



## A National Statistics Publication for Scotland

# Poverty and income inequality in Scotland: 2007/08

7 May 2009

This publication supersedes 'Scottish Households Below Average Income 2006/07' which was published in June 2008. It presents annual estimates of the proportion 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 2007 to March 2008.

### Key points:

- Overall, levels of poverty and income inequality remained fairly stable between 2004/05 and 2007/08. The year-on-year changes highlighted below are all within the margins of sampling error for the survey upon which they are based<sup>1</sup>.
- Between 2006/07 and 2007/08 the proportion of individuals in relative poverty<sup>2</sup> in Scotland remained at 17 percent of the population.
- The proportion of children in relative poverty fell from 21 to 20 percent of children in Scotland.
- The proportion of pensioners in relative poverty increased from 20 to 21 percent of pensioners.
- The proportion of Working Age Adults in relative poverty increased from 14 to 15 percent of working age adults.
- Between 2006/07 and 2007/08 the proportion of total income received by those in the bottom three income deciles fell from 14 to 13 percent.

All the figures presented in this report are derived from the Department for Work and Pensions' Family Resources Survey, Households Below Average Income dataset. Comparable UK income and poverty figures are published on the same day by the Department for Work and Pensions (DWP). See the DWP website for further information:  
<http://www.dwp.gov.uk/asd/hbai.asp>

Further analysis of these figures will be published on the Income and Poverty website  
<http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/incomepoverty>

---

<sup>1</sup> For more detail see 'How reliable are the figures presented here?' in Annex 2: Frequently Asked Questions

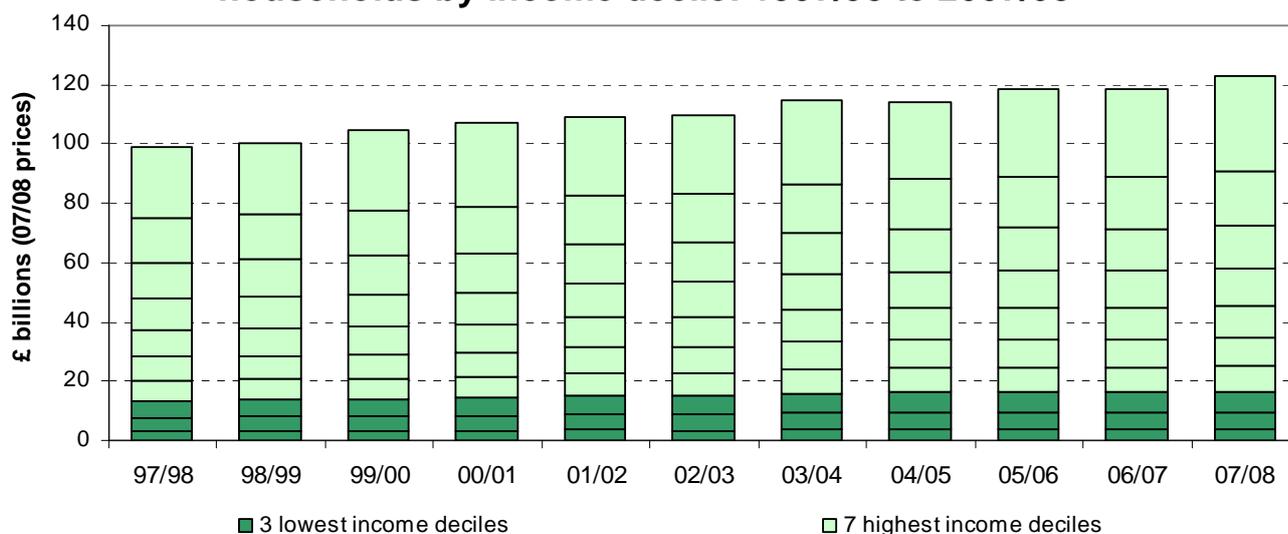
<sup>2</sup> Relative poverty before housing costs – for more detail on definitions see Annex 2: Frequently Asked Questions

## Income Inequality

The chart below presents 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'.

The bars show equivalised income (before housing costs) for all individuals within Scottish Households in 2007/08 prices. The dark green segments show the income received by those individuals in the lowest three income deciles, that is the thirty percent of people with the lowest incomes.

**Chart 1: Total adjusted income\* received by Scottish households by income decile: 1997/98 to 2007/08**



\* The adjusted income definition used here applies equivalised household income to each individual within that household and then sums it for all individuals in a decile. This is used to examine the distribution of income across society, but should not be taken as an estimate of total national income as for multi-member households, households income will be summed more than once. This is the methodology used for the Solidarity target, however it is currently under review.

- Total income received by households in Scotland increased almost every year between 1997/98 and 2007/08.
- While household income has increased over this period, the proportions of that income received by those at the top and bottom of the income distribution has remained broadly unchanged.
- Between 1997/98 and 2007/08 the proportion of total income received by those in the bottom three income deciles has remained fairly constant at around 13 or 14 percent of overall income.
- In contrast the top three income deciles received between 50 and 53 percent of total income each year. This means that the thirty percent of people with the highest incomes received over half of total income.
- Between 2006/07 and 2007/08 the proportion of income received by those in the bottom three income deciles fell from 14 to 13 percent. Over the same period the proportion of income received by those in the top three income deciles rose from 52 to 53 percent.

