



# Poverty & Income Inequality in Scotland: 2014-17



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Riaghaltas na h-Alba  
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Annual

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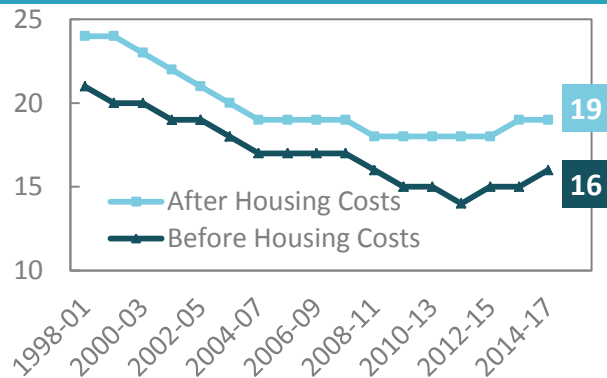
This publication presents three year averaged estimates of the percentage of people, children, working age adults and pensioners living in low income households in Scotland, and other statistics on household income and income inequality. Previously, we reported on single-year estimates, see page 2 for more information. The estimates are used to monitor progress in reducing poverty and income inequality.

## Key trends

- Poverty rates appear to be rising slowly.
- Income inequality appears to be rising after a decline following the recession.
- Median income has reached highest level since reporting began.

### Relative poverty

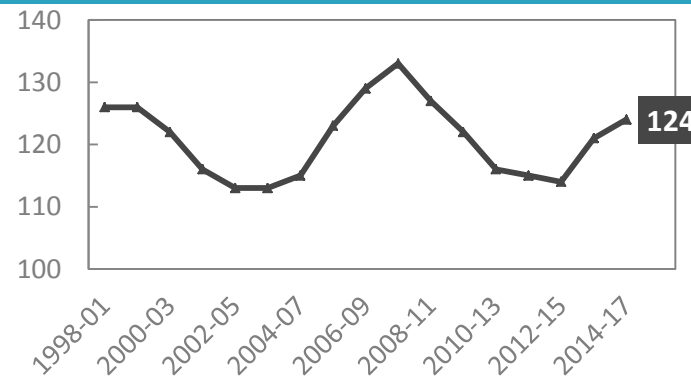
Poverty rates slowly rising



19% of people in Scotland were living in relative poverty after housing costs in 2014-17. Overall, poverty rates seem to be rising slowly.

### Income inequality

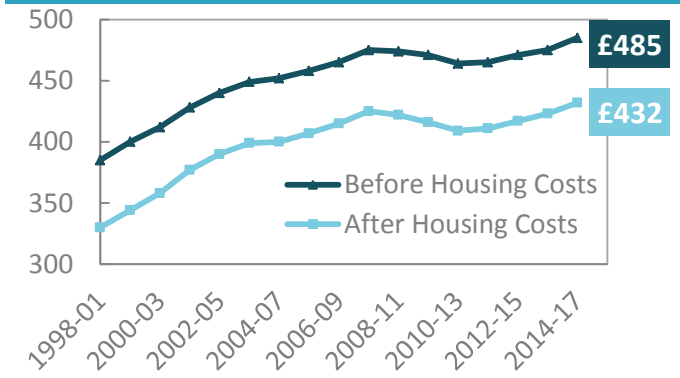
Palma inequality measure increasing



The Palma coefficient measures income inequality. The top 10% of the population in Scotland had 24% more income in 2014-17 than the bottom 40% combined. This compares to 21% more income in 2013-16.

### Household income

Overall household income rising



Median income before housing costs in Scotland in 2014-17 was £485 a week. Compared to 2013-17, this is an increase by 2%, equivalent to £10 a week.

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Comments? Feedback is welcome

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## What you need to know

Statistics in this report are taken from the Family Resources Survey. This survey is the main source of information on household income and poverty in Scotland. Users include the Scottish Government, local authorities, academia, journalists and the voluntary sector.

### Income and poverty measures

In this publication, unless otherwise stated, statistics are based on net income. That is, income after taxes and including social security payments. All incomes are in 2016/17 prices (real prices). All figures in this publication are rounded to the nearest pound or whole percentage point. Poverty is measured at the household level. If the household income is below the poverty threshold, all people within the household are in poverty.

### Survey data

The estimates presented in this publication are based on a sample survey and are therefore subject to sampling error. Annual changes in the numbers and percentages of people in poverty presented in the body of this report are not statistically significant. In time series, looking at longer term trends offers a better indicator of significant change.

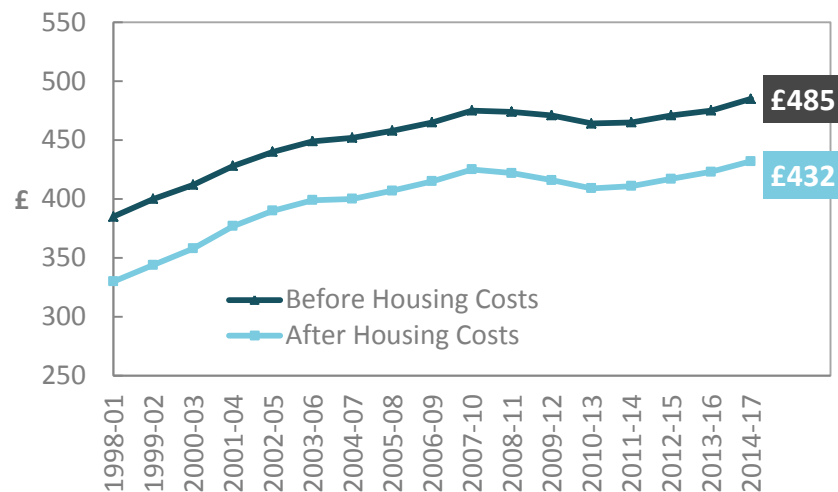
### Three-year averages

In this year's update, the data is presented for the first time as three-year rolling averages of each estimate. Rolling updates compare the most recent three financial years to the previous three financial years. For example, the latest estimates (2014-17) are an average of the single-year estimates in the financial years 2014/15, 2015/16 and 2016/17, and the previous estimates are an average of the single-year estimates in the financial years 2013/14, 2014/15 and 2015/16. This means, that the latest estimate and the previous estimate are based on two years' worth of the same data.

This change ensures the statistics are usable and understandable, and that they are comparable with poverty and income statistics reported by the Department for Work and Pensions. Single-year estimates are still available in the associated tables. Single-year estimates are best used for understanding the current situation, whereas trends over time are better identified using three-year estimates.

# Median household income continues to increase slowly since last recession

## Ch1. Median weekly household income



In 2014-17, median household income before housing costs was £485 per week, compared to £475 in 2013-16. Median income has increased steadily since the last recession and has reached its highest level since reporting began.

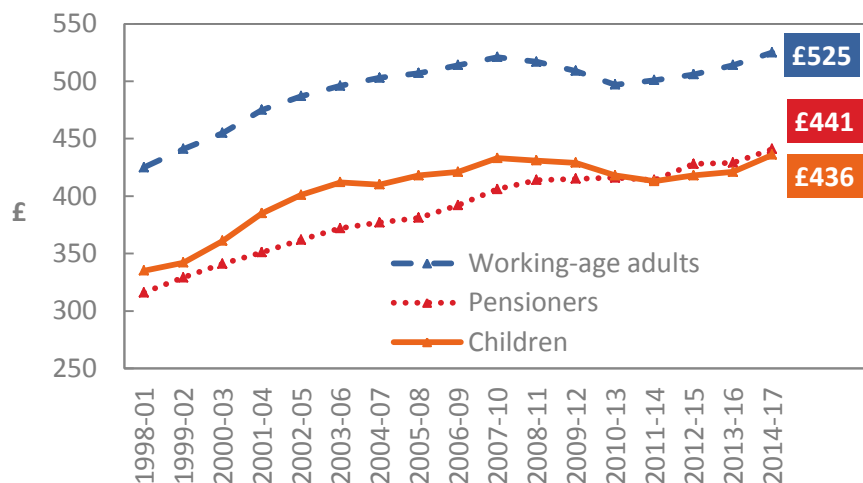
Median income after housing costs has followed the same trend to median income before household costs. Median income after housing costs was £432 per week in 2014-17, at its highest level since reporting began.

Median incomes are rising for all age groups: children, working-age adults and pensioners.

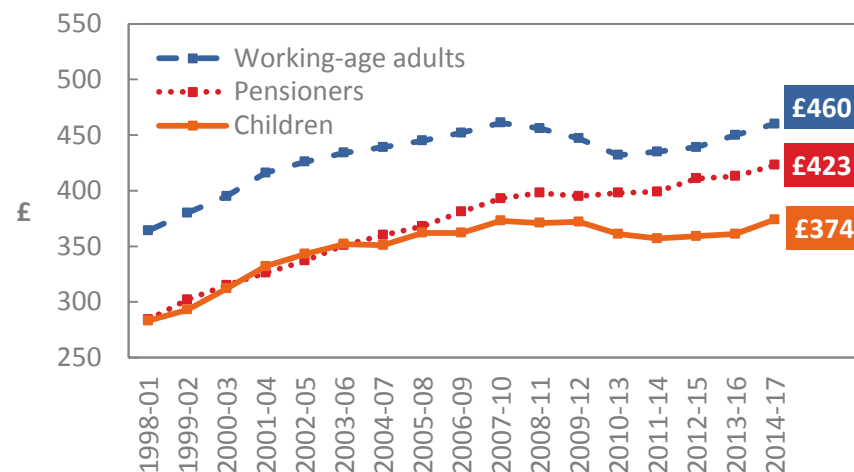
All incomes are quoted in 2016/17 prices.

