

Statistical bulletin

Effects of taxes and benefits on UK household income: 2011 to 2012

Analysis of how household incomes in the UK are affected by direct and indirect taxes and benefits received in cash or kind, and the changing levels of income inequality over time.



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1 . Main points

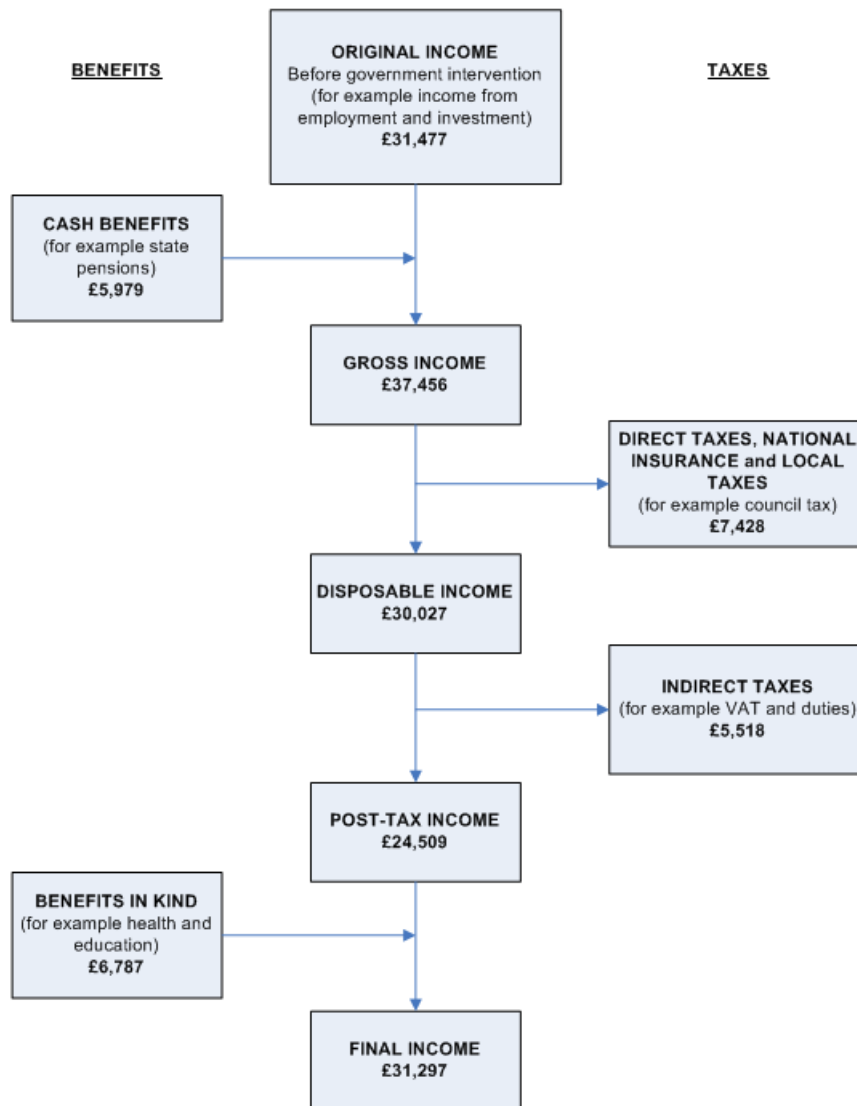
- There was a fall in income inequality between 2010/11 and 2011/12. This was driven partly by earnings falling for higher income households and partly by changes in taxes and benefits. These changes include an increase in the income tax personal allowance and changes to National Insurance Contributions and Child Tax Credits
- Disposable incomes have fallen since the start of the economic downturn, with average equivalised income falling by £1,200 since 2007/08 in real terms. The fall in income has been largest for the richest fifth of households (6.8%). In contrast, after accounting for inflation and household composition, average income for the poorest fifth has grown over this period (6.9%)
- Before taxes and benefits, the richest fifth of households had an average income of £78,300 in 2011/12, 14 times greater than the poorest fifth, who had an average income of £5,400
- Overall, taxes and benefits lead to income being shared more equally between households. After all taxes and benefits are taken into account, the ratio between the average incomes of the top and the bottom fifth of households (£57,300 per year and £15,800 respectively) is reduced to four-to-one
- The proportion of disposable income paid in indirect taxes increased across the income distribution in 2011 /12 compared with the previous two years. This is largely explained by the increase in the standard rate of VAT in 2010 and 2011
- On average, households in the top two income quintiles paid more in taxes than they received in benefits, while households in the bottom three quintiles received more in benefits than they paid in taxes

2 . Stages of redistribution

This release looks at how taxes and benefits affect the distribution of income and breaks this process into five stages. These are summarised below and in Diagram A:

1. Household members begin with income from employment, private pensions, investments and from other non-government sources. This is referred to as 'original income'
2. Households then receive income from cash benefits. The sum of cash benefits and original income is referred to as 'gross income'
3. Households then pay direct taxes. Direct taxes, when subtracted from gross income is referred to as 'disposable income'
4. Indirect taxes are then paid via expenditure. Disposable income minus indirect taxes is referred to as 'post-tax income'
5. Households finally receive a benefit from services (benefits in kind). Benefits in kind plus post-tax income is referred to as 'final income'

