

Statistical Publication

A National Statistics Publication for Scotland



Poverty and income inequality in Scotland: 2011-12 13 June 2013

This publication presents annual estimates of the percentage and number of children, working age adults and pensioners living in low income households in Scotland, and the distribution of household income across Scotland. The estimates are used to monitor progress towards UK and Scottish Government targets to reduce poverty and income inequality. The data published for the first time here are for the financial year April 2011 to March 2012. The latest figures cover a period where the Scottish economy and wider UK economy were both showing little GDP growth and average earnings fell in real terms. These figures include the impact of some changes to benefits resulting from welfare reform, but precede the more significant changes implemented in April 2013.

This publication includes changes to the methodology compared with previous publications:

1. This publication presents a change in reference year for absolute poverty. In order to measure absolute low income in line with the Child Poverty Act 2010, absolute low incomes will be measured against the UK median income in 2010/11 adjusted for inflation, instead of the 1998/99 median income as in previous publications. This results in an absolute poverty threshold in 2011/12 of £264 per week net income compared to the previous threshold of £231 (in 2011/12 prices). Further information on the change is available in [Annex 3](#) or at [DWP Statistical notice](#)
2. This publication includes a break in the series for child material deprivation. 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. This creates a break in the series. Further information on the change is available in [Annex 2](#) or at: [DWP Statistical Notice](#)
3. Pensioners are defined as all adults above the state pension age. From 6th April 2010, the qualifying age for women to receive the state pension 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. Therefore the age groups covered by the analysis of working age adults and pensioners will change in this publication to incorporate the changes to women's qualifying state pension age. There has been no change to the qualifying state pension age for men. Further information is available at: [DWP Statistical Notice](#)

Key points:

- In 2011/12, there were **710 thousand individuals** living in relative poverty in Scotland compared to 780 thousand in 2010/11, a drop of 70 thousand individuals. The number of **individuals** living in poverty fell from **15 per cent to 14 per cent** between 2010/11 and 2011/12, although this is not a statistically significant change. This follows a decrease in the number of individuals in relative poverty in 2010/11, with a 6 year period of little change in poverty levels prior to that.
- The percentage of **children** living in relative poverty fell from **17 per cent to 15 per cent** between 2010/11 and 2011/12, which represents a reduction of 20 thousand children from 170 thousand children to **150 thousand children**. This change is not statistically significant. This follows a decrease in the number of children living in relative poverty in 2010/11, with little change in the 6 year period prior to that.
- In 2011/12, there were **420 thousand working age adults** living in relative poverty in Scotland compared with 440 thousand in 2010/11. This is a decrease from **14 per cent to 13 per cent** between 2010/11 and 2011/12, although this is not a statistically significant change. This represents a reduction of 20 thousand working age adults, and follows a decrease in the number of working age adults in relative poverty in 2010/11, following a small increase in the number of working age adults living in relative poverty between 2006/07 and 2009/10.
- **140 thousand pensioners** were living in relative poverty in 2011/12, a decrease of 20 thousand pensioners since 2010/11. This is a reduction from **16 per cent to 15 per cent** between 2010/11 and 2011/12. This change is not statistically significant. The percentage of pensioners living in relative poverty has remained largely unchanged since 2008/09, following a decrease in 2007/08.
- In terms of income inequality, the percentage of income received by the lowest 3 income deciles in 2011/12 was **14 per cent**, unchanged from 2010/11. This percentage has remained at between 13 and 14 per cent since 1998/99.
- The equivalised median income in Scotland in 2011/12 was **£436 per week**, net income. This compares to £437 in 2010/11. The equivalised median income in Scotland generally recorded annual increases in value up to 2009/10 (£461 per week) before decreasing in 2010/11.
- No statistically significant changes were observed between 2010/11 and 2011/12 to the **absolute poverty** levels.

Please Note:

The figures above are based on income 'before housing costs' (**BHC**); changes in income 'after housing costs' (**AHC**) are given later in the publication. All figures in this publication are rounded to the nearest 10 thousand individuals or whole percentage point. In some cases calculations based on the unrounded figures do not match those based on the rounded ones.

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Chapter 1: Introduction

Figures presented here are taken from the Department for Work and Pensions' Family Resources Survey - Households Below Average Income (HBAI) dataset. Comparable UK income and poverty figures are published on the same day by DWP. See the DWP website for further details.

<http://statistics.dwp.gov.uk/asd/index.php?page=hbai>

Further analysis of these figures will be published later in the year on the Scottish Government income and poverty statistics website. This will include figures on the Gini Coefficient, interaction between income, poverty, disability and housing tenure.

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty>

1.1 What does the HBAI measure?

Households Below Average Income (HBAI) uses household disposable incomes, adjusted for the household size and composition, as a proxy for material living standards. More precisely, it is a proxy for the level of consumption of goods and services that people could attain given the disposable income of the household in which they live.

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.

The living standards of an individual depend not only on his or her own income, but also on the income of others in the household. Consequently, the analyses are based on **total household income**: the equivalised income of a household is taken to represent the income level of every individual in the household. Equivalisation, a technique that allows comparison of incomes between households of different sizes and compositions, is explained section 1.2 below. Thus, all members of any one household will appear at the same point in the income distribution.

See [Annex 2](#) for a detailed definition of net disposable household income.

1.2 Equivalisation

Income is adjusted, or equivalised, to take into account variations in the size and composition of the households in which individuals live. This reflects the common sense notion that, in order to enjoy a comparable standard of living, a household of say three adults will need a higher income than a single person living alone. The process of adjusting income in this way is known as equivalisation and is needed in order to make sensible income comparisons between households.

Equivalence scales conventionally take an adult couple without children as the reference point, with an equivalence value of one. The process then increases relatively the income of single person households (since their incomes are divided by a value of less than one) and reduces relatively the incomes of households with three or more persons, which have an equivalence value of greater than one.

More detail on the equivalisation factors used can be found in [Annex 2](#).

1.3 Housing Costs

It could be argued that the costs of housing faced by different households at a given time do not always match the true value of the housing that they actually enjoy, and that housing costs should therefore be deducted from any definition of disposable income. However, any measure of income defined in this way would understate the relative standard of living of those individuals who were actually benefiting from a better quality of housing by paying more for better accommodation. Income growth over time would also understate improvements in living standards where higher costs reflected improvements in the quality of housing.

Conversely, any income measure which does not deduct housing costs may overstate the living standards of individuals whose housing costs are high relative to the quality of their accommodation. Growth over time in income before housing costs could also overstate improvements in living standards for low income groups in receipt of Housing Benefit, and whose rents have risen in real terms. This is because Housing Benefit will also rise to offset the higher rents (for a given quality of accommodation) and would be counted as an income rise, although there would be no associated increase in the standard of living. A similar effect could work in the opposite direction for pensioners: if a shift from renting to owning their housing outright leads to a fall in Housing Benefit income, because fewer low income pensioners are paying rents, then changes in income before housing costs may understate any improvement in living standards.

Therefore, this publication presents analyses on two bases: **Before Housing Costs (BHC)** and **After Housing Costs (AHC)**. This is principally to take into account variations in housing costs that themselves do not correspond to comparable variations in the quality of housing. A definition of housing costs can be found in [Annex 2](#).

1.4 Sampling Error and Confidence Intervals

The poverty estimates presented in this publication are based on a sample survey and are therefore subject to sampling error. Confidence intervals are a measure of sampling error. A 95 per cent confidence interval for an estimate is the range that contains the 'true' figure on average 19 times out of 20 if sampling error were the only source of errors.

Many of the changes referred to in this publication are within the width of the confidence limits and caution should be exercised when looking at year on year comparisons, with longer term trends often giving a clearer picture. More information on the confidence intervals that surround the estimates in this publication can be found on the income and poverty website via the following link: <http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/Methodology#a6>

Chapter 2: Poverty

Low Income Poverty Indicators

The Scottish Government currently uses two main indicators of low income poverty, both of which reveal slightly different information about changes in poverty over time. These indicators are *relative* and *absolute* poverty.

Relative poverty:

Individuals living in households whose equivalised income is below 60% of UK median income in the same year. This is a measure of whether those in the lowest income households are keeping pace with the growth of incomes in the population as a whole. In 2011/12 the relative poverty threshold for a couple with no children was an income of £256 per week ([BHC](#)) from all sources (see [Annex 2](#) for further information on income definitions). For a couple with children the threshold would be higher and for a single person (without children) the threshold would be lower.

Absolute poverty:

Individuals living in households whose equivalised income is below 60% of the (inflation adjusted) median income in 2010/11. This is a measure of whether those in the lowest income households are seeing their incomes rise in real terms. In 2011/12 the absolute poverty threshold for a couple with no children was an income of £264 per week ([BHC](#)) from all sources (see [Annex 2](#) for further information on income definitions).

Change of reference year for absolute poverty:

For the 2005/06 to 2010/11 publications, absolute poverty was measured against 60% of median household income in 1998/99 adjusted for inflation. In order to keep the absolute low income measure in line with the Child Poverty Act 2010, the reference year for measuring absolute low income has been changed to 2010/11, adjusted for inflation to 2011/12 prices. The change in the reference year has a large effect on the percentage and number of people identified as in absolute poverty. It also magnifies the scale of historical changes in the time series. This is because the threshold has moved to a more densely populated part of the income distribution (see [Annex 3](#) for further information on the effects of the change in reference year). This affects absolute poverty measurement for all groups in this publication.

2.1 Individuals in poverty

The Scottish Government's National Indicator 35 is to "reduce the proportion of individuals living in poverty":

<http://www.scotland.gov.uk/About/Performance/scotPerforms/indicator/poverty>

This is measured using relative poverty [before housing costs](#). Charts 1a and 1b below show Scottish trends for relative and absolute poverty between 1998/99 and 2011/12.

Chart 1a: Relative Poverty - All Individuals: 1998/99 - 2011/12

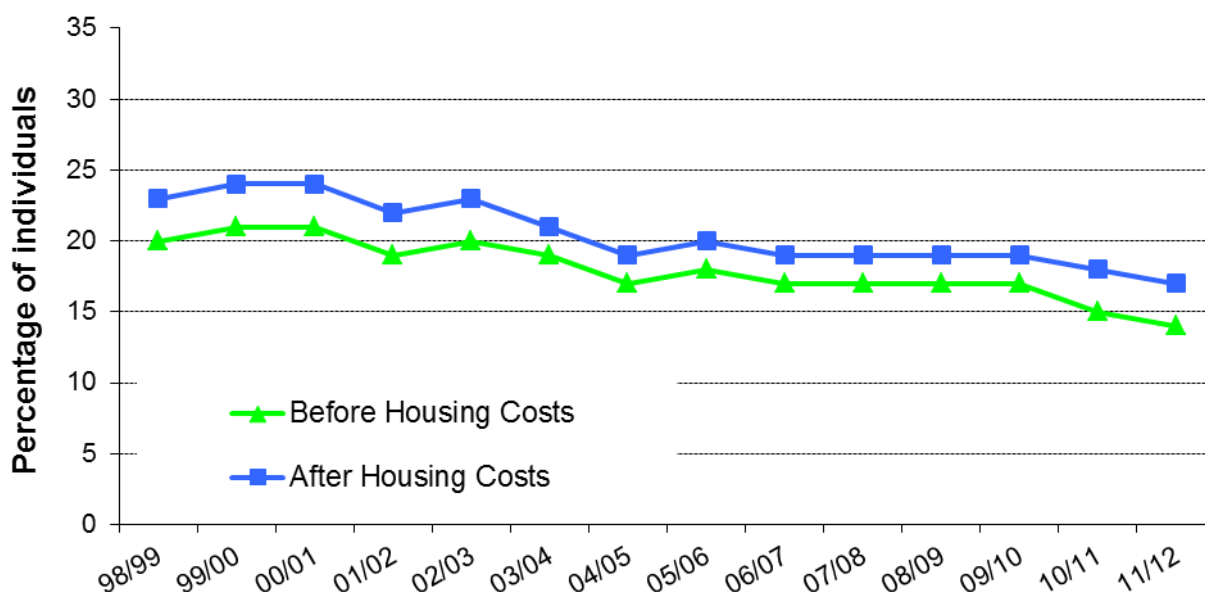
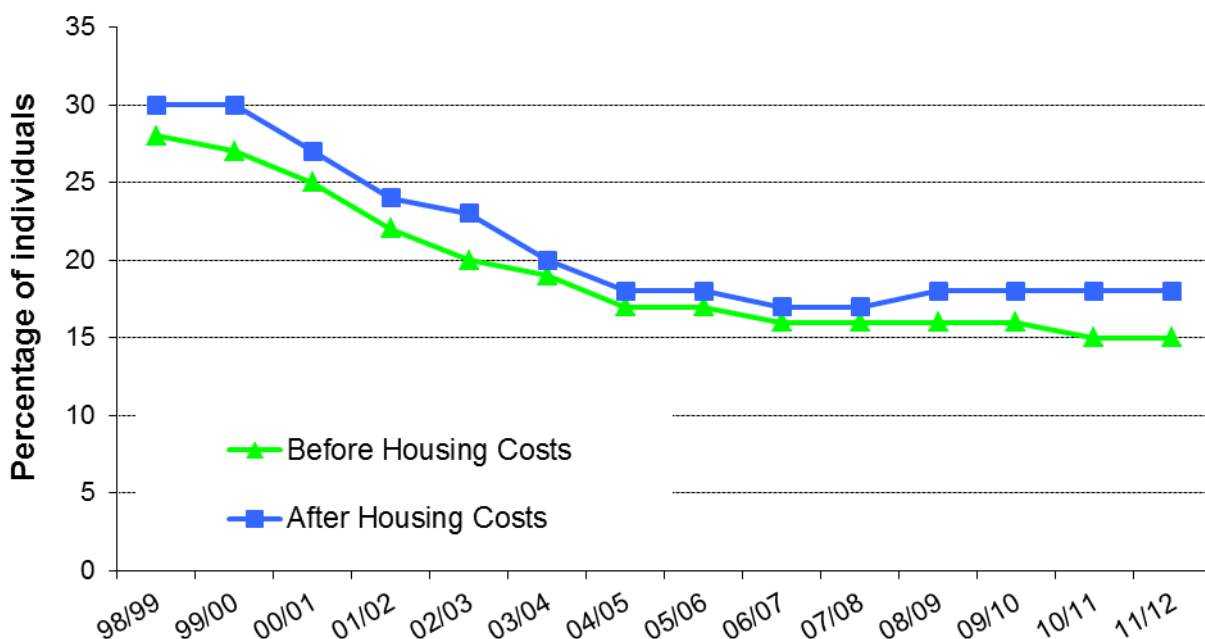


Chart 1b: Absolute Poverty - All Individuals: 1998/99 - 2011/12



Source: HBAI dataset, DWP. See Annex 1 (Tables [A1](#) and [A2](#)) for the figures behind these charts.