## Median weekly household income for children, working age adults and pensioners

### Ch2. Before housing costs

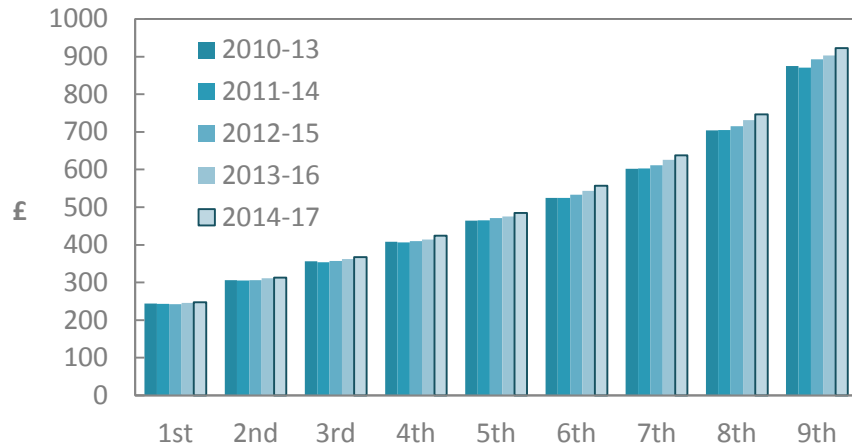


### Ch3. After housing costs



# Household income increased more for higher incomes

## Ch4. Weekly household income before housing costs for each decile point

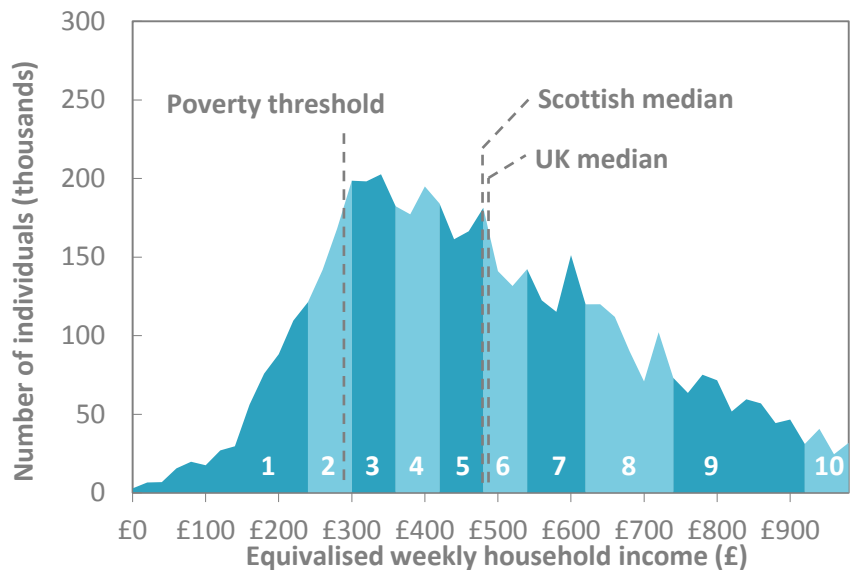


This chart shows how weekly equivalised incomes before housing costs have changed from 2010-13 to 2014-17 across the different income decile points. Generally, the bottom deciles saw smaller increases compared to the top deciles, both in absolute as well as relative terms.

After housing costs data is available in the associated tables.

Deciles (or **decile points**) are the income values which divide the Scottish 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 percent of the income distribution.

## Ch5. Distribution of weekly household income with income decile points, medians and relative poverty threshold



This chart shows the distribution of weekly income before housing costs across Scotland in 2014-17 with relative poverty threshold (£291), Scottish and UK median incomes (£485 and £486), and income decile groups.

The relative poverty threshold is based on the UK median equivalised household income.

Many people have household incomes near the poverty threshold. This means that small movements in the overall distribution can sometimes lead to sizeable movements in poverty rates.

**Decile groups** are groups of the population defined by the decile points. The lowest decile group is the ten percent 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.

## Household income for different household types

### Distribution of weekly household income with income decile points

Most of the income figures in this publication are based on **equivalised income**. This means that household income is adjusted to reflect different household sizes and compositions. There are different poverty thresholds for different household sizes. The table below presents some commonly used income thresholds, before equivalisation and after tax and transfers, for households of different sizes.

The incomes presented elsewhere in this report use the value for “Couple with no children” as the standard, and all other household types are adjusted to reflect their different household composition. After housing costs data is available in the associated tables.

### T1. Income thresholds for different household types before housing costs 2014-17

	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
<b>UK median income (before housing costs)</b>	325	17,000	486	25,300	583	30,400	743	38,700
<b>Scottish median income (before housing costs)</b>	325	16,900	485	25,300	582	30,300	742	38,700
<b>60% of UK median income - relative poverty threshold</b>	195	10,200	291	15,200	350	18,200	446	23,200
<b>60% of inflation adjusted 2010/11 UK median income (before housing costs) - absolute poverty threshold</b>	186	9,700	278	14,500	334	17,400	426	22,200
<b>Scottish 1st income decile</b>	166	8,600	247	12,900	297	15,500	378	19,700
<b>Scottish 2nd income decile</b>	210	10,900	313	16,300	376	19,600	479	25,000
<b>Scottish 3rd income decile</b>	246	12,800	367	19,200	441	23,000	562	29,300
<b>Scottish 4th income decile</b>	284	14,800	424	22,100	509	26,500	649	33,800
<b>Scottish 5th income decile</b>	325	16,900	485	25,300	582	30,300	742	38,700
<b>Scottish 6th income decile</b>	373	19,500	557	29,100	669	34,900	852	44,500
<b>Scottish 7th income decile</b>	428	22,300	638	33,300	766	39,900	976	50,900
<b>Scottish 8th income decile</b>	500	26,100	747	38,900	896	46,700	1,143	59,600
<b>Scottish 9th income decile</b>	619	32,300	923	48,100	1,108	57,800	1,413	73,700

Note: to split the population into ten decile groups only nine decile points are needed

# The majority of household income comes from earnings or social security payments

## Income sources as a percentage of gross income by decile

The chart below shows the different sources of gross income by decile, ranking the population by income and dividing into ten equal-sized groups. Income components are all considered before tax, this is therefore a different definition of household income from that used elsewhere in this report.

Higher income households receive a large proportion of income from earnings, and lower income households more of their income from social security payments.

Earnings account for around 40% of gross income for those in the first two deciles compared to over 80% for those in the top three deciles.

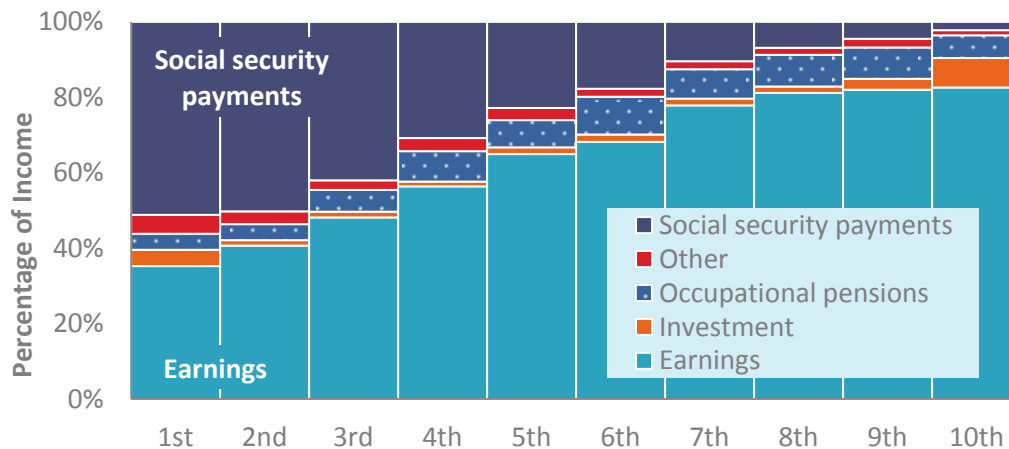
The proportion of household income from earnings exceeds that from social security payments for around 80% of the population (those above the 2<sup>nd</sup> percentile point).

Income sources look different for different household types. Here, we look at households with children, households that contain working-age adults only, and households that contain pensioners only.

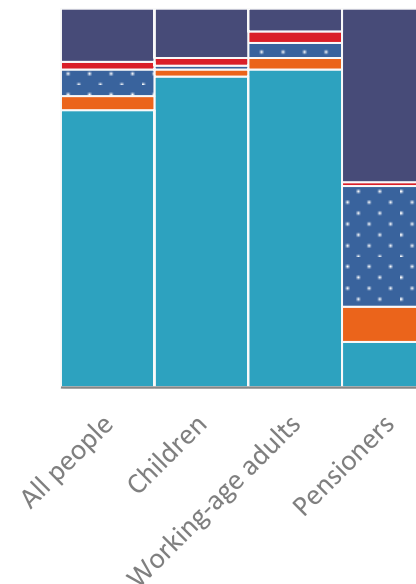
On average, working-age adults receive the largest proportion of their income from earnings, and pensioners the smallest.

Household income for children is made up of a higher proportion of social security payments compared to working-age adults' income.

## Ch6. Income sources for all individuals by decile 2014-17

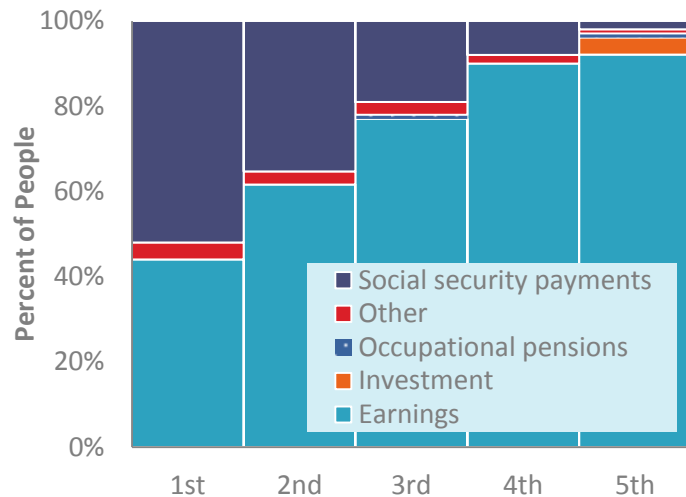


## Ch7. Income sources by age group 2014-17



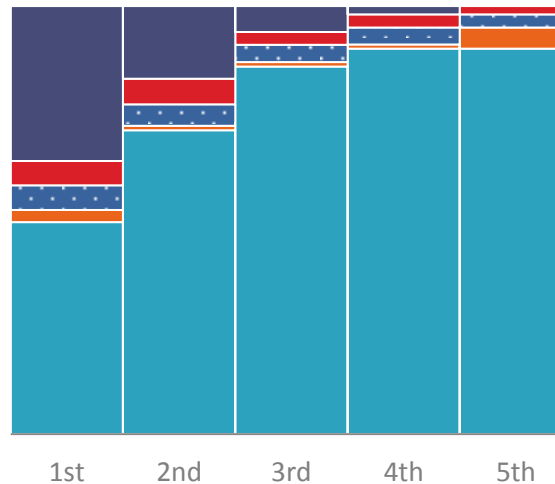
# The majority of household income comes from earnings or social security payments

**Ch8. Income sources for households with children 2014-17**



Households with children receive the majority of their income from earnings. Social security payments generally make up a larger proportion of income for households with children compared to households with working-age adults only. This is because households with children are eligible for different social security payments.