Diagram A: Average household income, cash benefits and taxes, 2011/12



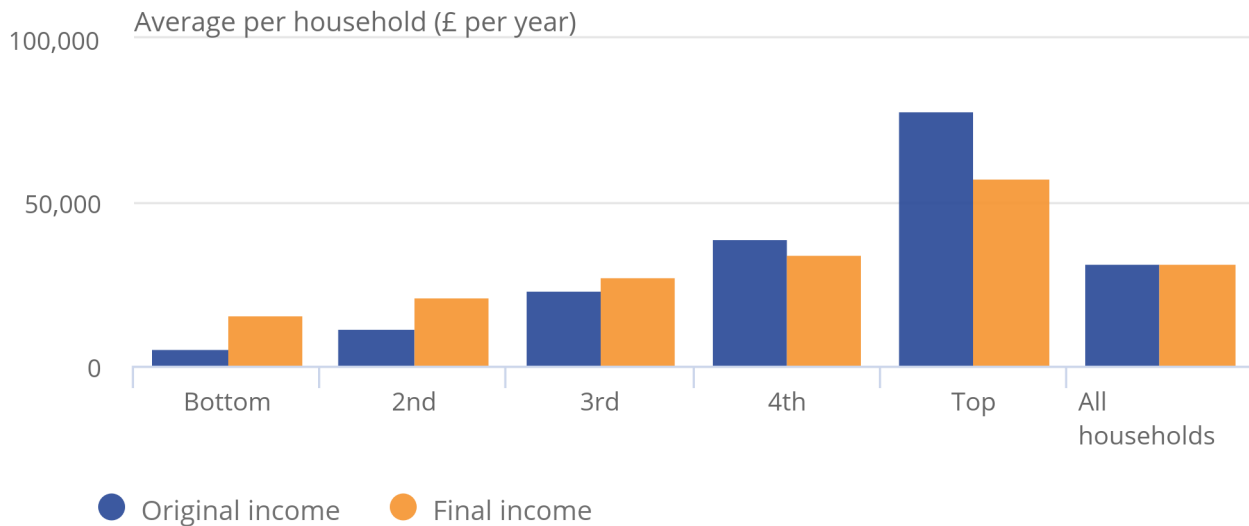
Source: Office for National Statistics

3 . Summary of results for all households

The overall impact of taxes and benefits are that they lead to income being shared more equally between households. In 2011/12, before taxes and benefits, the richest fifth (those in the top income quintile group) had an average original income of £78,300 per year, compared with £5,400 for the poorest fifth – a ratio of 14 to 1. This ratio was 16 to 1 in 2010/11, indicating that inequality of original income has reduced between the two years according to this measure, largely due to a fall in original income for the richest fifth of households. Original income includes earnings, private pensions and investments.

Figure 1: The effects of taxes and benefits on household income by quintile groups, ALL households, 2011/12

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Source: Office for National Statistics

Notes:

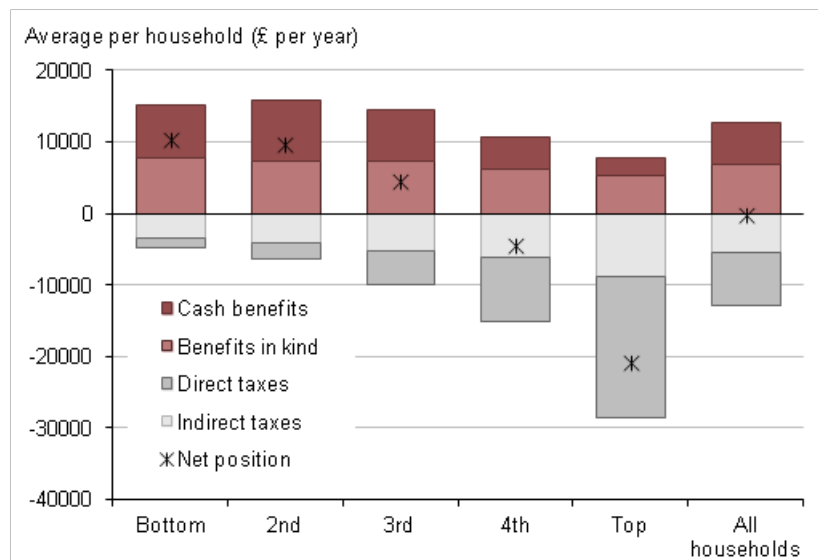
1. Households are ranked by their equivalised disposable incomes, using the modified OECD scale

Impact of cash benefits

In contrast to original income, the amount received from cash benefits such as tax credits, housing benefit and income support tends to be higher for poorer households than for richer households. The highest amount of cash benefits were received by households in the second quintile group, £8,400 per year, compared with £7,400 for households in the bottom group. This is largely because more retired households are located in the second quintile group, compared with the bottom group, and in this analysis the state pension is classified as a cash benefit.

The distribution of cash benefits between richer and poorer households has the effect of reducing inequality of income. After cash benefits were taken into account, the richest fifth had income that was six times that of the poorest fifth (gross incomes of £80,700 per year compared with £12,900, respectively). Inequality of gross income has decreased slightly from 2010/11, when this ratio was 7 to 1.

Figure 2: Summary of the effects of taxes and benefits on ALL households, 2011/12



Source: Office for National Statistics

Notes:

1. Households are ranked by their equivalised disposable incomes, using the modified OECD scale

Impact of direct taxes

On average, households paid £7,400 per year in direct taxes, equivalent to 20% of their gross income. Richer households pay both higher amounts of direct tax and higher proportions of their income in direct tax (income tax, National Insurance, and council tax and Northern Ireland rates). As a result, direct taxes also reduce inequality of income.

The richest fifth of households paid on average £19,900 per year in direct taxes, the vast majority of which was income tax. This corresponds to 25% of their gross income. This is an increase from 24% in 2010/11, driven largely by an increase in Employee’s National Insurance Contributions, caused by several changes including the rate above the Upper Earnings Limit increasing from 1% to 2%.

