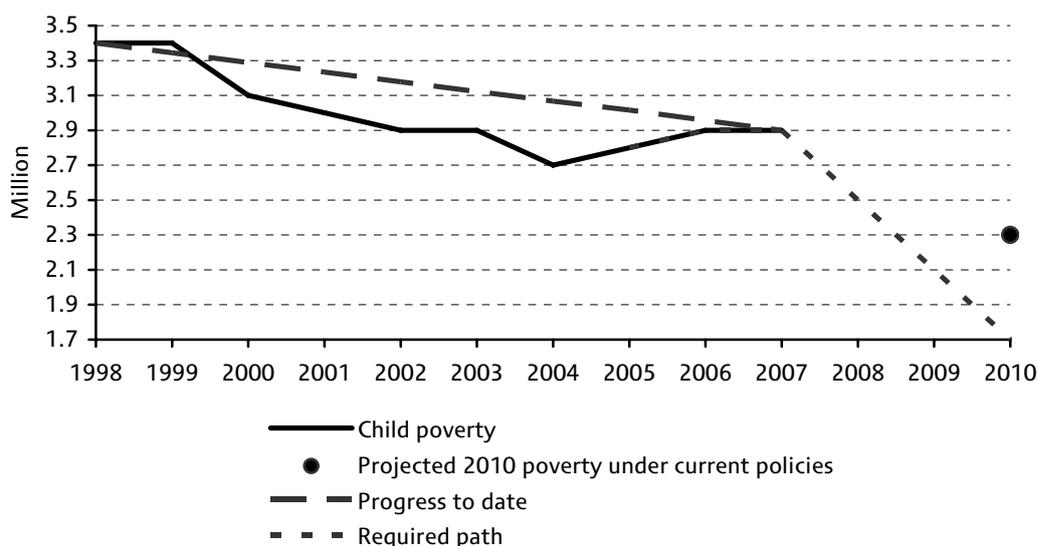
Notes: Years are financial years (e.g. 1998 refers to financial year 1998–99). Child poverty is defined as living in households in the UK with less than 60% of median household income (BHC) using the modified OECD equivalence scale.
Sources: Authors' calculations based on the Family Resources Survey, various years; Brewer, Browne, Joyce and Sutherland (2009).

Box 4.2. Defining the eradication of child poverty

The government has recently completed a consultation on how best to measure poverty after 2010–11 and how to define the target of eradicating child poverty (see Child Poverty Unit (2009)). The government suggested using three measures and targets for 2020. First, it proposed to continue using the current relative income poverty measure, using a poverty line of 60% of the contemporary median (BHC), with a target level of between 5% and 10% in 2020. The government has said that this would be consistent with a level of child poverty amongst the best in Europe. The second target would be a level of persistent income poverty approaching zero. This measure is still to be precisely defined, but would likely indicate whether children lived in poverty for a number of years rather than just one year. Third, the government has proposed a target level approaching zero for a combined relative low income and material deprivation indicator, which is also still to be fully defined.

The government also asked for views on whether or not it would be desirable to add a measure of absolute poverty to these three targets. The proportion of children living in families with incomes below a fixed point may also be intrinsically interesting (e.g. subsistence income). Progress on this measure would require increases in the real incomes of low-income households, whereas relative income poverty can fall even if their incomes fall as long as the income of the median household falls by a larger amount. However, if, as seems likely, real incomes grow over time, absolute measures of poverty lose their relevance as the group with real incomes below a fixed point shrinks. Families with the lowest incomes are often only temporarily poor or have their incomes mismeasured, and indeed, as measured by their consumption or level of material deprivation, those at the very bottom of the income distribution often look similar to those much higher up the income distribution (see Box 2.1). Therefore, for similar reasons, we feel absolute poverty measures, and 'severe poverty' measures based on 40% of median poverty lines, are likely to give a misleading picture of who is poor and how their number is evolving. Better ways to check whether the living standards of poor families with children are rising include simple checks of whether the incomes for families in relative poverty are growing and whether the numbers reporting material deprivation are falling.

We do, however, have serious concerns regarding the almost exclusively income-based nature of the targets. With all the focus on income-based measures, especially the relative income measure, we feel that there is a risk that the policy response will be skewed towards those measures that have immediate and predictable impacts on household incomes – mostly tax and benefit changes – rather than those that will do the most to improve the lives of today's children or to reduce the risk of the next generation of children being poor. We believe it would therefore be sensible to make use of targets for other aspects of children's and parents' lives, with these published at the same time as income-based poverty measures. To some extent, this is already done via the data and targets published in *Opportunity for All*. However, these targets have much less prominence than the headline income poverty targets, and the publication no longer discusses the government's overall poverty strategy; both of these points are to be regretted. We think that progress towards the 2020 targets should not be assessed solely as continual decline in the income poverty measures, but in wider policy targets, such as measures of educational inequality. For example, one could define an educational target in terms of closing the gap between the proportion of children eligible for free school meals who attain five good (A*–C) GCSEs, including English and Maths, and the national average. One could also add a target for the national average to improve by a given amount to avoid accusations of attempting to 'level down'.