Charts with confidence intervals for relative and absolute poverty can be found in [Confidence Intervals Surrounding Key Poverty Estimates](#)

Main points:

- In 2011/12, there were 710 thousand people (14 per cent of the population) in relative poverty ([BHC](#)) and 780 thousand people (15 per cent of the population) in absolute poverty ([BHC](#)) in Scotland.
- Between 2010/11 and 2011/12, the percentage of people in relative poverty ([BHC](#)) did not change significantly (15% in 2010/11 to 14% in 2011/12). There has been no significant change in the number of people in relative poverty (BHC) since 2006/07.

- Between 2010/11 and 2011/12, the percentage of people in absolute poverty ([BHC](#)) remained at 15 per cent. There has been no significant change in absolute poverty since 2006/07.
- For a reduction in the number of individuals living in households in absolute poverty over the period, incomes at the lower end of the income distribution in 2010/11 would have had to increase by more than inflation. Instead, household incomes of low income households increased by about the same level as inflation, meaning there was no statistically significant change in absolute poverty levels in 2011/12.
- Between 2002/03 and 2004/05, relative and absolute poverty rates fell in Scotland. Before 2002/03, absolute poverty was considerably higher than relative poverty. Absolute poverty rates remained broadly the same from 2004/05. As absolute poverty is now based on 2010/11 income, the two measures are identical for the 2010/11 year.

2.2 Child poverty

Child poverty is commonly measured using the following indicators:

- relative poverty,
- absolute poverty,
- material deprivation and low income combined.

These are three of the four poverty indicators which the UK parliament is required to report on by the 2010 Child Poverty Act. There is also a persistent poverty indicator in the Act but the precise target is yet to be defined. Information on the targets for the Child Poverty Act can be found in [Annex 1](#).

The Scottish Government's National Indicator 36 is to "reduce children's deprivation":

<http://www.scotland.gov.uk/About/Performance/scotPerforms/indicator/childdeprivation>

This is measured using the material deprivation and low income combined poverty indicator.

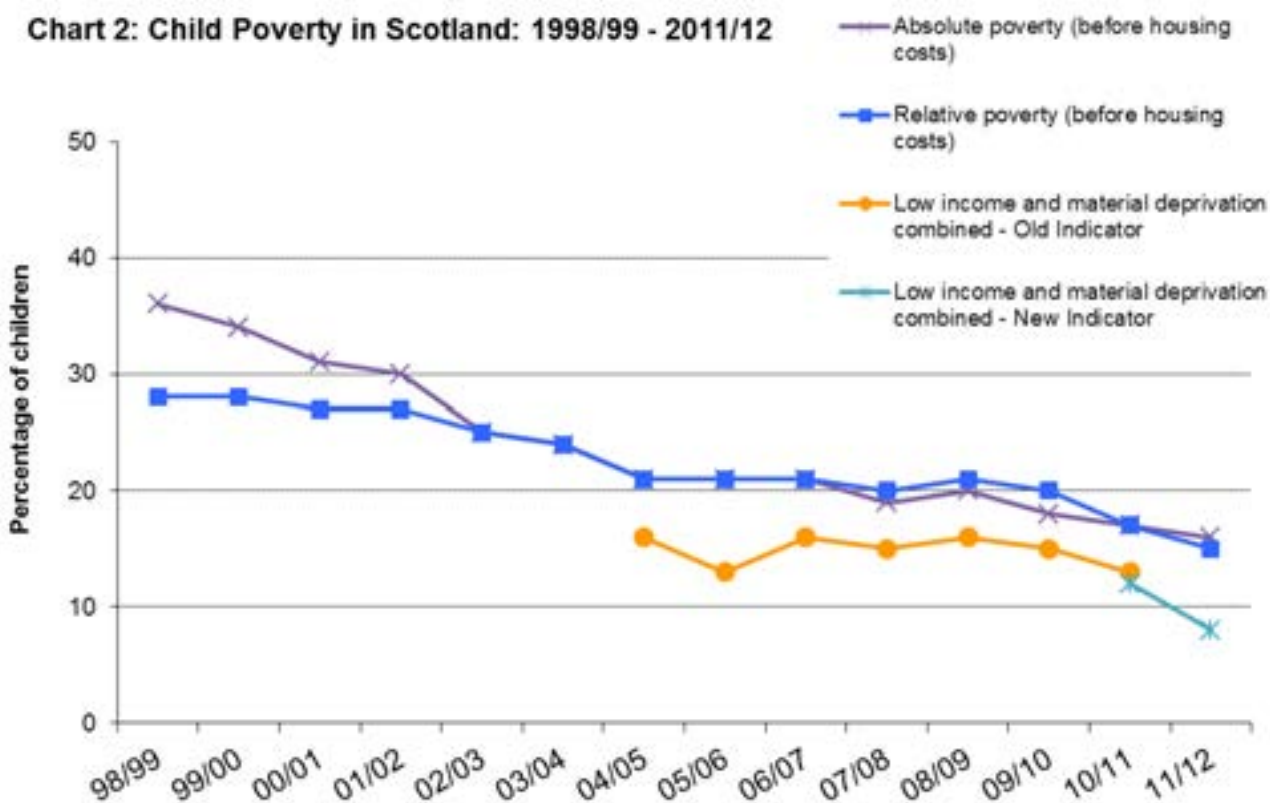
Material Deprivation and Low Income Combined Poverty Indicator:

Material deprivation is calculated from a suite of questions in the Family Resources Survey about whether people can afford to buy certain items and participate in leisure or social activities. This measure is applied to households with incomes below 70% of UK median income (£299 per week) to create the 'material deprivation and low income combined' indicator. This indicator aims to provide a measure of children's living standards which, unlike relative and absolute poverty, is not solely based on income.

Changes to measuring material deprivation in 2011/12:

The 21 items in the suite of questions used to measure material deprivation are designed to reflect the items and activities people in the UK believe to be necessary. These items are reviewed periodically to ensure the measure remains a relative measure of poverty. In 2010/11 four new items were included in the FRS, and in 2011/12 four old items were removed. Both sets of questions were asked in 2010/11 to allow an overlap for comparison. This creates a break in the child material deprivation series, with the measure for 2004/05 to 2010/11 on the old basis. The new measure is presented for 2010/11 and 2011/12 (see [Annex 2](#) for further detail).

Chart 2 below presents recent Scottish poverty trends for these three child poverty indicators.



Source: HBAI dataset, DWP. See Annex 1 (Tables [A1](#), [A2](#) and [A3](#)) for the figures behind these charts.

Note: A version of this chart showing the Child Poverty Act targets can be found in Annex 1, Chart A10. Charts with confidence intervals for relative and absolute child poverty can be found in [Confidence Intervals Surrounding Key Poverty Estimates](#).

Main points:

- The percentage of children in relative poverty ([BHC](#)) decreased from 17 per cent to 15 per cent in 2011/12, a reduction of 20 thousand children. In 2011/12 there were 150 thousand children living in relative poverty (BHC). The change between 2010/11 and 2011/12 is not statistically significant.
- The percentage of children in absolute poverty ([BHC](#)) in 2011/12 was 16 per cent, a decrease from 17 per cent in 2010/11. This represents 160 thousand children living in absolute poverty (BHC) in 2011/12, a decrease of 10 thousand from 2010/11. Again, the change from 2010/11 is not statistically significant.
- The percentage of children in material deprivation and low income combined decreased from 12 per cent to 8 per cent, a reduction of 40 thousand children to 80 thousand in 2011/12. For this measure the low income threshold is defined as 70% of UK median income.
- The measurement of child material deprivation is based on self-perceived ability to afford the 21 items and activities identified as 'necessary'. This measure is applied to households with incomes below 70% of UK median income. In 2011/12, the number of households with children identified as low income decreased, and within this the percentage who were identified as materially deprived fell.
- Families with children in the lower income deciles generally receive a greater percentage of their income from benefits and a smaller percentage from earnings than households just containing working age adults.
- The percentage of children living in absolute poverty decreased from 1998/99 to 2004/05

and then remained relatively unchanged until 2008/09. Between 2008/09 and 2011/12 there has been a small decrease in absolute child poverty levels, however the rate of decrease was slower compared to the overall rate of decrease observed between 1998/99 and 2004/05.

2.3 Working age adult poverty

Working age vs. State pension age:

Working age adults are defined as all adults up to the State pension Age. Prior to April 6th 2010, women reached the state pension age at 60. From 6th April 2010, the qualifying age for women has been gradually increasing. The changes do not affect the state pension age for men, which remains at 65. As with the analysis for 2010/11, the age groups covered by the analysis for working age adults and pensioners in 2011/12 will change to reflect these shifts in the qualifying age for state pensions for women. The impact is to retain women in the working age adult group, who prior to April 2010 would have been classified as pensioners.

Charts 3a and 3b below present recent relative and absolute poverty trends for working age people in Scotland.

Chart 3a: Relative Poverty: 1998/99 - 2011/12

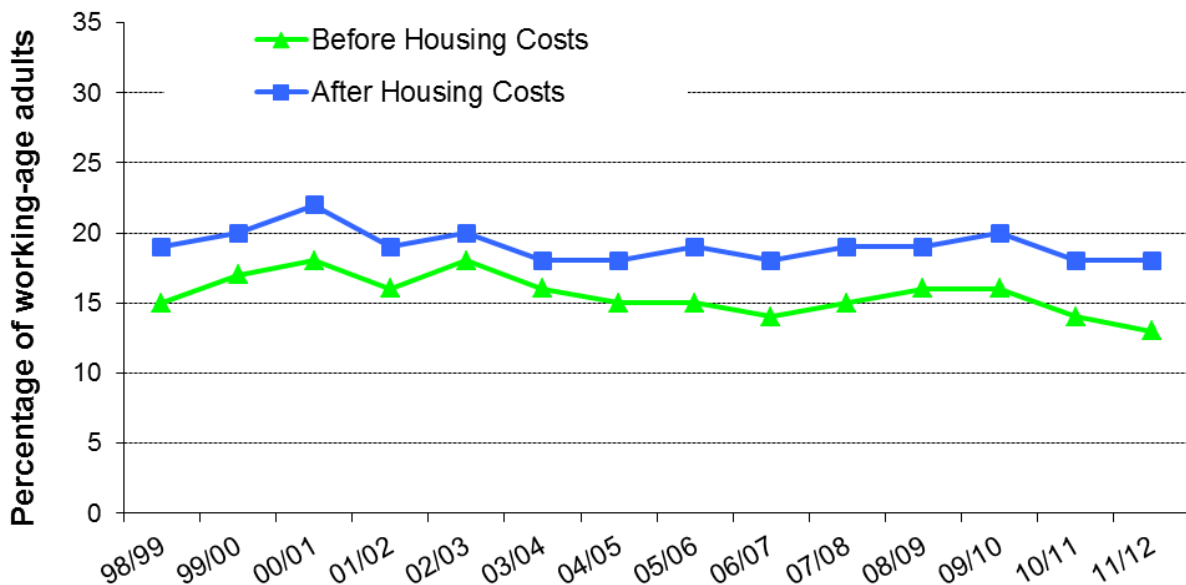


Chart 3b: Absolute Poverty: 1998/99 - 2011/12



Source: HBAI dataset, DWP. These figures are also presented in Annex 1 (Tables [A1](#) and [A2](#)).