The average direct tax bill for the poorest fifth was around £1,300 per year, of which the largest component was council tax/rates. This was equivalent to 10% of gross household income for this group, broadly unchanged from the previous year. However, for the second poorest fifth of households, the percentage of gross income paid in direct taxes did fall, from 12% to 11%, largely due to a fall in the proportion of income paid in income tax. This can be explained by the increase in the personal allowance between 2010/11 and 2011/12 from £6,475 to £7,475.

The richest fifth of households had disposable incomes that were five times that of the poorest fifth (£60,800 per year and £11,500, respectively), again showing a fall in income inequality compared with 2010/11 when the ratio was 6 to 1.

Impact of indirect taxes

The amount of indirect tax (such as VAT, and duties on alcohol and fuel) each household pays is determined by their expenditure rather than their income. The richest fifth of households paid two and a half times as much indirect tax as the poorest fifth (£8,700 and £3,400 per year, respectively). This reflects higher expenditure on goods and services subject to these taxes by higher income households. However, although richer households pay more in indirect taxes than poorer ones, they pay less as a proportion of their income. This means that indirect taxes act to increase inequality of income.

In 2011/12, the bottom fifth of households paid 29% of their disposable income in indirect taxes, compared with 14% for the richest fifth. These proportions have increased over the last two years, from 27% and 12% respectively, in 2009/10. The rise in the proportion of income paid in indirect taxes over this time period is largely explained by the increases in the standard rate of VAT from 15.0% to 17.5% on 1 January 2010 and 20.0% on 4 January 2011, which have contributed to an increase in the average amount paid in VAT across all income groups. The VAT increases will also have impacted on inflation rates in these years.

When expressed as a percentage of expenditure, the proportion paid in indirect tax declines less sharply as income rises. The bottom fifth of households paid 21% of their expenditure in indirect taxes compared with 17% for the top fifth. The figure for the top fifth is a slight increase on last year, when the proportion was 16%, while the figure for the bottom fifth is broadly unchanged.

When looking at the total proportion of income paid in taxes (both direct and indirect) there is considerably less variation across the income distribution. Overall, 37% of the gross income of the poorest fifth of households was accounted for by direct and indirect taxes (down 1 percentage point from 2010/11), whilst the richest fifth paid 35% of their income in taxes (up almost 2 percentage points). The lowest effective total tax rate was for the second poorest fifth of households, who paid 31% of their gross income in tax.

After indirect taxes, the richest fifth had post-tax household incomes that were over six times those of the poorest fifth (£52,100 compared with £8,100 per year, respectively).

Table 1: Taxes as a percentage of gross income, disposable income and expenditure for ALL households by quintile groups, 2011/12

| | Quintile groups of ALL households (1) | | | | | All households |
|---|---------------------------------------|-----|-----|-----|-----|----------------|
| | Bottom | 2nd | 3rd | 4th | Top | |
| (a) Percentages of gross income | | | | | | |
| Direct taxes | 10 | 11 | 16 | 21 | 25 | 20 |
| Indirect taxes | 27 | 20 | 17 | 14 | 11 | 15 |
| All taxes | 37 | 31 | 33 | 35 | 36 | 35 |
| (b) Percentages of disposable income | | | | | | |
| Indirect taxes | 29 | 22 | 21 | 18 | 14 | 18 |
| (c) Percentages of expenditure (2) | | | | | | |
| Indirect taxes | 21 | 21 | 20 | 19 | 17 | 19 |

Source: Office for National Statistics

Notes:

1. Households are ranked by equivalised disposable income, using the modified-OECD scale
2. Calculated to be consistent with disposable income. See Further Analysis and Methodology section for the definition of expenditure

Impact of benefits in kind

This publication also considers the effect on household income of certain benefits received in kind. Benefits in kind are goods and services provided by the Government to households that are either free at the time of use or at subsidised prices, such as education and health services. These goods and services can be assigned monetary values based on the cost to the Government, which are then allocated as a benefit to individual households. The poorest fifth of households received the equivalent of around £7,700 per year from all benefits in kind, compared with £5,200 received by the top fifth. This is partly due to households towards the bottom of the income distribution having a larger number of children in state education on average. After the impact of benefits in kind are taken into account, the ratio of the richest fifth of households' final income to the poorest fifth's is reduced to less than four-to-one (£57,300 per year and £15,800, respectively).

Table 2: Summary of the effects of taxes and benefits by quintile groups on ALL households, 2011/12

| | Quintile groups of ALL households (1) | | | | | All households | Ratio Top/Bottom quintile |
|--------------------------------------|---------------------------------------|--------|--------|--------|--------|----------------|---------------------------|
| | Bottom | 2nd | 3rd | 4th | Top | | |
| Original income | 5,436 | 11,813 | 22,946 | 38,906 | 78,283 | 31,477 | 14 |
| plus cash benefits | 7,419 | 8,448 | 7,187 | 4,388 | 2,453 | 5,979 | 0.3 |
| Gross income | 12,855 | 20,260 | 30,132 | 43,294 | 80,736 | 37,456 | 6.3 |
| less direct taxes and employees' NIC | 1,306 | 2,263 | 4,781 | 8,887 | 19,905 | 7,428 | 15 |
| Disposable income | 11,548 | 17,997 | 25,352 | 34,407 | 60,831 | 30,027 | 5.3 |
| less indirect taxes | 3,400 | 4,009 | 5,206 | 6,230 | 8,743 | 5,518 | 2.6 |
| Post-tax income | 8,148 | 13,988 | 20,146 | 28,177 | 52,087 | 24,509 | 6.4 |
| plus benefits in kind | 7,674 | 7,386 | 7,380 | 6,260 | 5,238 | 6,787 | 0.7 |
| Final income | 15,823 | 21,373 | 27,526 | 34,437 | 57,325 | 31,297 | 3.6 |
| Household type (percentages) | | | | | | | |
| Retired | 35 | 41 | 31 | 17 | 10 | 27 | |
| Non-retired | 65 | 59 | 69 | 83 | 90 | 73 | |
| All household types | 100 | 100 | 100 | 100 | 100 | 100 | |