Table 4.5 also shows that the combined indicator of material deprivation and relative low income fell by 200,000 between 2004–05 and 2006–07. However, in 2007–08 it rose by a statistically significant amount of 200,000, returning to its level in 2004–05. With static levels of relative and absolute poverty, this rise appears to be driven by a rise in material deprivation. This is consistent with our view that material deprivation is related to absolute levels of income: real benefit levels in 2007–08 were hit by accelerating inflation, and there is some evidence that households with low income faced higher rates of inflation than the average household (Leicester, O'Dea and Oldfield, 2008).

In a recent Commentary,[35] IFS researchers projected a fall in the number of children in poverty to 2.3 million in 2010–11 (using incomes measured BHC). This projected fall of 600,000 in poverty by 2010 is for the whole four-year period between 2006–07 and 2010–11, and is mostly accounted for by policy announcements that were not due to be implemented until 2008–09. However, this still means that the number of children in poverty in 2010–11 would exceed the government's target by 600,000. Furthermore, this work estimated that additional spending[36] of around £4.2 billion a year by 2010–11 would be needed to meet the target. Given that Budget 2009 allocated less than £0.2 billion towards meeting the 2010 child poverty target, it seems highly likely that this target will be missed, unless the government can find approximately £4 billion between now and the 2009 Pre-Budget Report.

Looking further ahead, to 2020, the government has a target to eradicate child poverty. Partly because of fluctuations in incomes and the potential for incomes to be misreported by survey respondents, and partly because there will always be a small number of people who fail to claim benefits or make use of opportunities they are entitled to, defining 'eradication' as zero measured by relative income poverty is impractical. In a recent consultation (Child Poverty Unit, 2009), the government proposed that a rate of relative income poverty between 5% and 10% would be a level comparable to the lowest in Europe and would be consistent with eradication of child poverty. Box 4.2 discusses the various measures that could be used in judging whether the pledge to eradicate child poverty has been met.

Pensioner poverty

Under the HBAI methodology, pensioners are defined as individuals above the current pension age – 65 for men and 60 for women – and pensioner incomes depend on the combined income of the household, which may include working-age adults.

After a large rise in pensioner poverty in 2006–07, pensioner poverty fell in 2007–08, as can be seen in Tables 4.1 and 4.2. The poverty rate fell by 0.8 percentage points measuring incomes AHC, from 18.9% to 18.1%, and by 0.5 percentage points measuring incomes BHC, from 23.2% to 22.7%. Neither of these changes is statistically significantly different from zero. Figure 4.4 shows that the fall in poverty is not restricted to the 60% of median income measure, but all falls are small and none is statistically significant (in the case of the BHC 40% poverty line, there has been no fall at all).

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[35] Brewer, Browne, Joyce and Sutherland, 2009.

[36] On the per-child element of the child tax credit and a new supplement for children in large families.

