

# HBAI absolute low income – illustrative figures using CPI to adjust for inflation

## United Kingdom

June 2013

# Contents

Introduction.....	3
Queries.....	3
Methodology .....	3
Results.....	4
Table A: Percentage and number of individuals in absolute low income (BHC).....	4
Table B: Percentage and number of children in absolute low income (BHC).....	5
Table C: Percentage and number of working-age adults in absolute low income (BHC).....	6
Table D: Percentage and number of pensioners in absolute low income (AHC).....	7

# Introduction

As with previous years, HBAI uses variants of the Retail Prices Index (RPI) to adjust for inflation.

In response to requests, this note presents illustrative comparisons for our headline series using CPI to adjust for inflation in the HBAI. We have chosen CPI because, from 2011/12, many benefits and tax credits were uprated using CPI rather than RPI.

## Queries

Please direct any queries to: [team.hbai@dwp.gsi.gov.uk](mailto:team.hbai@dwp.gsi.gov.uk)

## Methodology

This release presents one of the three main measures of low income presented in the HBAI publication - **absolute low income**. Someone is considered to be in absolute low income if they receive less than 60 per cent of average income in 2010/11 adjusted by inflation.

Absolute low income sets the low income line in a given year, then adjusts it each year with inflation. 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.

As outlined in the Statistical Notice "[DWP Family and Household Income Statistics – adjusting for inflation](#)" published on 13 June 2013, there are a range of indices (such as: RPI, RPIJ, CPI and CPIH) which seek to measure inflation but there are differences in their coverage, calculation and population base. In January 2013, the National Statistician announced that the formula used to produce RPI did not meet international standards. DWP will be setting up an HBAI Technical Advisory Group to explore whether the adoption of an alternative inflation index to RPI would be appropriate.

The RPI inflation measure used in the HBAI excludes council tax for the BHC figures, and excludes housing costs for the AHC figures. The CPI inflation measure presented in this analysis excludes council tax, mortgage interest payments, housing depreciation, buildings insurance, ground rent and other house purchase costs, but includes rent for both the BHC and AHC figures.

This information is illustrative. The Technical Advisory Group will consider whether the adoption of an alternative index to RPI (such as CPI, RPIJ, CPIH) would be appropriate, taking into account user needs, data availability and methodological issues, and make recommendations to DWP's Statistics Head of Profession by the end of 2013.

The [HBAI publication](#) provides more detail on the methodology used to produce the HBAI statistics.

# Results

Tables A, B, C and D summarise the percentage and number changes of all individuals, children, working-age adults and pensioners respectively, using RPI and CPI to uprate the absolute low income threshold (60% of the 2010/11 median income uprated to account for inflation). The figures using RPI are published in the HBAI report in Tables 3.2tr and 3.4tr for all individuals, Tables 4.2tr and 4.4tr for children, Tables 5.2tr and 5.4tr for working-age adults and Tables 6.2tr and 6.4tr for pensioners.

The information presented in Tables A, B and C is on a Before Housing Costs (BHC) basis, as After Housing Costs (AHC) measures can underestimate the true living standard of families who choose to spend more on housing to attain a higher standard of accommodation. Information in Table D is presented on an After Housing Costs (AHC) basis as three-quarters of pensioners own their own home. Figures in Tables A, B, C and D are presented from 2005/06 to give a reasonable run of data.

**Table A: Percentage and number of individuals falling below 60% of 2010/11 median income Before Housing Costs, held constant in real terms using RPI and CPI, United Kingdom**

Percentage and number (millions) of individuals					
		Inflation measure		Inflation measure	
		RPI <sup>2</sup>	CPI <sup>3</sup>	RPI <sup>2</sup>	CPI <sup>3</sup>
		Percentage		Number (millions)	
FRS (UK)	2005/06	17	18	10.0	10.8
	2006/07	17	17	10.1	10.4
	2007/08	17	17	10.5	10.1
	2008/09	17	17	10.2	10.1
	2009/10	15	16	9.4	9.9
	2010/11	16	16	9.8	9.8
	2011/12	17	17	10.8	10.6
<b>Change</b>	2010/11-2011/12 <sup>1</sup>	1	1	0.9	0.7

**Notes:**

1. Due to rounding, the estimates of change in percentages of individuals below low-income thresholds may not equal the difference between the total percentage of individuals below thresholds for any pair of years shown.

2. The RPI variant used excludes council tax. It includes rent, mortgage interest payments, housing depreciation, buildings insurance, ground rent and other house purchase costs.

3. CPI excludes council tax, mortgage interest payments, housing depreciation, buildings insurance, ground rent and other house purchase costs. It includes rent. Please refer to the Statistical Notice "DWP Family and Household Income Statistics - adjusting for inflation" for more details.