## Poverty

The Scottish and UK Governments use two main poverty measures both of which reveal slightly different information about changes in poverty over time. These measures are relative and absolute poverty:

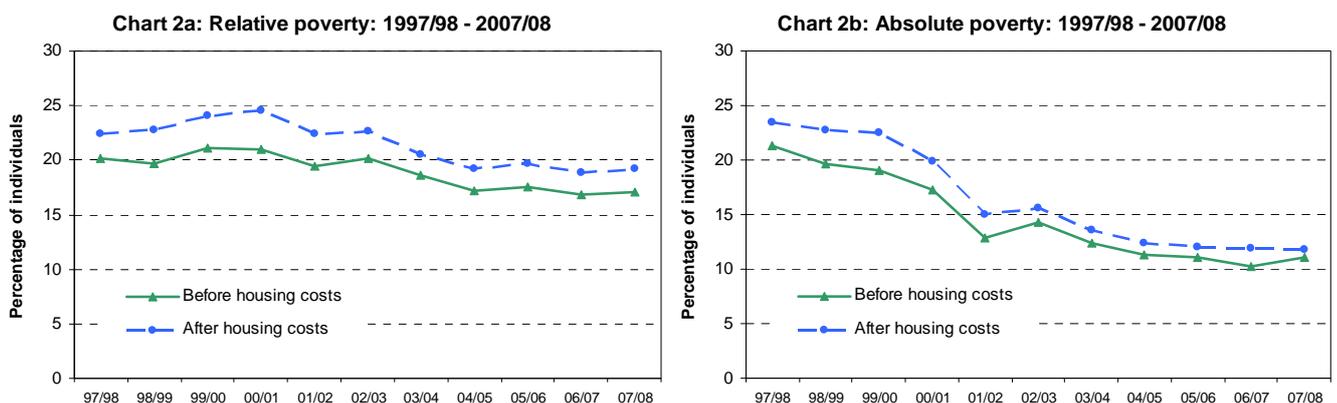
**Relative poverty:** Individuals living in households whose equivalised income is below 60% of UK median income in the same year. This is a measure of whether those in the lowest income households are keeping pace with the growth of incomes in the economy as a whole. In 2007/08 the relative poverty threshold for a couple with no children was an income of £236 per week from all sources (Income from all sources before housing costs and after income tax, national insurance etc...). 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) Great Britain median income in 1998/99. This is a measure of whether those in the lowest income households are seeing their incomes rise in real terms. In 2007/08 the absolute poverty threshold for a couple with no children was an income of £203 per week from all sources (Income from all sources before housing costs and after income tax, national insurance etc...).

For further information about the definitions and the terms used here, such as 'equivalised income', see the Annex 2: Frequently Asked Questions.

## Individuals in poverty

The Scottish Government's National Indicator 14 is to 'decrease the proportion of individuals living in poverty'. This is measured using the relative poverty measure, before housing costs. The charts below show the proportion of individuals in relative and absolute poverty between 1997/98 and 2007/08.



- In 2007/08 there were 860,000 individuals (17% of the Scottish population) living in relative poverty before housing costs. This was an increase of 20,000 people on the previous years figure, however this increase is too small to make a difference to the percentage of the population which remained unchanged at 17%.
- Of the 860,000 individuals living in relative poverty, 200,000 are children, 460,000 are working age adults and 200,000 are pensioners.
- Relative poverty rates after housing costs are slightly higher (970,000 individuals or 19% of the population in 2007/08).

- Between 1997/98 and 2004/05 both absolute and relative poverty rates fell in Scotland, however absolute poverty rates fell more steeply. This indicates that over this period the incomes of the poorest were increasing in real terms (which was reflected in the decrease in absolute poverty). At the same time, total income for the population as a whole was increasing and so a greater income was required to 'keep up' with the rest of society. This meant that the relative poverty threshold increased and so the decrease in relative poverty was less dramatic than that in absolute poverty.
- Between 2004/05 and 2007/08 both absolute and relative poverty rates remained fairly flat.