Charts with confidence intervals for relative and absolute working age adult poverty can be found in [Confidence Intervals Surrounding Key Poverty Estimates](#)

Main points:

- In 2011/12, 420 thousand working age adults were living in relative poverty ([BHC](#)), a decrease of 20 thousand from 2010/11.
- The percentage of working age adults in relative poverty ([BHC](#)) was 13 per cent in 2011/12, down from 14 per cent in 2010/11. This change is not statistically significant.
- The percentage of working age adults in relative poverty ([AHC](#)) remained the same as in 2010/11 (18 per cent).
- The percentage in absolute poverty (both [BHC](#) and [AHC](#)) increased by one percentage point between 2010/11 and 2011/12. Neither change was statistically significant.
- The percentage of working age adults in absolute poverty ([BHC](#)) has remained largely unchanged since 2004/05, following a significant decrease between 1998/99 and 2003/04. The percentage of working adults in absolute poverty ([AHC](#)) also recorded a significant decrease between 1998/99 and 2003/04, with rates remaining largely unchanged since then.
- The percentage of working age adults in relative poverty ([BHC](#)) recorded a small increase between 1998/99 and 2002/03, remaining largely unchanged until 2009/10. There has been a small decrease to 13 per cent (from 16 per cent) since 2009/10. Overall, the trend is broadly flat.
- The percentage of working age adults in relative poverty ([AHC](#)) has remained largely unchanged since 2003/04, following a decrease between 1998/99 and 2002/03.

2.4 Pensioner poverty

Pensioner Material Deprivation Indicator:

This is an additional way to measure the living standards of pensioners. This measure is based on a set of goods, services and experiences, judged using academic research to be the best discriminators of deprivation. Pensioners are asked if they have an item (or access to a service) and to give a reason if they do not have it. Their responses are then used to judge whether or not they are materially deprived. It is similar to the child material deprivation and low income combined indicator (which is presented in Chart 2) but has some important differences:

- Differences in the set of *items* asked about, e.g. pensioners are not asked if they can afford school trips.
- Pensioners are presented with a *greater variety of reasons* for not having a particular item, whereas families with children are simply asked whether they can *afford* an item they do not have. Pensioners are able to say if they are prevented from having it due to *ill health, disability or lack of support from other people*. These additions reflect that deprivation can occur because of ill health, disability or social isolation, and not just for financial reasons.
- The pensioner “material deprivation” indicator is **not** combined with household income information to produce a combined indicator, as is done with the child deprivation indicator. This is because for pensioners, the concept of material deprivation is broad and very different from low income, so it is appropriate to present it as a separate measure.

For these reasons, pensioner material deprivation cannot be directly compared to the child material deprivation and low income measure.

More background on pensioner material deprivation is given in [Annex 2](#), and the following technical note on the DWP website gives further information, including the list of questions which are asked to pensioners:

http://research.dwp.gov.uk/asd/hbai/technical_note_20110307.pdf

State pension age:

Working age adults are defined as all adults up to the State pension Age. Prior to April 6th 2010, women reached the state pension age at 60. From 6th April 2010, the qualifying age for women has been gradually increasing. The changes do not affect the state pension age for men, which remains at 65. The age groups covered by the analysis for working age adults and pensioners in 2011/12 changed to reflect these changes in the qualifying age for state pensions for women. The impact is to retain women in the working age adult group, who prior to April 2010 would have been classified as pensioners.

However material deprivation is presented here for pensioners aged 65 and over only.

Charts 4a and 4b present recent trends for the three main pensioner poverty indicators: relative poverty, absolute poverty and the material deprivation indicator. Note that poverty based on income [after housing costs](#) is a more commonly used measure for pensioner households, as many have low housing costs. Further discussion on whether it is better to use before or after housing costs can be found in the [Introduction](#).

Chart 4a: Relative poverty: 1998/99 - 2011/12

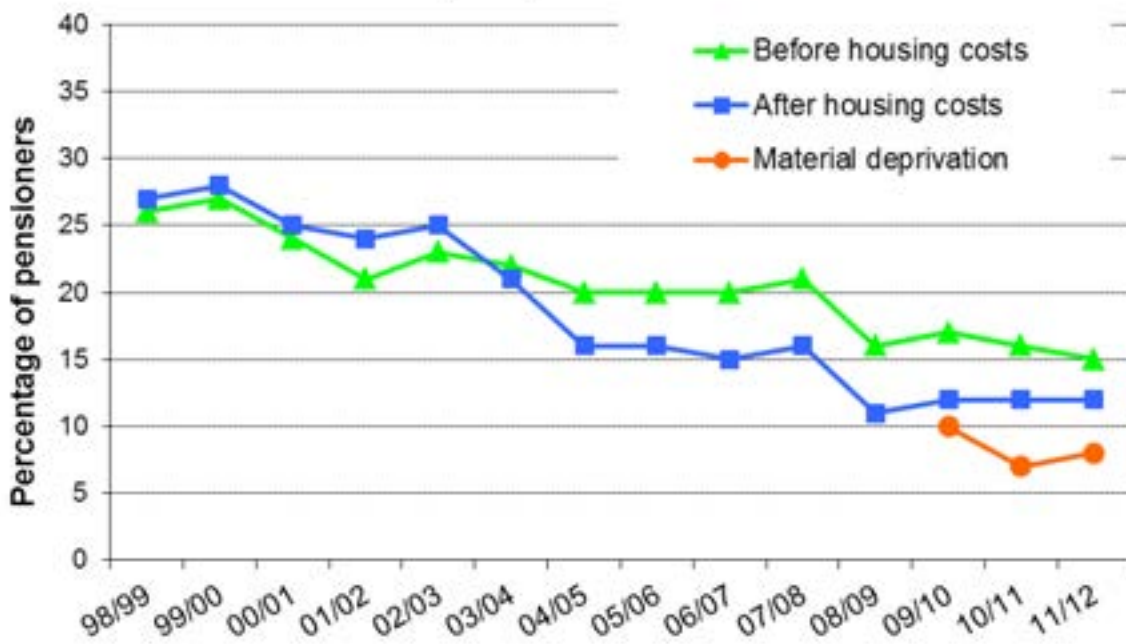
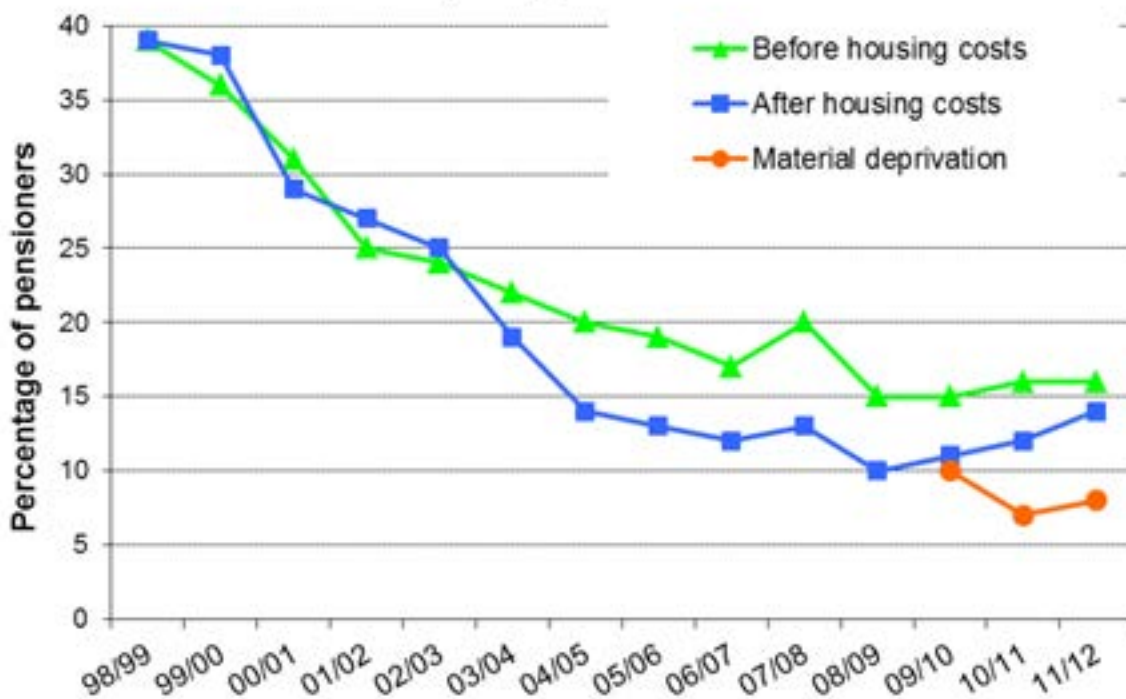


Chart 4b: Absolute poverty: 1998/99 - 2011/12



Source: HBAI dataset, DWP. These figures are also presented in Annex 1 (Tables [A1](#) and [A2](#) and [A4](#)).

Charts with confidence intervals for relative and absolute pensioner poverty can be found in [Confidence Intervals Surrounding Key Poverty Estimates](#).

Notes:

1. Pensioner material deprivation is not solely based on affordability and so should not be compared directly with measures of income-related poverty.
2. Pensioner material deprivation is included for those aged 65 and over only and therefore is not the same population as relative and absolute poverty measures.

Main points:

- In 2011/12, there were 140 thousand pensioners living in relative poverty ([BHC](#)), a decrease of 20 thousand from 2010/11.
- The percentage of pensioners in relative poverty ([BHC](#)) in 2011/12 was 15 per cent, compared with 16 per cent in 2010/11. This has remained relatively unchanged since 2008/09.
- The changes in the latest year in the relative pensioner poverty rates were small and not statistically significant.
- The percentage of pensioners living in relative poverty ([AHC](#)) was 12 per cent in 2011/12, unchanged from 2010/11. This percentage has remained largely unchanged since 2008/09, following a significant decrease in pensioner poverty between 1998/99 and 2004/05. There was a decrease between 2004/05 and 2008/09, but at a slower rate.
- There were 150 thousand pensioners living in absolute poverty ([BHC](#)) in 2011/12, a decrease of 10 thousand from 2010/11. This represents 16 per cent of pensioners, unchanged from 2010/11. This percentage has remained largely unchanged over the last four years, following a decrease in 2008/09.
- Eight per cent of pensioners aged 65 and over were materially deprived in 2011/12, compared to 7 per cent in 2010/11. In 2009/10, 10 per cent of pensioners were living in material deprivation.
- The fall in pensioner poverty since 1998/99 has been steeper than comparable falls for children and working age adults.
- Households containing pensioners at the lower end of the income distribution generally received a larger proportion of their income from benefits and a smaller proportion from other sources. So because benefit income grew more than earned income, households with pensioners saw their overall income fall less in real terms in 2011/12 than other households with more income from earnings. In addition, many benefits and tax credit elements were uprated in 2011/12 by 3.1 per cent, the annual increase in the CPI to September 2010. However the Basic State Pension increased by 4.6 per cent, while Pension Credit Guarantee Credit was increased by the cash rise in the full Basic State Pension, an increase of 3.6 per cent.

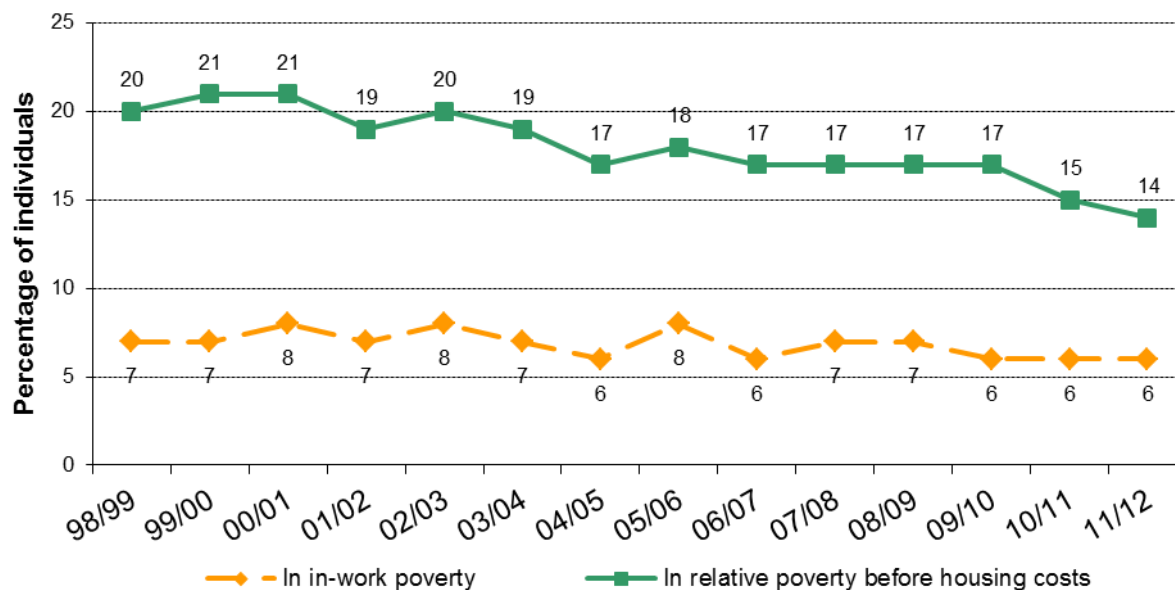
2.5 In-work poverty

In-work poverty:

'In-work poverty' refers to those individuals living in households where at least one member of the household is working (either full or part time) but where the household income is below the poverty threshold. This group contains non-working household members such as children and non-working partners.

Chart 5 compares recent Scottish in-work poverty trends with the relative poverty trends.

Chart 5: Proportion of individuals in in-work poverty (relative poverty before housing costs): 1998/99 - 2011/12



Source: HBAI dataset, DWP. These figures are also presented in Annex 1 (Table A5).

Main points:

- During 2011/12, 6 per cent of people in Scotland were in relative in-work poverty, the same as 2010/11 and 2009/10.
- In 2011/12, this represents 280 thousand people living in households in relative poverty ([BHC](#)), despite the fact that these households contain a working member.
- In-work poverty trends have remained flat over the years since 1998/99, at between 6 and 8 per cent of the population.