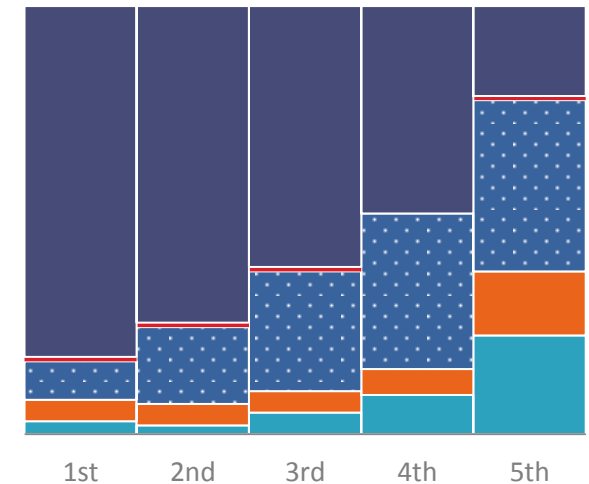
**Ch9. Income sources for households containing working-age adults only 2014-17**



Households containing only working-age adults receive an even larger part of their income through earnings compared to households with children. On average, people in working-age adult households receive a larger proportion of their household income from earnings than all other income sources combined.

Some working-age adults receive occupational pensions. The data suggests that these are early retirees.

**Ch10. Income sources for households containing pensioners only 2014-17**



Overall, pensioner households receive almost 80% of their income through occupational pensions and social security payments (including state pension).

Generally, pensioners in higher income quintiles receive a larger share of their income as an occupational pension.

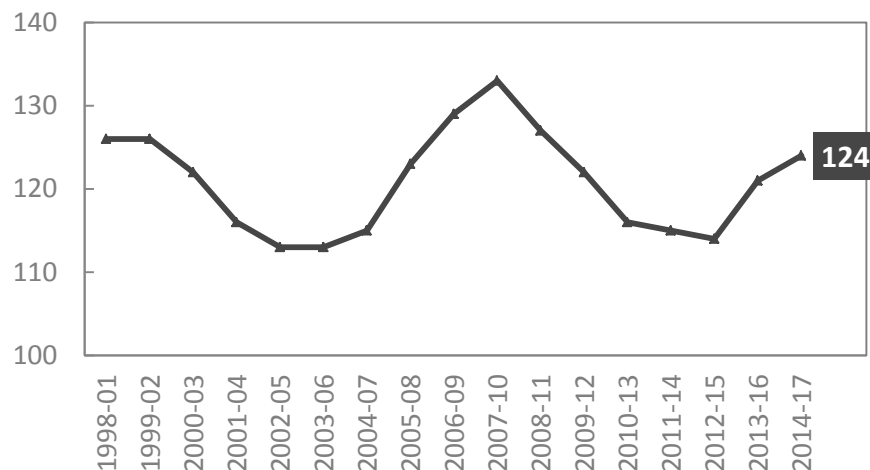
In the highest income quintile, 15% of pensioners' income comes from earnings.

The charts on this page divide each population into five income groups (quintiles) rather than ten (deciles) as shown on the previous page. This is to ensure that the estimates shown here are based on large enough samples in each quintile group to be reliable.

## Income inequality rising after a decrease following the end of the recession

The two inequality measures shown below generally follow the same trend. However, rounding leads to small differences in the shape of each time series.

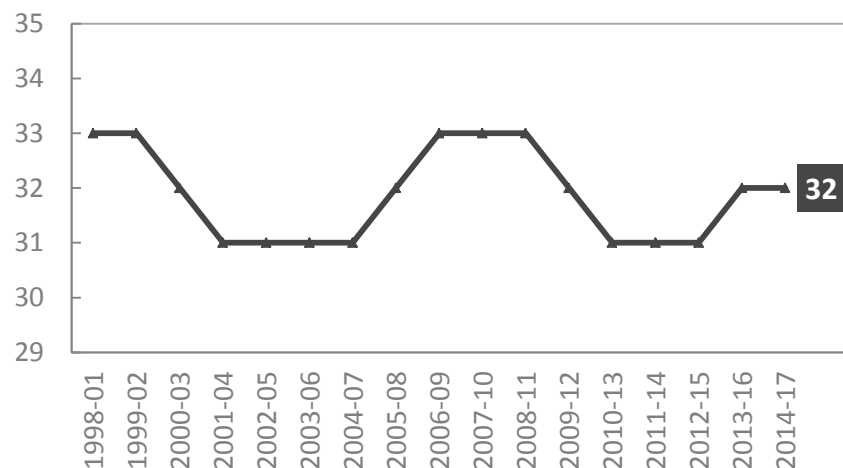
### Ch11. Palma measure of inequality



This chart shows the ratio of total income received by the top ten percent of the population divided by the total income of the bottom forty percent of the population (expressed as a percentage) over time. This measure of how equally income is distributed across the population is known as the “Palma ratio” or “S90/S40 ratio”. Palma is used internationally to estimate the extent of inequality between those at the top of the income distribution and those at the bottom and is currently used in Scotland to monitor progress towards the Scottish Government’s Solidarity Purpose Target.

The top ten percent of the population had 24% more income in 2014-17 than the bottom forty percent combined. Comparing this to the two previous three-year periods might suggest an increasing trend of income inequality.

### Ch12. Inequality of household income as measured by the Gini coefficient



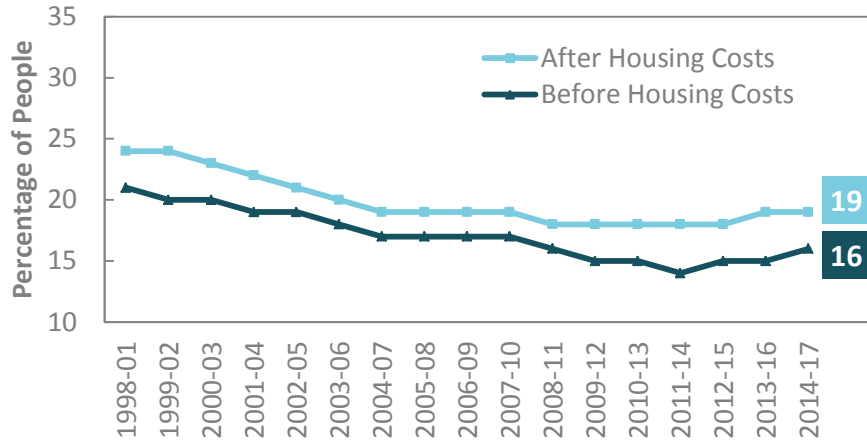
The Gini coefficient is a measure of how equally income is distributed across the population. It takes a value between 0 and 100, with 0 representing perfect equality where every person has the same income. The larger the Gini coefficient, the more people towards the top of the income distribution have a greater share of overall income with a value of 100 representing the case where one individual has all the income. In practice, the proportion of overall income going to each individual increases gradually across the income distribution.

In 2014-17, the Gini coefficient for Scotland was 32, unchanged from 2013-16, but higher than in the previous three-year periods.



# Relative poverty slowly rising, absolute poverty falling

## Ch13. Relative poverty rate for all individuals

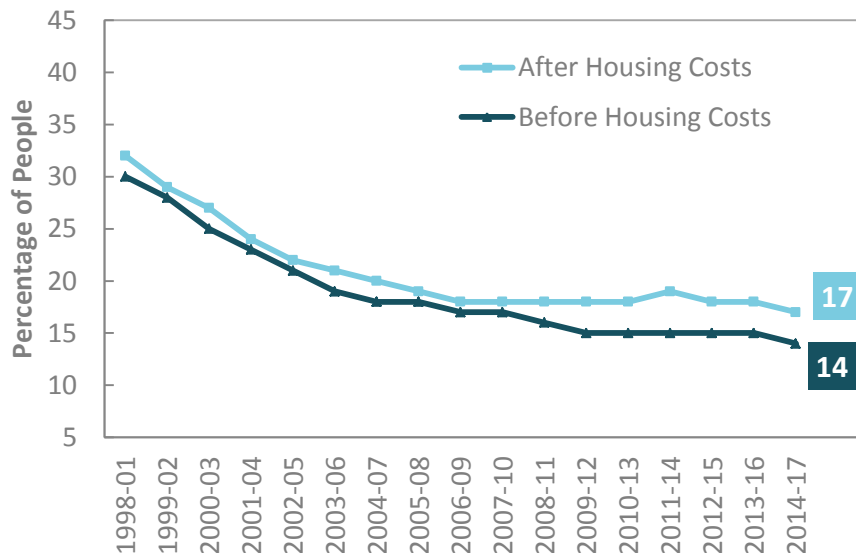


It is estimated that 16% of Scotland’s population, or 860,000 people each year, were living in relative poverty before housing costs in 2014-17. This compares to 15% in the previous period. After housing costs, 19% of Scotland’s population, or 1 million people each year, were living in poverty in 2014-17, the same as in 2013-16.

Relative poverty is a measure of whether the income of the poorest households are keeping pace with middle income households across the UK.

Poverty rates before housing costs in Scotland have been falling since the late nineties, but recent years’ data suggest a slow increase since the recession. After housing costs, relative poverty rates have been rising since the all-time low in 2011-14.