Figure 4.4a. Relative poverty: percentage of pensioners living in households with incomes below various fractions of median income (AHC)
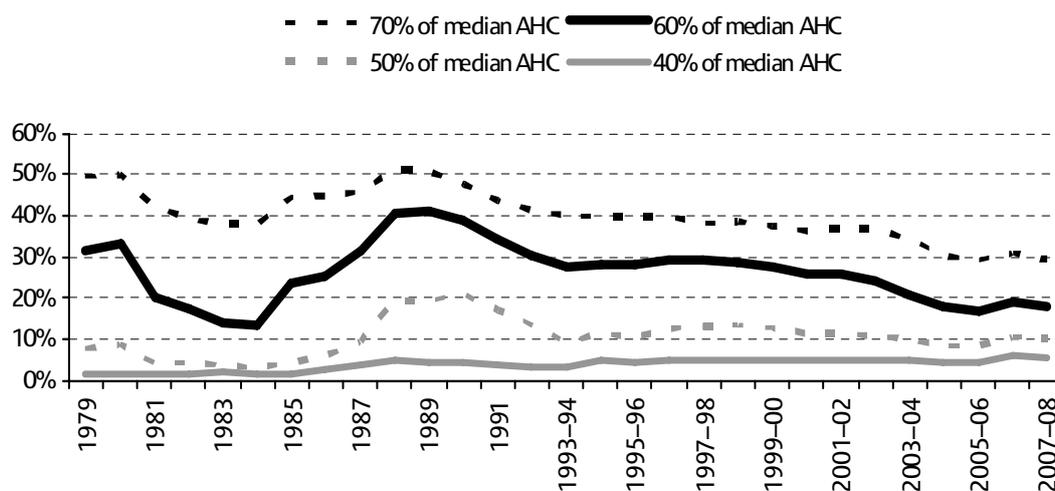
Figure 4.4b. Relative poverty: percentage of pensioners living in households with incomes below various fractions of median income (BHC)
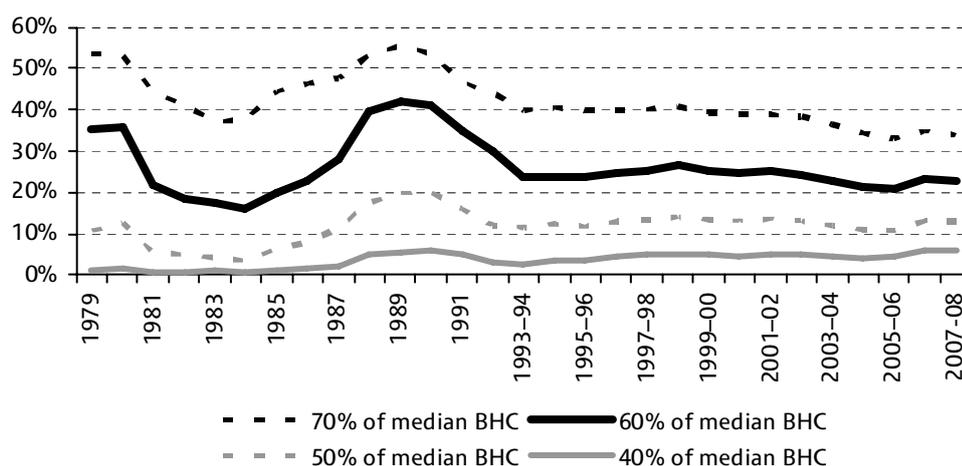
Note: Figures are presented for GB up until 2001–02 and then for the whole of the UK from 2002–03 onwards.
Source: Authors' calculations based on Family Expenditure Survey and Family Resources Survey, various years.

Using a poverty line of 60% median income, there are now 2.0 million pensioners in poverty measuring incomes AHC and 2.5 million measuring incomes BHC in the UK. With the small fall in pensioner poverty and the rise amongst the rest of the population, 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 11.0 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 1.9 percentage points between 1996–97 and 2007–08, but this is only just 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 4.4 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 rise in poverty (BHC) in 2006–07 did much to reverse the relatively modest decline that has occurred since 1996–97.

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 for 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 4.2 million working-age adults without dependent children living in poverty in the UK measuring incomes AHC (3.2 million BHC). These figures are up 100,000 and 200,000 respectively from 2006–07, or by 0.5 and 0.8 percentage points respectively. As shown in Figure 4.5, the rates of poverty for this group are now 18.1% (AHC) and 14.0% (BHC), with both of these figures being the highest poverty rate amongst working-age non-parents since the start of our consistent time series in 1961 and both being statistically significantly higher than the rate in 1996–97.

Table 4.6 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:

- 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 4.6), 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. The most important (quantitatively) of these are the rise in the (already high) risk of poverty for workless couple households and the increase in the risk of poverty for single individuals working full-time (although this is still relatively low).

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 which is largest for non-working single people and for couples without children where neither partner works.

Until recently, the rise in poverty rates amongst working-age adults without children attracted very little attention. However, the abolition of the 10p starting rate of income tax announced in Budget 2007 and implemented in April 2008 caused a significant

Figure 4.5a. Relative poverty: percentage of working-age non-parents living in households with incomes below various fractions of median income (AHC)
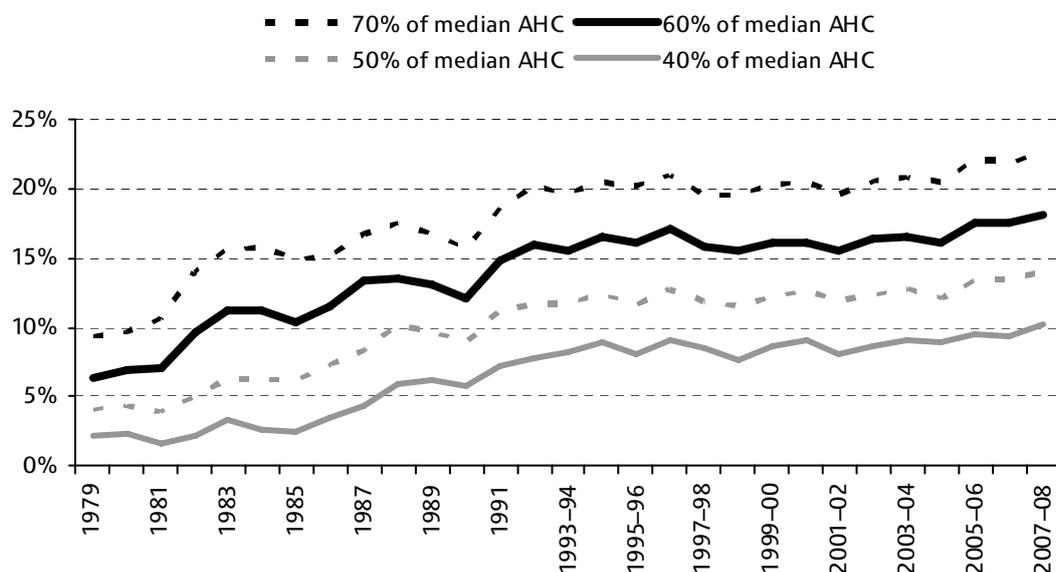