Source: Office for National Statistics

Notes:

1. Households are ranked by equivalised disposable income, using the modified-OECD scale

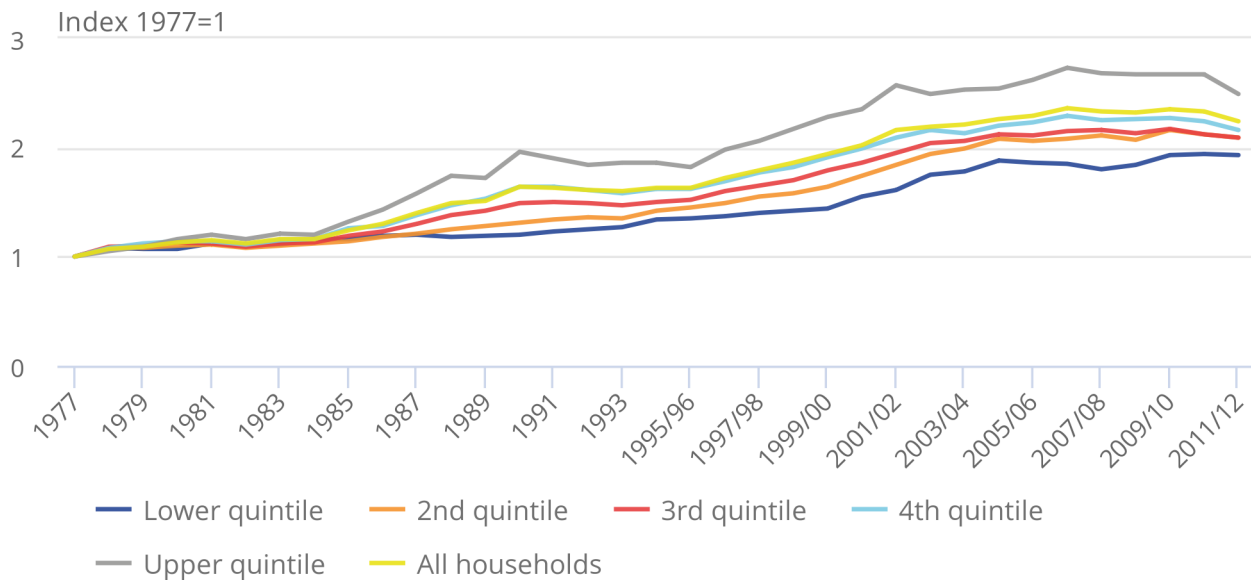
4 . Longer-term trends in household income

The average household disposable income was £30,000 in 2011/12. After taking account of inflation and changes in household structures over time, the average disposable income in 2011/12 was 2.24 times higher than in 1977. Most of this growth in average incomes occurred during the late 1980s and late 1990s.

However, incomes have not grown evenly across the income distribution. The average disposable income for the richest fifth of households in 2011/12 was almost two and a half (2.49) times higher than in 1977, once inflation and household composition were accounted for. The average income of the poorest fifth of households has also grown over this time, but the rate of growth has been slower (1.93 times higher in 2011/12 than 1977).

Figure 3: Growth in equivalised household disposable income, 1977 to 2011/12

Figure 3: Growth in equivalised household disposable income, 1977 to 2011/12



Source: Office for National Statistics

Since the start of the recent economic downturn, household incomes have fallen, with the average disposable income falling by almost £1,200 (or 4.0%) between 2007/08 and 2011/12, after accounting for inflation and household structure. The level of change has varied considerably across the income distribution. The largest fall in incomes over this period has been for the richest fifth of households, whose disposable income has fallen by £4,200 (or 6.8%) in real terms. This has been largely driven by a fall in average income from employment (including self-employment). The average income of the middle fifth of households fell by £760 (or 3.1%) over this same period.

By contrast, the average income of the poorest fifth has risen by £700 (or 6.9%) since 2007/08. This is mainly due to an increase in the average income from employment for this group, along with an increase in the average amount received in certain cash benefits such as tax credits and housing benefit. The increase in average income from employment is associated with the changing make-up of this group since 2007/08. While the proportion of households in the bottom fifth whose 'chief economic supporter' is in employment has increased, the proportion whose 'chief economic supporter' is retired has fallen. This reflects an ongoing pattern of retired households moving up the overall income distribution, due to their incomes growing at a faster rate than those of non-retired households (see *Incomes of Retired Households, 1977-2010/11* for further details and analysis).

Further analysis of longer-term trends in household income, including more detailed examination of different population groups and components of income, will be published later in the year.

5 . Retired households

Retired households are those where the income of retired household members accounts for the majority of the total household gross income (see the background note for the definition of a retired person). Retired households have different income and expenditure patterns to their non-retired counterparts.

Retired households are much more likely to be towards the bottom of the income distribution than at the top of the distribution. Whereas retired households made up 35% and 41% of the bottom and second quintile groups respectively, they only made up 10% of the richest fifth in 2011/12.