## Ch14. Absolute poverty rate for all individuals



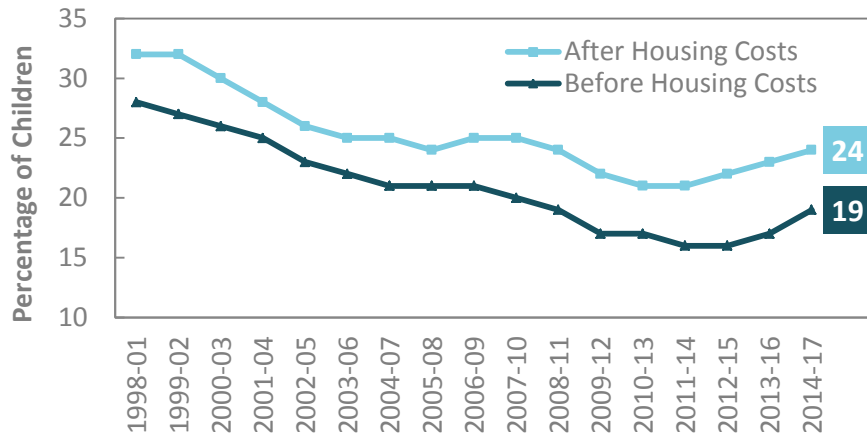
It is estimated that 14% of Scotland’s population, or 750,000 people each year, were living in absolute poverty before housing costs in 2014-17. This is roughly the same as in the previous period. Absolute poverty rates have stagnated over the last nine years following a decline until 2009-12.

After housing costs, 17% of Scotland’s population, or 910,000 people each year, were in absolute poverty. The trend is similar to the the before housing costs measure, although the stagnation happened sooner.

Absolute poverty is a measure of whether the incomes of the poorest households are keeping pace with inflation, and is based on the poverty threshold in 2010/11. The gap between before and after housing costs measure had widened in recent years, and remained steady in 2014-17.

# Child poverty: relative poverty rising, absolute poverty broadly stable

## Ch15. Relative poverty rate for children

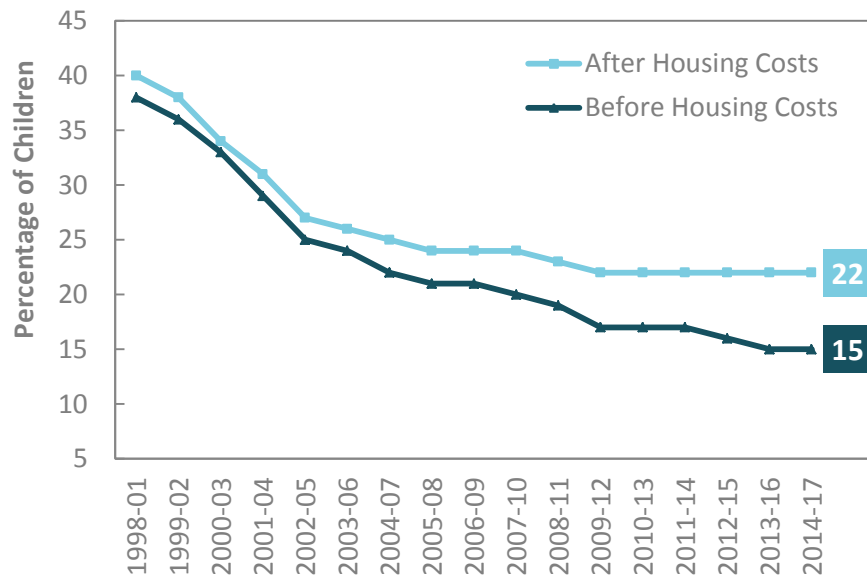


It is estimated that 19% of children, or 180,000 children each year, were in relative poverty before housing costs in 2014-17. This compares to 17% in the previous three-year period.

After housing costs, it is estimated that 24% of children, or 230,000 children each year, were in relative poverty.

Child poverty rates had been falling for many years, but have started to rise again since 2011-14.

## Ch16. Absolute poverty rate for children



Absolute child poverty before housing costs remained at 15%, or 150,000 children each year, after a long slow decrease.

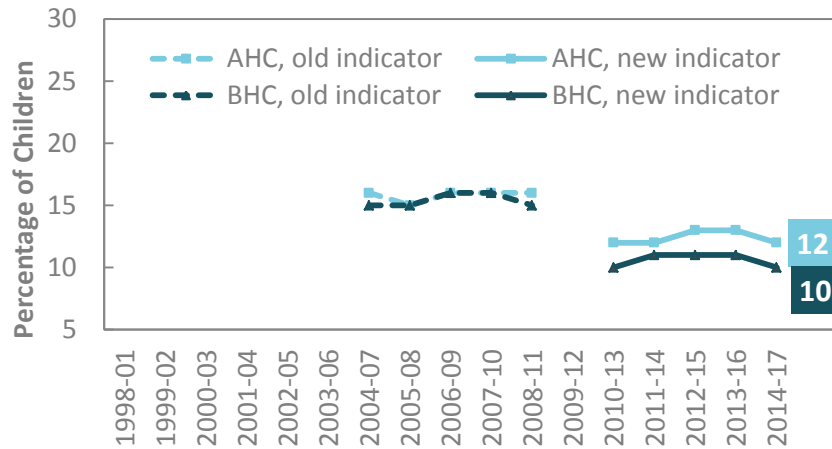
After housing costs, absolute child poverty is stagnating at 22%, or 210,000 children each year, the same as in the previous years.

As a result of the differing trends, the gap between absolute poverty before and after housing costs has widened in recent years.

The Child Poverty (Scotland) Act 2017 requires us to report annually on a number of child poverty measures. The latest single year figures can be found in a separate update here: <http://www.gov.scot/Topics/Statistics/Browse/Social-Welfare/IncomePoverty>

# Children in combined material deprivation and low income broadly stable; children in in-work poverty rising

## Ch17. Children in combined material deprivation and low income



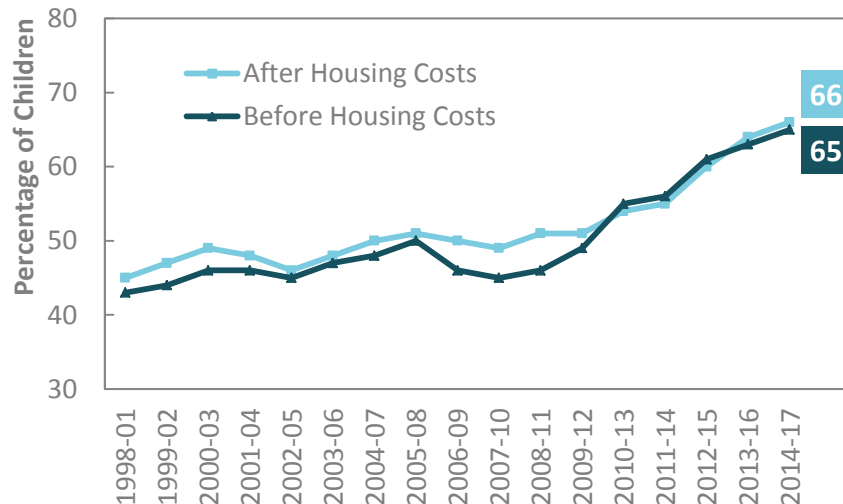
It is estimated that 10% of children, or 100,000 children each year, were living in combined low income before housing costs (BHC) and material deprivation in 2014-17, compared to 11% in 2013-16. After housing costs (AHC), this was 12% of children, or 110,000 children each year, compared to 13% in 2013-16.

Combined low income and child material deprivation is an additional way of measuring living standards and refers to the inability of households to afford basic goods and activities that are seen as necessities in society.

More detail on this can be found in the [Annex](#).

Due to a change in the methodology, it is not possible to compare the most recent years with years before 2010-13. Dashed lines in the chart indicate data collected before the change.

## Ch18. In-work poverty for children



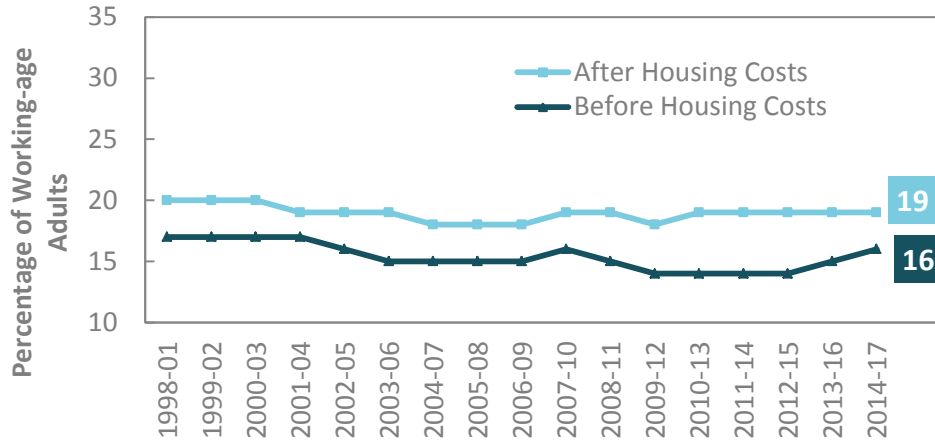
It is estimated that in 2014-17, 65% of children in relative poverty before housing costs, or 120,000 children each year, were living in working households, compared to 63% in the previous period. After housing costs, 66% of children in poverty were living in working households, compared to 64% in the previous period.

While the year-on-year change may not be statistically significant, recent years show a clear upward trend and the highest levels since reporting began.

The terms 'working' and 'in-work poverty' here refer to paid employment only. In-work poverty refers to people living in households where at least one member of the household is in either full or part-time paid work, but where the household income is below the relative poverty threshold.

