

Statistical bulletin

Household income inequality, UK: financial year ending 2021

Initial insight into main estimates of household incomes and inequality in the UK, along with analysis of how these measures have changed over time accounting for inflation and household composition.



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Next release: To be announced

Correction

28 March 2022 11:40

A correction has been made to the data in figure 4. The previous version had incorrect data. We apologise for any inconvenience caused.

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1. Other pages in this release

- Average household income, UK: financial year ending 2021
- Interpreting changes in UK income estimates during the coronavirus pandemic: financial year ending 2021.

2. Main points

- Disposable income inequality fell slightly to 34.4% in the financial year ending (FYE) 2021 from 35.4% in FYE 2020; however, this difference was not statistically significant, and disposable income inequality remained broadly in line with the average over the decade prior to the coronavirus (COVID-19) pandemic.
- Original income (before direct taxes and cash benefits) has fallen from 51.7% to 48.6% over the last decade (FYE 2012 to FYE 2021); this reflects greater equality in earnings over this period, partially offset by a fall in the effectiveness of cash benefits at reducing income inequality.
- Disposable income inequality for people in retired households remained stable at 30.8%, changing only 0.1 percentage points from FYE 2020 to 2021; income inequality of retired households remains at near historical highs, although remains consistently lower than non-retired households (34.4% for FYE 2021).

3. Analysis of income inequality

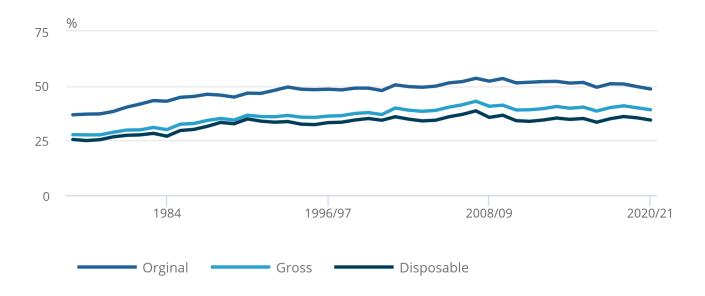
Income inequality in the UK as measured by the Gini coefficient reduced by 1.0 percentage points from 35.4% to 34.3%, when comparing the financial year ending (FYE) 2020 with FYE 2021. This was driven by a reduction in mean disposable income in both the fifth poorest and richest households of 3.4% and 1.3% respectively. While the fifth richest households saw a nominal reduction of £957 in household disposable income, the poorest fifth of households saw a corresponding reduction of £568. This follows a relatively stable ten-year period leading up to FYE 2021 (FYE 2012 to FYE 2021), where income inequality derived from disposable income increased by an average of only 0.07 percentage points per year as shown in Figure 1.

Figure 1: Income inequality fell slightly in financial year ending (FYE) 2021, but remains in line with the average over the decade before the coronavirus pandemic

Gini coefficients for measures of original, gross and disposable income, UK, 1977 to financial year ending 2021

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Gini coefficients for measures of original, gross and disposable income, UK, 1977 to financial year ending 2021



Source: Office for National Statistics - Household Finances Survey

Notes:

- 1. 2020/21 represents the financial year ending 2021, (April to March), and similarly for all other years expressed in this format.
- 2. Original income includes all sources of income from employment, private pensions, investments and other non-government sources. The receipt of cash benefits is then added to original income to estimate gross income. Finally, direct taxes are subtracted from gross income to estimate disposable income.
- 3. Estimates of income inequality from financial year ending (FYE) 2002 onwards have been adjusted for the under-coverage of top earners.
- 4. Estimates up to and including financial year ending (FYE) 2017 are sourced from the Living Costs and Food (LCF) survey. Estimates from FYE 2018 onwards are based on the Household Finances Survey, which the LCF is part of.

Over this ten-year period (FYE 2012 to FYE 2021), the Gini coefficient for original income (which includes sources of income from employment, private pensions, investments and other income) decreased by a total of 3.1 percentage points, reflecting greater equality. However, the Gini coefficient for gross income (which incorporates cash benefits, including the temporary £20 increase to the Universal Credit standard allowance during the coronavirus pandemic) remained stable.