*Annex 1 gives figures for each year back to 1994/95 for relative and absolute poverty, before and after housing costs*

## Child Poverty

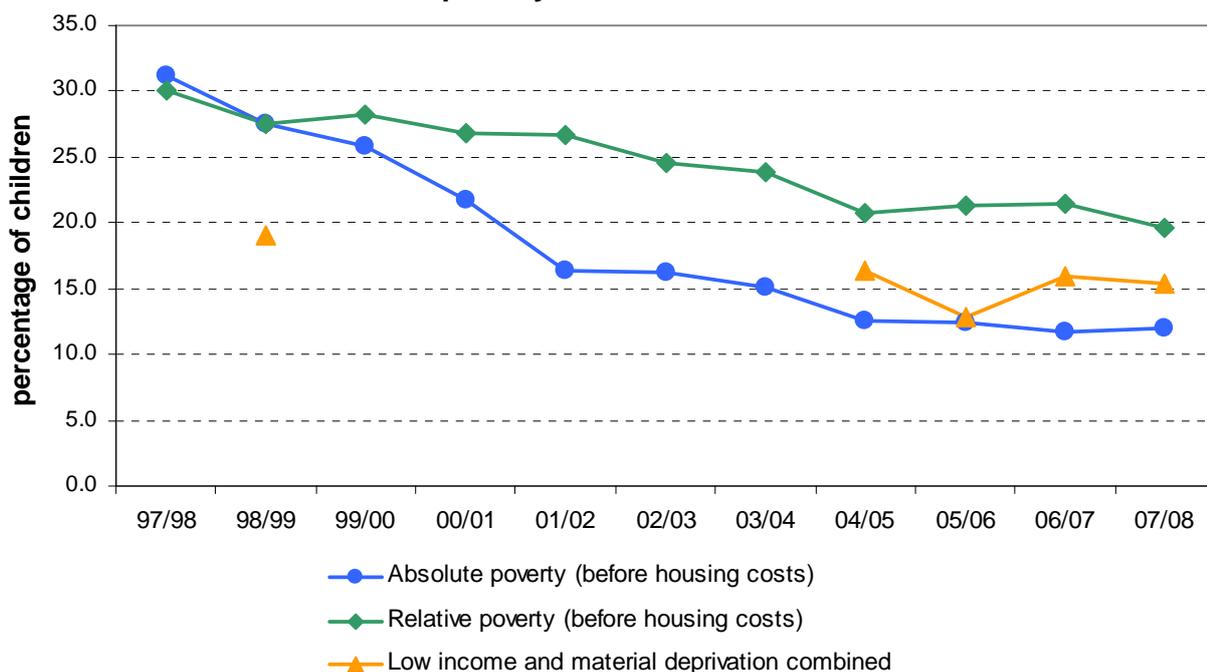
### Material deprivation measure of child poverty

As well as the absolute and relative poverty measures (described above) a third measure is used when examining child poverty which aims to understand more about what families with children can afford to spend money on. 'Material deprivation' is calculated from a suite of questions in the Family Resources Survey about whether people can afford to buy essential items and participate in leisure or social activities. This measure is applied to households with incomes below seventy percent of median income to create the 'material deprivation and low income combined' indicator. This indicator aims to provide a wider measure of children's living standards. *For more detail about this indicator see Annex 2: Frequently asked Questions.*

Absolute poverty, relative poverty and material deprivation and low income combined are used to measure the UK Government target to halve child poverty by 2010, from a 1998/99 baseline, and eradicate it by 2020.

The chart below shows recent trends for the three key child poverty measures.

**Chart 3: Child poverty in Scotland: 1997/98 to 2007/08**

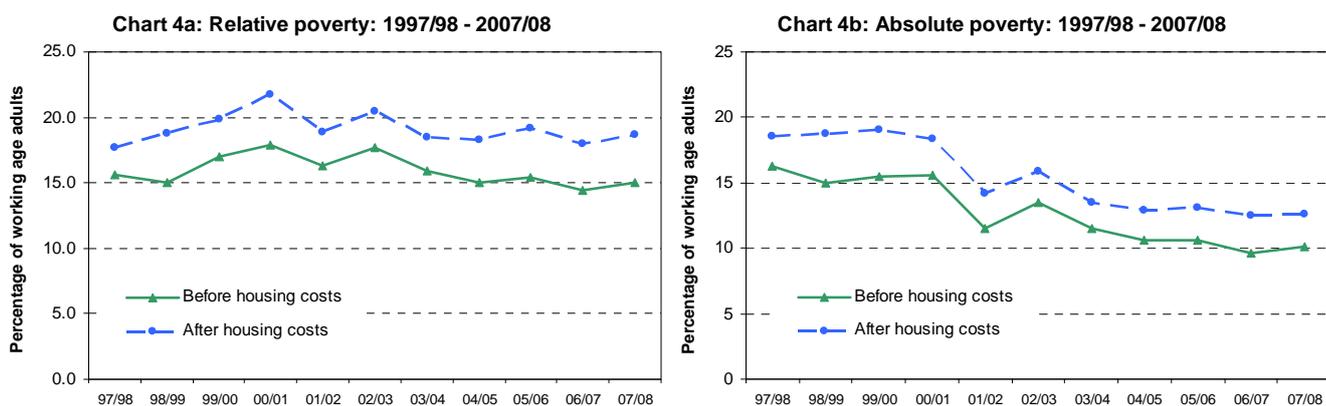


Note that the material deprivation suite of questions was not included in the Family Resources Survey before 2004/05. The 1998/99 figure for Combined Low Income and Material Deprivation was estimated based on the assumption that the reduction for this measure was equivalent to the reduction in relative poverty.