Figure 4.5b. Relative poverty: percentage of working-age non-parents living in households with incomes below various fractions of median income (BHC)

Note: Figures are presented for GB up until 2001–02 and for the whole of the UK from 2002–03 onwards.

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

49
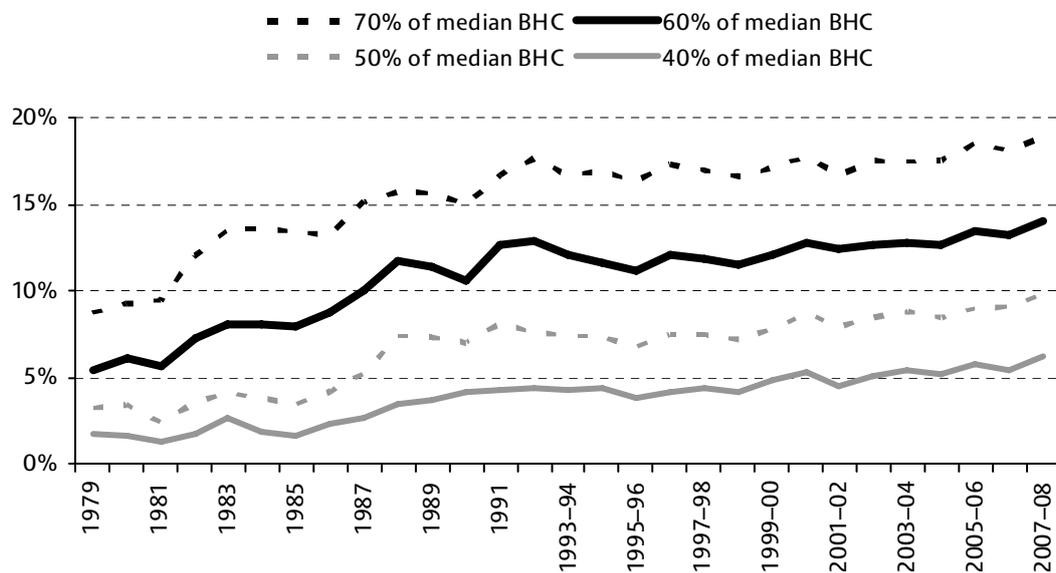
Table 4.6. Decomposition of the rise in relative poverty amongst working-age non-parents (AHC), 1996–97 to 2007–08, by family type

	Poverty rate		Percentage of population		Compositional effect	Incidence effect	Total change in poverty
	1996–97	2007–08	1996–97	2007–08			
Single individuals							
Full-time	6.7%	8.4%	25.4%	25.5%	–0.0%	0.4%	0.4%
Part-time	28.2%	29.4%	4.0%	5.8%	0.2%	0.1%	0.3%
Workless	55.6%	52.4%	14.8%	14.5%	–0.1%	–0.5%	–0.6%
Couples, no children							
Self-employed	14.5%	17.3%	7.8%	7.2%	0.0%	0.2%	0.2%
Two full-time earners	0.3%	2.0%	18.9%	20.6%	–0.3%	0.3%	0.0%
One full-time, one part-time	2.0%	5.0%	8.6%	9.0%	–0.0%	0.3%	0.3%
One full-time, one not working	10.1%	12.9%	8.7%	8.0%	0.0%	0.2%	0.2%
One or two part-time	21.0%	28.0%	4.1%	4.0%	–0.0%	0.3%	0.3%
Workless	39.2%	44.7%	7.7%	5.4%	–0.6%	0.4%	–0.2%
All working-age non-parents	17.2%	18.1%	100.0%	100.0%	–0.8%	1.7%	0.9%

Notes: 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 2007–08. 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 2007–08.

controversy.[37] The reforms introduced in April 2008 hit this group relatively hard because of poor take-up of tax credits amongst those without children and because those without children and aged under 25 are ineligible for the working tax credit.