Chapter 3: Income Inequality and the distribution of income

The tables and charts in this section provide information about income inequality, the distribution of income and the types of families which are most common at the top and bottom of the income distribution.

Deciles / decile points:
 Deciles (or decile points) are the income values which divide the Scotland population, when ranked by income, into ten equal-sized groups. Therefore nine decile points are needed in order to form the ten groups. **Decile** is also often used as a shorthand term for **decile group**; for example ‘the bottom decile’ is used to describe the bottom ten per cent of the income distribution.

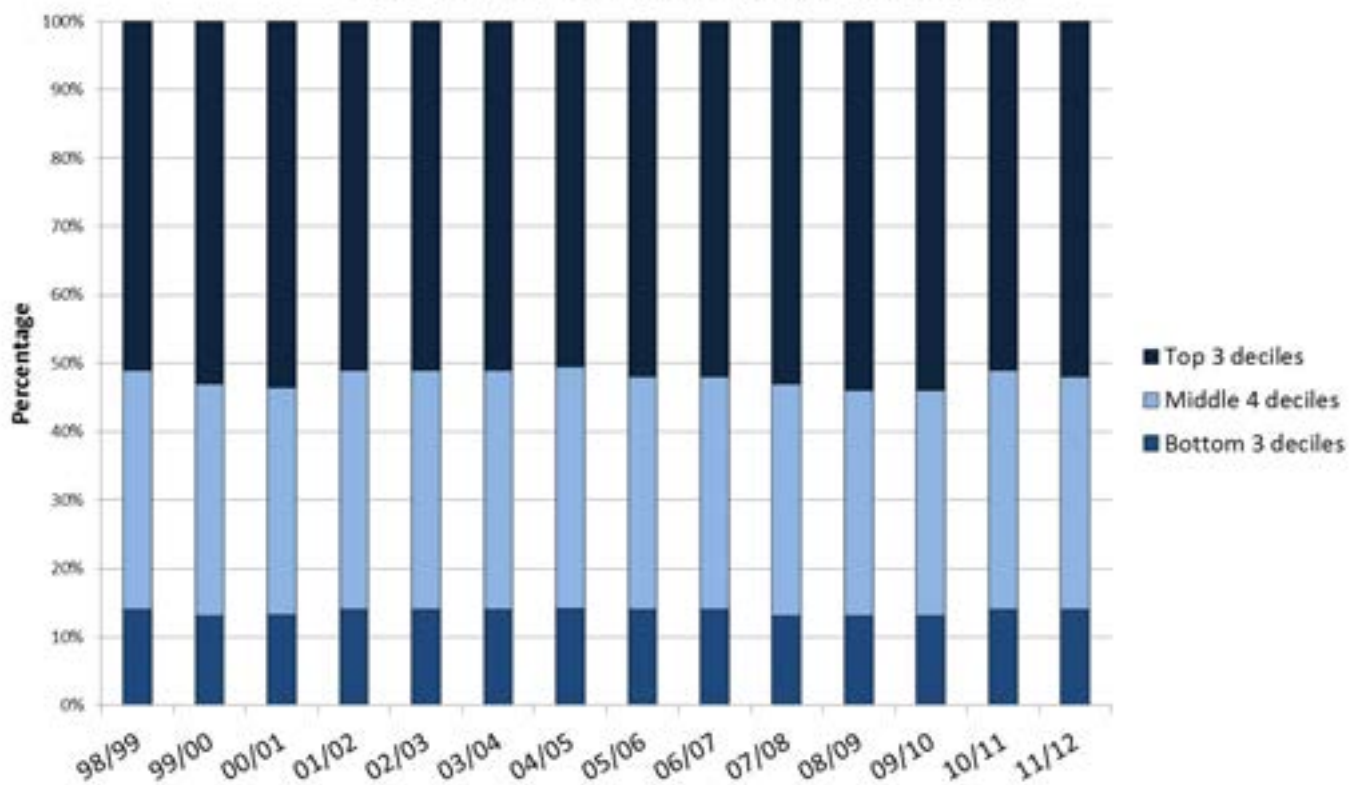
Decile groups:
 These are groups of the population defined by the **decile points**. The lowest decile group is the ten per cent of the population with the lowest incomes. The second decile group contains individuals with incomes above the lowest decile point but below the second decile point.

The following chart and table present figures that relate to the Scottish Government's Solidarity Purpose Target which is "to increase overall income and the proportion of income earned by the three lowest income deciles as a group by 2017":

<http://www.scotland.gov.uk/About/Performance/scotPerforms/purpose/solidarity>

Chart 6 shows the percentage of total income received by the three lowest income deciles (the thirty per cent of the population with the lowest incomes), from 1998/99 to 2011/12. It also shows the percentage of total income received by the three highest income deciles. This is a measure of how equally income is distributed across the population.

Chart 6. Percentage of total equivalised income going to the bottom and top three income deciles, 1998-99 - 2011/12



Source: HBAI dataset, DWP.

Main points:

- In 2011/12, the percentage of income received by those in the bottom 3 deciles was 14%, the same as 2010/11.
- Having dropped from 54 per cent to 51 per cent between 2009/10 and 2010/11, the percentage of income received by those in the top three income deciles increased slightly in 2011/12 to 52 per cent.
- There has been no significant change in income inequality between 2010/11 and 2011/12.
- Over the longer term it can be seen that there has been very little change in income inequality since 1998/99, with the percentage of income received by the bottom 3 deciles remaining at between 13 and 14 per cent.

3.1 Income thresholds

Most of the income figures in this publication are based on equivalised income. One consequence of the [equivalisation](#) process is that there are different poverty thresholds for households of different sizes and compositions. To help readers understand the figures in this publication, the following table presents some commonly used income thresholds, before equivalisation, for families of different sizes.

Table 1 - Income thresholds for different family types (income after tax and [BHC](#))

	Single person with no children		Couple with no children		Single person with children aged 5 and 14		Couple with children aged 5 and 14	
	weekly	annual	weekly	annual	weekly	annual	weekly	annual
UK median income (before housing costs)	286	14,900	427	22,300	513	26,700	654	34,100
Scottish median income (before housing costs)	292	15,200	436	22,700	523	27,300	667	34,800
60% of UK median income (before housing costs) - relative poverty threshold	172	9,000	256	13,400	308	16,000	392	20,500
60% of inflation adjusted 2010/11 UK median income (before housing costs) - absolute poverty threshold	177	9,200	264	13,800	317	16,500	404	21,000
Scottish 1st income decile	156	8,100	233	12,100	279	14,600	356	18,600
Scottish 2nd income decile	194	10,100	290	15,100	347	18,100	443	23,100
Scottish 3rd income decile	223	11,700	333	17,400	400	20,900	510	26,600
Scottish 4th income decile	255	13,300	381	19,900	457	23,800	582	30,400
Scottish 5th income decile	292	15,200	436	22,700	523	27,300	667	34,800
Scottish 6th income decile	330	17,200	493	25,700	591	30,800	754	39,300
Scottish 7th income decile	379	19,800	566	29,500	679	35,400	865	45,100
Scottish 8th income decile	438	22,900	654	34,100	785	40,900	1001	52,200
Scottish 9th income decile	545	28,400	813	42,400	975	50,900	1244	64,800

Source: HBAI dataset, DWP. Note: To create ten decile groups only nine decile points are needed to split the population.

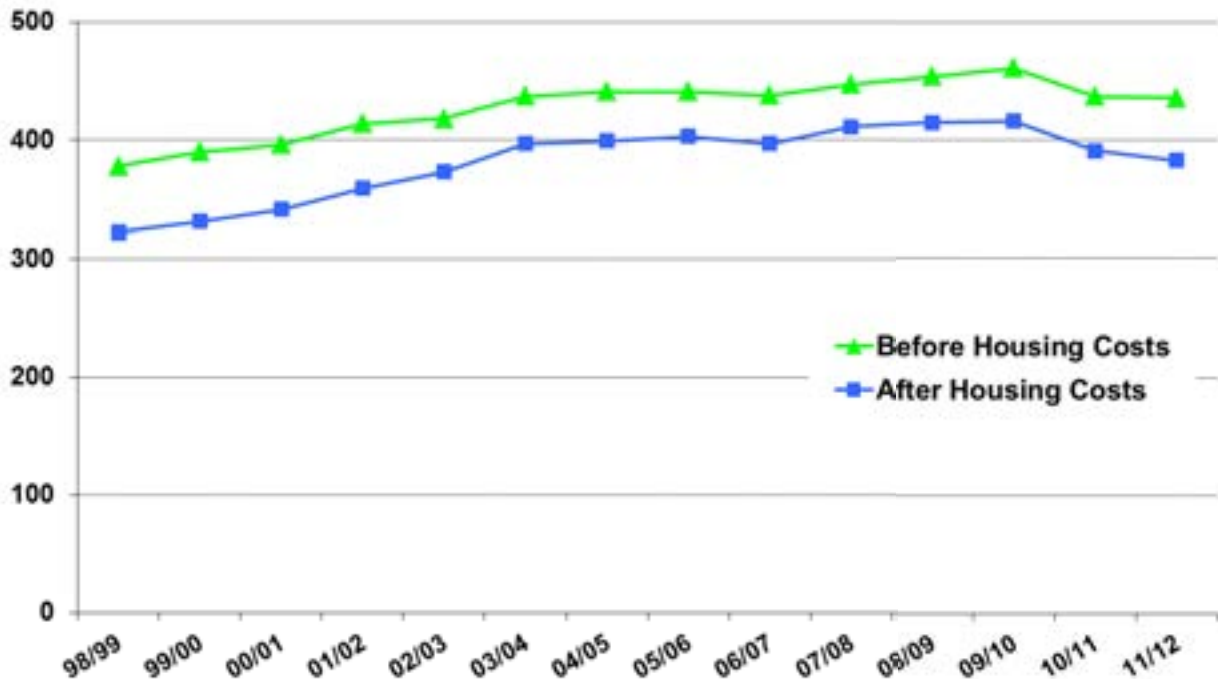
Main points:

- The relative poverty ([BHC](#)) threshold in 2011/12 is equivalent to £172 per week for a single person with no children; £256 for a couple with no children; or £392 per week for a couple with one young and one older child.
- A couple with no children with a combined income of over £34,100 (after tax) would be in the highest income 20 per cent of the population.

3.2 Trends in income distributions

Chart 7 shows how the median equivalised household income in Scotland has changed from 1998/99 to 2011/12.

**Chart 7. Median equivalised weekly household income in Scotland:
1998/99 to 2011/12 (in 2011/12 prices)**



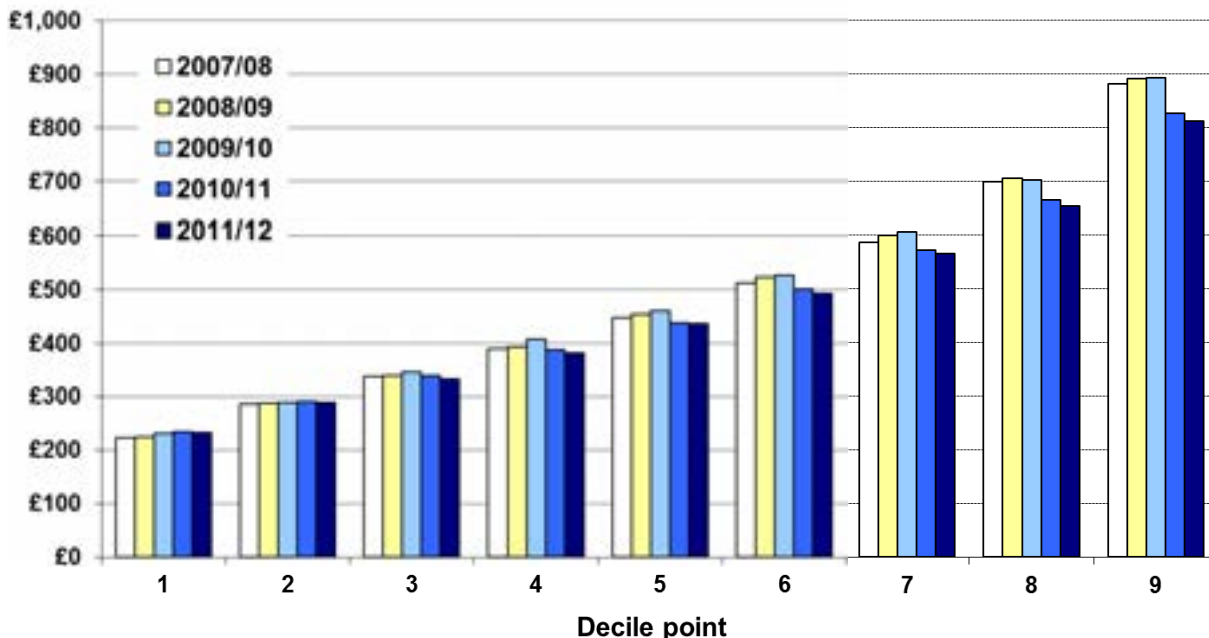
Source: HBAI dataset, DWP. These figures are also presented in Annex 1 (Table [A6](#)).