- The proportion of children in absolute poverty (before housing costs) has fallen from 31 per cent in 1997/98 to 12 per cent in 2007/08. The level has been fairly stable since 2004/05.
- Although not as dramatic as the reduction in absolute poverty, relative child poverty has also fallen since 1997/98. It dropped from 30 percent in 1997/98 to 20 percent in 2007/08, and has been fairly stable at between 20 and 21 per cent since 2004/05.
- There were 20,000 fewer children in relative poverty in 2007/08 than in 2006/07, a reduction from 21 to 20 percent.
- Since the material deprivation suite of questions was introduced in 2004/05 there has been little change in the proportion of children in low income and material deprivation combined. In 2007/08 15 percent of children in Scotland were poor according to this measure. This was a reduction of less than a percentage point on the 2006/07 figure.

## Working age adult poverty

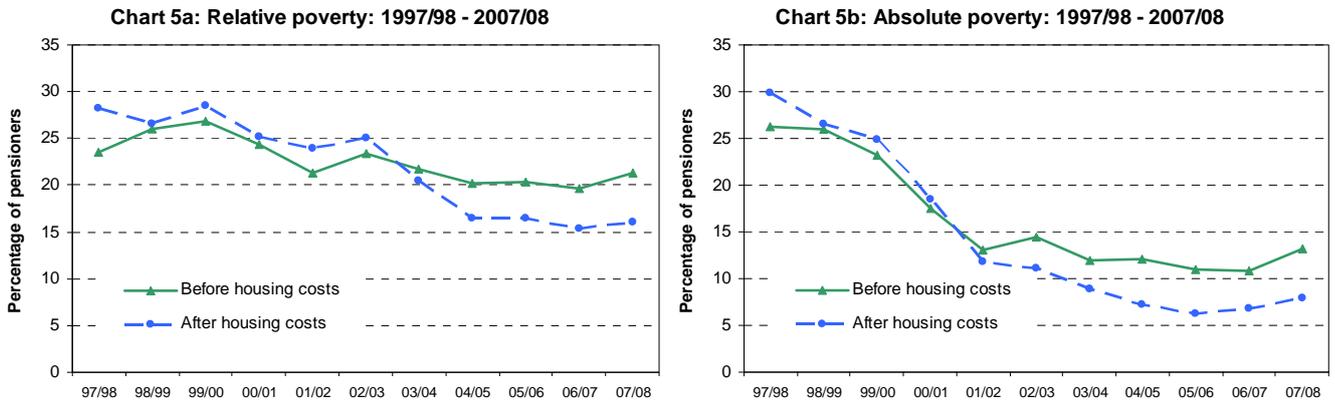
The following charts present recent absolute and relative poverty trends for working age adults.



- In 2007/08 10 percent of working age adults were in absolute poverty (before housing costs) and 15 percent were in relative poverty, broadly the same as recent years.
- In line with absolute poverty levels for all individuals, absolute poverty among working age adults fell between 1997/98 and 2004/05 and has not changed much since then.
- Between 1997/98 and 2007/08 the proportion of working age adults in relative poverty rose and then fell back to previous levels.

## Pensioner poverty

The following charts present recent relative and absolute pensioner poverty trends.

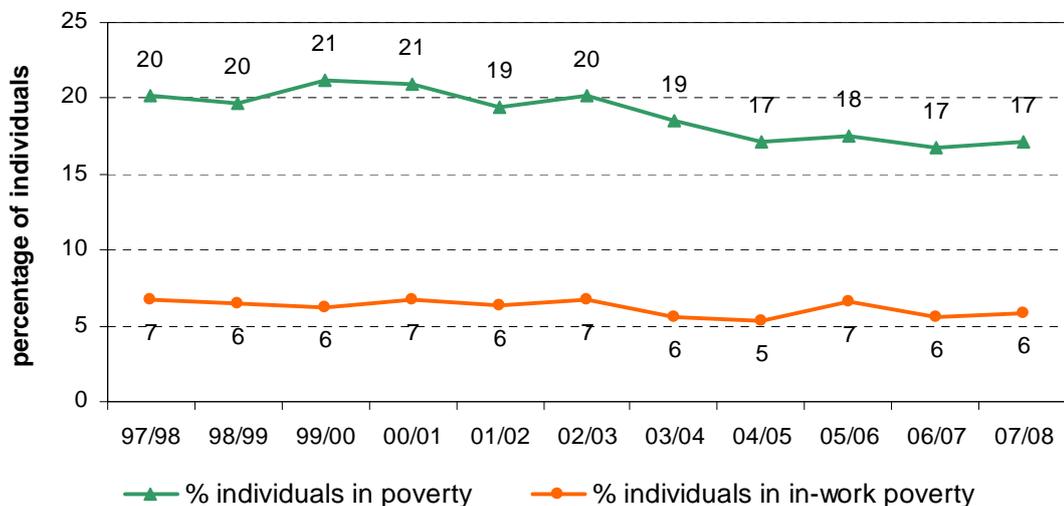


- Between 2006/07 and 2007/08 absolute pensioner poverty (before housing costs) increased by two percentage points from 11 to 13 percent of pensioners. This was an increase of 20,000 pensioners.
- Over this period relative pensioner poverty (before housing costs) increased by one percentage point from 20 to 21 percent of pensioners.
- The increases in pensioner poverty between 2006/07 and 2007/08 are the largest percentage rises over this period for the different age groups examined in this publication.