4.3 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 4.7 and 4.8 set out estimates of the number of individuals in poverty, where 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). However, it should be noted that, as detailed in Box 4.2, there could well be drawbacks in using absolute poverty indicators over a long time frame.

[37] The controversy led the Chancellor to implement a 'one-off' £600 increase in the personal allowance that was then extended indefinitely.

In 2007–08, there were 8.0 million individuals (13.4% of the UK population) living in absolute poverty measuring incomes AHC, a rise of 100,000 since 2006–07. Measuring incomes BHC, there were 6.4 million individuals in absolute poverty, 100,000 higher than in 2006–07 (the rate of absolute poverty measuring incomes BHC rose from 10.6% to 10.8%). Neither of these changes is statistically significant, but they are the third consecutive rise (both AHC and BHC) and absolute poverty is statistically significantly higher than its low in 2004–05. Absolute poverty is currently at its highest level since 2002–03.

This is the third 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 2007–08 remains considerably lower than it was in 1996–97. It also means that 60% of the 1996–97 median income corresponds to 50% of median income in 2007–08.

Absolute child and pensioner poverty (using the 1996–97 median income as a poverty line) changed little in 2007–08. However, absolute child and pensioner poverty (AHC) remain statistically significantly higher than in 2004–05.

Table 4.7. 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
2007–08 (UK)	17.5	2.2	8.3	0.9	14.9	1.9	12.6	2.9	13.4	8.0
Changes										
1996–97 to 2000–01	–9.5		–12.9		–7.0		–3.2		–7.3	
2000–01 to 2004–05	–8.7		–9.3		–6.0		–2.7		–6.0	
2004–05 to 2007–08	1.5	0.2	1.4	0.2	1.3	0.2	1.3	0.4	1.3	0.9
2006–07 to 2007–08	(0.2)	(0.0)	(–0.5)	(0.0)	(0.0)	(0.0)	(0.5)	(0.1)	(0.1)	(0.1)

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 4.8. 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
2007–08 (UK)	11.8	1.5	12.8	1.4	9.8	1.3	9.7	2.2	10.8	6.4
Changes										
1996–97 to 2000–01	–9.5		–7.1		–6.6		–1.7		–5.6	
2000–01 to 2004–05	–5.9		–5.8		–4.1		–1.7		–3.9	
2004–05 to 2007–08	(0.4)	(0.1)	(1.1)	(0.2)	(0.3)	(0.1)	1.0	0.3	0.8	0.6
2006–07 to 2007–08	(0.0)	(0.0)	(–0.2)	(0.0)	(–0.1)	(0.0)	(0.7)	(0.2)	(0.2)	(0.1)

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.

4.4 Conclusion

For the third consecutive year, poverty has risen in 2007–08. Unlike 2006–07, when the increase in poverty was concentrated amongst pensioners – a group favoured by Labour's tax and benefit reforms to date – in the latest year the rise was most evident for working-age adults without dependent children, a group not favoured by tax and benefit reforms. Indeed, poverty for this group has sharply increased since 1979 and is now at its highest level since the start of our consistent time series on poverty going back to 1961 – though they are still on average less likely to experience poverty than families with children and pensioners.

Child poverty has risen (although statistically insignificantly) for the third year in a row, with child poverty up 200,000 since its recent low point in 2004–05. Looking forward, child poverty is likely to fall in 2008–09 and 2009–10, even after accounting for a potential fall in the level of employment during the current recession. This results from particularly generous increases in benefits and tax credits aimed at low-income families with children announced in Budget 2007 and Budget 2008. Even after these reforms, it is predicted that the government will miss its 2010 child poverty target by about 600,000 and that extra spending of around £4.2 billion would be required to meet it. Given that

Budget 2009 allocated less than £0.2 billion towards meeting the 2010 child poverty target, it seems highly likely that this target will be missed, unless the government can find approximately £4 billion between now and the 2009 Pre-Budget Report.

Having fallen substantially up to 2005–06, pensioner poverty increased in 2006–07 and remained at that level in 2007–08. Partly as a result of declining levels of inflation, pensioners are likely to see real increases in the value of their state benefits in the coming years. This seems likely to translate into reduced levels of pensioner poverty, especially if the recession delivers falls in average or median incomes. Indeed, in previous recessions pensioner poverty has fallen substantially.

5.   Conclusion

This Commentary has analysed what the latest set of Households Below Average Income (HBAI) statistics tell us about changes in living standards and relative income poverty in the UK up to the year 2007–08. We have considered what the extra year of statistics tell us about living standards, inequality and poverty relative to one year before, and have also considered the record over the whole period of the Labour government since 1996–97.