It should be noted that there are typically large confidence intervals around the Gini coefficient as shown in Figure 2. Values are very sensitive to movements at the extremes of the distribution and should be taken together with a range of other inequality measures. Confidence intervals are slightly lower for the latest years' estimate, as the achieved sample for the Household Finances Survey (HFS) was higher.

Figure 2: The Gini coefficient fell from 35.4% in FYE 2020 to 34.4% in FYE 2021, however confidence intervals overlap

Gini coefficient for disposable income and 95% confidence intervals around the central estimate, UK, FYE 2020 to 2021

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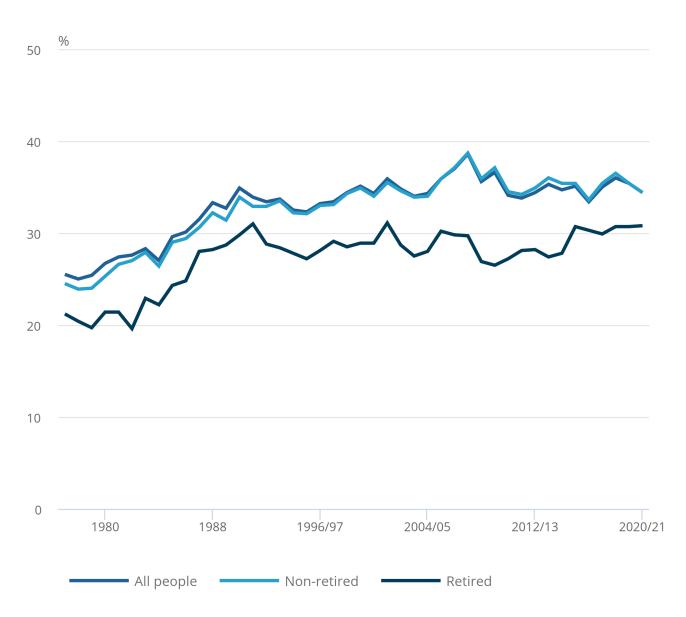
Income inequality varies by household type as shown in Figure 3. Over the five-year period leading up to FYE 2021 (FYE 2017 to FYE 2021), the overall difference in inequality is greater for non-retired households than retired, with absolute increases in the Gini coefficient of 0.8 and 0.5 percentage points respectively. The Gini coefficient is also typically far more stable over time in retired households. Over the same five-year period, retired households have an average annual increase of 0.13 percentage points per year, while non-retired households saw an average annual increase of 0.2 percentage points per year.

Figure 3: Income inequality for people in retired households increased by 2.7 percentage points in the 10-year period leading up to financial year ending 2021

Gini coefficients for disposable income by household type, UK, 1977 to financial year ending 2021

Figure 3: Income inequality for people in retired households increased by 2.7 percentage points in the 10-year period leading up to financial year ending 2021

Gini coefficients for disposable income by household type, UK, 1977 to financial year ending 2021



Source: Office for National Statistics - Household Finances Survey

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The characteristics of the Gini coefficient make it particularly useful for making comparisons over time, between countries and before or after taxes and benefits. However, one disadvantage of the Gini coefficient is that, as a single summary indicator, it cannot distinguish between different shaped income distributions. For that reason, it is useful to look at this index alongside other measures of inequality (Figure 4).

In the 10-year period leading up to FYE 2021 (FYE 2012 to 2021), the S80/S20 ratio increased from 5.2 to 5.9. In FYE 2021, the S80/S20 ratio increased slightly in comparison with FYE 2020. While both the poorest and richest fifth of households showed a slightly reduced share in total disposable income (and a resulting increased share of total income across the middle of the distribution), the ratio between them increased.

The P90/P10 ratio increased from 4.0 to 4.3 in the 10-year period leading up to FYE 2021, however it remained stable in comparison with FYE 2020. The Palma ratio has remained broadly stable.