Among retired households, there is a higher degree of income inequality before taxes and benefits than for non-retired households. One way of looking at income inequality is to see what proportion of income is received by the richest fifth (20%) of households. In 2011/12, the richest fifth of retired households received 57% of total original income for all retired households. In comparison, the richest fifth of non-retired households received 47% of total income for that group.

Another widely used measure of inequality in the distribution of household income is the Gini coefficient. Gini coefficients can vary between 0 and 100 and the lower the value, the more equally household income is distributed. In 2011/12, the Gini coefficient for original income was 60% for retired households, compared with 45% for non-retired households.

Taxes and benefits have a particularly significant redistributive effect on the income of retired households, meaning that, in contrast, disposable income inequality is much lower for retired households than for non-retired households. Cash benefits play by far the largest part in bringing about this reduction, due principally to the state pension. Retired households' Gini coefficient for disposable income was 26% in 2011/12, compared with 33% for non-retired households. The corresponding coefficients for 2010/11 were 26% and 34%, respectively.

On average, the poorest fifth of retired households received £7,700 per year from cash benefits, while those in the other quintile groups received between £10,200 and £11,700 per year. Cash benefits represent almost half (49%) of retired households' total gross income on average, a proportion which is higher for poorer households and lower for richer households (78% for the poorest fifth of retired households and 26% for the richest fifth). Of the total value of retired households' cash benefits, just over three-quarters (78%) was due to the state pension.

On average, retired households derive significantly higher benefits from the National Health Service (NHS) than non-retired households. The benefit in kind from the NHS is spread fairly evenly across the income range of retired households and in 2011/12 it was worth an average of £5,700 per year, per household. The benefit derived from the NHS makes up 96% of the total benefit in kind received by retired households, on average.

Table 3: Summary of the effects of taxes and benefits on RETIRED households by quintile groups, 2011 /12

| | Quintile groups of ALL households | | | | | All retired households | Ratio Top/Bottom quintile |
|--|-----------------------------------|-------|-------|-------|-------|------------------------|---------------------------|
| | Bottom | 2nd | 3rd | 4th | Top | | |
| Original income | 2212 | 3653 | 6238 | 10678 | 31827 | 10922 | 14 |
| plus Total cash benefits | 7744 | 10208 | 11257 | 11689 | 11202 | 10420 | 1 |
| Gross income | 9956 | 13861 | 17496 | 22367 | 43030 | 21342 | 4 |
| less Direct taxes | 1035 | 1113 | 1680 | 2476 | 6909 | 2643 | 7 |
| Disposable income | 8921 | 12748 | 15815 | 19891 | 36120 | 18699 | 4 |
| less Indirect taxes | 2715 | 2811 | 3369 | 3714 | 6202 | 3762 | 2 |
| Post-tax income | 6207 | 9937 | 12446 | 16177 | 29918 | 14937 | 5 |
| Final income | 12020 | 15657 | 18342 | 22104 | 36035 | 20832 | 3 |
| Cash benefits as a percentage of gross income | 78 | 74 | 64 | 52 | 26 | 49 | |
| State Pension as a percentage of cash benefits | 82 | 76 | 76 | 74 | 81 | 78 | |

Source: Office for National Statistics

Notes:

1. Households are ranked by equivalised disposable income, using the modified-OECD scale

The extent to which retired households are major beneficiaries from redistribution through the tax and benefit system can be further seen by comparing average incomes of the top and bottom fifths of retired households. Before taxes and benefits, the richest fifth of retired households had an average original income of £31,800 per year, over 14 times that of the poorest fifth (£2,200 per year). The richest fifth of retired households had an average disposable income of £36,100 per year, four times that of the poorest fifth (£8,900 per year). After all taxes and benefits, the ratio between the top and bottom fifths was further reduced to three-to-one (final incomes of £36,000 and £12,000 per year, respectively), unchanged on the ratio for the previous year.

6 . Non-retired households

Taxes and benefits also lead to income being shared more equally between non-retired households, though the effect is smaller than for retired households. Before taxes and benefits, there is less inequality of non-retired households' income than for retired households. However, after the process of redistribution, inequality of post-tax income (as measured, for example, by the Gini coefficient) is greater than that for retired households. In 2011 /12 the Gini coefficient for post-tax income was 37% for non-retired households compared with 31% for retired households. The equivalent Gini for non-retired households was 38% in 2010/11.

In 2011/12, the average original income for non-retired households was £39,000 per year. As might be expected, the original income of non-retired households showed a relatively strong relationship to the number of economically active people they contained. On average, households in each of the top three quintile groups contained almost twice as many economically active people as those in the lowest group.

Table 4: Summary of the effects of taxes and benefits by quintile groups on NON-RETIRED households, 2011/12

