Chapter 1

Summary and background

Summary

The latest figures cover a period where the UK economy was showing little GDP growth and average earnings fell in real terms. Benefit reforms, including the adoption of CPI for the uprating of many benefits and tax credits (instead of RPI), the triple guarantee for pensions, measures to reduce housing benefit expenditure and the focusing of tax credits on lower income families were introduced in 2011/12.

This summary presents three main measures of low income:

- someone is considered to be in relative low income if they receive less than 60 per cent of the average income¹ in the year in question.
- someone is considered to be in absolute low income if they receive less than 60 per cent of average income¹ in 2010/11 adjusted by inflation.
- income inequality, as measured by the Gini coefficient, ranges from zero (when everybody has identical incomes) to 100 per cent (when all income goes to only one person).

Overall findings

- Average income decreased by 3 per cent in 2011/12 in real terms compared with 2010/11, similar to the decrease in 2010/11. Incomes across the distribution grew by less than RPI inflation². Average income fell as earnings and benefit income grew more slowly than the cost of living as measured by RPI. Prior to 2010/11, average income had risen in most years since 1994/95³.
- The percentage of individuals in relative low income, Before Housing Costs (BHC), was 16 per cent. This is unchanged from 2010/11 and continues the lowest level since the 1980s. Levels remained static because, in the main, real incomes for households near the bottom of the income distribution fell by roughly the same rate as real incomes for households at the average.
- In 2011/12, the percentage of individuals in absolute low income, measured against the 2010/11 baseline⁴, was 17 per cent, BHC, which is 1 percentage point, or 900,000 people, higher than in 2010/11⁵. As incomes across the distribution

¹ In this summary the **average income** is defined as the median equivalised net household income, where the median income divides the population of individuals, when ranked by income, into two equal sized groups. Equivalisation is a process that makes adjustments to incomes, so that the standard of living of households with different compositions can be compared.

² HBAI uses RPI to look at how incomes are changing over time in real terms. As described in the background section, the use of different inflation measures has an effect on historical real terms income figures.

³ This is the first year of data available on a consistent basis.

⁴ The change of baseline from 1998/99 to 2010/11 is explained in the Statistical Notice published on 16th May 2013 and reproduced in **Appendix 3**.

⁵ This increase is statistically significant.

grew by less than RPI inflation in 2011/12, and the absolute low-income threshold was uprated by RPI inflation, the population falling into absolute low income rose.

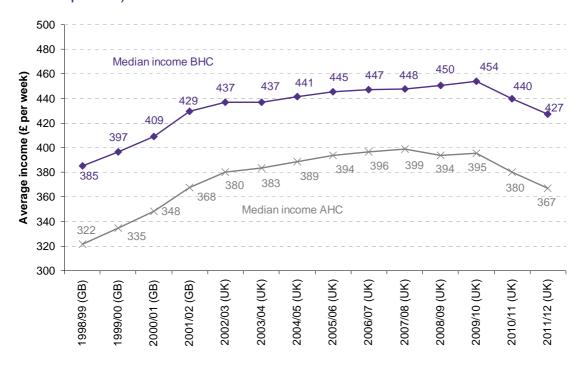
Income inequality remained reasonably level between 2010/11 and 2011/12, as incomes fell by broadly similar amounts across the entire distribution. Having fallen between 2009/10 and 2010/11, income inequality is now at levels last seen in the middle of the last decade having reached historic highs in recent years.

Average income and the income distribution

HBAI uses variants of RPI to adjust for inflation to look at how incomes are changing over time in real terms. As described in the background section, the use of different inflation measures has an effect on historical real terms income figures.

Average income decreased by 3 per cent in 2011/12 in real terms compared with 2010/11, and incomes across the distribution grew by less than RPI inflation. Average income fell as earnings and benefit income grew more slowly than the cost of living as measured by RPI. Incomes in 2011/12 have fallen to around 2001/02 levels, but are still higher than in 1998/99 in real terms.

Chart 1.1: Average incomes, 1998/99 to 2011/12, United Kingdom (2011/12 prices)



The reduction in real terms earnings may partly be due to a combination of both pay freezes and economic restructuring following the recession⁶.

Various benefit reforms were introduced in 2011/12. These included the adoption of the CPI, rather than the RPI, for the uprating of many benefits and tax credits, the triple guarantee for basic State Pensions, measures to reduce housing benefit expenditure, and the focussing of tax credits on lower income families. These reforms

⁶ See ONS publication http://www.ons.gov.uk/ons/rel/regional-trends/regional-economic- analysis/changes-in-real-earnings-in-the-uk-and-london--2002-to-2012/sum-real-wages-down-by-8-5-since-2009.html

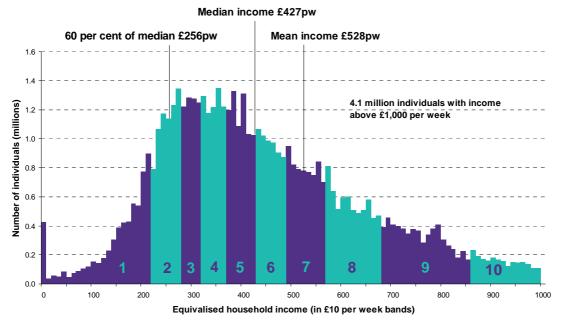
See Table A, Chapter 2 for more details.

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had different effects on different benefit recipients but overall resulted in a real terms fall in benefit income.

Average income in 2011/12 was £427 per week, BHC, and £367 per week, AHC. This meant that the most commonly used threshold to determine if someone is in relative low income, 60 per cent of average income, was £256 per week, BHC, and £220 per week, AHC. The income distribution showed a high concentration of individuals close to the relative low-income threshold (Chart 1.2).