## In-work poverty

Individuals living in households which are in poverty despite the fact that one or more members of the household are working are described as being in 'in-work poverty'. The income from these workers is not sufficient to raise the household income above the poverty threshold. This group therefore contains many non-workers including children and non-working partners.

**Chart 6: Proportion of individuals in in-work poverty (relative poverty before housing costs): 1997/98 to 2007/08**



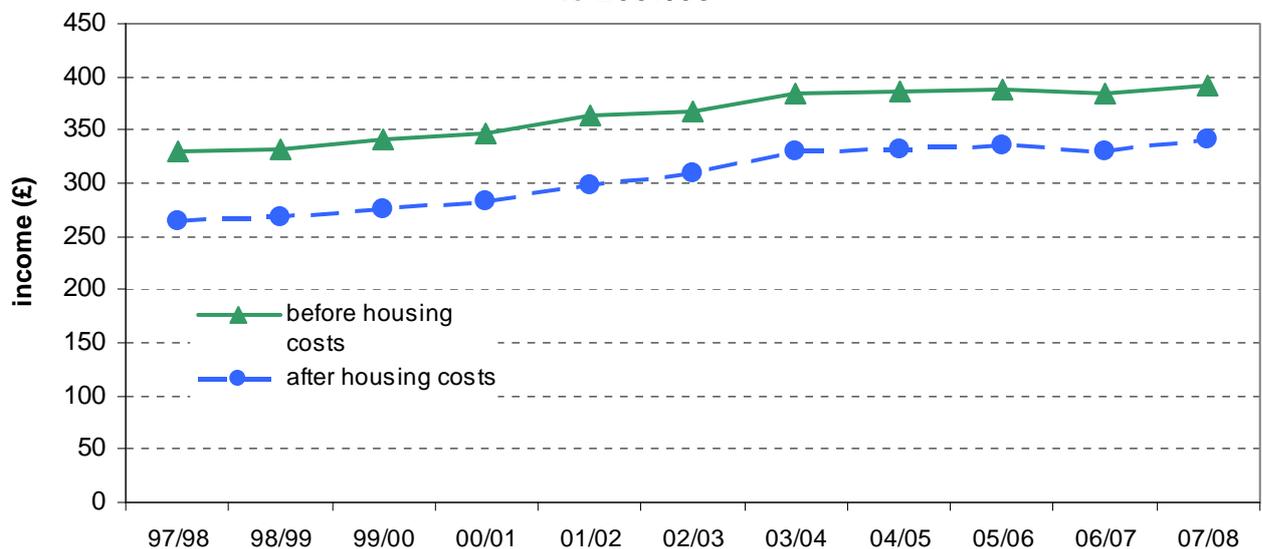
- The chart above shows that, while there was a reduction in relative poverty between 1997/98 and 2007/08 this was not matched by a reduction in 'in-work poverty'.
- The proportion of individuals in relative poverty fell from around 20 percent to around 17 percent over this period while the proportion of individuals in 'in-work poverty' remained at around 6 or 7 percent.

## The distribution of income

Charts 7 to 10 present information about income trends, the distribution of income in Scotland and the types of families which are more common at the top and bottom of the income distribution.

### Median income trends

**Chart 7: Median equivalised weekly household income: 1997/98 to 2007/08**



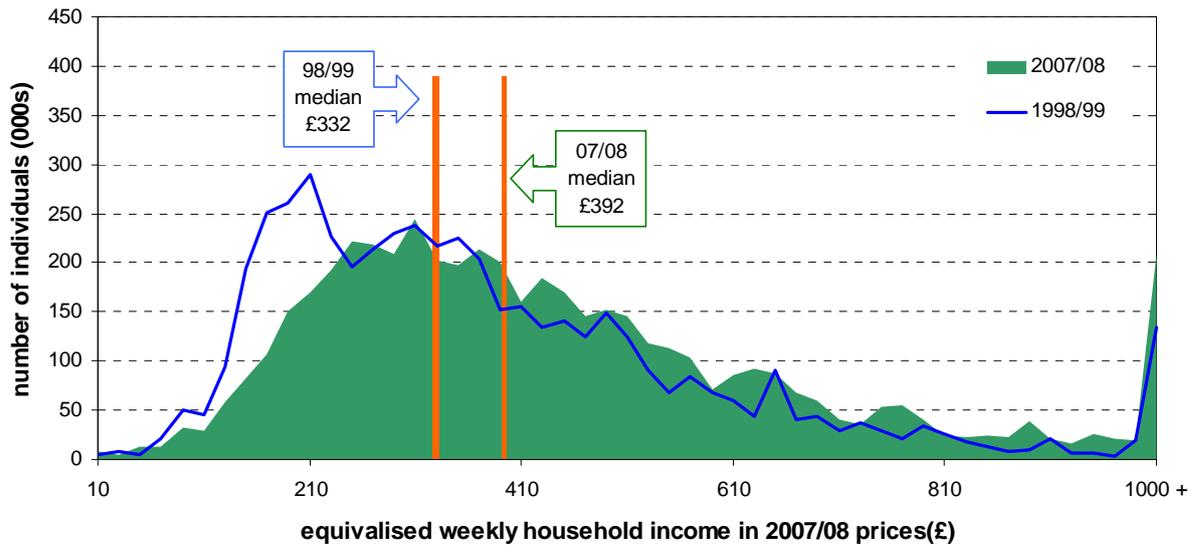
The chart above shows trends in median equivalised income for households in Scotland between 1997/98 and 2007/08.