| | Quintile groups of Non-Retired households | | | | | All households | Ratio Top/ Bottom quintile |
|--|---|-------|-------|-------|-------|----------------|----------------------------|
| | Bottom | 2nd | 3rd | 4th | Top | | |
| Original income | 7797 | 19241 | 32577 | 47791 | 87807 | 39043 | 11 |
| plus cash benefits | 6991 | 6525 | 4577 | 2164 | 1464 | 4344 | 0 |
| Gross income | 14788 | 25766 | 37154 | 49955 | 89271 | 43387 | 6 |
| less direct taxes (2) and employees' NIC | 1539 | 3636 | 6782 | 11168 | 22825 | 9190 | 15 |
| Disposable income | 13249 | 22130 | 30372 | 38787 | 66446 | 34197 | 5 |
| less indirect taxes | 3830 | 5044 | 6011 | 6736 | 9200 | 6164 | 2 |
| Post-tax income | 9418 | 17087 | 24361 | 32052 | 57246 | 28033 | 6 |
| plus benefits in kind | 8660 | 8491 | 7389 | 5868 | 5172 | 7116 | 1 |
| Final income | 18078 | 25578 | 31750 | 37920 | 62418 | 35149 | 4 |
| Number of individuals per household | | | | | | | |
| Children (3) | 1 | 1 | 1 | 1 | 0 | 1 | |
| Adults | 2 | 2 | 2 | 2 | 2 | 2 | |
| Men | 1 | 1 | 1 | 1 | 1 | 1 | |
| Women | 1 | 1 | 1 | 1 | 1 | 1 | |
| People | 3 | 3 | 3 | 3 | 2 | 3 | |
| People in full-time education | 1 | 1 | 1 | 1 | 0 | 1 | |
| Economically active people | 1 | 1 | 2 | 2 | 2 | 2 | |
| Retired people | 0 | 0 | 0 | 0 | 0 | 0 | |

Source: Office for National Statistics

Notes:

1. Households are ranked by equivalised disposable income, using the modified-OECD scale
2. These are: Income Tax (after deducting tax credits), Employees' National Insurance contributions and Council Tax/Northern Ireland rates (after deducting discounts, Council Tax benefits and rates rebates)
3. Children are defined as people aged under 16 or aged between 16 and 19, not married nor in a Civil Partnership, nor living with a partner; and living with parent(s)/guardian(s); and and receiving non-advanced further education or in unwaged-government training

Cash benefits provided 47% of gross income for households in the bottom quintile group, falling to less than 2% for households in the top quintile. Their payment results in a significant reduction in income inequality. The patterns for direct and indirect taxes are similar to those described for all households.

Of those benefits in kind for which a value can be assigned to households, the largest two categories for non-retired households are education and health. The poorest fifth of non-retired households received the highest value from benefits in kind, on average £8,700 per year in 2011/12. This is mainly due to the relatively high average number of children per household in this part of the income distribution.

7 . Longer-term trends in income inequality

Analysis of these data over time shows that, overall, income inequality, as measured by the Gini coefficient, increased considerably during the 1980s, but since then the changes have been smaller in scale.

As described above, the Gini coefficient is a measure of income inequality. Gini coefficients can vary between 0 and 100 and the lower the value, the more equally household income is distributed.

Looking at the results for all households, the 1980s were characterised by a large increase in inequality of disposable income, particularly during the second half of that decade. Following that rise, inequality of disposable income reduced slowly from 1990 until the mid-1990s, although it did not fully reverse the rise seen in the previous decade. In the late 1990s, income inequality rose slightly before falling once again in the early 2000s.

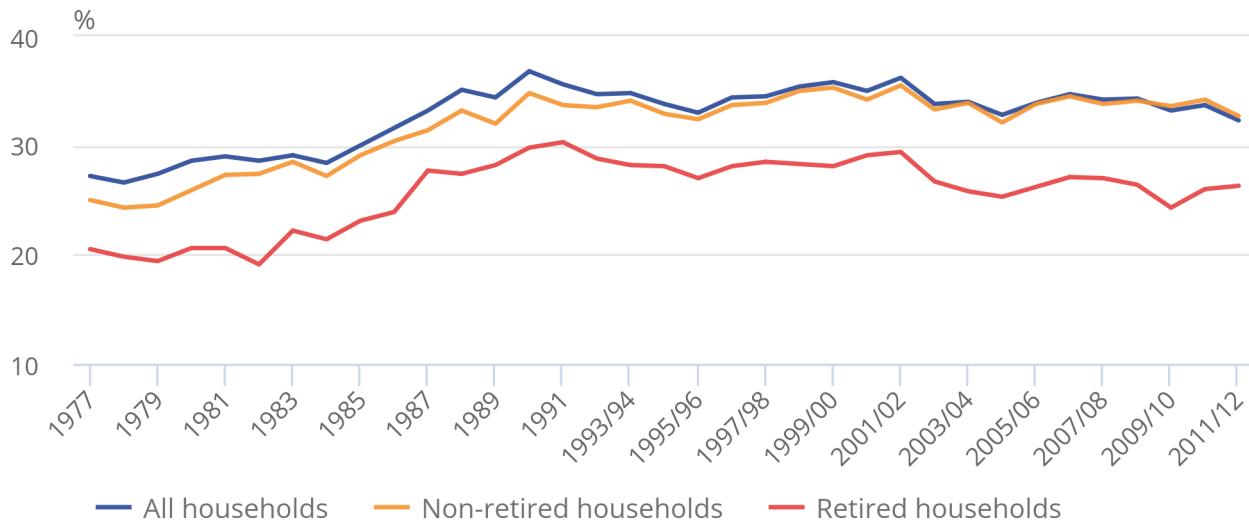
In recent years the trend has been broadly flat, though the most recent figures have shown a fall in inequality. The Gini coefficient for disposable income in 2011/12 was 32.3%, a fall from its 2010/11 value of 33.7%, and the lowest level since 1986. This fall in income inequality is partly due to earnings (including income from self-employment) falling towards the top of the income distribution but increasing for the poorest fifth of households. However, the effects of these variations in earnings have been magnified by changes in the tax and benefits system, including changes to income tax personal allowances, National Insurance Contribution rates and Child Tax Credits.