Chart 1.2 (BHC): Income distribution for the whole population, 2011/12

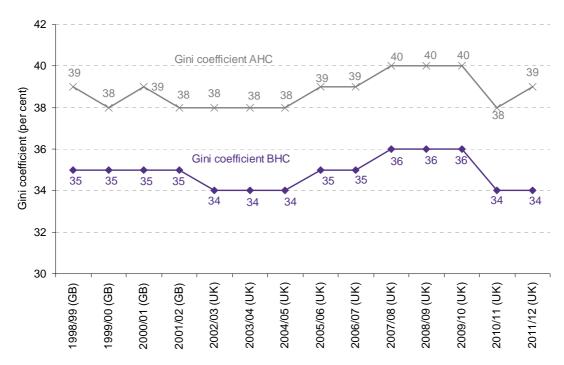


Income inequality

Income inequality is measured by the Gini coefficient (which ranges from zero when everybody has identical incomes to 100 per cent when all income goes to only one person) and remained reasonably level between 2010/11 and 2011/12, because household incomes fell by a broadly similar proportion across the entire distribution. Income inequality is now at levels last seen in the middle of the last decade having reached historic highs in recent years.

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Chart 1.3: Income inequality, 1998/99 to 2011/12, United Kingdom



Individuals in low income and material deprivation

This section presents the latest annual estimates of the percentage living in relative and absolute low income, for the whole population, and then separately for children, working-age adults and pensioners, together with statistics on children living in combined low income and material deprivation and pensioners living in material deprivation.

HBAI uses variants of RPI to adjust for inflation to look at how incomes are changing over time in real terms. As described in the background section, the use of different inflation measures has an effect on absolute low income figures.

Average income decreased by 3 per cent in 2011/12 in real terms compared with 2010/11, and incomes across the distribution grew by less than RPI inflation. Average income fell as earnings and benefit income grew more slowly than the cost of living as measured by RPI.

Whole population

Both BHC and AHC measures are used to examine low income for the whole population. In this summary we focus on BHC measures⁸, as AHC measures can underestimate the true living standard of families who choose to spend more on housing to attain a higher standard of accommodation.

The proportion of individuals in relative low income has not changed since last year, after falling in both of the previous three years; however the percentage of individuals in absolute low income rose by 1 percentage point⁹, a similar increase to that seen between 2009/10 and 2010/11, and returns to levels last seen in 2008/09.

⁸ Both BHC and AHC measures are reported later in this report.

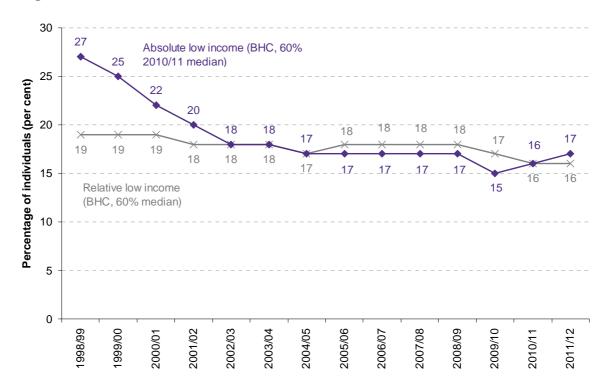
⁹ This increase is statistically significant.

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16 per cent of individuals were in relative low income with incomes below £256 per week¹⁰ BHC, the same as 2010/11 and the lowest level since the 1980s, having fallen between 2008/09 and 2010/11. Incomes for households near the bottom of the income distribution fell by roughly the same rate as incomes for households at the average. As a result, levels of relative low income remained static.

In 2011/12, the percentage of individuals in absolute low income measured against the 2010/11 baseline¹¹ was 17 per cent, which is 1 percentage point higher than in 2010/11¹². This follows a period of decreases or stability between 1995/96 and 2009/10, and levels have increased to those last seen between 2004/05 and 2008/09. The recent increase was driven by an increase in the percentage of children and working-age adults in absolute low income, because there was a reduction in real terms income. The absolute low income threshold was uprated by RPI inflation and so the population falling into low income increased.

Chart 1.4: All individuals, main measures, 1998/99 to 2011/12, United Kingdom



The following groups were more likely to be in relative low income BHC in 2011/12 compared to the overall population:

- children and working-age adults in workless families, lone-parent families, those
 in families with three or more children and people in households with no
 savings;
- those aged 85 or more, pensioners having no occupational/personal pensions and pensioners living alone;

¹⁰ This is the relative low income threshold.

The change of baseline from 1998/99 to 2010/11 is explained in the Statistical Notice published on 16th May 2013 and reproduced in **Appendix 3**.

¹² This increase is statistically significant.

Summary

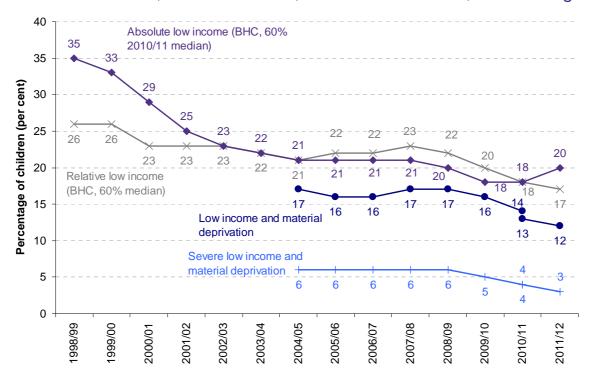
- households headed by a member of certain ethnic minority groups, particularly someone of Pakistani or Bangladeshi ethnic origin;
- individuals in families containing one or more disabled member and social rented sector tenants.

Children

Both BHC and AHC measures are used to examine low income for children. The preferred measure of low income for children is based on incomes measured BHC¹³, as AHC measures can underestimate the true living standard of families who choose to spend more on housing to attain a higher standard of accommodation. The <u>Child Poverty Act 2010</u> sets out four income related targets that the Government must meet by 2020. These are based on the measures of relative low income, absolute low income, low income and material deprivation¹⁴ and persistent poverty¹⁵.