Over the period of the Labour government as a whole, living standards in Great Britain have risen on average by the equivalent of 2.0% a year at the mean and 1.7% at the median. This growth in living standards was fastest during Labour's first term of office. Since 2001, there has been sluggish growth in average living standards, which can largely be accounted for by a slowdown in earnings growth. This weak growth in average living standards occurred at a time of fairly strong macroeconomic growth and before the start of the current recession. The most recent available data on trends in unemployment and earnings growth suggest a bleak outlook for income growth in 2008–09 and 2009–10.

Income inequality, on most measures, is now higher than when Labour came to power and at its highest level since the start of our comparable time series in 1961. However, income inequality has not increased uniformly under Labour: it rose during the government's first term, fell during its second term, but has risen in each of the past three years. Indeed, the pattern of income growth over the past three years is much more like the pattern seen under the period of Conservative governments between 1979 and 1997, when income growth was increasing in household income.

Predicting the future of income inequality is never easy, and it is rendered even more difficult this year, with the economy entering recession amid turmoil in world financial markets. We might expect these events to reduce top incomes and income inequality: top incomes fell in real terms as stock markets fell in the aftermath of the dot-com bubble. However, unemployment is currently rising fastest among low-educated workers. History also offers us few clues as to what we might expect to happen during the current recession: income inequality has not evolved uniformly during previous recessions. Increases to benefits and tax credits for low-income families with children and pensioners, together with tax-raising measures on high earners, might be expected to reduce income inequality in the coming years. But there remains a considerable degree of uncertainty as to how income inequality will evolve in the near future.

Relative poverty has fallen sharply since Labour came to power in 1997, with the biggest falls occurring for families with children and pensioners, groups favoured by recent tax and benefit reforms. However, relative poverty has risen for all groups over the last three years, and poverty for working-age adults without dependent children is now at it highest level since the start of our comparable time series in 1961.

The government currently has a target to halve the level of child poverty in 2010–11 compared with 1998–99. Previous work by IFS researchers projected a fall in the number of children in poverty between 2006–07 and 2010–11 to 2.3 million, even after accounting for potential falls in employment as a result of the recession. However, this means that the number of children in poverty in 2010–11 would exceed the government's target by 600,000. Furthermore, this work estimated that additional spending of around

£4.2 billion a year by 2010–11 would be needed to meet the target. Given that Budget 2009 allocated less than £0.2 billion towards meeting the 2010 child poverty target, it seems highly likely that this target will be missed, unless the government can find approximately £4 billion between now and the 2009 Pre-Budget Report.

The above-inflation increase in benefits and tax credits in April 2009 should act to reduce poverty, but one also needs to take account of the potential impact of the current recession. This could both increase the number of low-income households and lower the poverty threshold. If previous experience of changes in poverty during recessions is anything to go by, then we would expect small reductions in overall levels of relative poverty, driven by a reduction in pensioner poverty. Relative to average incomes, there has been a decline in the generosity of out-of-work benefits for working-age adults without children over time, which has not occurred for pensioners or families with children. This group could thus fare worse this time round.

To conclude, since Labour came to power in 1997, measures of average living standards, poverty and inequality have not evolved uniformly. During Labour's first term, there was strong growth in average living standards, falls in poverty, but rising levels of income inequality. In its second term, growth in average living standards was much slower, but poverty and income inequality both fell. Over the past three years, average living standards have continued to stagnate, though poverty and income inequality both rose. We expect that the current recession will again lead to a change in the course of poverty, inequality and average living standards. Unfortunately, the only thing we can be near-certain of is that average living standards will fall, but we cannot be sure how this pain will be shared.

Appendix A. The Households Below Average Income (HBAI) methodology[38]

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. For families with children, there is also a 'material deprivation' indicator, which is based upon both income and the inability of a family with children to afford specific goods and services; discussion and analysis of this indicator can be found in chapter 5 of Brewer, Muriel, Phillips and Sibieta (2008).

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 Family Resources Survey (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.[39]

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

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

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

the purchase of other consumption goods (such as food or clothing). For these individuals, it 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 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 but who have mortgage or rental payments, since housing is an asset which is of benefit to those who own their own homes. On a BHC measure, an individual who owns his or her 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.[40]

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 the incomes 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. This is by no means the only 'reasonable' assumption 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

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[40] 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

method is required to adjust incomes for the different needs that different households may face.

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 they have or the extra costs they face, then the standard of living of this household may be no higher.[41]

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 (2009)). 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.

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[41] See also section 5.3 of last year's poverty and inequality report (Brewer, Muriel, Phillips and Sibieta, 2008).

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 for the richest individuals which is 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 0.9% of the population (corresponding to around 540,000 individuals, or 133 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 2007–08 prices, as our measure of living standards. For brevity, we often use this term interchangeably with 'income'.