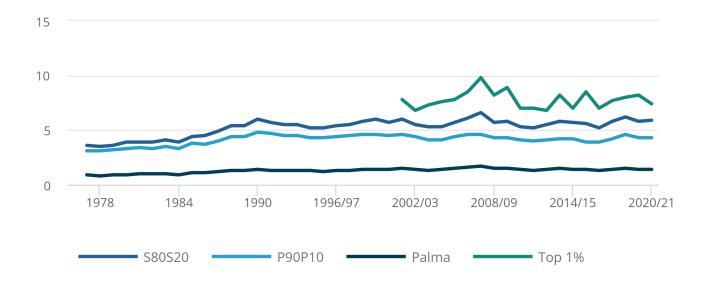
Finally, the amount of income accounted for by the richest 1% has increased by 0.4 percentage points to 7.4% over the 10-year period leading up to FYE 2021. Again, there was a reduction when comparing this year's data with both FYE 2020 and FYE 2019 (pre-coronavirus pandemic years).

Figure 4: Alternative measures of inequality have increased over the 10-year period to financial year ending 2021

S80S20 ratio, P90P10 ratio, Palma ratio, and top 1% share, equivalised disposable income, all people, UK, 1977 to financial year ending 2021

Figure 4: Alternative measures of inequality have increased over the 10-year period to financial year ending 2021

S80S20 ratio, P90P10 ratio, Palma ratio, and top 1% share, equivalised disposable income, all people, UK, 1977 to financial year ending 2021



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4. Household income inequality data

The effects of taxes and benefits on household income, disposable income estimate

Dataset | Released 28 March 2022

Average UK household incomes, taxes, and benefits by household type, tenure status, household characteristics and long-term trends in income inequality.

5. Glossary

Disposable income

Disposable income is arguably the most widely used household income measure. It is the amount of money that households have available for spending and saving after direct taxes (such as Income Tax, National Insurance and Council Tax) have been accounted for. It includes earnings from employment, private pensions and investments, as well as cash benefits provided by the state.

Equivalisation

We compare different types of individuals and households (such as retired and non-retired, or rich and poor) and compare over time after income has been equivalised. 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 considers the number of people living in the household and their ages, acknowledging that while 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 uses the <u>modified Organisation for Economic Co-operation and Development (OECD) equivalisation scale (PDF, 165KB).</u>

Measures of income inequality

The mean measure of income divides the total income of individuals by the number of individuals. A limitation of using the mean is that it can be influenced by just a few individuals with very high incomes and therefore does not necessarily reflect the standard of living of the "typical" person. However, when considering changes in income and direct taxes by income decile or types of households, the mean allows for these changes to be analysed in an additive way.

Many researchers argue that growth in median household incomes provides a better measure of how people's well-being has changed over time. The median household income is the income of what would be the middle person, if all individuals in the UK were sorted from poorest to richest. Median income provides a good indication of the standard of living of the "typical" individual in terms of income.

Gini coefficient

The <u>Gini coefficient</u> is one of the most widely used measures of inequality in the distribution of household income. It takes values between 0% and 100%, with higher values representing an increase in the level of inequality. A value of 0% indicates complete equality in the distribution of household income, implying that all people have the same equivalised income. A value of 100% indicates complete inequality, implying that one person has all the income, and the others have no income.

P90/P10

The ratio of the income of the individual at the bottom of the top decile (or 10%) to that of the person at the top of the bottom decile.

S80/S20

The ratio of the total income received by the 20% of people with the highest income to that received by the 20% with the lowest income.

Palma ratio

The ratio of the income share of the richest 10% of people to that of the poorest 40%.

6. Measuring these data

This release provides headline estimates of average disposable income, calculated using the Household Finances Survey data, a newly combined data source that has been used since FYE 2021. These data are derived from a combination of the Living Costs and Food Surveyand the Survey on Living Conditions questionnaires, with harmonised income collection, to provide a voluntary sample survey of around 17,000 private households in the UK. ONS estimates of median and mean household income from 1977, up to and including FYE 2016, are based on the Living Costs and Food Survey (LCF). Estimates produced from FYE 2017 onwards have been revised to include data from the Household Finances Survey (HFS) and remain comparable with those produced using the LCF for the same period. More information about the impact of this change in data source can be found in Improving the measurement of household income.

To make robust comparisons over time, data have been adjusted for effects of inflation and are equivalised to account for changes in household composition. When growth rates are quoted, they compare the average for a group of households in one period to the average for a different set of households in the next period. These statistics are assessed fully compliant with the Code of Practice for Statistics and are therefore designated as National Statistics. More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the Effects of taxes and benefits on household income QMI.