# Working-age adults in poverty: relative and absolute poverty broadly stable

## Ch19. Relative poverty rate for working-age adults

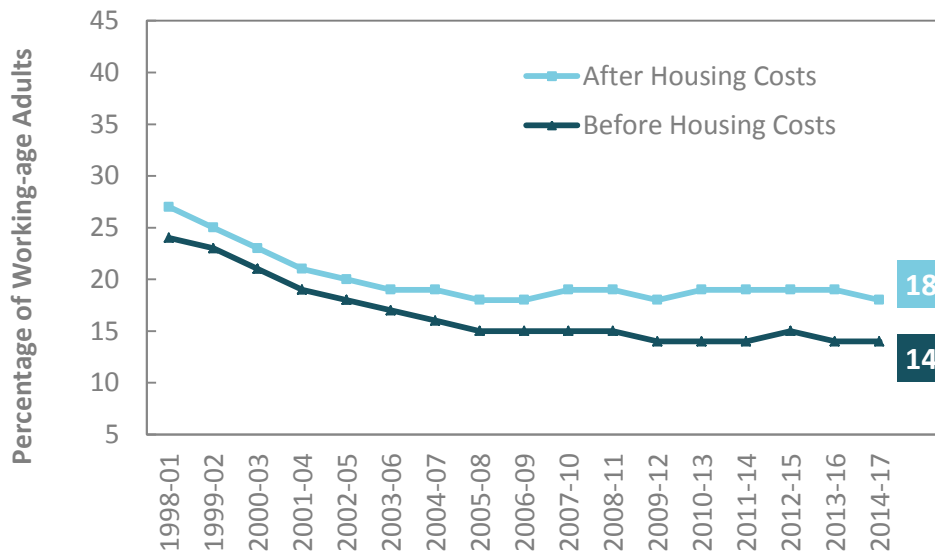


Relative poverty for working-age adults has been broadly stable since reporting began. Relative poverty in 2014-17 was estimated to be 16% before housing costs, and 19% after housing costs.

In 2014-17, there were 510,000 working-age adults in poverty before housing costs, and 630,000 after housing costs.

Working-age adults are defined as all adults up to the state pension age. Prior to April 2010, women reached the state pension age at 60. Between 2010 and 2016, the state pension age for women increased to 63, and it will subsequently increase to 65 by November 2018. At this point the state pension age for women and men will be the same.

## Ch20. Absolute poverty rate for working-age adults



Absolute poverty for working-age adults has remained stable for the last ten years. In 2014-17, 14% of working-age adults were in absolute poverty before housing costs, and 18% after housing costs.

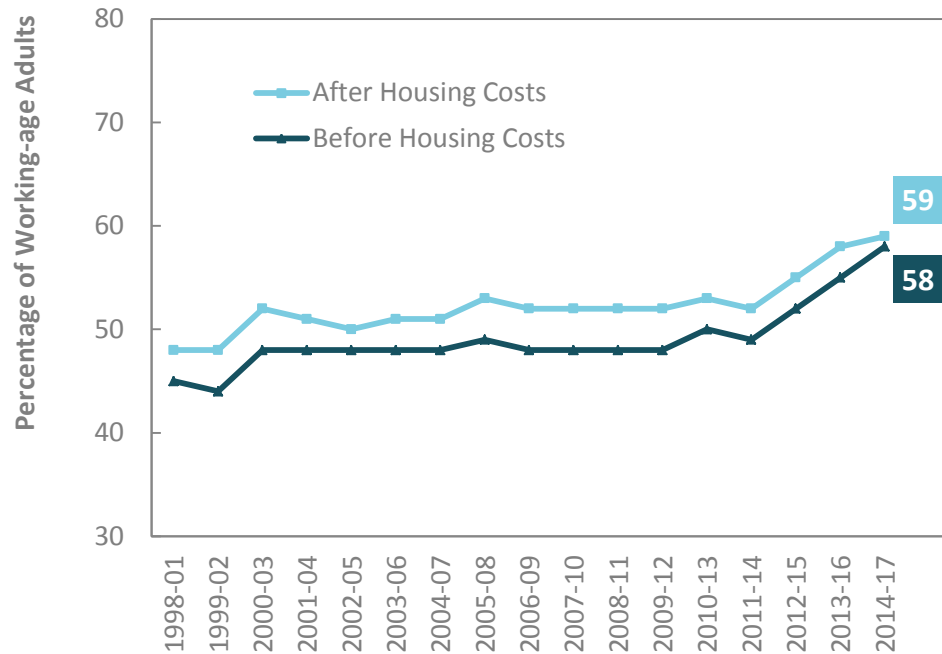
This means that there were 450,000 working-age adults each year in absolute poverty before housing costs, and 580,000 after housing costs.

Working-age adults are considered to be in poverty when they live in a household in poverty.

Poverty is measured at the household level. If the household income is below the poverty threshold, all people within the household are in poverty.

# Working-age adults in poverty: in-work poverty rising

## Ch21. In-work poverty for working-age adults



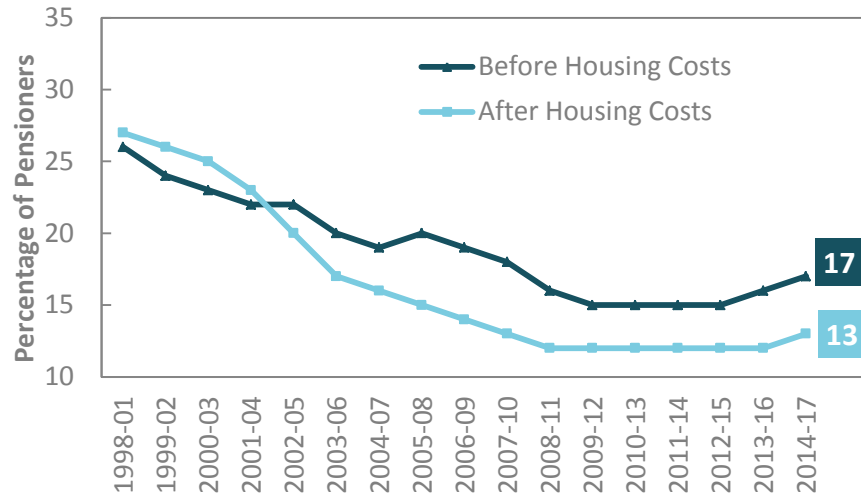
In 2014-17, 58% of working-age adults in relative poverty before housing costs were living in working households. After housing costs, this was 59% of working-age adults.

In-work poverty for working-age adults has continuously increased since 2011-14, and both, before and after housing costs measures were at an all time high in 2014-17 since reporting began.

The terms 'working' and 'in-work poverty' here refer to paid employment only. In-work poverty refers to people living in households where at least one member of the household is in either full or part-time paid work, but where the household income is below the relative poverty threshold.

# Pensioners in poverty: relative and absolute poverty broadly stable

## Ch22. Relative poverty rate for pensioners

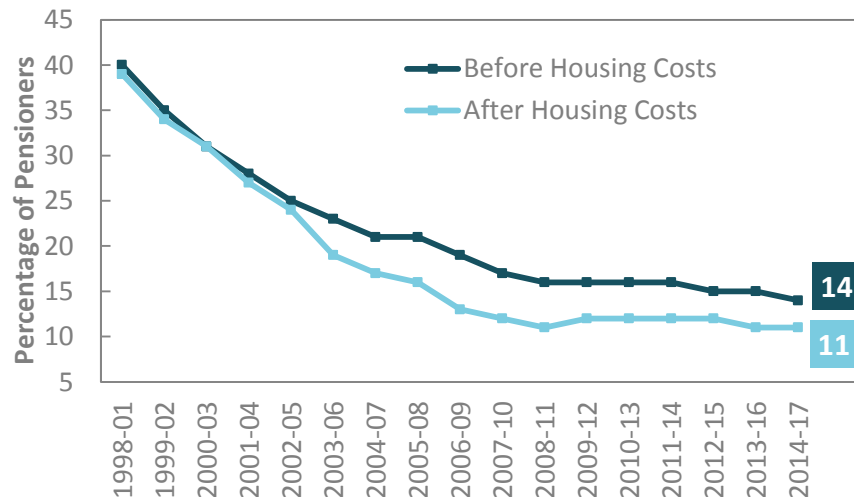


Relative poverty before housing costs for pensioners was 17% in 2014-17, or 170,000 pensioners each year. While this appears higher than in the two previous three-year periods, these changes are not statistically significant, and more data points will be needed to confirm whether it represents a long-term trend.

After housing costs, 13% of pensioners, 140,000 pensioners each year, were in relative poverty in 2014-17, which has been broadly stable since 2008-11.

The majority of pensioners own their home. Examining pensioners' income after deducting housing costs allows for more meaningful comparisons of income between working-age adults and pensioners, or for pensioners over time.

## Ch23. Absolute poverty rate for pensioners



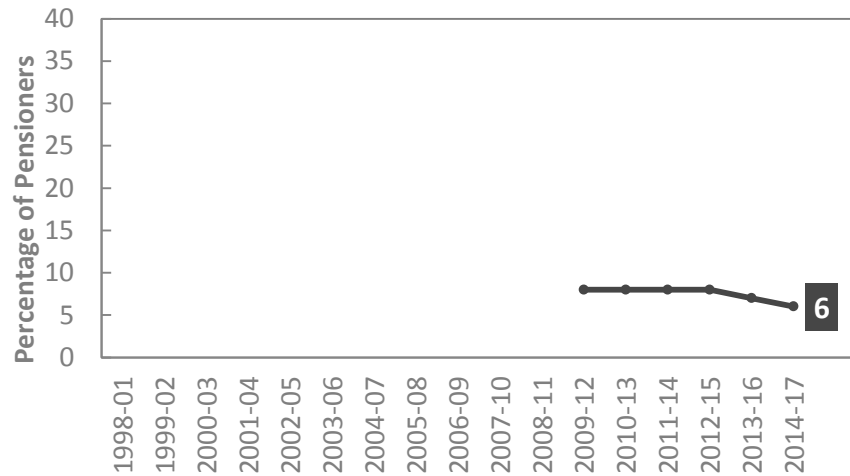
Absolute poverty before housing costs for pensioners was 14%, or 140,000 pensioners each year, in 2014-17. After housing costs, it was 11%, or 120,000 pensioners each year.

Absolute poverty remained broadly stable since 2008-11 following a continuous decrease since reporting began.

Pensioners are defined as all those adults above state pension age. State pension age for men is 65, state pension age for women has been increasing since 2010 and will be the same as for men by November 2018.

# Pensioners in material deprivation broadly stable

## Ch24. Pensioners in material deprivation



The figures show a fall in pensioner material deprivation over the last two three-year periods, but more years of data will be required to determine whether this represents a sustained change in trend.