Appendix B. A comparison with the National Accounts

Table B.1 gives growth rates since 1996–97 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% a year in real terms) and average growth across each of the two parliaments (at 3.3% and 2.1% 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, since national income includes the income of companies and the government as well as the income of households.[42]

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%	3.3%	4.4%
1998–99	3.5%	1.5%	3.1%	–0.4%
1999–00	2.1%	3.1%	3.4%	4.6%
2000–01	4.4%	3.1%	3.2%	3.9%
2001–02	4.4%	4.9%	1.8%	2.7%
2002–03	1.3%	2.0%	1.9%	1.8%
2003–04	–0.4%	0.0%	2.6%	2.4%
2004–05	1.4%	1.0%	2.0%	2.1%
2005–06	1.4%	1.1%	1.5%	2.5%
2006–07	0.8%	0.4%	2.3%	–0.1%
2007–08	1.1%	0.2%	2.3%	1.8%
Labour (1996–97 to 2007–08)	**2.0%**	**1.7%**	**2.5%**	**2.3%**
Of which:				
Labour I (1996–97 to 2000–01)	**3.1%**	**2.4%**	**3.3%**	**3.1%**
Labour II (2000–01 to 2004–05)	**1.7%**	**2.0%**	**2.1%**	**2.3%**
Labour III (2004–05 to 2007–08)	**1.1%**	**0.5%**	**2.0%**	**1.4%**

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

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[42] 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.

The series 'real household disposable income per head' from the National Accounts excludes the income of companies and the government.[43] Average income growth under this measure is also broadly similar to HBAI income growth, showing average annualised income growth since 1996–97 of 2.3% a year compared to 2.0% a year for mean HBAI income growth.

Further details of how the HBAI and National Accounts measures of income differ were provided in the appendix of IFS Election Briefing Note 9 (Brewer, Goodman, Shaw and Shephard, 2005).

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[43] 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. Growth in benefits income: HBAI versus administrative data

In last year's poverty and inequality report,[44] we expressed concern about the low growth in benefits income found in the HBAI data, compared with the benefits spending reported by HMRC and DWP. Almost no growth in mean benefits income was seen in 2006–07, whereas administrative data suggested that benefits expenditure had increased by 4% in nominal terms.[45] This was cause for concern, since we would expect administrative data to more accurately reflect 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.

Figure C.1. Nominal growth in spending on benefits and tax credits: comparing HBAI and administrative data
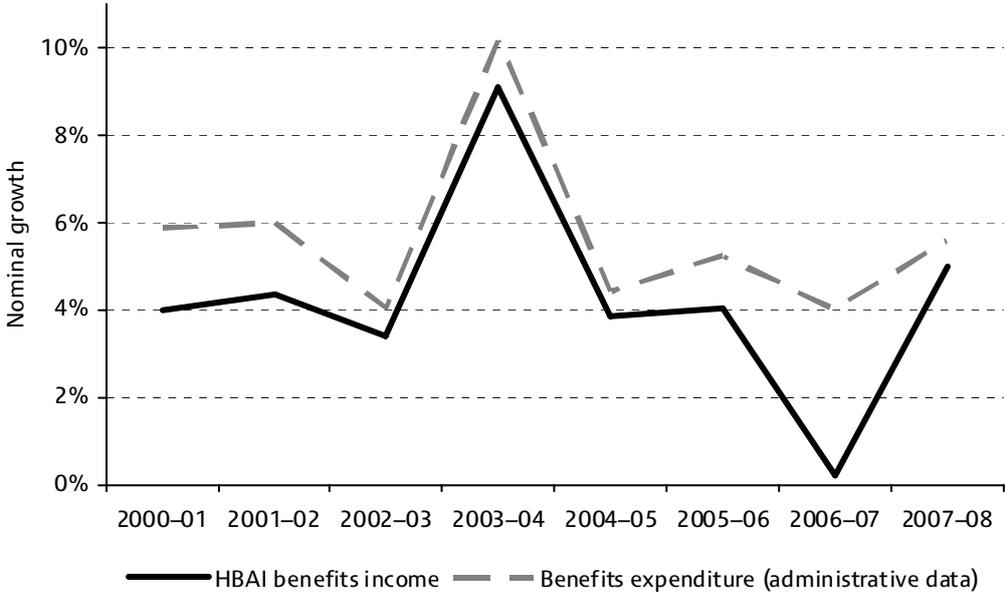
Sources: HBAI benefits income from authors' calculations using Family Resources Survey, various years. Benefits expenditure (administrative data) from DWP benefit expenditure table 3 (http://www.dwp.gov.uk/asd/asd4/Table3.xls) and HMRC annual accounts, various years (available at http://www.hmrc.gov.uk/about/annual_reps.htm).

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[44] Brewer, Muriel, Phillips and Sibieta, 2008.

[45] 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.

Figure C.1 shows 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. The two series track one another fairly closely (within 2 percentage points) up to and including 2004–05, but begin to diverge thereafter, so that in 2006–07 the two differed by over 3 percentage points.