Main points:

- There was a gradual increase in median equivalised weekly household income ([BHC](#)) in Scotland from £378 in 1998/99 to £461 in 2009/10 followed by a fall to £437 in 2010/11. Median income in 2011/12 fell slightly to £436 per week. All incomes are quoted in 2011/12 prices.
- The pattern is similar for median equivalised weekly household income ([AHC](#)) in Scotland, which was £322 in 1998/99 increasing to £416 in 2009/10, followed by a fall to £391 in 2010/11. However, median income AHC continued to drop in 2011/12 to £383.

Chart 8 shows how the weekly equivalised incomes have changed from 2007/08 to 2011/12 across the different income decile points.

Chart 8. Equivalised weekly household incomes (Before Housing Costs) for each decile point from 2007/08 to 2011/12 (in 2011/12 prices) - Scotland



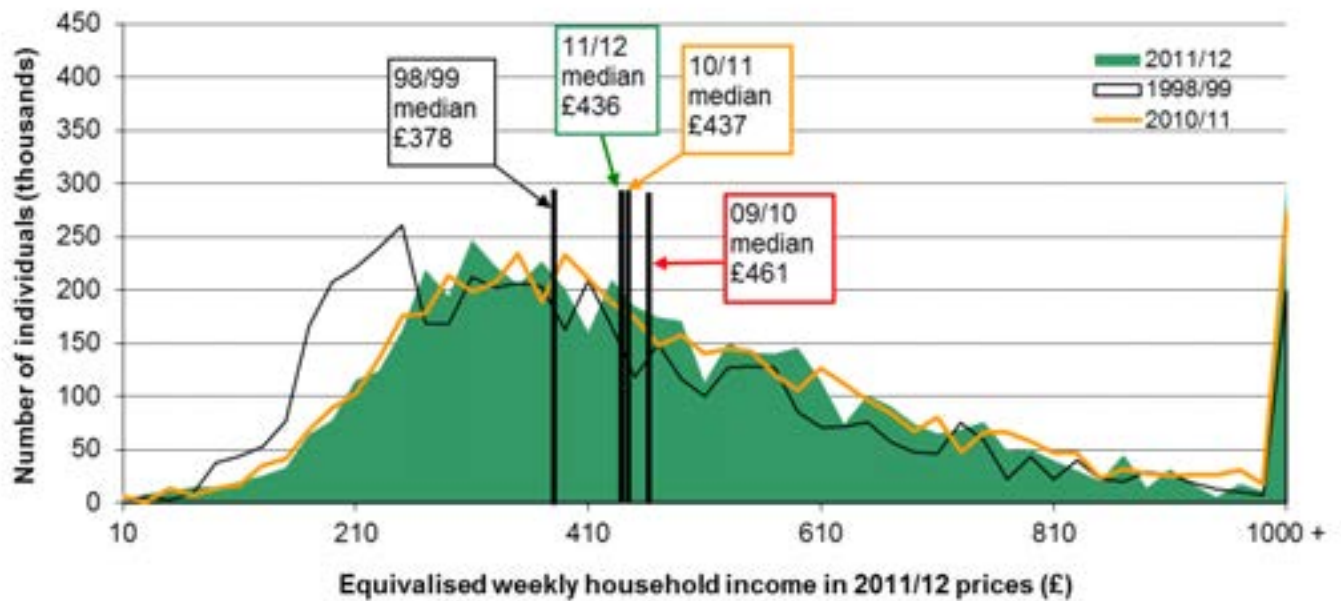
Source: HBAI dataset, DWP. These figures are also presented in Annex 1 (Table [A7](#)).

Main points:

- Between 2007/08 and 2009/10, equivalised weekly household income in Scotland increased in real terms across all the income decile points except the 8th.
- In 2010/11, there was a drop in equivalised weekly household incomes in all but the bottom two income decile points. This is linked to the drop in average earnings.
- All deciles saw a slight decrease in 2011/12, in particular the top 4 deciles and deciles 3 and 4. The median (decile 5) recorded the smallest change between 2010/11 and 2011/12.
- Households in the bottom two deciles receive a greater proportion of their income from benefits and a smaller proportion from earnings. From April 2011, benefits were uprated by CPI instead of RPI, with the exception of the Basic State Pension which was uprated by RPI. This means incomes in the bottom deciles (where households are more likely to be benefit dependent) also recorded small decreases in real income between 2010/11 and 2011/12 as benefit increases were less than RPI measured inflation.

Chart 9 below shows how the distribution of income across Scotland changed between 1998/99 and 2011/12. The shaded area shows the shape of the 2011/12 income distribution, the continuous orange line for 2010/11 and the black line for 1998/99. The peak in median income in 2009/10 is also shown (£461) as median income had been increasing until then before decreasing in 2010/11. Previous year's figures are adjusted for inflation and are in 2011/12 prices.

Chart 9: Equivalised weekly household income distribution (before housing costs): Scotland - 1998/99, 2010/11 and 2011/12



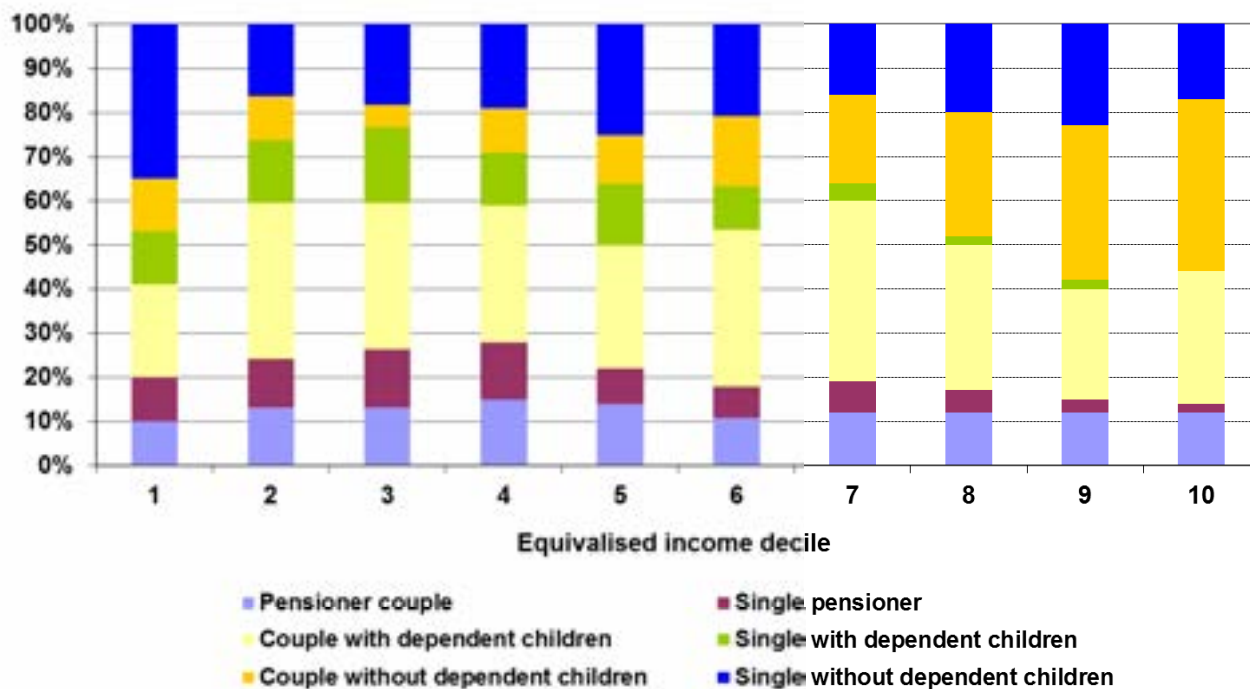
Source: HBAI dataset, DWP.

Main points:

- The median equivalised weekly household income has decreased slightly from £437 per week in 2010/11 to £436 per week in 2011/12 (in 2011/12 prices).
- This follows a period of increasing median income up to 2009/10 (£461) and a subsequent decrease to present levels.
- The relative poverty threshold is based on the UK median equivalised household income. As the median income has fallen in the last two years, the poverty threshold also fell in 2010/11 and 2011/12. The UK median (£427) is used to calculate the poverty threshold in 2011/12, which is £256 per week for a couple with no children).

Chart 10 below shows the composition of family types by equivalised income decile.

Chart 10. Family type by equivalised income decile, 2011/12



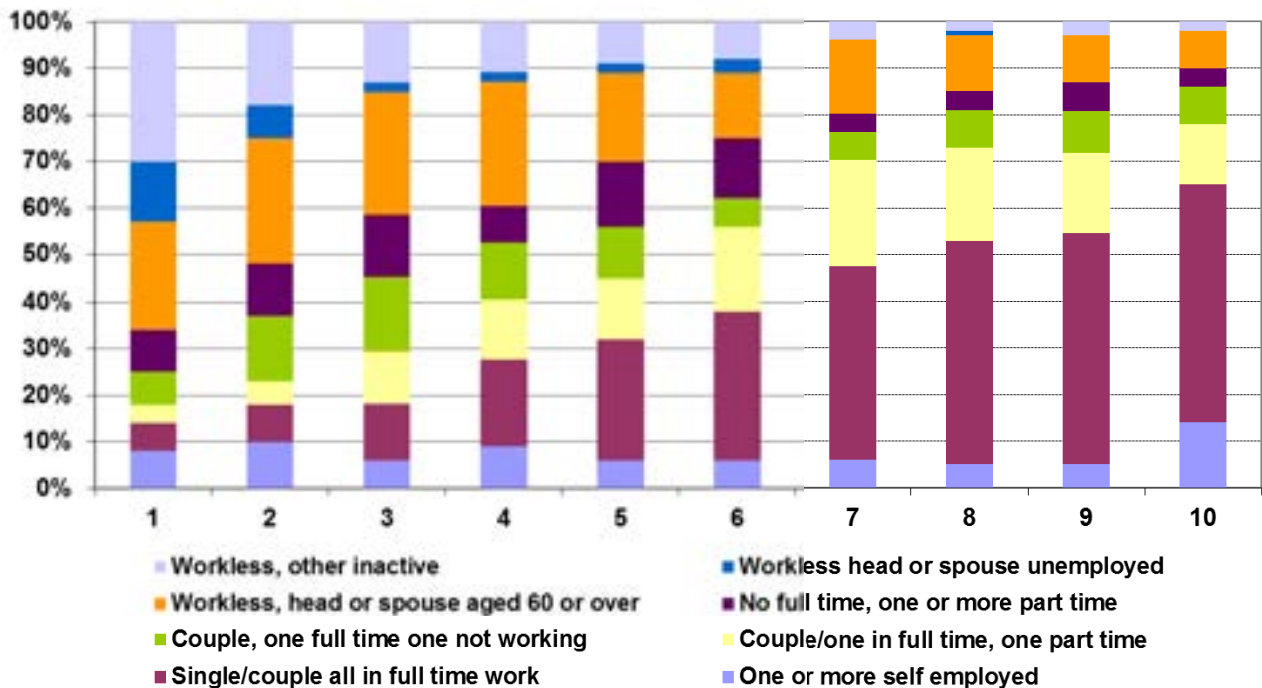
Source: HBAI dataset, DWP. These figures are also presented in Annex 1 (Table [A8](#)).

Main points:

- There is a higher percentage of single people with dependent children towards the lower end of the income distribution.
- Single people without dependent children make up over 30 per cent of those in the lowest decile, and around 20 per cent in the other deciles.
- There are also more pensioners towards the lower end of the income distribution – the second, third and fourth income deciles contain the highest proportions.
- There are more couples without children towards the top end of the income distribution.

Chart 11 below shows the composition of the economic status of families by equivalised income decile.

Chart 11. Economic status of family by equivalised income decile: 2011/12



Source: HBAI dataset, DWP. These figures are also presented in Annex 1 (Table A9).

Note: The 'workless, other inactive category' would include, for example, non-working single parents, or those who cannot work due to long-term sickness or disability.

Main points:

- Families where no-one is working either through unemployment, retirement or economic inactivity (those who are neither in work, nor looking for work) are more common towards the bottom of the income distribution. 53 per cent of people in the bottom three income deciles are in families of these types compared to 13 per cent in the top three deciles. Two thirds of households in the lowest decile are households where no-one is working.
- People in families where at least one adult is working full-time (including those who are self-employed) make up 83 per cent of those in the top three deciles. Such families make up 36 per cent of those in the bottom three deciles.

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Annex 1: Tables from the Family Resources Survey

Table A1: Relative poverty (below 60% of UK median income in the same year) in Scottish households: 1994/95 to 2011/12

	All individuals				Children				Working Age Adults				Pensioners			
	Before Housing Costs		After Housing Costs		Before Housing Costs		After Housing Costs		Before Housing Costs		After Housing Costs		Before Housing Costs		After Housing Costs	
	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s
1994/95	21	1,040	23	1,140	28	310	30	330	17	510	18	560	26	220	29	250
1995/96	20	980	23	1,160	27	300	32	360	14	440	18	540	28	240	31	270
1996/97	22	1,090	25	1,230	31	340	33	360	16	490	19	580	30	260	33	290
1997/98	20	1,000	22	1,120	30	330	31	330	16	470	18	540	24	210	28	250
1998/99	20	980	23	1,130	28	300	31	330	15	450	19	570	26	230	27	230
1999/00	21	1,050	24	1,200	28	300	32	350	17	510	20	600	27	240	28	250
2000/01	21	1,040	24	1,220	27	280	32	340	18	540	22	650	24	210	25	220
2001/02	19	960	22	1,110	27	280	31	330	16	490	19	570	21	190	24	210
2002/03	20	1,000	23	1,120	25	260	27	280	18	530	20	620	23	210	25	220
2003/04	19	920	21	1,020	24	250	27	280	16	480	18	560	22	190	21	180
2004/05	17	860	19	960	21	210	25	250	15	460	18	560	20	190	16	150
2005/06	18	880	20	990	21	210	24	250	15	470	19	590	20	190	16	150
2006/07	17	840	19	950	21	210	25	250	14	440	18	550	20	180	15	140
2007/08	17	860	19	970	20	200	24	240	15	460	19	580	21	200	16	150
2008/09	17	860	19	970	21	210	26	260	16	500	19	600	16	150	11	110
2009/10	17	870	19	980	20	200	25	250	16	510	20	610	17	160	12	120
2010/11	15	780	18	910	17	170	21	220	14	440	18	570	16	160	12	120
2011/12	14	710	17	870	15	150	20	200	13	420	18	560	15	140	12	110

Source: HBAI dataset, DWP.