Whilst the proportion in absolute low income rose in 2011/12¹⁶, the proportion of children in combined low income and material deprivation, and severe poverty continued to fall¹⁷, whilst the proportion in relative low income remained flat¹⁸.

Chart 1.5: Children, main measures, 1998/99 to 2011/12, United Kingdom



Note: Because new material deprivation items were introduced in 2010/11, low income and material deprivation and severe poverty figures prior to 2010/11 are not comparable to 2011/12.

¹⁷ These reductions are not statistically significant.

¹³ Both BHC and AHC measures are reported later in this report.

¹⁴ Below 70 per cent of equivalised median household income, BHC and material deprivation.

¹⁵ Below 60 per cent of median household income for at least three of the last four years.

¹⁶ This increase is statistically significant.

¹⁸ Table 4.1tr in the HBAI statistical report shows a change from 18 to 17 per cent between 2010/11 and 2011/12, but unrounded figures show relative low income to be flat. Rounding figures at the final point of calculation of a statistic produces the best estimate. This change is not statistically significant

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Between 2010/11 and 2011/12, the percentage of children in relative low income was 17 per cent, and was at its lowest level since the mid 1980s. The stability in 2011/12 was driven primarily by incomes for families with children at the lower end of the income distribution falling at the same rate as incomes around the median.

The percentage of children in absolute low income BHC increased by 2 percentage points, or 300,000 children, between 2010/11 and 2011/12¹⁹. This was the first percentage point increase since the early 1990s, BHC. The recent increase was driven by a reduction in real terms income. The absolute low income threshold was uprated by RPI inflation and so the population falling into low income increased.

New material deprivation items were introduced in 2010/11. The proportion of children living in low income (below 70 per cent of equivalised median household income, BHC) and material deprivation and severe poverty (below 50 per cent of median household income and in material deprivation) for 2011/12 has fallen to 12 per cent and 3 per cent respectively in 2011/12, representing a 1 percentage point fall for both measures compared to 2010/11²⁰. As the proportion of households with children falling below the 70 per cent and 50 per cent low-income thresholds remained the same in 2011/12 compared to 2010/11, this fall was primarily driven by a decrease in the proportion of families experiencing material deprivation. As only two years' worth of data exists using the new items it is not possible to compare the trends prior to 2010/11 for either measure²¹.

Working-age adults

Both BHC and AHC measures are used to examine low income for working-age population. In this summary we focus on BHC measures²², as AHC measures can underestimate the true living standard of families who choose to spend more on housing to attain a higher standard of accommodation.

Between 2010/11 and 2011/12 the percentage of working-age adults in relative low income BHC remained constant, but an increase in the population led to a further 100,000 working-age adults in relative low income. This stability was driven by incomes for households near the bottom of the income distribution falling by roughly the same rate as incomes for households in the middle. The real terms decline in average income was driven by both earnings and benefit income growing by less than inflation.

The percentage of working-age adults in absolute low income increased by 1 percentage point BHC²³. This constituted an increase of 600,000 working-age adults BHC in absolute low income. The recent increase was driven by a reduction in real terms earnings and in real terms benefit income. The absolute low income threshold was uprated by RPI inflation and so the population falling into low income increased.

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¹⁹ This increase is statistically significant.

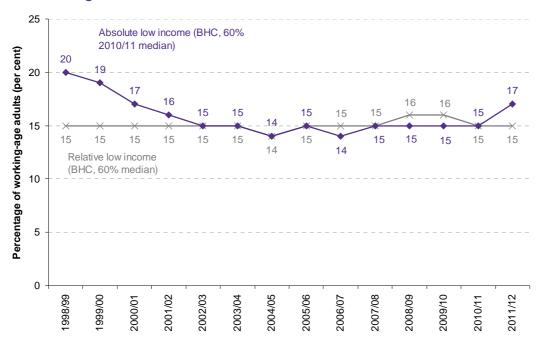
²⁰ These reductions are not statistically significant.

²¹ The break in the series is explained in the Statistical Notice published on 16th May 2013 and reproduced in **Appendix 3**.

²² Both BHC and AHC measures are reported in the rest of the report.

²³ This increase is statistically significant.

Chart 1.6: Working-age adults, main measures, 1998/99 to 2011/12, **United Kingdom**



Pensioners

Both BHC and AHC measures are used to examine low income for the working-age population. The preferred measure of low income for pensioners is based on incomes measured AHC²⁴, as around three quarters of pensioners own their own home. Considering pensioners' incomes compared to others after deducting housing costs allows for more meaningful comparisons of income between working-age people and pensioners, and for pensioners over time. Pensioners are defined as all those adults above State Pension age. Prior to 6th April 2010, women reached the State Pension age at 60. From 6th April 2010, the qualifying age for women has been gradually increasing. For example, pensionable age at 30 June 2011 was 65 for men and approximately 60 years and 238 days for women.

There was a decrease in the percentage of pensioners in relative low income between 2010/11 and 2011/12²⁵, with the percentage close to a historic low, and pensioners less likely to be in relative low income than the population as a whole, AHC. The reduction of 100,000 pensioners was driven primarily by incomes for pensioners at the lower end of the income distribution falling less than incomes around the middle. Households containing pensioners in the lowest quintiles generally received a larger proportion of their income from benefits and a smaller proportion from other sources. The introduction of the triple guarantee in 2011/12 meant that the key pensioner benefit - the basic State Pension - was uprated by 4.6 per cent in April 2011 (the higher of earnings, prices or 2.5 per cent). In addition the Pension Credit (Guarantee Credit) was increased by 3.6 per cent to ensure the lowest income pensioners received the full increase of the basic State Pension. These increases were larger than

²⁴ Both BHC and AHC measures are reported in the rest of this report.