Pensioner material deprivation is different to other measures of poverty, including the child low income and material deprivation measure, in that it is not associated with an income threshold. It captures issues such as whether poor health, disability and social isolation prevent access to goods and services, rather than solely low income. More information about pensioner material deprivation can be found in the [Annex](#).

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.

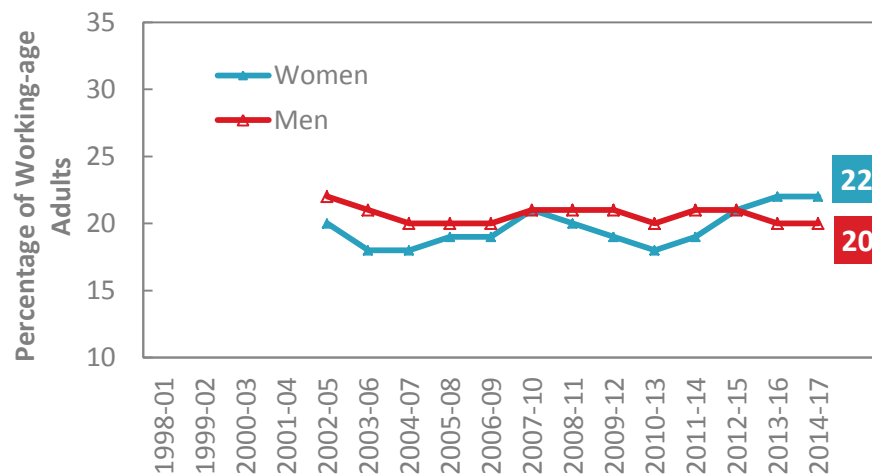
## Gender and poverty: Poverty for working-age women higher than men in recent years

It is difficult to measure each individual's income in a household, because income is measured at a household level. Everyone in a household will be either above or below the poverty threshold. This methodology means that for the 60% of women and men who live in couple families (with or without children), the measured rate of poverty will always be similar. In the analysis below, we therefore only include single people.

### Relative poverty rates for single working-age adults without dependent children, by gender

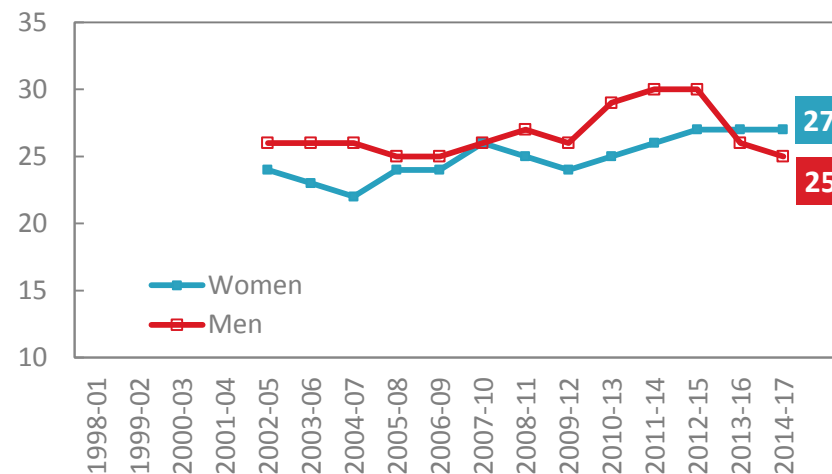
#### Ch25. Before housing costs

Over the last 10 years there has generally been little difference between men and women and in 2014-17 22% of single working age women were in poverty compared to 20% of single working age men.



#### Ch26. After housing costs

After housing costs are taken into account, the rate of poverty in 2014-17 is slightly higher for single working age women (27%) than men (25%). The increased poverty rate for working-age men from 2010-13 through to 2012-15 is due to an unusually high poverty rate in the sample in one of the years, and might not reflect a genuine increase. In the following years, the rate of poverty for working-age men has fallen back to previous levels.



#### Lone parents

Lone parents were excluded from this analysis, but are included in the analysis on the next page.



## Gender and poverty: Poverty for working-age women higher than men in recent years

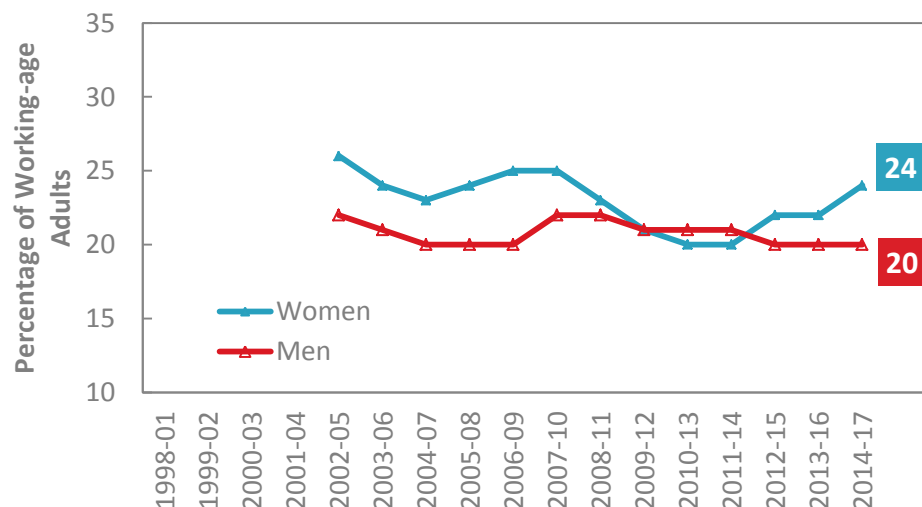
In the analysis below, all single working-age adults are included, whether or not they have children.

### Relative poverty rates for single working-age adults, by gender

When lone parents are included in the analysis, the gap between poverty rates for men and women increases. The reason for this is that the poverty rates for lone parents are higher than for single working-age adults without children. Around 90% of lone parents are women, so the poverty rate for all single working-age women will see a larger increase than for men when lone parents are included.

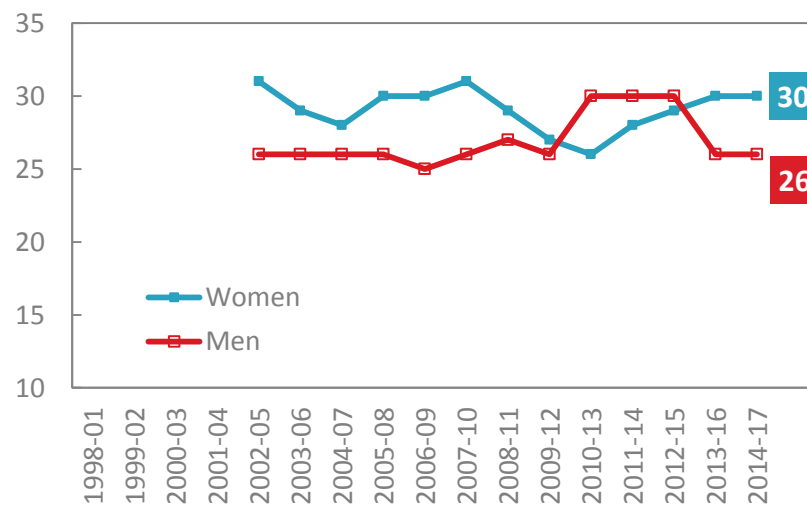
#### Ch27. Before housing costs

In 2014-17, the poverty rate before housing costs of single working-age women was 24% and 20% for men. Over the past ten years, the poverty rate has been slightly higher for women in most years. The gap narrowed between 2007-10 and 2011-14, as the poverty rate for working-age women fell slightly, though this has reversed in recent years.



#### Ch28. After housing costs

After housing costs, the poverty rate of single working-age women was 30% in 2014-17. In comparison, the poverty rate for single working-age men was 26%. The poverty rate for women has largely remained stable at around 30%, though dipped slightly between 2008-11 and 2011-14, before increasing again. The poverty rate for men increased from 2010-13 through to 2012-15 due to an unusually high poverty rate in the sample in one of the years, and might not reflect a genuine increase.



# Gender and poverty: poverty higher for female pensioners than for male pensioners

## Relative poverty rates for single pensioners, by gender

### Ch29. Before housing costs

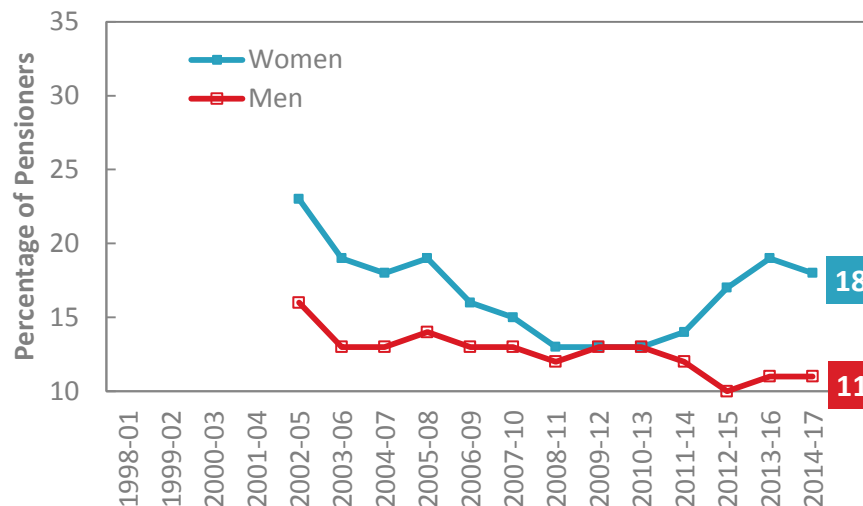
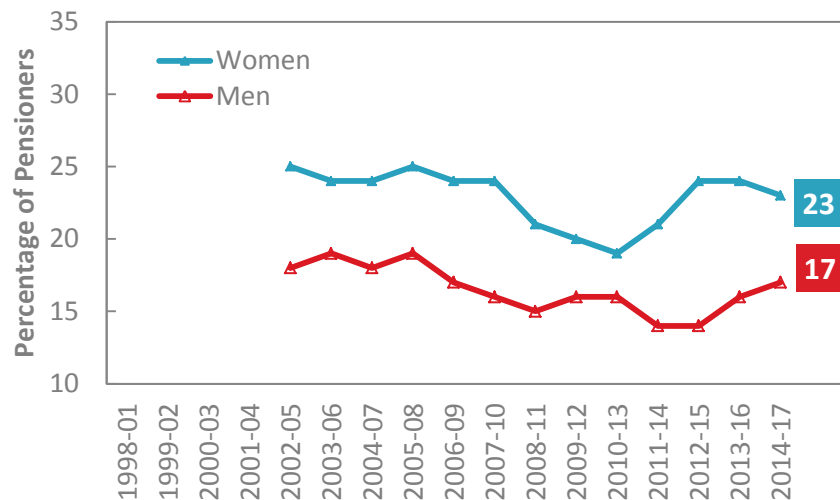
In 2014-17, 23% of single female pensioners and 17% of single male pensioners were in relative poverty before housing costs.