However, benefits income growth in the latest year of data closely matches growth in benefits spending from the administrative data, suggesting that 2006–07 may have been something of an outlier.

Appendix D. Benefit and tax credit receipt amongst families with children

Table D.1 compares 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 2007–08, the Family Resources Survey (FRS) recorded 16% fewer families with children in receipt of the child tax credit (or equivalent in means-tested benefits) than administrative records. A little over half of this is due to undercounting the number of families in receipt of only the family element of the child tax credit or less.[46]

But Table D.1 also reveals an interesting pattern by family type: the FRS records 1% fewer couples receiving the working tax credit and 6% *more* couples receiving the child tax credit (more than the family element) than administrative data suggest; the equivalent figures for lone-parent families are 26% and 22% fewer.

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 2007–08, the government was paying child-related support

Table D.1. Comparing estimates of the number of families receiving tax credits in 2007–08 (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	5,604	4,694	−16%	2,135	1,676	−21%	3,469	3,018	−13%
Child tax credit: more than family element plus equivalent through IS/JSA	3,680	3,329	−10%	2,030	1,582	−22%	1,650	1,747	+6%
Of whom:									
Working tax credit	*1,647*	*1,410*	*−14%*	*886*	*655*	*−26%*	*761*	*755*	*−1%*
Child tax credit: family element or less	1,924	1,365	−29%	105	95	−10%	1,818	1,270	−30%

Notes: Numbers have been rounded to the nearest 10,000 but percentages are based on unrounded numbers. Administrative totals are the mean of those for April and December 2007.
Sources: Authors' calculations from various HBAI data sets and HM Revenue & Customs (2007b and 2007c).

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[46] The pattern of under-recording of tax credits shown in Table D.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 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 2007–08, and this change has made it easier for the FRS to record its receipt.

Figure D.1. Comparing estimates of the number of lone-parent families in GB/UK
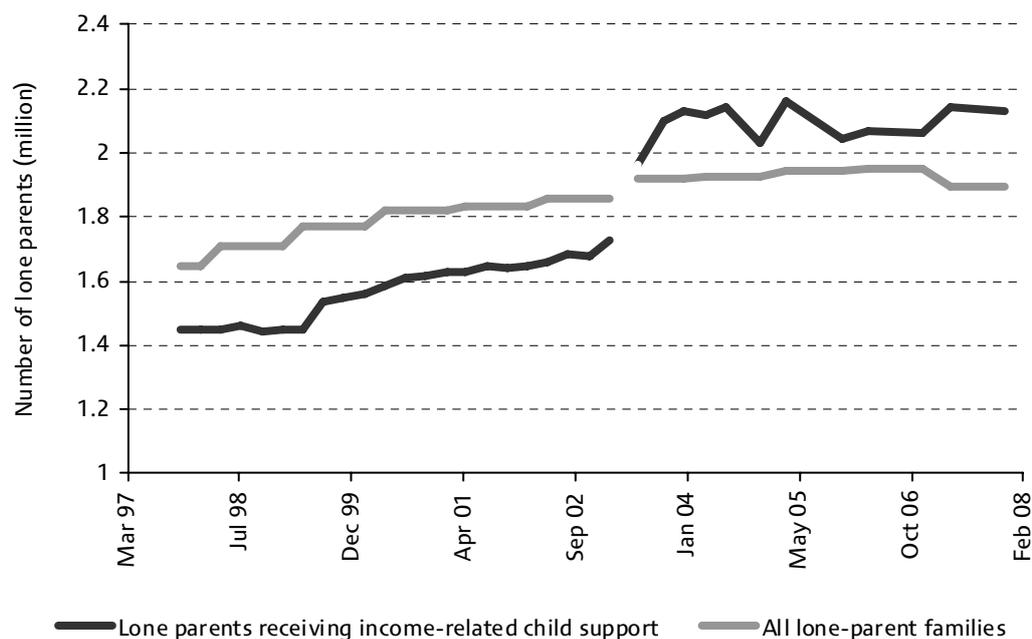
Notes: Both series are for GB before April 2003 and UK thereafter; hence the break in the series. *Lone parents receiving income-related child support:* Before April 2003, graph shows sum of lone parents in GB receiving working families' tax credit (WFTC) plus lone parents receiving any of income support (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 online table created using DWP's Tabulation Tool (before 2003).

to 200,000 more lone-parent families than the Office for National Statistics believes live in the United Kingdom: see Figure D.1.[47]

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.[48] This provides a direct vindication of our hypothesis, and so we see no reason to alter our conclusion from three years ago:

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[47] 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 only include those in private households.

[48] 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, page 13

The Conservative Party has 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.[49] 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.

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, it 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 *understating* the true level of poverty.

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

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