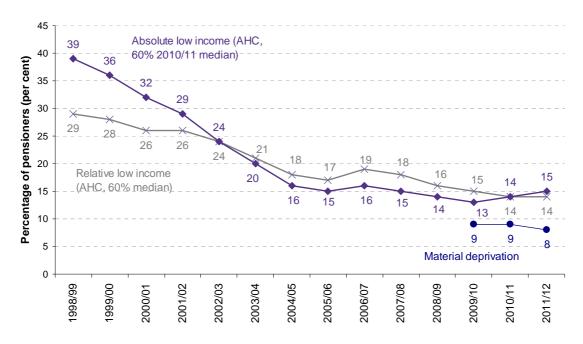
²⁵ Figure 7 shows that the percentage in relative low income AHC was 14 per cent in 2010/11 and 2011/12, but unrounded figures show a reduction of 1 percentage point. This reduction is not statistically significant.

for many other state benefits, which meant that pensioners in the lowest quintiles saw their income fall less in real terms than other households.

There was a 1 percentage point increase²⁶ in the proportion of pensioners in absolute low income AHC, as low-income households containing pensioners saw their income fall in real terms. This is because, despite the higher increases in benefits, incomes for low-income pensioners in 2011/12 rose by less than RPI inflation. The absolute low income threshold was uprated by RPI inflation and so the population falling into low income increased by 100,000.

There has been a small decrease in the proportion of pensioners aged 65 or over in material deprivation, down from 9 per cent in 2010/11 to 8 per cent in 2011/12²⁷.

Chart 1.7: Pensioners, main measures, 1998/99 to 2011/12, United Kingdom



Disability

Both BHC and AHC measures are used to examine relative low income for disabled people. In this summary we focus on BHC measures²⁸, in line with most of the other figures in this release.

Between 2010/11 and 2011/12, there has been a decrease in the percentage of individuals living in relative low income in families where at least one member is disabled by 1 percentage point to 19 per cent BHC²⁹, whilst the percentage of individuals living in relative low income in families where no member is disabled has remained constant.

²⁷ This reduction is not statistically significant.

²⁹ This reduction is not statistically significant.

²⁶ This increase is statistically significant.

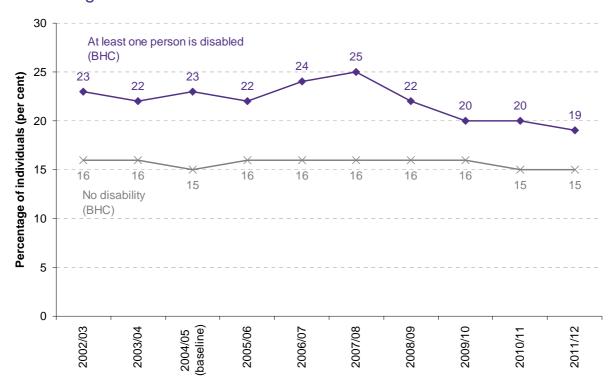
²⁸ Both BHC and AHC measures are reported in the rest of this report.

Summary

Over the longer term, since the Office for Disability Issues (ODI) baseline of 2004/05³⁰, BHC, there has been a decrease in the percentage of individuals living in relative low income in families where at least one member is disabled of 4 percentage points to 19 per cent³¹. The percentage of individuals living in relative low income in families where no-one is disabled BHC has remained level.

A higher proportion of individuals living in families with at least one disabled member live in relative low income BHC, compared to individuals living in families with no disabled members. This is particularly the case for individuals living in families containing one or more disabled member and not receiving disability benefits.

Chart 1.8: Individuals by family disability status 2002/03 to 2011/12, United Kingdom



No adjustment is made to disposable household income to take into account any additional costs that may be incurred due to a disability. This means that the position in the income distribution of these groups may be somewhat upwardly biased.

³⁰ The ODI has an indicator which looks at the percentage of individuals living in families containing one or more disabled member in low income with a baseline of 2004/05. http://odi.dwp.gov.uk/disability-guality-indicators.php

³¹ This reduction is statistically significant.

This report presents information on living standards in the United Kingdom as determined by net disposable income in 2011/12, and changes in income patterns over time.

What does HBAI measure?

Households Below Average Income (HBAI) uses net disposable weekly household income, after adjusting for the household size and composition, as an assessment for material living standards - the level of consumption of goods and services that people could attain given the net income of the household in which they live. In order to allow comparisons of the living standards of different types of households, income is adjusted to take into account variations in the size and composition of the households in a process known as equivalisation. HBAI assumes that all individuals in the household benefit equally from the combined income of the household. The unit of analysis is the individual, so the populations and percentages in the tables are numbers and percentages of individuals – both adults and children.

Income Before Housing Costs (BHC) takes income from all household members including dependants and includes the following main components:

- usual net earnings from employment;
- profit or loss from self-employment (losses are treated as a negative income);
- all Social Security benefits and tax credits¹;
- · income from occupational and private pensions;
- investment income;
- maintenance payments, if a person receives them directly;
- income from educational grants and scholarships (including, for students, top-up loans and parental contributions);
- the cash value of certain forms of income in kind (free school meals, Healthy Start vouchers and free school milk and free TV licence for those aged 75 and over).

Income is net of the following items:

- income tax payments;
- National Insurance contributions;
- domestic rates / council tax;
- contributions to occupational pension schemes;
- all maintenance and child support payments, which are deducted from the income of the person making the payment;
- parental contributions to students living away from home;
- student loan repayments.

Income After Housing Costs (AHC) is derived by deducting a measure of **housing costs** from the above income measure.

¹ For the full list, please see the glossary in **Appendix 1**.

Changes to the 2011/12 publication

The following changes have been made to the analyses within the publication this year. These were detailed in the Statistical Notice released on 16th May 2013.