- Between 1997/98 and 2003/04 both before and after housing costs (BHC and AHC) median income increased. BHC median income increased from £330 pw to £384 pw (an increase of 16%) and AHC median income increased from £264 pw to £330 pw (an increase of 25%).
- Between 2003/04 and 2007/08 median income trends were fairly flat and the 2007/08 median incomes (£392pw BHC and £342pw AHC) are close to the 2003/04 figures.

### Income distribution

The following chart shows how the distribution of income across Scotland changed between 1998/99 and 2007/08. The green area shows the shape of the more recent income distribution and the blue line shows the shape of the earlier one. The 1998/99 figures are adjusted for inflation and are in 2007/08 prices.

**Chart 8: Equivalised weekly household income distribution (before housing costs): 1998/99 and 2007/08**

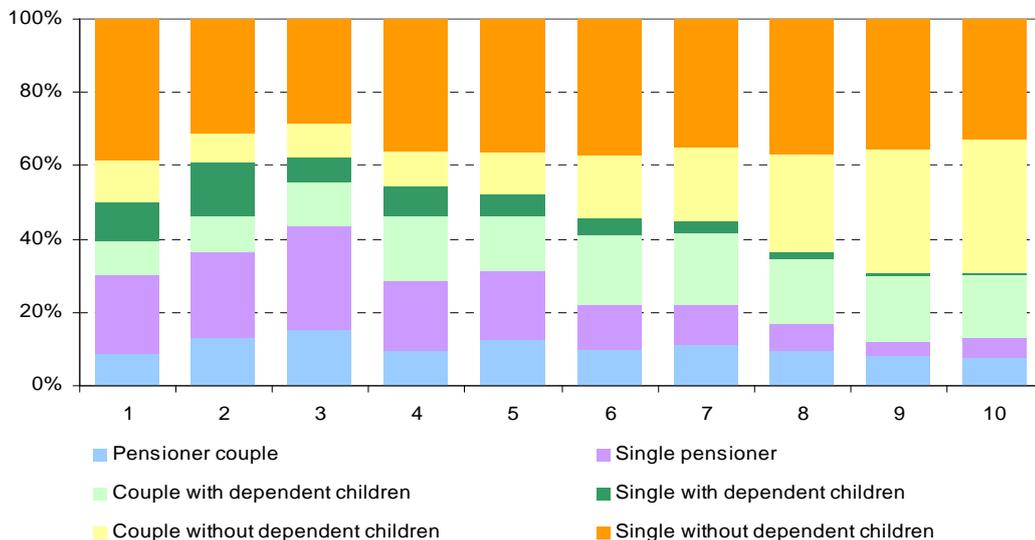


- Between 1998/99 and 2007/08 people's incomes rose in real terms and because of this the shape of the income distribution moved upwards.
- This is reflected in the way that the large peak that is around £210pw in the 1998/99 line has moved upwards to around £300pw in the 2007/08 distribution.
- Over this period the median income increased from £322pw to £392pw. The relative poverty threshold is based on this median and this also increased.

### Income deciles

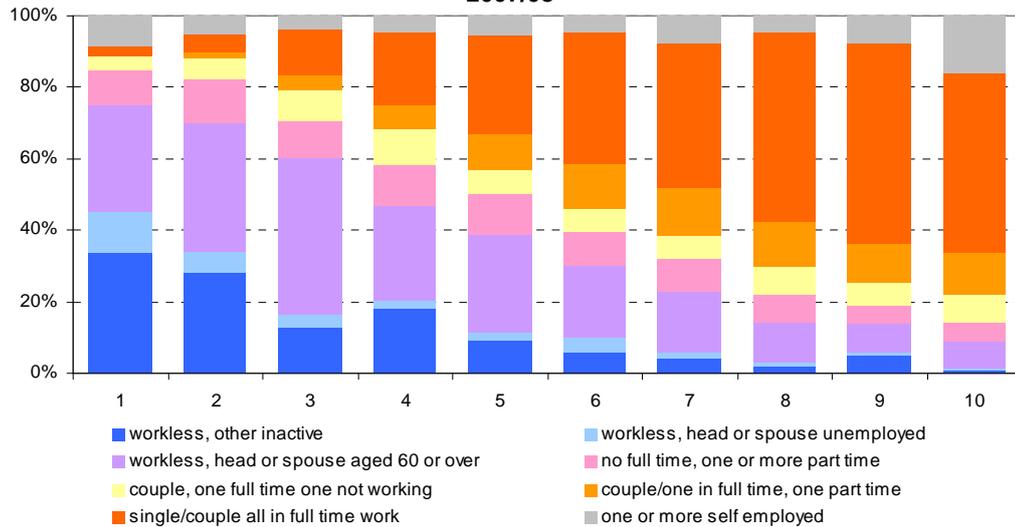
The following charts (charts 9 and 10) present the Scottish income deciles by the types of families that make them up and by the economic status of families. The deciles are calculated by arranging the families in Scotland in order of equivalised income (before housing costs) and then dividing them into ten groups. Each decile contains roughly a tenth of the Scottish population with the first containing those with the lowest incomes and the tenth containing those with the highest incomes.