Over the past ten years, the poverty rate before housing costs for single female pensioners has been higher than that for single male pensioners.

### Ch30. After housing costs

In 2014-17 18% of single female pensioners and 11% of single male pensioners were in poverty after housing costs.

The rate for female pensioners has tended to be higher than that for men. The gap closed slightly between 2008 and 2014, but has since widened again.



Some of the difference in pensioner poverty between genders may be due to different age profiles. Female pensioners are on average older than male pensioners because of their longer life expectancy. Older pensioners may have access to different income sources which may result in them having lower incomes.

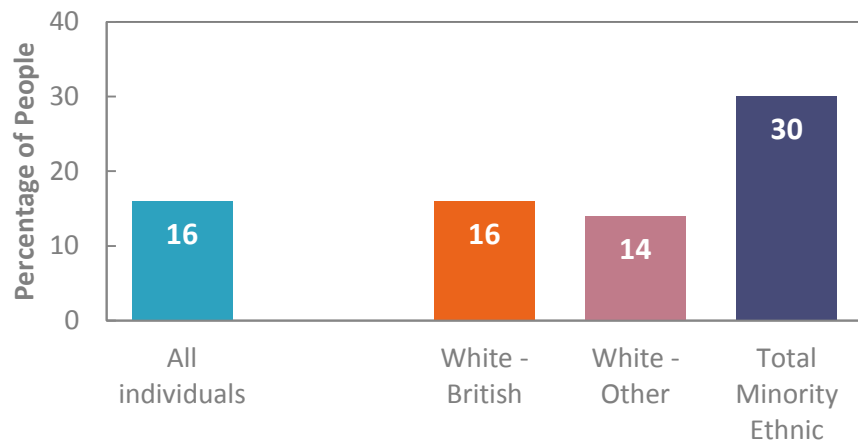
# Ethnicity and poverty: poverty higher for minority ethnic groups

## Relative poverty rates by ethnic background

People from minority ethnic (non-white) groups are more likely to be in poverty, both before and after housing costs, compared to those from the 'White - British' group. The poverty rate amongst the 'White – Other' group is similar to that of the 'White – British' group before housing costs but rises well above it after housing costs.

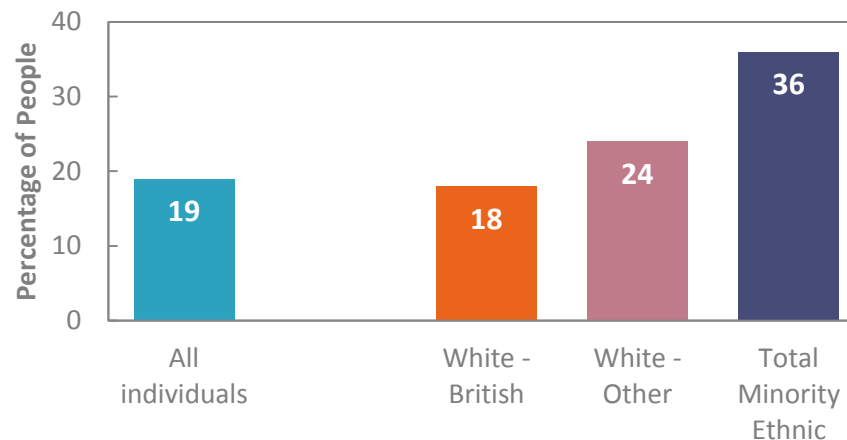
### Ch31. Before housing costs

30% of people from minority ethnic backgrounds were in poverty before housing costs in 2014-17. This compares to 16% in the 'White – British' category, and 14% in the 'White – Other' category.



### Ch32. After housing costs

Over a third of people in minority ethnic groups were in poverty after housing costs were taken into account. For comparison, the poverty rate for the 'White – British' group was 18%.



## More information

Data has been collected for additional categories to those shown above. However, The 'Asian / Asian British', 'Mixed', 'Black / Black British' and 'Other' ethnic groups all have sample sizes that are too small to reliably report on their own. Therefore, although it is far from ideal, they have been combined into a single category so that they can be reported with confidence.

Due to the small sample sizes for some of the ethnic groups, the measurement uncertainty will be fairly large. This means that there is uncertainty over the precise poverty rates, making it difficult to compare different years. A time series hasn't been produced for poverty rates by ethnicity, as this uncertainty in the data will obscure any long-term trends.

## Disability and poverty: Poverty higher when a family member is disabled

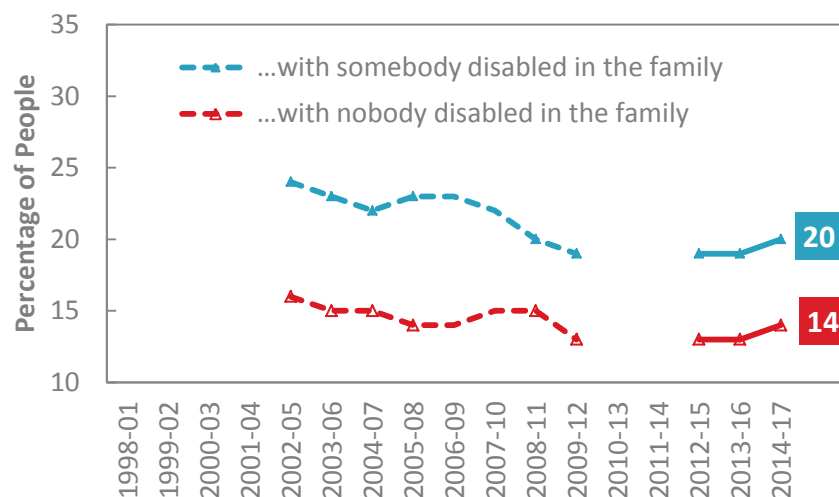
Due to a change in the way information on people with disabilities was collected, it is not possible to compare the most recent years with years before 2012-15, but before that, poverty had been decreasing for both groups. Since 2012/13, disabled people are identified as those who report any physical or mental health condition(s) or illness(es) that last or are expected to last 12 months or more, and which limit their ability to carry out day-to-day activities.<sup>1</sup> Dashed lines in the charts below indicate data collected before the change.

### Relative poverty rates by whether a family member is disabled

Poverty rates remain higher for families in which somebody is disabled. The gap between the two groups has remained fairly steady over the last few years.

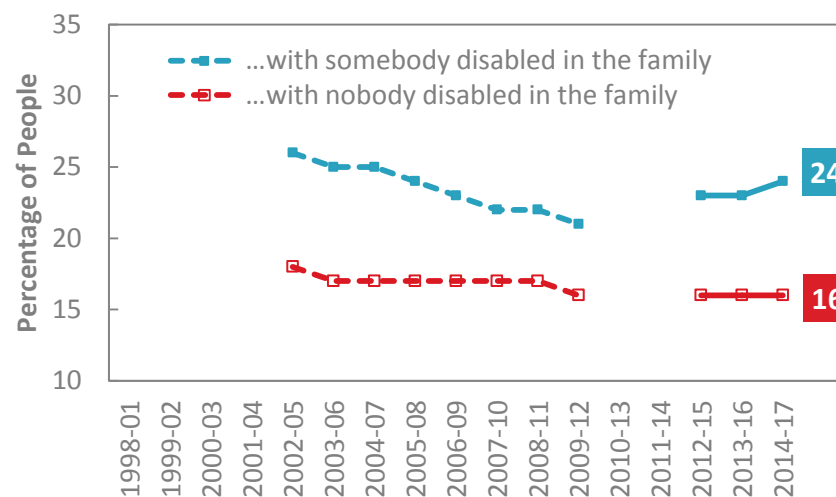
#### Ch33. Before housing costs

In 2014-17, 20% of those in a family with a disabled person were in poverty before housing costs compared to 14% of those in families without a disabled person.



#### Ch34. After housing costs

In 2014-17, the poverty rate after housing costs for families with a disabled person was 24%. This compares with 16% of people in a family without a disabled person who were in poverty.



### Additional living costs

The previous measure of poverty doesn't take into account the fact that additional living costs may be incurred due to the illness or disability in question. The analysis on the following page attempts to make an adjustment to the poverty rates to partly account for this for those households where someone is in receipt of disability benefits.

<sup>1</sup> More detail can be found in the HBAI technical report: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/599163/households-below-average-income-quality-methodology-2015-2016.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/599163/households-below-average-income-quality-methodology-2015-2016.pdf)

## Disability and poverty: Poverty higher when a family member is disabled

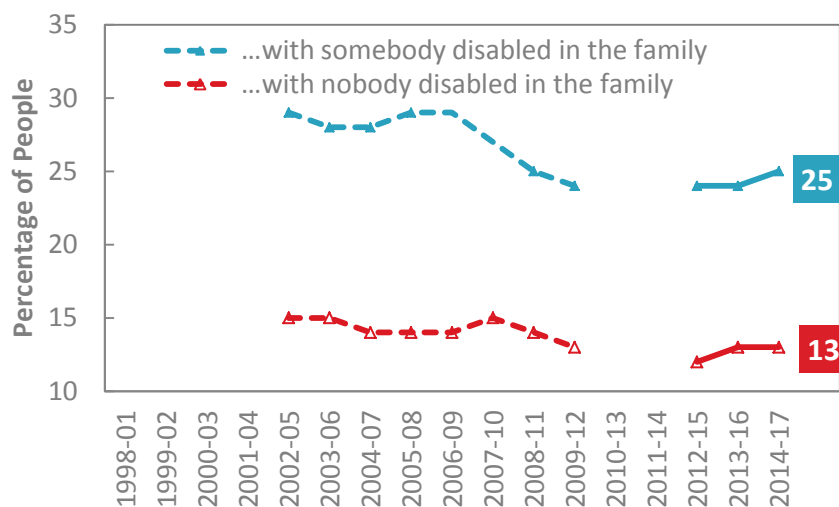
### Relative poverty rates after housing costs, with disability benefits removed from household income, by whether a family member is disabled

Whilst it is recognised that there are additional costs associated with disability, research shows that these vary greatly in level and nature, and there is no general agreement on how to measure these costs.