- Change of reference year for absolute low income: As advised in the 2010/11
 HBAI publication, and in order to measure absolute low income in line with the
 Child Poverty Act 2010 and to keep the absolute measure more in line with
 contemporary living standards, absolute low incomes are measured against the
 median in 2010/11 adjusted for inflation, instead of against the 1998/99 median
 income as in previous publications.
- Child material deprivation: As advised in the 2010/11 HBAI publication, four new questions about additional material deprivation items for children were introduced into the 2010/11 Family Resources Survey (FRS) and from 2011/12 four questions from the original suite were removed. We present the breakdown tables for 2011/12 including the new questions. The time series table presents figures from the original suite of questions up to and including 2010/11, and the new suite of questions from 2010/11 onwards. Therefore 2010/11 data is presented on both bases as figures from the old and new suite of questions are not comparable. Due to the break in the series it is not possible to calculate results for ethnicity or regional breakdowns for this publication as these require three consecutive years of data; this will be available for the 2012/13 HBAI publication.
- State Pension Age: Pensioners are defined as all those adults above State Pension age. Prior to 6th April 2010, women reached the State Pension age at 60. From 6th April 2010, the basic State Pension qualifying age for women has been gradually increasing. The changes do not affect the State Pension age for men, currently 65. Therefore, as with the 2010/11 publication, the age groups covered by the analysis of working-age adults and pensioners have changed for this publication.
- Pensioner material deprivation: For this publication we have 3 years of data on pensioner material deprivation, and therefore present ethnicity and regional breakdowns for the first time.
- Ethnicity breakdowns: The ethnicity figures in this publication reflect the new harmonised standards published in August 2011 and updated in February 2013. This has resulted in some changes, the most significant being to the following categories²:
 - Chinese has moved from the 'Chinese or other ethnic group' section to the 'Asian/ Asian British' section;
 - Arab is now specifically included in the 'Other ethnic group' section; and
 - o the treatment for 'Gypsy' and 'Gypsy or Irish traveller' is different for respondents in Northern Ireland compared to Great Britain.

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² These changes are described in more detail in **Appendix 2**.

Uses of HBAI

The main source of data used in this publication is the UK Department for Work and Pensions (DWP) Family Resources Survey (FRS). Prior to 2002/03 the survey covered Great Britain; from 2002/03 the survey was extended to cover the UK.

HBAI is a key source for data and information about household income. Users include: policy and analytical teams within the DWP, the Devolved Administrations and other government departments, local authorities, parliament, academics, journalists, and the voluntary sector.

Researchers and analysts outside government use the statistics and data³ to examine topics such as income inequality, poverty, the distributional impacts of fiscal policies and understanding the income profile of vulnerable groups. Examples of published reports using HBAI data include:

- "<u>Living standards, poverty and inequality in the UK</u>": Cribb, Joyce and Phillips, Institute for Fiscal Studies, 2012;
- "Working families receiving benefits": Kenway, New Policy Institute, 2013;
- "Squeezed Britain 2013": Resolution Foundation, 2013;
- "Monitoring poverty and social exclusion 2012": Aldridge, Kenway, MacInnes and Parekh, Joseph Rowntree Foundation and New Policy Institute, 2012;
- "Ending child poverty by 2020. Progress made and lessons learnt": Child Poverty Action Group, 2012; and
- " Later Life in the United Kingdom": Age UK, 2013.

Within government the statistics and data are used to:

- to inform policy development and monitoring, and for international comparisons;
- to inform the <u>Child Poverty Strategy</u>; and the four income-related targets set in the <u>Child Poverty Act</u> 2010⁴;
- to inform the Social Justice Strategy and the Social Mobility Strategy;
- to inform the DWP indicators to measure progress on <u>disability equality</u> for the <u>Independent Living Strategy</u>, the <u>Roadmap</u> to achieving disability equality by 2025 and the UN Convention on the Rights of Persons with Disabilities;
- to inform the DWP indicator to measure progress on the aim that all <u>pensioners</u> have a decent and secure income in retirement;
- for use in the DWP's Policy Simulation Model (PSM)⁵ and HM Treasury's Inter-Governmental Tax Benefit Model (IGOTM)⁶; and

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³ The UK Data Service web-site provides information on access to HBAI data http://discover.ukdataservice.ac.uk/catalogue/?sn=5828&type=Data%20catalogue

⁴ The HBAI report presents data for the four income-related targets set in the Child Poverty Act 2010. The Child Poverty Act sets out targets for relative low income, combined low income and material deprivation, absolute low income and persistent poverty (this target will be set at a later date). The other indicators covered in the HBAI report are: severe poverty, in-work poverty and poverty by family structure.

• for use in the <u>DWP's annual equality information report</u> on its compliance with the Equality Duty under the Equality Act 2010.

The Scottish Government uses the HBAI data to:

- to support users to understand the issues and inequalities of concern in Scotland;
- to help to inform policy action, and to measure and evaluate the impact of changes or interventions;
- evidence the Scottish Government's National Performance Framework, specifically for the <u>Scottish Government's Solidarity Purpose Target</u>;
- to inform two of the <u>Scottish Government's Scotland Performs National</u> Indicators;
- to monitor progress of the Scottish Government Child Poverty Strategy⁷; and
- to inform the <u>Scottish Government's Equality Evidence Strategy</u>.

The Welsh Government uses the HBAI data to:

- to support users to understand issues relating to poverty in Wales, and to help inform policy in this area;
- measure progress on the <u>Welsh Government's Programme for Government Poverty indicators</u>;
- monitor progress of the <u>Welsh Government's Tackling Poverty Action Plan</u> 2012-2016.

The Department of Social Development in Northern Ireland uses the HBAI data to:

- to monitor progress of the <u>Northern Ireland Child Poverty Strategy</u>; and
- to measure progress on the <u>Northern Ireland Executive Programme for Government 2011-2015 targets</u>.

Using HBAI data and statistics

The HBAI statistics incorporate widely-used, international standard measures of low income and inequality. There are a range of measures of low income, income inequality and material deprivation to capture different aspects of changes to living standards. The series started in 1994/95 and so allows for comparisons over time, as well as between different groups of the population. The statistics are based on the FRS, whose focus is capturing information on incomes, and as such captures more detail on different income sources compared to other household surveys. The FRS captures a lot of contextual information on the household and individual circumstances, such as employment, education level and disability. This is therefore a very comprehensive data source allowing for a lot of different analysis.