**Chart 9: Family type by equivalised income decile: 2007/08**



- In the deciles towards the bottom end of the distribution there are greater proportions of single pensioners and single people with dependent children than in higher deciles.
- Families of a single adult with dependent children make up 11 percent of families in the bottom three deciles and 1 percent in the top three. Single pensioners make up 24 percent of families in the bottom three deciles and 5 percent in the top three.
- Towards the top end of the distribution the proportion of couple families, particularly couples without children increases.

**Chart 10: Economic status of family by equivalised income decile:  
2007/08**



The chart above breaks down the income deciles by the economic status of the families within them.

- The proportion of families which are workless through retirement, unemployment or economic inactivity (people who are neither in work nor looking for work) is much higher towards the bottom of the income distribution. Workless families make up 68 percent of those in the bottom three deciles and 12 percent of those in the top three.
- Families with either all adults working full time or one working full time and the other part-time (excluding families containing someone who is self-employed) make up 9 percent of the families in the bottom three deciles and 65 percent of those in the top three.

## Annex 1 - Tables

ABSOLUTE poverty (below 60% of inflation adjusted 1998/99 GB median income) in Scottish households: 1994/95 to 2007/08

	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)												
1994/95	25	1,240	28	1,380	32	350	34	380	19	590	22	660	35	300	39	340
1995/96	25	1,230	27	1,340	33	370	36	400	18	550	20	610	37	320	37	330
1996/97	24	1,220	27	1,360	34	370	36	400	18	540	21	650	35	310	36	320
1997/98	21	1,060	23	1,170	31	340	32	350	16	490	19	560	26	230	30	260
1998/99	20	980	23	1,130	28	300	31	330	15	450	19	570	26	230	27	230
1999/00	19	950	22	1,120	26	280	30	320	15	470	19	580	23	200	25	220
2000/01	17	850	20	990	22	230	25	270	16	470	18	550	17	150	18	160
2001/02	13	640	15	740	16	170	20	210	11	350	14	430	13	120	12	100
2002/03	14	710	16	770	16	170	19	200	14	410	16	480	14	130	11	100
2003/04	12	610	14	670	15	160	18	180	11	350	13	410	12	110	9	80
2004/05	11	560	12	620	13	130	15	160	11	320	13	390	12	110	7	70
2005/06	11	550	12	600	12	130	14	140	11	330	13	400	11	100	6	60
2006/07	10	510	12	600	12	120	15	150	10	300	12	390	11	100	7	60
2007/08	11	560	12	590	12	120	13	130	10	310	13	390	13	120	8	70

RELATIVE poverty (below 60% of UK median income in the same year) in Scottish households: 1994/95 to 2007/08

	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)												
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

## Annex 2 - Frequently asked questions

### **Where can I get UK figures?**

#### **Where do these figures come from?**

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: 2007/08' on the same day as 'Poverty and income inequality in Scotland'. For further information see the DWP website <http://www.dwp.gov.uk/asd/hbai.asp>.

#### **What is equivalised income?**

All the income figures in this publication are adjusted through a process called equivalisation which reduces the incomes of larger families and increases the incomes of single people. This equivalised income allows the comparison of living standards between households that vary in size and composition. The adjustment reflects the fact that a family of several people requires a higher income than a single person in order for both households to enjoy a comparable standard of living. There are several different equivalence scales which will result in slightly different estimates. The low income figures in this publication notice use the modified OECD equivalence scale in line with the rest of Europe. To find out more about equivalisation see the following report on the Scottish Government website: <http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/equivalence-scales-paper>.

#### **How is poverty measured?**

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 significantly by the highest incomes, median income thresholds are widely accepted as a better benchmark when considering a derived measure for low income. 60% of median is the most commonly used low income measure.

For a couple with no children, the UK median income before housing costs in 2007/08 was £393 per week, this is a real terms increase of £55 (16%) since 1998/99 (the inflation adjusted median income in 1998/99 was £338). After housing costs the increase is from £268 per week in 1998/99 (inflation adjusted) to £332 in 2007/08. This is an increase of 24% or £64.