Inequality of disposable income for retired households has followed a similar trend, increasing significantly during the 1980s and peaking at 30.3% in 1991. Since then the broad trend has been downwards, though income inequality levels remain above those seen in the late 1970s and early 1980s. There has been more year-on-year variation in the Gini coefficients for retired households than for the overall population, though this is primarily a consequence of the smaller sample size on which these estimates are based. In 2011/12, the Gini coefficient for disposable income amongst retired households was 26.3%, broadly unchanged from the previous year (26.0%).

In 2011, ONS published [‘The effects of taxes and benefits on income inequality, 1980 – 2009/10’](#), (188.6 Kb Pdf) which provides a more detailed analysis of these longer term trends.

Figure 4: Gini coefficients, 1997 to 2011/12

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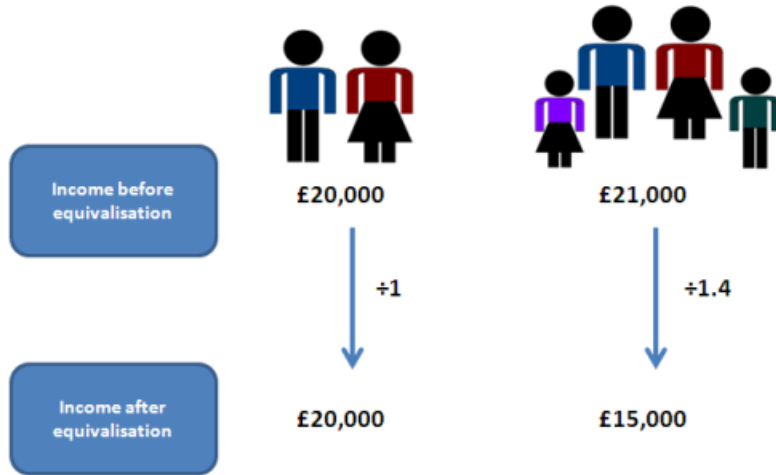
Source: Office for National Statistics

8. Background notes

1. Today's analysis, along with '[The effects of taxes and benefits on household income, 2011/12: Further analysis and methodology](#)' can be found on the Office for National Statistics website.
2. This analysis has been undertaken each year since the early 1960s. Where it is practical, the methodology used is similar to that used in previous years. However, there have been some changes in the underlying surveys and improvements made to the methodology. For this reason, one should be cautious about making direct comparisons with earlier years. Comparisons with previous years are also affected by sampling error (for more details see the technical paper). Time series are presented for inequality measures.

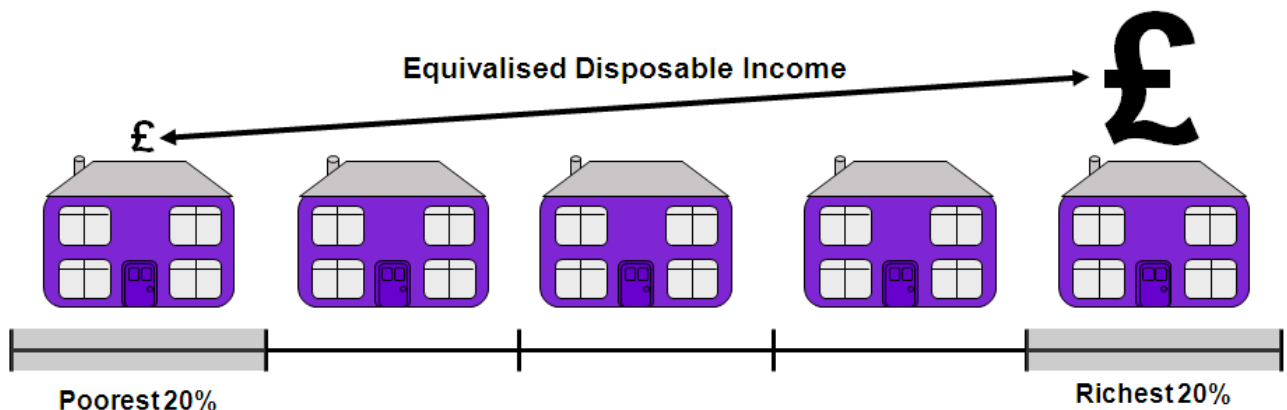
3. Glossary

Equivalisation: Income quintile groups are based on a ranking of households by equivalised disposable income. Equivalisation is the process of accounting for the fact that households with many members are likely to need a higher income to achieve the same standard of living as households with fewer members. Equivalisation takes into account the number of people living in the household and their ages, acknowledging that whilst a household with two people in it will need more money to sustain the same living standards as one with a single person, the two person household is unlikely to need double the income.



This analysis has used the [modified-OECD equivalisation scale \(165.7 Kb Pdf\)](#) since 2009/10. Previously the McClements Scale was used.

- Gini coefficients:** The most widely used summary measure of inequality in the distribution of household income is the [Gini coefficient](#). The lower the value of the Gini coefficient, the more equally household income is distributed. A Gini coefficient of 0 would indicate perfect equality where every member of the population has exactly the same income, whilst a Gini coefficient of 100 would indicate that one person would have all the income.
- Income quintiles:** Households are grouped into quintiles (or fifths) based on their equivalised disposable income. The richest quintile is the 20% of households with the highest equivalised disposable income. Similarly, the poorest quintile is the 20% of households with the lowest equivalised disposable income.



- Household income:** This analysis uses several different measures of household income. Original income (before taxes and benefits) includes income from wages and salaries, self-employment, private pensions and investments. Gross income includes all original income plus cash benefits provided by the state. Disposable income is that which is available for consumption, and is equal to gross income less direct taxes. Post-tax income is calculated by estimating the payment of indirect taxes, and deducting these from disposable income. Final income is calculated as post-tax income plus benefits in kind received from the state.