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⁵ PSM is used extensively by analysts in DWP and the Department for Social Development, Northern Ireland, for policy evaluation and costing of policy options.

⁶ IGOTM is used to model possible tax and benefit changes before policy changes are decided and announced.

⁷ The Scottish Government Child Poverty Strategy focuses on policy matters that are devolved to the Scottish Parliament and Scottish Ministers.

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The FRS is a household survey and so subject to the nuances of using a survey. Chapter 1 of the FRS 2011/12 publication and Appendix 2 of this publication summarise key points to note when using FRS data including sampling error, non-response error, survey coverage, survey design and sample size.

From April 2011, the target achieved GB sample size for the FRS was reduced by 5,000 households, resulting in an overall achieved sample size for the UK of around 20,000 households for 2011/12. We previously published an <u>assessment</u> concluding that this still allows core outputs (such as measures of poverty and take-up of income related benefits) from the FRS to be produced, though with slightly wider confidence intervals or ranges.

The following issues need to be born in mind when using the HBAI:

- Lowest incomes. Comparisons of household income and expenditure suggest that those households reporting the lowest incomes may not have the lowest living standards. The bottom 10 per cent of the income distribution should not, therefore, be interpreted as having the bottom 10 per cent of living standards. For HBAI tables, this will have a relatively greater effect on results where incomes are compared against low thresholds of median income. For this reason, compositional and percentage tables using the 50 per cent of median thresholds have been italicised to highlight the greater uncertainty. We have also presented money value quintile medians in Table 2.3ts on three-year averages to reflect this uncertainty.
- Adjustment for inflation. There are a range of indices which seek to measure inflation, but there are differences in their coverage, calculation and population base⁸. As with previous years, the HBAI statistics use variants of the Retail Prices Index (RPI) to look at how incomes are changing over time in real terms. DWP is aware that in January 2013 the National Statistician announced, following a review and consultation, that the formula used to produce the RPI did not meet international standards and recommended that a new index be published (RPIJ) using the Jevons⁹ formula. The National Statistician also noted that there was significant value to users in maintaining the continuity of the existing RPI's long time series without major change, so that it may continue to be used for long-term indexation and for index-linked gilts and bonds in accordance with user expectations. In accordance with the Statistics and Registration Service Act 2007, the RPI and its derivatives have been assessed against the Code of Practice for Official Statistics and found not to meet the required standard for designation as National Statistics. A full report can be found on the UK Statistics Authority website. In response to this announcement regarding the limitations of RPI, DWP plans to engage with users of the HBAI data and publications during Summer 2013, to explore whether the adoption of an alternative index would be appropriate, taking into account user needs, data availability and methodological issues¹⁰.

⁸ The ONS web-site provides further information on consumer price indices. http://www.ons.gov.uk/ons/guide-method/user-guidance/prices/cpi-and-rpi/index.html

⁹ This is a geometric formula, whereas the RPI uses the Carli with is an arithmetic formula. These formulae are used at the elementary aggregate level (i.e. the first stage of calculation where no weighting data are available). At higher levels of aggregation weighted averages are used.

¹⁰ See Statistical Notice at http://research.dwp.gov.uk/asd/hbai/statistical_notice_13_06_2013.pdf

- The differences have resulted in different annual growth rates in the indices. To illustrate the effect of differences in calculation, in 2010/11 and 2011/12 the annual growth in the RPI was 0.7 percentage points higher than the RPIJ. In earlier years the difference was slightly lower, at 0.3 to 0.4 percentage points. The differences between indices will therefore have an effect on the statistics on real terms income trends and the percentage of people in absolute low income. Using other inflation indices instead of RPI would increase real term income prior to 2011/12 (with the differences increasing over time), moderately increase the proportion of people in absolute low income prior to 2010/11 and moderately decrease the proportion of people in absolute low income in 2011/12. Between 2010/11 and 2011/12 income grew less than all inflation measures, but the gap was largest using RPI.
- The CPI factor used for the uprating of many benefits and tax credits in 2011/12 (based on the change between September 2009 and September 2010) was 1.2 percentage points lower than actual CPI inflation in 2011/12, 1 percentage point less than actual RPIJ inflation and 1.7 percentage points less than actual RPI inflation. Therefore, as the uprating of many benefits in 2011/12 was lower than actual CPI, RPIJ and RPI inflation in 2011/12, this would have meant a reduction in real terms income for these benefits and tax credits irrespective of which inflation measure was used. For those benefits uprated by RPI, the factor was 0.2 and 1.3 percentage points lower than actual RPI and AHC RPI inflation in 2011/12. As mentioned above, the HBAI statistics use variants of RPI to look at how incomes are changing over time in real terms.
- Benefit receipt. Relative to administrative records, the FRS is known to under-report benefit receipt. However, the FRS is considered to be the best source for looking at benefit and tax credit receipt by characteristics not captured on administrative sources, and for looking at total benefit receipt on a benefit unit or household basis. It is often inappropriate to look at benefit receipt on an individual basis because means-tested benefits are paid on behalf of the benefit unit. DWP recently published research (Working Paper 115) which explores the reasons for benefit under-reporting with the aim of improving the benefits questions included within the FRS. Table M.6 of the 2011/12 FRS publication presents a comparison of receipt of state support between FRS and administrative data.
- Self-employed. All analyses in this publication include the self-employed. A proportion of this group are believed to report incomes that do not reflect their living standards and there are also recognised difficulties in obtaining timely and accurate income information from this group. This may lead to an understatement of total income for some groups for whom this is a major income component, such as pensioners, although this is likely to be more important for those at the top of the income distribution. There are few differences in the overall picture of proportions in low-income households when analysis is performed either including or excluding the self-employed.
- Gender analysis. The HBAI assumes that both partners in a couple benefit equally from the household's income, and will therefore appear at the same

position in the income distribution. Research¹¹ has suggested that, particularly in low income households, the assumption with regard to income sharing is not always valid as men sometimes benefit at the expense of women from shared household income. This means that it is possible that HBAI results broken down by gender could understate differences between the two groups.