Table A2: Absolute poverty (below 60% of inflation adjusted 2010/11 UK median income) in Scottish households: 1994/95 to 2011/12

	All individuals				Children				Working Age Adults				Pensioners			
	Before Housing Costs		After Housing Costs		Before Housing Costs		After Housing Costs		Before Housing Costs		After Housing Costs		Before Housing Costs		After Housing Costs	
	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s
1994/95	32	1,580	34	1,720	38	420	42	460	24	740	28	840	48	420	48	420
1995/96	32	1,610	36	1,810	42	470	47	520	24	720	28	860	48	420	49	420
1996/97	31	1,550	35	1,740	40	440	46	500	23	700	27	820	47	410	48	420
1997/98	28	1,400	31	1,570	39	420	43	470	22	650	25	750	37	320	40	350
1998/99	28	1,390	30	1,520	36	390	39	420	22	660	25	750	39	340	39	340
1999/00	27	1,330	30	1,480	34	360	38	410	22	650	24	740	36	310	38	330
2000/01	25	1,220	27	1,360	31	330	35	380	20	620	24	730	31	270	29	260
2001/02	22	1,070	24	1,210	30	310	34	360	18	530	20	610	25	220	27	240
2002/03	20	1,010	23	1,120	25	260	27	280	18	540	20	620	24	210	25	220
2003/04	19	930	20	1,000	24	250	27	270	16	490	18	550	22	200	19	170
2004/05	17	850	18	910	21	210	24	240	15	460	18	540	20	180	14	130
2005/06	17	850	18	890	21	210	22	230	15	460	18	550	19	180	13	120
2006/07	16	790	17	840	21	210	22	220	14	420	16	510	17	160	12	110
2007/08	16	820	17	880	19	190	22	220	14	440	17	540	20	190	13	130
2008/09	16	810	18	900	20	200	24	240	15	470	18	570	15	140	10	100
2009/10	16	790	18	900	18	180	22	230	15	470	18	570	15	140	11	100
2010/11	15	780	18	910	17	170	21	220	14	440	18	570	16	160	12	120
2011/12	15	780	18	950	16	160	22	220	15	460	19	600	16	150	14	130

Source: HBAI dataset, DWP.

Table A3: Children in combined material deprivation and low income (below 70% of UK median income in the same year) in Scottish households: 2004/05 to 2011/12

Old Indicator			New Indicator		
	%	000s		%	000s
2004/05	16	170	2004/05	-	-
2005/06	13	130	2005/06	-	-
2006/07	16	160	2006/07	-	-
2007/08	15	150	2007/08	-	-
2008/09	16	160	2008/09	-	-
2009/10	15	150	2009/10	-	-
2010/11	13	130	2010/11	12	120
2011/12	-	-	2011/12	8	80

Source: HBAI dataset, DWP.

Table A4: Pensioners over 65 in material deprivation: 2009/10 to 2011/12

	%	000s
2009/10	10	80
2010/11	7	60
2011/12	8	60

Source: HBAI dataset, DWP.

Table A5: Individuals in in-work poverty (relative poverty [BHC](#)) in Scotland: 1998/99 to 2011/12

	In in-work poverty		In relative poverty before housing costs	
	000s	%	000s	%
98/99	360	7	980	20
99/00	350	7	1,050	21
00/01	390	8	1,040	21
01/02	370	7	960	19
02/03	400	8	1,000	20
03/04	340	7	920	19
04/05	310	6	860	17
05/06	380	8	880	18
06/07	320	6	840	17
07/08	340	7	860	17
08/09	340	7	860	17
09/10	330	6	870	17
10/11	320	6	780	15
11/12	280	6	710	14

Source: HBAI dataset, DWP.

Table A6: Median equivalised weekly household income in Scotland: 1994/95 to 2011/12 (2011/12 prices)

	Before Housing Costs	After Housing Costs
94/95	352	300
95/96	350	293
96/97	362	304
97/98	376	318
98/99	378	322
99/00	390	331
00/01	396	341
01/02	414	359
02/03	418	373
03/04	437	397
04/05	441	399
05/06	441	403
06/07	438	397
07/08	447	411
08/09	454	415
09/10	461	416
10/11	437	391
11/12	436	383

Source: HBAI dataset, DWP.

Table A7: Equivalised weekly household income ([BHC](#)) in Scotland: 1994/95 to 2011/12 (2011/12 prices)

	Scottish 1st income decile	Scottish 2nd income decile	Scottish 3rd income decile	Scottish 4th income decile	Scottish 5th income decile	Scottish 6th income decile	Scottish 7th income decile	Scottish 8th income decile	Scottish 9th income decile
94/95	175	211	254	304	352	412	467	561	681
95/96	181	216	253	303	350	400	468	551	687
96/97	181	217	260	306	362	418	479	568	697
97/98	185	227	271	319	376	428	499	587	737
98/99	189	232	277	329	378	432	510	594	752
99/00	194	234	280	329	390	448	518	620	774
00/01	201	242	289	338	396	447	518	617	774
01/02	215	259	308	359	414	474	542	634	838
02/03	207	261	310	364	418	479	552	641	809
03/04	218	272	331	387	437	496	568	664	808
04/05	224	281	332	383	441	501	575	676	820
05/06	223	279	334	388	441	504	577	683	848
06/07	230	283	331	388	438	503	578	680	848
07/08	223	286	338	389	447	512	586	699	881
08/09	225	288	340	393	454	523	599	706	892
09/10	231	290	346	407	461	526	606	702	893
10/11	234	291	339	388	437	500	571	665	827
11/12	233	290	333	381	436	493	566	654	813

Source: HBAI dataset, DWP.

Table A8: Family type by equivalised income decile in Scotland: 2011/12

Income decile	Pensioner couple		Single pensioner		Couple with dependent children		Single with dependent children		Couple without dependent children		Single without dependent children	
	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%
1	50	10	50	10	110	21	60	12	60	12	180	35
2	70	13	60	11	180	35	70	14	50	10	80	16
3	70	13	70	13	170	33	90	17	30	5	90	18
4	80	15	70	13	160	31	60	12	50	10	100	19
5	70	14	40	8	150	28	70	14	60	11	130	25
6	60	11	40	7	180	36	50	10	80	16	110	21
7	60	12	40	7	210	41	20	4	100	20	80	16
8	60	12	30	5	170	33	10	2	150	28	100	20
9	60	12	20	3	130	25	10	2	180	35	120	23
10	60	12	10	2	150	30	0	0	200	39	90	17
Total	640	12	410	8	1,610	31	450	9	950	19	1,080	21

Source: HBAI dataset, DWP.

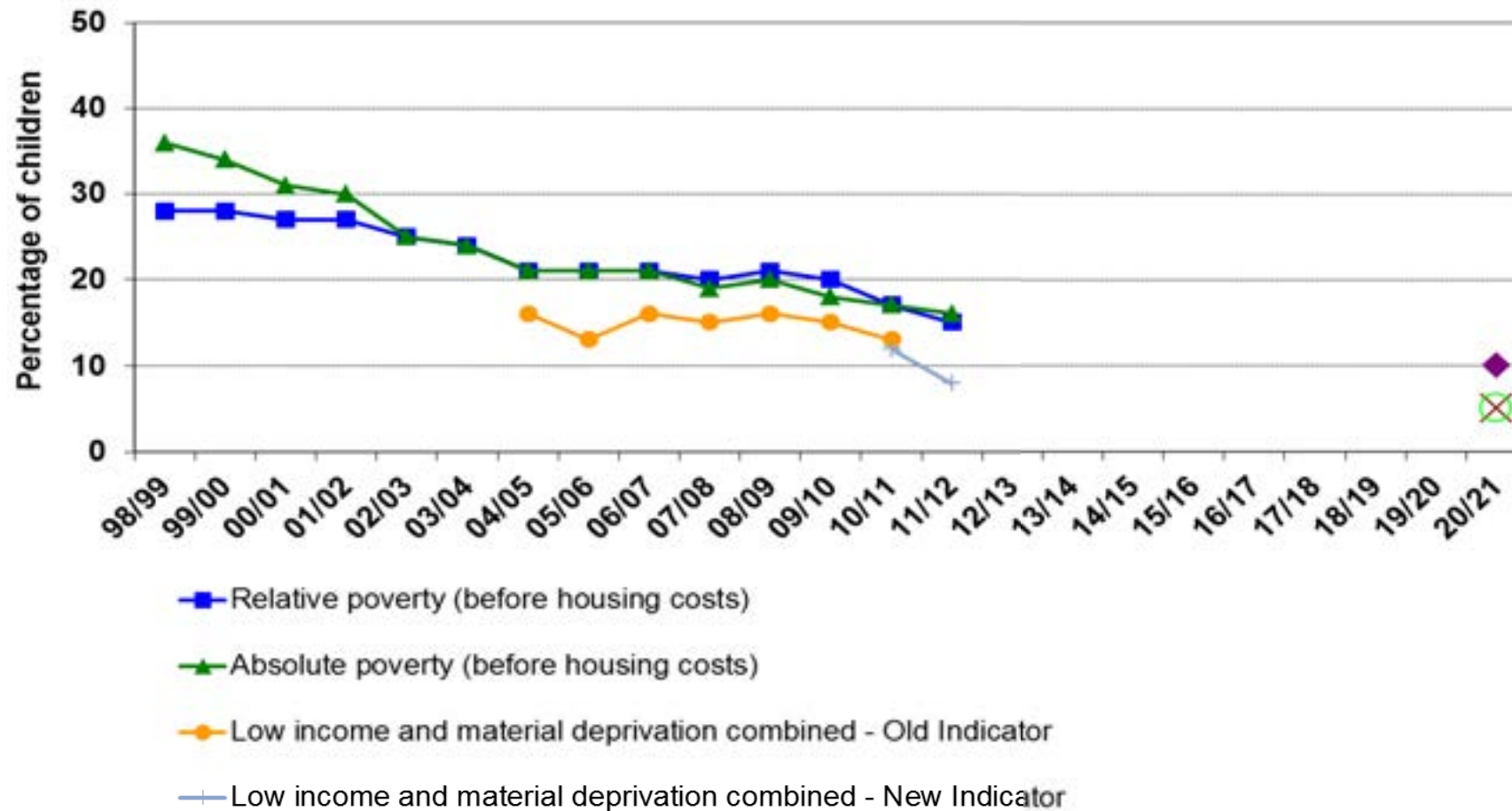
Table A9: Economic status of families by equivalised income decile: Scotland 2011/12

Income decile	One or more self employed		Single/couple all in full time work		Couple/one in full time, one part time		Couple, one full time one not working		No full time, one or more part time		Workless, head or spouse aged 60 or over		Workless head or spouse unemployed		Workless, other inactive	
	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%
1	40	8	30	6	20	4	40	7	50	9	120	23	60	13	160	30
2	50	10	40	8	20	5	70	14	60	11	140	27	40	7	90	18
3	30	6	60	12	60	11	80	16	70	13	140	26	10	2	70	13
4	50	9	100	19	70	13	60	12	40	8	140	27	10	2	50	11
5	30	6	140	26	70	13	60	11	70	14	100	19	10	2	40	9
6	30	6	170	32	90	18	30	6	70	13	70	14	20	3	40	8
7	30	6	210	42	120	23	30	6	20	4	80	16	0	0	20	4
8	30	5	250	48	100	20	40	8	20	4	60	12	10	1	10	2
9	30	5	250	49	90	17	50	9	30	6	50	10	0	0	20	3
10	70	14	260	51	70	13	40	8	20	4	40	8	0	0	10	2
Total	390	8	1,510	29	700	14	500	10	440	9	930	18	150	3	510	10

Source: HBAI dataset, DWP.

Chart A10: Child Poverty Act Targets:

Child Poverty Act Targets



Note: the 21 items in the suite of questions used to measure material deprivation are designed to reflect the items and activities people in the UK believe to be necessary. These items are reviewed periodically to ensure the measure remains a relative measure of poverty. In 2010/11 four new items were included in the FRS, and in 2011/12 four old items were removed. This creates a break in the child material deprivation series, with the measure for 2004/05 to 2010/11 on the old basis. The measure for 2011/12 is presented on the new basis along with 2010/11 for comparison with the old measure. For further detail see [Annex 2](#).

2. The targets under the Child Poverty Act are "less than 10 per cent" for relative poverty and "less than 5 per cent" for both absolute poverty and combined low income and material deprivation. These are marked on the chart by a square, circle and cross respectively.