**Table B: Percentage and number of children falling below 60% of 2010/11 median income Before Housing Costs, held constant in real terms using RPI and CPI, United Kingdom**

<b>Percentage and number (millions) of children</b>					
		<b>Inflation measure</b>		<b>Inflation measure</b>	
		<b>RPI<sup>2</sup></b>	<b>CPI<sup>3</sup></b>	<b>RPI<sup>2</sup></b>	<b>CPI<sup>3</sup></b>
		<b>Percentage</b>		<b>Number (millions)</b>	
<b>FRS (UK)</b>	2005/06	21	23	2.7	2.9
	2006/07	21	22	2.7	2.8
	2007/08	21	21	2.7	2.6
	2008/09	20	20	2.6	2.6
	2009/10	18	19	2.3	2.4
	2010/11	18	18	2.3	2.3
	2011/12	20	19	2.6	2.5
<b>Change</b>	2010/11-2011/12 <sup>1</sup>	2	2	0.3	0.2

**Notes:**

1. Due to rounding, the estimates of change in percentages of individuals below low-income thresholds may not equal the difference between the total percentage of individuals below thresholds for any pair of years shown.

2. The RPI variant used excludes council tax. It includes rent, mortgage interest payments, housing depreciation, buildings insurance, ground rent and other house purchase costs.

3. CPI excludes council tax, mortgage interest payments, housing depreciation, buildings insurance, ground rent and other house purchase costs. It includes rent. Please refer to the Statistical Notice "DWP Family and Household Income Statistics - adjusting for inflation" for more details.

**Table C: Percentage and number of working-age adults below 60% of 2010/11 median income Before Housing Costs, held constant in real terms using RPI and CPI, United Kingdom**

<b>Percentage and number (millions) of working age adults</b>					
		<b>Inflation measure</b>		<b>Inflation measure</b>	
		<b>RPI<sup>2</sup></b>	<b>CPI<sup>3</sup></b>	<b>RPI<sup>2</sup></b>	<b>CPI<sup>3</sup></b>
		<b>Percentage</b>		<b>Number (millions)</b>	
<b>FRS (UK)</b>	2005/06	15	16	5.2	5.5
	2006/07	14	15	5.1	5.2
	2007/08	15	14	5.3	5.2
	2008/09	15	15	5.5	5.4
	2009/10	15	15	5.2	5.5
	2010/11	15	15	5.5	5.5
	2011/12	17	16	6.1	6.0
<b>Change</b>	2010/11-2011/12 <sup>1</sup>	1	1	0.6	0.5

**Notes:**

1. Due to rounding, the estimates of change in percentages of individuals below low-income thresholds may not equal the difference between the total percentage of individuals below thresholds for any pair of years shown.

2. The RPI variant used excludes council tax. It includes rent, mortgage interest payments, housing depreciation, buildings insurance, ground rent and other house purchase costs.

3. CPI excludes council tax, mortgage interest payments, housing depreciation, buildings insurance, ground rent and other house purchase costs. It includes rent. Please refer to the Statistical Notice "DWP Family and Household Income Statistics - adjusting for inflation" for more details.

**Table D: Percentage and number of pensioners falling below 60% of 2010/11 median income After Housing Costs, held constant in real terms using RPI and CPI, United Kingdom**

<b>Percentage and number (millions) of pensioners</b>					
		<b>Inflation measure</b>		<b>Inflation measure</b>	
		<b>RPI<sup>2</sup></b>	<b>CPI<sup>3</sup></b>	<b>RPI<sup>2</sup></b>	<b>CPI<sup>3</sup></b>
		<b>Percentage</b>		<b>Number (millions)</b>	
<b>FRS (UK)</b>	2005/06	15	18	1.6	1.9
	2006/07	16	19	1.8	2.0
	2007/08	15	17	1.7	1.9
	2008/09	14	15	1.6	1.7
	2009/10	13	14	1.5	1.7
	2010/11	14	14	1.7	1.7
	2011/12	15	15	1.8	1.7
<b>Change</b>	2010/11-2011/12 <sup>1</sup>	1	0	0.1	0.0

**Notes:**

1. Due to rounding, the estimates of change in percentages of individuals below low-income thresholds may not equal the difference between the total percentage of individuals below thresholds for any pair of years shown.
2. The RPI variant used excludes council tax, rent, mortgage interest payments, housing depreciation, buildings insurance, ground rent and other house purchase costs.
3. CPI excludes council tax, mortgage interest payments, housing depreciation, buildings insurance, ground rent and other house purchase costs. It includes rent. Please refer to the Statistical Notice "DWP Family and Household Income Statistics - adjusting for inflation" for more details.