- Students. Information for students should be treated with some caution because they are often dependent on irregular flows of income. They also receive a large proportion of their income from loans, which, with the exception of student loans, are not counted as income in HBAI. The figures are also not necessarily representative of all students because HBAI only covers private households and this excludes halls of residence.
- Elderly. The effect of the exclusion of the elderly who live in residential homes is likely to be small overall except for results specific to those aged 80 and above.
- Ethnicity analysis. Smaller ethnic minority groups exhibit year-on-year variation which limits comparisons over time. For this reason, analysis by ethnicity is presented as three-year averages.
- Disability analysis. No adjustment is made to disposable household income to take into account any additional costs that may be incurred due to the illness or disability in question. This means that the position in the income distribution of these groups, as shown here, may be somewhat upwardly biased. Analysis excluding Disability Living Allowance and Attendance Allowance from the calculation of income has been published on the ODI web-site.
- Regional analysis. Disaggregation by geographical regions¹² is presented as three-year averages. This presentation has been used as single-year regional estimates are considered too volatile. This issue was discussed in Appendix 5 of the 2004/05 HBAI publication, where regional time series using three-year averages were presented. Although the FRS sample is large enough to allow some analysis to be performed at a regional level, it should be noted that no adjustment has been made for regional cost of living differences, as the necessary data are not available. In the analysis here it is therefore assumed that there is no difference in the cost of living between regions, although the AHC measure will partly take into account differences in housing costs.

Interpreting low-income measures

Relative low income sets the threshold as a proportion of the average income, and moves each year as average income moves. It is used to measure the number and proportion of individuals who have incomes a certain proportion below the average.

The percentage of individuals in relative low income will **increase** if:

- the average income stays the same, or rises, and individuals with the lowest incomes see their income fall, or rise less, than average income; or
- the average income falls and individuals with the lowest incomes see their income fall more than the average income.

See, for instance, Goode, J., Callender, C. and Lister, R. (1998) Purse or Wallet? Gender Inequalities and the Distribution of Income in Families on Benefits. JRF/Policy Studies Institute. ¹² Regional information is at <u>NUTS1</u> level.

The percentage of individuals in relative low income will **decrease** if:

- the average income stays the same, or rises, and individuals with the lowest incomes see their income rise more than average income; or
- the average income falls and individuals with the lowest incomes see their income rise, or fall less, than average income, or see no change in their income.

Absolute low income sets the low income line in a given year, then adjusts it each year with inflation as measured by variants of the RPI. This measures the proportion of individuals who are below a certain standard of living in the UK (as measured by income).

- The percentage of individuals in absolute low income will **increase** if individuals with the lowest incomes see their income fall or rise less than inflation.
- The percentage of individuals in absolute low income will **decrease** if individuals with the lowest incomes see their incomes rise more than inflation.

Income inequality, measured by the Gini Coefficient, shows how incomes are distributed across all individuals, and provides an indicator of how high and low-income individuals compare to one another. It ranges from zero (when everybody has identical incomes) to 100 per cent (when all income goes to only one person).

BHC measures allow an assessment of the relative standard of living of those individuals who were actually benefiting from a better quality of housing by paying more for better accommodation, and income growth over time incorporates improvements in living standards where higher costs reflected improvements in the quality of housing.

AHC measures allow an assessment of living standards of individuals whose housing costs are high relative to the quality of their accommodation, and income growth over time may also overstate improvements in living standards for low-income groups, as a rise in Housing Benefit to offset higher rents (for a given quality of accommodation) would be counted as an income rise.

Other publications focussing on income and low-income statistics

The HBAI first release and report are released alongside a number of other publications focused on income and low-income statistics:

Poverty and income inequality in Scotland

http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/incomepoverty

An analysis of the income distribution in Northern Ireland

http://www.dsdni.gov.uk/index/stats_and_research/stats-publications/stats-family-resource/households.htm

EU comparisons

A brief description of how levels of low income in the UK compare with other EU countries is available at:

http://ons.gov.uk/ons/taxonomy/index.html?nscl=Living+Conditions

Details of the differences between the EU and HBAI methodology are given in **Appendix 2**.

The effects of taxes and benefits on household income. The article provides estimates of income, taxes and benefits (in cash and in kind) in decile groups ranked by equivalised disposable income.

http://ons.gov.uk/ons/taxonomy/index.html?nscl=Effects+of+Taxes+and+Benefits+on+Households

Pensioners' Incomes series. This gives more a more detailed analysis of pensioners' incomes. http://research.dwp.gov.uk/asd/index.php?page=pensioners_income

Family Resources Survey

http://research.dwp.gov.uk/asd/frs/

Low-Income Dynamics

http://research.dwp.gov.uk/asd/index.php?page=lid

Survey of Personal Incomes

http://www.hmrc.gov.uk/statistics/personal-incomes.htm

Estimates of income and low-income levels for small areas

HBAI data cannot be broken down below the level of region (<u>NUTS1</u>), due to sample size and coverage issues. However there are some data sources that present information at smaller geographies:

The revised local child poverty measure

The revised local child poverty measure published by HM Revenue and Customs gives the proportion of children living in families in receipt of out of work (meanstested) benefits or in receipt of tax credits where their reported income is less than 60 per cent of median income. The means-tested out-of-work benefits are Income Support, income based Jobseekers Allowance, Employment and Support Allowance and Pension Credit. The median income used is based on the HBAI publication, but as income on tax credit records is at benefit unit not household level, a series of manipulations have to be made to calculate this. The 2010 data, which is the most recent published, is available for England, Wales, Scotland and Northern Ireland at the following geographic levels: region (NUTS1), county, local authority, ward, parliamentary constituency and Lower Layer Super Output Area (LSOA)/Data Zone/SOA. Statistics for 2006-2008 only include local child poverty figures for England. Data is available here:

http://www.hmrc.gov.uk/statistics/child-poverty-stats.htm.