A newly released Income and Earnings interactive tool allows data to be compared across a range of sources, and can be filtered by topic area, data source, and geographic coverage.

Retired and non-retired households

This bulletin presents analysis examining the incomes of people who live in retired and non-retired households. A retired household is one where more than 50% of its income is sourced from retired people. A retired person must satisfy one of the following criteria:

- their self-defined employment status is "Retired", and they are aged over 50 years
- their self-defined employment status is "Sick/Injured", they are not seeking work and aged at or above the State Pension Age (SPA)

As such, analysis of the average income of people living in retired households can include much younger people and potentially exclude older people. However, the strength of this measure is that it highlights those individuals who are most likely to be affected by policy, societal or economic changes that disproportionately impact upon pension income.

Transformation of data

The ONS is currently conducting research into making more use of administrative data on income, including Department for Work and Pensions (DWP) benefits data and HM Revenue and Customs (HMRC) tax data. Although these other sources have their own limitations, by using them together with surveys we should be able to improve how we measure household income. In particular, administrative data are likely to help address limitations in survey-based statistics, discussed in more detail in the strengths and limitations section such as under-reporting at the top and bottom of the income distribution, and enable analysis at lower geographic levels.

The Government Statistical Service (GSS) recently published <u>collaborative plans</u> relating to income and earnings coherence, which includes plans to continue to build on the use of <u>administrative data in household surveys</u>.

7. Strengths and limitations

An important strength of these data is that comparable estimates are available back to 1977, allowing analysis of long-term trends. This release also currently provides the earliest survey-based analysis of the household income distribution available each year, providing insight into the evolution of living standards as early as possible.

However, as with all survey-based sources, the data are subject to some limitations. For example, the Household Finances Survey (HFS) is a sample of the private household population, and therefore does not include those that live in institutionalised households, such as care homes and hostels, or the homeless. As such, it is likely that many of the poorest in society are not captured, which users should bear in mind when interpreting these statistics.

In addition, household income surveys are known to suffer from under-reporting at the top and bottom of the income distribution. An adjustment to address survey under-coverage of the richest people has been introduced for statistics covering the financial year ending (FYE) 2002 onwards, reported in more detail in Top income adjustment in effects of taxes and benefits data: methodology. However, measurement issues at the bottom remain. See the Effects of taxes and benefits on household income QMI for further details of the sources of error.

Table 11 and Table 32 of our Household disposable income and inequality, UK: financial year ending 2021 dataset provide estimates of uncertainty for many headline measures of average income and income inequality.

The Department for Work and Pensions (DWP) also produces an analysis of the UK income distribution in its annual <u>Households below average income (HBAI)</u> publication, using data from its Family Resources Survey (FRS).

8. Related links

Income estimates for small areas, England and Wales: financial year ending 2018

Bulletin | Released 5 March 2020

Small area model-based income estimates covering local areas called Middle layer Super Output Areas (MSOAs) in England and Wales.

Effects of taxes and benefits on UK household income FYE 2020

Bulletin | Released 28 May 2021

The redistribution effects on individuals and households of direct and indirect taxation and benefits received in cash or kind, analysed by household type and the changing levels of income inequality over time.

Employee earnings in the UK: 2021

Bulletin | Released 26 October 2021

Measures of employee earnings, using data from the Annual Survey for Hours and Earnings (ASHE).

Household below average income: for financial years ending 1995 to 2020

Report | Released 25 March 2021

Statistics on the number and percentage of people living in low income households for financial years between 1995 and 2020.

Using tax data to better capture top earners in household income inequality statistics

Article | Released 26 February 2019

Adjustments to deal with issues of under-reporting of UK top incomes. Builds on methods from the Department for Work and Pensions (DWP), using administrative data supplied by HM Revenue and Customs (HMRC).

The effects of taxes and benefits on household income, technical report: financial year ending 2020 Methodology | 25 June 2020

The redistribution effects on households of direct and indirect taxation and benefits received in cash or kind analysed by household type, and the changing levels of income inequality over time.