Annex 2: Data Sources and Definitions

Data sources

Family Resources Survey, Households Below Average Income (HBAI) dataset:

All the figures in this publication come from the Department for Work and Pensions' (DWP) Households Below Average Income dataset which is produced from the Family Resources Survey. UK figures are published by DWP in 'Households Below Average Income: 2011/12' on the same day as 'Poverty and income inequality in Scotland'. For the UK figures, as well as more detail about the way these figures are collected and calculated, see the DWP website: <http://research.dwp.gov.uk/asd/index.php?page=hbai>.

Future plans for updating persistent poverty figures

Data on Persistent Poverty has been obtained from the British Household Panel Survey (BHPS) and figures are published here:

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/Publications>. The BHPS has been subsumed into the larger Understanding Society survey from the start of 2009. These figures will be updated when the new data becomes available towards the end of 2013. For more detail see www.understandingsociety.org.uk.

Definitions

Measures of income

The income measure used in HBAI is weekly net (disposable) equivalised household income. This comprises total income from all sources of all household members including dependants.

Income is adjusted for household size and composition by means of equivalence scales, which reflect the extent to which households of different size and composition require a different level of income to achieve the same standard of living. This adjusted income is referred to as **equivalised income** (see definition below and [section 1.2](#) for more information on equivalisation).

- **Income Before Housing Costs (BHC)** includes the following main components: net earnings; profit or loss from self-employment after income tax and NI; all social security benefits, including housing and council tax benefits; all tax credits, including Social Fund grants; occupational and private pension income; investment income; maintenance payments; top-up loans and parental contributions for students, educational grants and payments; the cash value of certain forms of income in kind such as free school meals, free welfare milk and free school milk and free TV licences for the over 75s (where data is available). Income is net of: income tax payments; National Insurance contributions; contributions to occupational, stakeholder and personal pension schemes; council tax; maintenance and child support payments made; and parental contributions to students living away from home.
- **Income After Housing Costs (AHC)** is derived by deducting a measure of housing costs from the above income measure.

- **Housing Costs** include the following: rent (gross of housing benefit); water rates; mortgage interest payments; structural insurance premiums; ground rent and service charges.

Real prices

Unless otherwise stated, all figures relating to income are in 2011/12 prices. Values from previous years are updated to account for inflation using the Retail Price Index (RPI).

All BHC incomes in this publication have been adjusted for inflation using a bespoke index supplied by the Office for National Statistics (ONS), consisting of the Retail Prices Index excluding Council Tax, while all AHC incomes in this publication have been adjusted for inflation using the Retail Prices Index excluding housing.

RPI measures the average price change on the basis of the changed expenditure of maintaining the consumption pattern of households and the composition of the consumer population in the base or reference period.

Equivalisation is the process by which household income is adjusted to take into account variations in the size and composition of the households in which individuals live. This reflects the common sense notion that, in order to enjoy a comparable standard of living, a household of say three adults will need a higher income than a single person living alone. The process of adjusting income in this way is known as equivalisation and is needed in order to make sensible income comparisons between households.

Equivalence scales conventionally take an adult couple without children as the reference point, with an equivalence value of one. The process then increases relatively the income of single person households (since their incomes are divided by a value of less than one) and reduces relatively the incomes of households with three or more persons, which have an equivalence value of greater than one.

Consider a single person, a couple with no children, and a couple with two children aged fourteen and ten, all having unadjusted weekly household incomes of £200 (Before Housing Costs). The process of equivalisation, as conducted in HBAI, gives an equivalised income of £299 to the single person, £200 to the couple with no children, but only £131 to the couple with children.

The equivalence scales used here are the modified OECD scales. Two separate scales are used, one for income Before Housing Costs ([BHC](#)) and one for income After Housing Costs ([AHC](#)). Modified OECD rescaled to couple without children, [BHC](#) is as follows:

First Adult	0.67
Spouse	0.33
Other Second Adult	0.33
Third Adult	0.33
Subsequent Adults	0.33
Children aged under 14 years	0.20
Children aged 14 years and over	0.33

The construction of household equivalence values from these scales is quite straightforward. For example, the [BHC](#) equivalence value for a household containing a couple with a fourteen year old and a ten year old child together with one other adult would be 1.86 from the sum of the scale values:

$$0.67 + 0.33 + 0.33 + 0.33 + 0.20 = 1.86$$

This is made up of 0.67 for the first adult, 0.33 for their spouse, the other adult and the fourteen year old child and 0.20 for the ten year old child. The total income for the household would then be divided by 1.86 in order to arrive at the measure of equivalised household income used in HBAI analysis.

Further information on equivalisation can be found in the following report on the Scottish Government website: <http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/equivalence-scales-paper>

Poverty measurement from the Family Resources Survey

Individuals are defined as being in poverty if their equivalised net disposable household income is below 60% of the UK median. The median is the income value which divides a population, when ranked by income, into two equal sized groups. Since the mean is influenced considerably by the highest incomes, median income thresholds are widely accepted as a better benchmark when considering a derived measure for low income. Sixty per cent of the median is the most commonly used low income measure.

For a couple with no children, the UK median income ([BHC](#)) in 2011/12 was £427 per week, this is a real terms increase of £42 (11%) since 1998/99 (the inflation adjusted median income in 1998/99 was £385). [After housing costs](#) the increase was from £322 per week in 1998/99 (inflation adjusted) to £367 in 2011/12. This is an increase of 14% or £45.

Consequently, the 60% low income threshold, which is used to derive the low income household figures, has increased by £25 per week ([BHC](#)) in real terms, from £231 in 1998/99 (inflation adjusted) to £256 in 2011/12. [After housing costs](#) the 60% low income threshold has increased by £27 per week in real terms, from £193 to £220.

Relative and absolute poverty:

- **Absolute poverty:** individuals living in households whose equivalised income is below 60% of inflation adjusted median income in 2010/11. This is a measure of whether those in the lowest income households are seeing their incomes rise in real terms.
- **Relative poverty:** individuals living in households whose equivalised income is below 60% of median income in the same year. This is a measure of whether those in the lowest income households are keeping pace with the growth of incomes in the economy as a whole.

Material deprivation for Children

A suite of questions designed to capture the material deprivation experienced by families with children has been included in the Family Resources Survey since 2004/05. Respondents are asked whether they have 21 goods and services, including child, adult and household items. The list of items was identified by independent academic analysis. See McKay, S. and Collard, S. (2004). *Developing deprivation questions for the Family Resources Survey*, Department for Work and Pensions Working Paper Number 13 available at <http://research.dwp.gov.uk/asd/asd5/WP13.pdf>. Together, these questions form the best

discriminator between those families that are deprived and those that are not. If they do not have a good or service, they are asked whether this is because they do not want them or because they cannot afford them.

These questions are used as an additional way of measuring living standards for children and their families.

A prevalence weighted approach has been used, in combination with a relative low income threshold. The income threshold is 70% of the median income. Prevalence weighting is a technique of scoring deprivation in which more weight in the deprivation measure is given to families lacking those items that most families already have. This means a greater importance, when an item is lacked, is assigned to those items that are more commonly owned in the population.

Changes to measuring material deprivation in 2011/12

The 21 items in the suite of questions used to measure material deprivation are designed to reflect the items and activities people in the UK believe to be necessary. These items are reviewed periodically to ensure the measure remains a relative measure of poverty. In 2010/11 four new questions about additional items were included in the FRS to be used in the future calculation of material deprivation scores, replacing the four existing items that were identified by research as potentially out of date partly because the proportion of the population considering them necessary had fallen. It is not possible to say whether the large drop in the proportions of people rating these items as necessary was due to a hardening of attitudes following a recession, or part of a longer term trend against certain 'social' measures of deprivation that will persist during an economic recovery. In the 2010/11 FRS, both the new and the old questions were asked. In 2011/12 the four old items were removed. Analysis presented in Annex 3 of the HBAI 2010/11 publication showed that the low income and material deprivation statistics are quite sensitive to the combination of the threshold and items chosen. Using the new items translates into higher prevalence weights, with the effect of increasing the overall sum of the weights suggesting that the higher the overall sum of weights, the lower the overall level of low income and material deprivation. This means that changing the items creates a break in the child material deprivation series, with the measure for 2004/05 to 2010/11 on the old basis. The measure for 2011/12 is presented on the new basis ([DWP Statistical Notice](#)). Table A10 below lists the adult and child material deprivation questions from the FRS, showing the those which have been included in 2010/11 and those which were dropped from the survey in 2011/12.

Table A10:

Family resources Survey: Adult and child material deprivation questions

Holiday away from home for at least one week a year, whilst not staying with relatives at their home	Items included in all years
Have enough money to keep your home in a decent state of decoration	
Have household contents insurance	
Make regular savings of £10 a month or more for rainy days or retirement	
Do you replace any worn out furniture	
Replace or repair major electrical goods such as a refrigerator or washing machine, when broken	
Have a small amount of money to spend each week on yourself (not on your family)	
In the winter are you able to keep your accommodation warm enough	
Does your child have a family holiday away from home for at least one week a year	
Are there enough bedrooms for every child of 10 or over of a different gender to have their own bedroom	
Does your child have leisure equipment such as sports equipment or a bicycle	
Does your child have celebrations on special occasions such as birthdays, Christmas or other religious festivals	
Does your child do a hobby or leisure activity	
Does your child have friends round for tea or a snack once a fortnight	
Does your child (if under 6 years and not attending school) go to toddler group/nursery/playgroup at least once a week	
Does your child (if attending school) go on school trips	
Does your child have an outdoor play space or facilities nearby where they can play safely.	New questions included in 2010/11 onwards
Does your child attend at least one regular organised activity a week outside school, such as sport or a youth group	
Does your child eat fresh fruit and/or vegetables every day	
Does your child have a warm winter coat	
Do you keep up with bills and regular debt payments	Old questions included up to and including 2010/11
Have friends or family round for a drink or meal at least once a month	
Do you have two pairs of all-weather shoes for each adult	
Do you have a hobby or leisure activity	
Does your child go swimming at least once a month	

For further information about material deprivation see [Appendix 2](#) of the DWP 'Households below average income' publication.

A discussion considering the implications of the impact of the threshold changes for measuring absolute child material deprivation is given in [Appendix 3](#) of this publication. Further detail on the approach used is available in the [DWP Statistical Notice](#) May 2013.

Material Deprivation for Pensioners

A suite of questions designed to capture the material deprivation experienced by pensioner households has been included in the Family Resources Survey since May 2008. Respondents are asked whether they have access to 15 goods and services. The list of items was identified by independent academic analysis. See:

- Legard, R., Gray, M. and Blake, M. (2008), *Cognitive testing: older people and the FRS material deprivation questions*, Department for Work and Pensions Working Paper Number 55. Available at: <http://research.dwp.gov.uk/asd/asd5/WP55.pdf> and;
- McKay, S. (2008), *Measuring material deprivation among older people: Methodological study to revise the Family Resources Survey questions*, Department for Work and Pensions Working Paper Number 54. Available at <http://research.dwp.gov.uk/asd/asd5/WP54.pdf>.

Together, these questions form the best discriminator between those pensioner families that are deprived and those that are not.

Where they do not have a good or service, pensioner households are asked whether this is because: they do not have the money for this; it is not a priority on their current income; their health / disability prevents them; it is too much trouble or tiring; they have no one to do this with or help them; it is not something they want; it is not relevant to them; other. Where a pensioner lacks one of the material deprivation items for one of the following reasons - they do not have the money for this; it is not a priority for them on their current income; their health / disability prevents them; it is too much trouble or tiring; they have no one to do this with or help them; other - they are counted as being deprived for that item.

The exception to this is for the unexpected expense question, where the follow up question was asked to explore how those who responded 'yes' would cover this cost. Options were: use own income but cut back on essentials; use own income but not need to cut back on essentials; use savings; use a form of credit; get money from friends or family; other. Pensioners are counted as materially deprived for this item if and only if they responded 'no' to the initial question.

The same prevalence weighted approach has been used to that for children, in determining a deprivation score. Prevalence weighting is a technique of scoring deprivation in which more weight in the deprivation measure is given to families lacking those items that most pensioner families already have. This means a greater importance, when an item is lacked, is assigned to those items that are more commonly owned in the pensioner population.

For children, material deprivation is presented as an indicator in combination with a low income threshold. However for pensioners, the concept of material deprivation is broad and very different from low income; therefore, it is appropriate to present it as a separate measure.

A technical note given a full explanation of the pensioner material deprivation measure is available at http://research.dwp.gov.uk/asd/index.php?page=hbai_arc.