The local child poverty proxy measure

The local child poverty proxy measure estimates the proportion of children living in families in receipt of out-of-work benefits. The out-of-work benefits are Income Support, Jobseekers Allowance, Incapacity Benefit/Severe Disablement Allowance, Pension Credit and Employment Support Allowance. The proportion of children in poverty is calculated using the out-of-work benefits data and ONS mid-year population estimates. Data is published to Local Authority level. Data is available from 2011 and can be accessed via the following link:

http://research.dwp.gov.uk/asd/asd1/ben_hholds/index.php?page=child_ben_hholds

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Neighbourhood Statistics model-based poverty levels for England and Wales

The Neighbourhood Statistics website has model-based estimates of average income and proportions of households in low income at Middle Layer Super Output Area (MSOA) level for 2007/08. This is available at:

See http://neighbourhood.statistics.gov.uk/dissemination/Download1.do.

English Indices of Deprivation

The English Indices of Deprivation, produced by the Department for Communities and Local Government is a measure of relative levels of deprivation in small areas of England called Lower Layer Super Output Areas and is available at:

http://www.communities.gov.uk/publications/corporate/statistics/indices2010.

Guide to the tables

tr suffix

headline trends over time.

db suffix

detailed breakdown results for the most recent year.

ts suffix

time series.

db: quintile distribution

the percentage of the population with a particular characteristic in each income quintile, with the value of the income quintiles determined by the household income of all individuals in the whole population, so that the quintiles are equal sized groups of all individuals in the whole population .

db: composition

the composition of people in relative low income.

db: percentage of people in low-income groups

the percentage of people with a particular characteristic who are in relative low income.

The publication follows the following conventions.

- .. not available due to small sample sizes (less than 100)
- the estimate is less than 50,000 or the percentage is less than 0.5 per cent

Population estimates are rounded to the nearest 100,000.

Percentages are rounded to the nearest 1 per cent.

Assessment of compliance with the Code of Practice for Official Statistics

In December 2011, the UK Statistics Authority (UKSA) published <u>assessment report</u> 161 on whether it was appropriate for HBAI to be designated as a National Statistic.

Subject to specific requirements, it was agreed that this was the case. To meet these requirements, in the 2010/11 publication we introduced commentary to the start of **Chapters 2** to **6** to aid user interpretation of the statistics in the report. We also published an <u>analysis</u> looking at the balance between users' needs for accuracy and timeliness. Finally, a comparison on how the methods used for measuring income differ from other European measures of income was included in **Appendix 2**.

In November 2012, the UKSA reviewed progress on these requirements following the 2010/11 publication and <u>confirmed</u> the designation of the outputs as National Statistics on the understanding that DWP:

- includes information about strengths and weaknesses in relation to uses in future releases; and
- continues to improve commentary in HBAI, taking into account users' views.

The DWP has addressed these comments for this publication and plans to engage with users about the future format and structure of the HBAI publication.

Acknowledgements

As in previous years, the DWP would like to thank the Institute for Fiscal Studies (IFS) for the substantial assistance that they have provided in checking and verifying the income data and grossing factors underlying the main results in this edition.

We are also grateful to HM Revenue and Customs (HMRC) for the provision of aggregated data from the Survey of Personal Incomes.

The British Household Panel Survey data was made available through the UK Data Archive at the University of Essex. Responsibility for the accuracy and interpretation of the results lies solely with the DWP.

Future developments

DWP statisticians plan to engage with HBAI users over the coming year on the following issues:

Adjustment for inflation. As mentioned above, HBAI uses variants of the Retail Price Index (RPI) to adjust for inflation. DWP is aware that in January 2013 the National Statistician announced, following a review and consultation, that the formula used to produce the RPI did not meet international standards and recommended that a new index be published (RPIJ) using the Jevons¹³ formula. The RPI and its derivatives have been assessed against the Code of Practice for Official Statistics and found not to meet the required standard for designation as National Statistics. In response to this announcement regarding the limitations of RPI, we plan to engage with users to explore whether the adoption of an alternative index would be appropriate, taking into account user needs, data availability and methodological issues.

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¹³ This is a geometric formula, whereas the RPI uses the Carli with is an arithmetic formula. These formulae are used at the elementary aggregate level (i.e. the first stage of calculation where no weighting data are available). At higher levels of aggregation weighted averages are used.

- Publication format and structure. As mentioned above, we plan to engage with users about the future format and structure of the HBAI publication.
- Weighting methodology for the material deprivation measures. Comments have been made about the methodology used to calculate the prevalence weights for material deprivation items¹⁴. We currently recalculate the prevalence weights each year based on the question responses from that year. The maximum possible material deprivation score for each year is then rescaled to 100 for ease of interpretation, and children in a family with a score of at least 25, or pensioners with a score of 20 or more, are classed as being materially deprived. If over time more families can afford a certain item, then a family lacking such a good will see an increasing overall deprivation score, and will be considered as becoming more materially deprived. The concern with the current method is that if there is a general increase in access to items, this should imply that a family lacking a particular number of items is now suffering from greater relative deprivation than before. But, because of the rescaling of scores to 100. each item lacked still counts the same amount towards the overall material deprivation score and a family is still required to lack five items to reach a score of 25 and be declared materially deprived. We will be engaging with users to explore whether an alternative methodology would be more appropriate.

In addition, for next year's publication we plan to incorporate the 2011 Census based mid-year population estimates into the grossing regime for HBAI data, as by that time data for all countries regions of the UK will be available, as well as a consistent historical series.

National Statistics

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods; and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

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¹⁴ Living standards, poverty and inequality in the UK: Cribb, Joyce and Phillips, 2012; p.98.