Consequently, the 60% low income threshold, which is used to derive the low income household figures, has increased by £33 per week (before housing costs) in real terms, from £203 in 1998/99 (inflation adjusted) to £236 in 2007/08. After housing costs the 60% of median has increased by £38 per week in real terms, from £161 to £199.

#### **What is the difference between relative and absolute poverty?**

Absolute and relative poverty measures are used to monitor changes in poverty over time and are discussed earlier in the publication. In essence, absolute poverty measures whether individuals in the lowest income households are seeing their incomes rise in real terms. Relative poverty measures whether those in the lowest incomes are keeping up with the growth of the economy as a whole.

**Absolute poverty:** individuals living in households whose equivalised income is below 60% of inflation adjusted median income in 1998/99. 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.

### **What is material deprivation?**

Since 2004/05 the Family Resources Survey has asked respondents a suite of questions about whether people could afford to buy certain goods or services, or to participate in leisure or social activities. Material deprivation is defined on the basis of those items that cannot be afforded and is designed to be a measure of standard of living which is not solely based on income, but includes information about what families can afford to buy with their money.

To determine the level of material deprivation a child experiences, a 'prevalence weighted' approach is used: for each item a child's family cannot afford they will be given a weight or score. This weight will be equivalent to the proportion of families who have this item. In this way, the higher the proportion that own that item, the more not having it suggests an inability to afford it and the greater weight it has in the measure.

The weighted scores for each item lacked through an inability to afford are summed and translated into a total material deprivation score which can range from 0 to 100. Children are materially deprived if they have a material deprivation score of 25 or more. Analysis conducted by Department for Work and Pensions has shown that this score is a good discriminator between those that are deprived and those that are not. For further information about material deprivation see the DWP 'Households below average income' publication.

### **Why include figures for poverty before and after housing costs?**

This publication provides low income estimates on a before housing costs basis and on an after housing costs basis. Since some people choose to spend more of their income on housing costs, an after housing costs measure would understate the relative standard of living of those individuals who were actually benefiting from a better quality of life by paying more for better accommodation. Conversely, any income measure which does not deduct housing costs (i.e. the before housing costs measure) will overstate the living standards of individuals whose housing costs are high relative to the quality of their accommodation.

### **Why is absolute poverty based on the GB median and relative poverty on the UK one?**

Since 2002/03 the Family Resources Survey has included Northern Ireland. As a result all relative low income figures from 2002/03 have been calculated using the UK median. Absolute measures use a base year prior to the inclusion of Northern Ireland and have therefore continued to use the GB median as the basis for the low income threshold.

In practice the change from GB to UK median makes very little impact on the figures.

### **How reliable are the figures presented here?**

The figures are estimates based on a sample survey - The Family Resources Survey - and are therefore subject to sampling variation. Caution should be exercised in the interpretation of small year-on-year fluctuations. Identification of trends must be based on data for several years. As the Scottish Government has funded a doubling of the Scottish sample since 2002/03, the Scottish figures from 2002/03 onwards should be less prone to fluctuation within key trends than those for earlier years. Details of the confidence intervals that surround the key estimates in this publication will be published on the Scottish government Income and Poverty website shortly.

## **Where can I find out more?**

### **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>

Scottish Government Social Inclusion website (Including information about 'Achieving our Potential: A framework to tackle poverty and income inequality in Scotland')

<http://www.scotland.gov.uk/Topics/People/Social-Inclusion>

High Level Summary of Statistics (Chapter 12, Social and Welfare)

<http://www.scotland.gov.uk/Topics/Statistics/About/HighLevelTrends>

For further information on all Scottish Government statistics

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

### **Department for Work and Pensions' websites**

Family Resources Survey, Department for Work and Pensions

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

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

<http://www.dwp.gov.uk/asd/hbai.asp>

Measuring child poverty, Department for Work and Pensions

[www.dwp.gov.uk/consultations/consult/2003/childpov/final.pdf](http://www.dwp.gov.uk/consultations/consult/2003/childpov/final.pdf)

## **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>

### **Contact details**

Anne MacDonald - Social Justice Statistician  
Telephone - 0131 244 3004

### **Release date and next update**

These figures were published on the 7<sup>th</sup> May 2009. They are due to be updated in Spring 2010

### **Feedback**

The Scottish Government Social Justice Analysis 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 [social-justice-analysis@scotland.gsi.gov.uk](mailto:social-justice-analysis@scotland.gsi.gov.uk) or phone 0131 244 0794

### **Complaints and suggestions**

If you are not satisfied with our service, please write to the Chief Statistician, Mr Rob Wishart, 3R02, St Andrews House, Edinburgh, EH1 3DG, Telephone: (0131) 244 0302, e-mail [rob.wishart@scotland.gsi.gov.uk](mailto:rob.wishart@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](http://www.scotland.gov.uk/scotstat)

### **Crown Copyright**

Brief extracts from the Crown Copyright material in this publication may be reproduced provided the source is fully acknowledged.