Population Coverage

The FRS is a survey of private households. This means that people in residential institutions, such as nursing homes, barracks, prisons or university halls of residence, and also homeless people are excluded from the scope of the analysis presented here. The area of Scotland north of the Caledonian Canal was included in the FRS for the first time in the 2001/02 survey year, and from the 2002/03 survey year, the FRS was extended to include a 100 per cent boost of the Scottish sample. This has increased the sample size available for analysis at the Scottish level. Between 2002/03, the sample size has been around 5 thousand. However, following cost savings introduced to the FRS in 2010, the sample size in Scotland

for 2011/12 is 4 thousand. Further detail is available at

<http://search2.openobjects.com/kbroker/dwp/dwp/search/search.lsim?sr=0&nh=10&cs=iso-8859-1&sc=dwp&sm=0&mt=1&to=0&ha=1098&qt=FRS+sample+size+2011%2F12>

Reliability of estimates

The figures are estimates based on sample surveys and are therefore subject to sampling variation. Caution should be exercised in the interpretation of small year-on-year fluctuations. Identification of trends should be based on data for several years. Estimates for the confidence intervals around the key figures presented here will be available on the Income and poverty statistics website after publication via the following link:

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/Methodology#a6>

The Family Resources Survey publication at

<http://research.dwp.gov.uk/asd/frs/index.php?page=intro> contains information on topics such as:

- Sample design, non-response biases, weighting
- Item non-response, imputation and editing
- Accuracy of income data

Detailed HBAI definitions and methodology

More detailed information on definitions and methodology can be found in Appendix 1 and 2 of DWP's publication:

<http://statistics.dwp.gov.uk/asd/index.php?page=hbai>

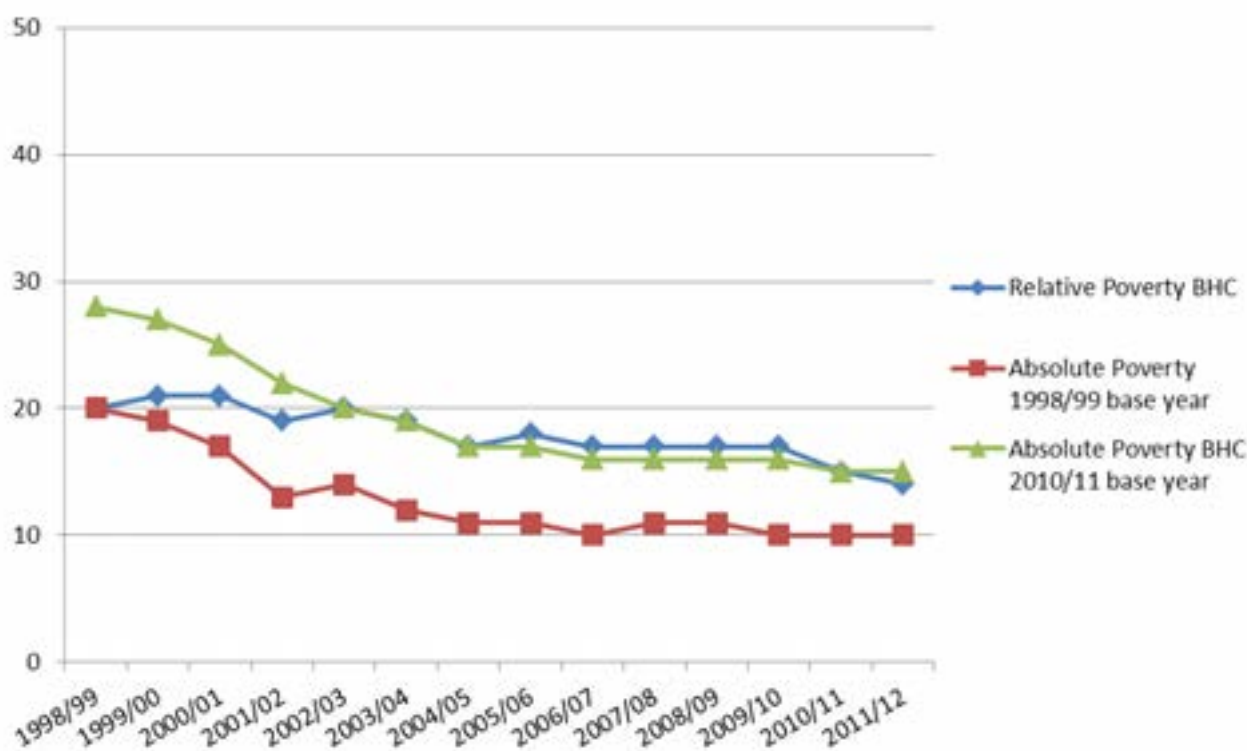
Annex 3: Impact of change to reference year for absolute poverty

For the 2005/06 to 2010/11 publications, absolute poverty was measured against 60% of median household income in 1998/99 adjusted for inflation. In order to keep the absolute low income measure in line with the Child Poverty Act 2010, the reference year for measuring absolute low income has been changed to 2010/11, adjusted for inflation from 2011/12.

The change in the reference year has a large effect on the percentage and number of people identified as being in absolute poverty. It also magnifies the scale of historical changes in the time series. This is because the threshold has moved to a more densely populated part of the income distribution. The change in the headline figure does not reflect a real change in the living standards of those who now fall below the rebased poverty line, nor does it reflect a worsening economic situation than previously published. It is a re-classification of 'absolute poverty'.

Chart A11 below shows the percentage of the population in Scotland identified as being in absolute poverty (BHC) using both the 1998/99 and 2010/11 base years. This clearly shows the increase in the population identified as being in absolute poverty using the 2010/11 base year.

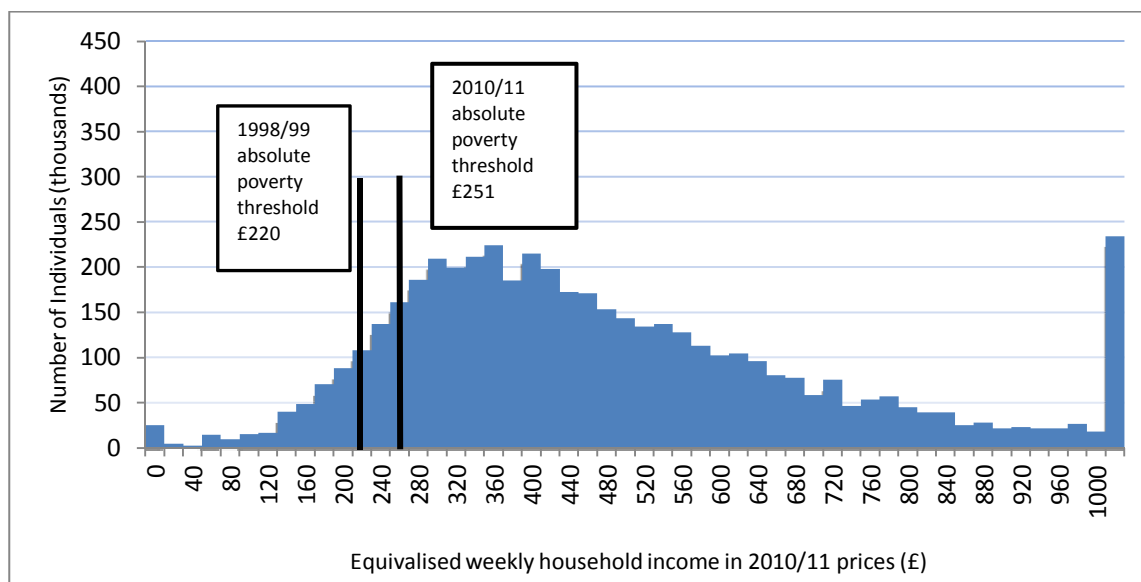
Chart A11: Comparison of absolute poverty with 1998/99 base year, absolute poverty with 2010/11 base year and relative poverty, Before Housing Costs.



The change in the base year means the absolute poverty threshold has moved from £231 per week (1998/99 base year) to £264 per week (2010/11 base year) in 2011/12 prices. When this shift is shown in the context of the income distribution, the threshold has moved into a denser part of the income distribution. This means that not only is more of the population identified as in absolute poverty but also historical changes are larger.

The following chart and commentary explain the difference between the 1998/99 base year and the 2010/11 base year. As such they use **2010/11 prices** and so values for median income and poverty thresholds are not the same as those presented elsewhere in this bulletin (2011/12 prices)

Chart A12: Income distribution for the total population, 2010/11, with 1998/99 and 2010/11 absolute low income thresholds.



This increase in threshold has meant a larger scale of change is seen between years. For example, using the 1998/99 baseline series the 60% absolute poverty threshold moved from £209 per week in 2009/10 to £220 per week in 2010/11. This change compared to the income distribution in 2010/11 meant that 10% of the population in Scotland were in absolute poverty in 2010/11 (unchanged from 2009/10). Using the 2010/11 baseline series, the absolute poverty threshold moves from £239 per week in 2009/19 to £251 per week in 2010/11. Although the monetary change is similar, the threshold is now in a denser part of the income distribution, with 15% of the population classified as being in absolute poverty (compared with 16% in 2009/10). The effect is a product of moving the absolute poverty measure to a new baseline and does not reflect a worsening in household living standards or a worsening economic situation than previously estimated.

A similar effect is seen on the estimated number of individuals in absolute poverty. Using the 1998/99 baseline series, 490 thousand individuals were in absolute poverty in 2010/11 (a decrease of 20 thousand compared with 2009/10). Using the 2010/11 baseline series 780 thousand individuals were in absolute poverty in 2010/11 (a decrease of 10 thousand on the previous year). Note that population estimates are rounded to the nearest 10 thousand. The change in absolute poverty between 2009/10 and 2010/11 using 1998/99 baseline and the 2010/11 baseline is not statistically significant.

Annex 4: Where to find more information

Supplementary analysis:

This publication contains the headline poverty and income inequality statistics.

Supplementary analysis based on the FRS and HBAI datasets is published by the Scottish Government during the year at <http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/CoreAnalysis>.

This provides further disaggregation of the headline statistics at sub-population level: poverty in urban and rural areas, poverty in deprived areas, poverty by disability, gender, and ethnicity, poverty by household tenure, household income distributions, trends in median income, income source, savings and assets, and income inequality.

Supplementary analysis themes are based on the needs of users. If you have any suggestions for future supplementary analysis please email stephen.smith@scotland.gsi.gov.uk or phone 0131 244 7045.

Scottish Government websites:

Income and Poverty statistics website

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

Scotland Performs website (for further information about the SG Solidarity Target and National Indicators)

<http://www.scotland.gov.uk/About/scotPerforms>

Uses of the data: In response to the UK Statistics Authority's (UKSA) report

<http://www.statisticsauthority.gov.uk/assessment/assessment/assessment-reports/index.html>

the Scottish Government were required to identify and document the ways in which these statistics are used. More information on this can be found via the following link:

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/income-data-sources>

Scottish Government Tackling Poverty website includes information about what they Scottish Government is doing to reduce poverty and income inequality.

<http://www.scotland.gov.uk/Topics/People/tackling-poverty>

Confidence limits surrounding Scotland poverty estimates:

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/Methodology#a6>

High Level Summary of Statistics (Social and Welfare)

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

For further information on all Scottish Government statistics

<http://www.scotland.gov.uk/topics/statistics/>

UK Government websites:

Family Resources Survey, Department for Work and Pensions

<http://statistics.dwp.gov.uk/asd/frs/>

Households Below Average Income, Department for Work and Pensions (methodology and UK estimates)

<http://statistics.dwp.gov.uk/asd/index.php?page=hbai>

UK Government action on child poverty

<http://www.education.gov.uk/childrenandyoungpeople/families/childpoverty>

Local Authority level analysis and other geographies in Scotland

The figures presented here are from a sample survey which limits the analysis possible at smaller geographical areas. A few analyses are published for areas below Scotland level, (e.g. poverty in rural and urban areas and in deprived areas), however it is **not** possible to produce reliable estimates at Local Authority level from this source. Estimates of poverty in rural and urban areas and in deprived areas will be updated on the income and poverty statistics website soon after publication of this report.

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/CoreAnalysis>

The Scottish Government are aware of the demand for Local Authority (LA) level poverty figures and are carrying out work to improve the quality of income information recorded by the Scottish Household Survey with the aim of producing LA level estimates. Initial estimates were published from this work in August 2010 and are classified as “data being developed” because they are undergoing quality assurance work and are published for the purpose of helping in this QA work and should **not** be treated as official statistics. For further detail and to comment on these data, see the [Relative poverty across Scottish local authorities](#) publication or contact the income and poverty statistics team on 0131 244 7045 or stephen.smith@scotland.gsi.gov.uk.

Academics from Heriot-Watt University have recently completed a project to develop a methodology for modelling income and poverty at local area levels in Scotland. Results are published on the Improvement Service website:

<http://www.improvementservice.org.uk/income-modelling-project/> .

On the income and poverty website there is also a [data sources and suitability](#) page which discusses some of the main data sources available to researchers interested in income and poverty in Scotland and their strengths and weaknesses. This discusses some of the indicators which are currently available at local authority level to find out about income and poverty in Scotland.

A National Statistics Publication for Scotland

This is a National Statistics publication. National Statistics are produced to high professional standards as set out in the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from political interference.

Further information about National Statistics can be viewed on the Scottish Government Statistics website at: <http://www.scotland.gov.uk/topics/statistics/about>.

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Release date and next update

These figures were published on the 13th June 2013. They are due to be updated in May/June 2014.

Feedback

The Scottish Government Income and Poverty Statistics team produced this publication and would be delighted to hear your comments or suggestions about how these figures could be made more useful to you. Please email stephen.smith@scotland.gsi.gov.uk or phone 0131 244 7045

Complaints and suggestions

If you are not satisfied with our service, please write to the Chief Statistician, Mr Roger Halliday, 4N05, St Andrews House, Edinburgh, EH1 3DG, Telephone: (0131) 244 0302, e-mail roger.halliday@scotland.gsi.gov.uk. We also welcome any comments or suggestions that would help us to improve our standards of service.

ScotStat

Scotstat is the Scottish Government network for consulting on, and notifying users about, official statistics. If you would like to be consulted about new or existing statistical collections or receive notification of statistical releases, please register your interest on the Scottish Government ScotStat website at www.scotland.gov.uk/scotstat.

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