The analysis below excludes Disability Living Allowance, Attendance Allowance and Personal Independence Payments from income. These are benefits paid as a contribution towards the additional living costs that households where nobody is disabled don't have, so by excluding these from income we are able to compare on a more like for like basis.

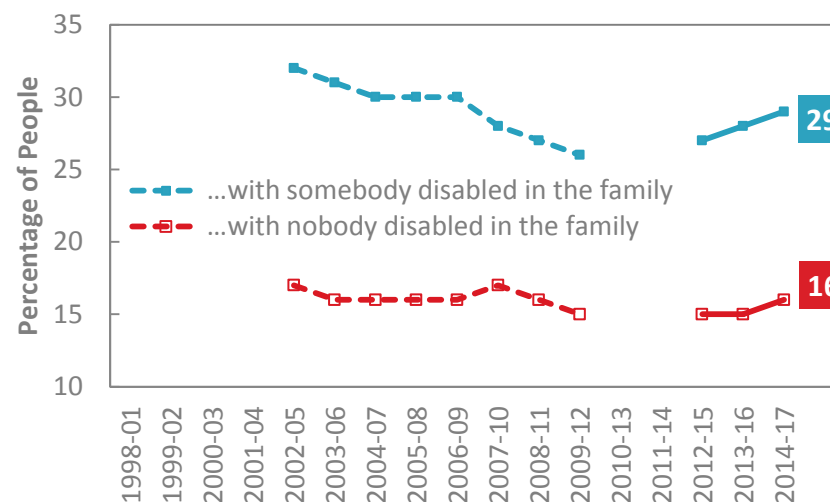
#### Ch35. Before housing costs

In 2014-17, as in previous years, the poverty rate was higher for individuals in families with a disabled person, when disability related benefits are not included. Before housing costs, the poverty rate was 25% for individuals with a disabled family member, and 13% for individuals without a disabled family member.



#### Ch36. After housing costs

Similar to the before housing costs measure, the poverty rate was higher for individuals in families with a disabled person in 2014-17. After housing costs, the poverty rate was 29% for individuals with a disabled family member, and 16% for individuals without a disabled family member.



Excluding disability benefits from the analysis results in some households moving down the income distribution, which will lower the median income and poverty threshold. As a consequence, some families without a disabled person that were just below the poverty threshold in the previous analysis will be above the threshold here.

## 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: 2016/17' on the same day as 'Poverty and Income Inequality in Scotland: 2014-17'. For the UK figures, as well as more detail about the way these figures are collected and calculated, see the DWP website: <https://www.gov.uk/government/collections/households-below-average-income-hbai--2>

Further analysis of these figures will be published on the Scottish Government income and poverty statistics website shortly. This will include figures on the interaction between income, poverty, disability and housing tenure: <http://www.gov.scot/Topics/Statistics/Browse/Social-Welfare/>

### Persistent Poverty figures

New figures on persistent poverty were published on 22 March 2018 and can be found on our website: <http://www.gov.scot/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/PersistentPoverty>

Persistent poverty identifies the number of individuals living in relative poverty for 3 or more of the last 4 years. It therefore identifies people who have been living in poverty for a significant period of time, the rationale being that this is more damaging than brief periods spent with a low income, with the impacts affecting an individual through their lifetime.

These figures come from the Understanding Society survey which tracks individuals over time. The persistent poverty figures are not directly comparable to the figures in this publication as they use different income definitions and cover different time periods, but they provide useful additional information on poverty in Scotland.

### 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 below. Thus, all members of any one household will appear at the same point in the income distribution.

## 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.

## 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. An adjustment is made to sample cases at the top of the income distribution to correct for volatility in the highest incomes captured in the survey.

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 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 payments, 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.

## Income sources

The analysis on income sources is the only analysis in this report **not** using net income. This analysis is based on income before taxes from employment or self-employment, social security payments, investment, occupational pensions and other income. In some cases, income from self-employment was negative in a year, for example, when someone in self-employment made a loss. In these cases, total income from earnings was reset to zero.

## Real prices

Unless otherwise stated, all figures relating to income are in 2016/17 prices. Values from previous years are updated to account for inflation using the Consumer Price Index (CPI). This follows a change in methodology for 2014/15. Prior to this the Retail Price Index (RPI) was used.

This change followed an announcement by the National Statistician that, in accordance with the Statistics and Registration Service Act 2007, the RPI and its derivatives had been assessed against the Code of Practice for Official Statistics and found not to meet the required standard for designation as National Statistics.

Following a subsequent review the National Statistician, John Pullinger, wrote to the Chair of the UKSA, Sir Andrew Dilnot, setting out his view that RPI “is not a good measure of inflation” and that future usage is strongly discouraged in favour of alternative measures.

This led to a change in HBAI methodology in 2014/15 and the Scottish Government adopted the change in deflator to allow consistent poverty estimates for Scotland and the UK.

Full details can be found at this link: [Methodological changes to poverty statistics](#)

## Equivalisation

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, for example, 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.gov.scot/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/PovertyMethodology>

## Poverty measurement from the Family Resources Survey

Individuals are defined as being in poverty if their equivalised net disposable household income is below 60 percent 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 percent of the median is the most commonly used low income measure.

For a couple with no children, the UK median income BHC in 2014-17 was £486 per week, which has increased by £11 in real terms since 2013-16. After housing costs the UK median increased by £11 to £417 per week in 2014-17.

Consequently, the 60 percent low income threshold, which is used to derive the low income household figures, has also increased in real terms, before and after housing costs. This means a household has to have a larger income in real terms to be above the poverty threshold.

## Relative and absolute poverty

- **Absolute poverty** - individuals living in households whose equivalised income is below 60 percent 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 percent 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 households 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). Together, these questions form the best discriminator between those households 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 households.

A prevalence weighted approach has been used, in combination with a relative low income threshold. The income threshold is 70 percent of the median income. Prevalence weighting is a technique of scoring deprivation in which more weight in the deprivation measure is given to households lacking those items that most in the population 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 2010/11

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. As such, there is a break in the series for child low income/material deprivation and estimates from 2010/11 onwards cannot be compared to those from before 2010/11.

In the 2010/11 FRS, both the new and the old questions were asked. As such, estimates are presented based on both sets of questions for this year.

For further information about material deprivation see the DWP [Households Below Average Income publication](#).

## 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 2009/10. 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://www.bristol.ac.uk/poverty/downloads/keyofficialdocuments/FRS%20cognitive%20testing%20of%20older%20people%20deprivation%20questions.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://www.bristol.ac.uk/poverty/downloads/keyofficialdocuments/FRS%20Older%20people%20deprivation%20questions%20report.pdf>

Together, these questions form the best discriminator between those pensioner households 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, or any other reason. 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, or any other reason - they are counted as being deprived for that item.

The exception to this is for the question on whether they could cover an unexpected expense, 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, or any other reason. 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 households lacking those items that most 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 <https://www.gov.uk/government/statistics/households-below-average-income-hbai-technical-note-on-pensioner-material-deprivation>.

## 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 percent 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 five thousand. However, following cost savings introduced to the FRS in 2010, the sample size in Scotland has reduced. It was approximately 3,200 in 2016/17. For further information see the DWP [Households Below Average Income publication](#).

## 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 shortly after publication via the following link: <http://www.gov.scot/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/PovertyMethodology/ConfidenceIntervals>

The method used to calculate these confidence intervals changed in 2015/16. Information on this can be found using the link below. The new method widens confidence intervals for most estimates making statistically significant results less likely than before.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/592042/dwp-family-household-income-stats-estimating-uncertainty-statistical-notice.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/592042/dwp-family-household-income-stats-estimating-uncertainty-statistical-notice.pdf)

The Family Resources Survey publication at <https://www.gov.uk/government/collections/family-resources-survey--2> 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 the DWP's publication:

<https://www.gov.uk/government/collections/households-below-average-income-hbai--2>.

## Where to find more information

### Further analysis

This publication contains the headline poverty and income inequality statistics.

Further analysis based on the FRS and HBAI datasets is published by the Scottish Government during the year at:

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

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

Additional analysis themes are based on the needs of users. If you have any suggestions for future analysis please email:

[social-justice-analysis@gov.scot](mailto:social-justice-analysis@gov.scot) or phone 0131 244 5851.

### Scottish Government websites

- The poverty statistics website contains a range of analysis on poverty and information about what the Scottish Government is doing to reduce poverty and income inequality <http://www.gov.scot/Topics/Statistics/Browse/Social-Welfare/>
- Scotland Performs website (for further information about the SG Solidarity Target and National Indicators): <http://www.gov.scot/About/scotPerforms>
- Confidence limits surrounding Scotland poverty estimates: <http://www.gov.scot/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/PovertyMethodology/ConfidenceIntervals>
- For further information on all Scottish Government statistics: <http://www.gov.scot/topics/statistics/>
- Scottish Government approach to tackling poverty: <http://www.gov.scot/Topics/People/fairerscotland/tacklingpovertyinScotland>

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For general enquiries about Scottish Government statistics please contact::

Office of the Chief Statistician, Telephone: 0131 244 0442,  
e-mail: [statistics.enquiries@gov.scot](mailto:statistics.enquiries@gov.scot)

### How to access background or source data

The data collected for this statistical bulletin cannot be made available by Scottish Government for further analysis as Scottish Government is not the data controller.

### Complaints and suggestions

If you are not satisfied with our service or have any comments or suggestions, please write to the Chief Statistician, 2W, St Andrews House, Edinburgh, EH1 3DG, Telephone: (0131) 244 0302, e-mail [statistics.enquiries@gov.scot](mailto:statistics.enquiries@gov.scot).

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