7. **Retired persons and households:** A retired person is defined as anyone who describes themselves (in the Living Costs & Food survey) as 'retired' or anyone over minimum National Insurance pension age describing themselves as 'unoccupied' or 'sick or injured but not intending to seek work'. A retired household is defined as one where the combined income of retired members amounts to at least half the total gross income of the household.

8. **Users and uses of these statistics**

The statistics contained within this release are of particular interest to HM Treasury (HMT), HM Revenue and Customs (HMRC) and the Department for Work and Pensions (DWP) in determining policies on taxation and benefits and in preparing Budget and pre-budget reports. Analyses by HMT based on this series, as well as the underlying LCF dataset, were published alongside the 2013 Budget. A dataset, based on that used to produce these statistics, is used by HMT in conjunction with the Family Resources Survey (FRS) in their Intra-Governmental Tax and Benefit Microsimulation Model (IGOTM). This is used to model possible tax and benefit changes before policy changes are decided and announced.

9. In addition to policy uses in Government, the statistics are frequently used and referenced in research work by academia, think tanks and articles in the media. These pieces often examine the impact of Government policy, or are used to advance public understand of tax and benefit matters. The data used to produce this release is made available to other researchers via the UK Data Service.

10. These statistics allow for analysis of the distributional impact of government policy on taxes and benefits. They are the only statistics available that are able to give such a complete picture of the distribution of income including indirect taxes and benefits in kind. The 2009 report by the Commission on the Measurement of Economic Performance and Social Progress by Stiglitz, Sen and Fitoussi identified income distribution, in addition to measures of average income, as an important factor in the measurement of well-being, giving a more complete picture of the standards of living experienced by individuals.

11. **Quality and methodology information**

A [Quality and Methodology Information document \(101.8 Kb Pdf\)](#) for these statistics is available on the ONS website.

12. The primary source of the estimates reported in this release is the Living Costs and Food survey (LCF). As the LCF is a sample survey, the estimates produced from it will be subject to sampling error. While each sample is designed to produce the 'best' estimate of the true population value, a number of equal sized samples covering the population would generally produce varying population estimates. A 95% confidence interval is a range within which the true population would fall for 95% of the times the sample survey was repeated. It is a standard way of expressing the statistical accuracy of a survey based estimate. If an estimate has a high error level, the corresponding confidence interval will be very wide. Estimates of the confidence intervals are provided in the table below:

Table 5: 95% confidence intervals for gross and disposable income of households, and as a percentage of the published estimate, 2011/12

| Average per household (£ per year) | | Gross income | | | Disposable income | | |
|------------------------------------|---------------------|--------------|--------------------|---------------|-------------------|--------------------|---------------|
| | | Lower bound | Published estimate | Upper bound ± | Lower bound | Published estimate | Upper bound ± |
| All households | Bottom decile group | 9,773 | 10,253 | 10,733 4.7 | 8,555 | 9,028 | 9,501 5.2 |
| | Mean | 36,537 | 37,456 | 38,375 2.5 | 29,376 | 30,027 | 30,678 2.2 |
| | Top decile group | 96,493 | 101,291 | 106,089 4.7 | 72,106 | 75,527 | 78,948 4.5 |
| Retired households | Bottom decile group | 7,581 | 8,056 | 8,531 5.9 | 6,557 | 7,014 | 7,471 6.5 |
| | Mean | 20,508 | 21,342 | 22,176 3.9 | 18,039 | 18,699 | 19,359 3.5 |
| | Top decile group | 50,987 | 55,058 | 59,129 7.4 | 42,744 | 45,935 | 49,126 6.9 |
| Non-retired households | Bottom decile group | 10,727 | 11,371 | 12,015 5.7 | 9,397 | 10,024 | 10,651 6.3 |
| | Mean | 42,126 | 43,387 | 44,648 2.9 | 33,302 | 34,197 | 35,092 2.6 |
| | Top decile group | 105,145 | 111,606 | 118,067 5.8 | 77,713 | 82,332 | 86,951 5.6 |

Source: Office for National Statistics

Notes:

1. Ranked by equivalised disposable income

13. Related statistics and analysis

Further analysis of these statistics is planned for this year, including a number short articles analysing particular groups or components of income in more detail.

14. Over the last year, articles published by ONS based on these data have included:

Measuring Benefits in Kind - Methodological Changes in the Measurement of Benefits in Kind, 2005/06-2010/11

Income of Retired Households, 1977-2010/11

[Middle Income Households, 1977-2010/11](#)

15. The Department for Work and Pensions (DWP) publishes analysis each year of the income distribution in their publication Households Below Average Income (HBAI), based on data from the Family Resources Survey (FRS). Further information can be found in the [latest publication](#), including data for 2011/12, released 13 June 2013. Due to HBAI being based on a different survey, along with some methodological differences, HBAI and ETB estimates can differ slightly from each other. However, historical trends are broadly similar across the two sources.

16. **Measuring national well-being**

This release adds to the evidence base amassed as part of the ONS Measuring National Well-being Programme. The programme aims to produce accepted and trusted measures of the well-being of the nation - how the UK as a whole is doing.

Measuring National Well-being is about looking at 'GDP and beyond'. It includes headline indicators in areas such as health, relationships, job satisfaction, economic security, education, environmental conditions and measures of 'personal well-being' (individuals' assessment of their own well-being).

Find out more on the Measuring National Well-being website pages.

17. Details of the policy governing the release of new data are available by visiting www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html or from the Media Relations Office email: media.relations@ons.gsi.gov.uk

These National Statistics are produced to high professional standards and released according to the arrangements approved by the UK Statistics Authority.