

Statistical bulletin

Effects of taxes and benefits on UK household income: financial year ending 2021

The redistribution effects on individuals and households of direct and indirect taxation and benefits received in cash or kind analysed by household type.



Contact: Paula Croal hie@ons.gov.uk +44 1633 456651 Release date: 29 July 2022 Next release: To be announced

Table of contents

- 1. Main points
- 2. Taxes and benefits' effects at different income levels
- 3. Effects of taxes and benefits on UK household income data
- 4. Glossary
- 5. Measuring the data
- 6. Strengths and limitations
- 7. Related links

1. Main points

- In the financial year ending (FYE) 2021, which covered the first year of the coronavirus pandemic, the median household income in the UK before taxes and benefits was £34,000, increasing to £37,600 after taxes and benefits.
- The richest fifth of people's average household income before taxes and benefits (£107,600) was 13 times larger than the poorest fifth (£8,200); however, this reduced to 4 times larger (£79,200 and £21,400, respectively) after taxes and benefits.
- Over the 10-year period leading up to FYE 2021, the richest fifth of people's average household income after taxes, benefits and price inflation increased by an average of 1.7% per year, compared with the poorest fifth, which increased by an average of 1.5% per year.
- Income inequality decreased by 1.0 percentage point after all taxes and benefits between FYE 2020 and FYE 2021, following a 10-year period of relative stability.
- Indirect taxes made income inequality rise by 3.8 percentage points; the poorest fifth of people paid 22.9% on indirect taxes such as Value Added Tax (VAT) compared with 9.1% for the richest fifth of people in FYE 2021.
- Reductions in indirect taxes and increased benefits-in-kind, largely in response to the coronavirus (COVID-19) pandemic, drove the proportion of individuals receiving more in benefits than they paid in taxes increased from 47.5% to 54.2% in FYE 2021, the largest annual increase since records began in 1977.

2. Taxes and benefits' effects at different income levels

Taxes and benefits lead to income being shared more equally in financial year ending 2021

In the financial year ending (FYE) 2021 which covered the first year of the coronavirus (COVID-19) pandemic, the median household income in the UK before taxes and benefits was £34,000, increasing to £37,600 after taxes and benefits. The richest fifth had an average income before taxes and benefits of £107,600, over 13 times larger than the poorest fifth (£8,200).

After cash benefits and direct taxes, the richest fifth of people had an average disposable income of £78,100, 5.9 times larger than the poorest fifth (£13,200). After considering all taxes and benefits, this gap reduced to 3.7, with average final income of £79,200 and £21,400 for richest and poorest people, respectively.

Figure 1. Taxes and benefits lead to household income being shared more equally between people

Household original, gross, disposable, post-tax and final income, by quintile group, and richest fifth to poorest fifth of individuals ratio, all individuals, FYE 2021, UK

Notes:

1. Incomes are equivalised using the modified Organisation for Economic Co-operation and Development (OECD) equivalisation scale.

Download the data

.xlsx

During the 10-year period leading up to FYE 2021 (FYE 2012 to FYE 2021), the richest fifth of people's average household income after taxes and benefits increased by 1.7% per year, compared with the poorest fifth, which increased at a slightly lower rate of 1.5% per year.

Cash benefits were most effective at reducing income inequality in financial year ending 2021

Cash benefits had the largest effect on reducing income inequality in FYE 2021, reducing the <u>Gini coefficient</u> by 9.5 percentage points, from 48.6% for original income to 39.1% for gross income. This is consistent with the 9.7 percentage point reduction seen in FYE 2020, suggesting the role of cash benefits in reducing income inequality remained similar throughout the coronavirus pandemic.

Figure 2: The redistributive effect of taxes and benefits lowers income inequality

Notes:

1. pp – percentage points.

Download the data

.xlsx

Indirect taxes increased income inequality in financial year ending 2021

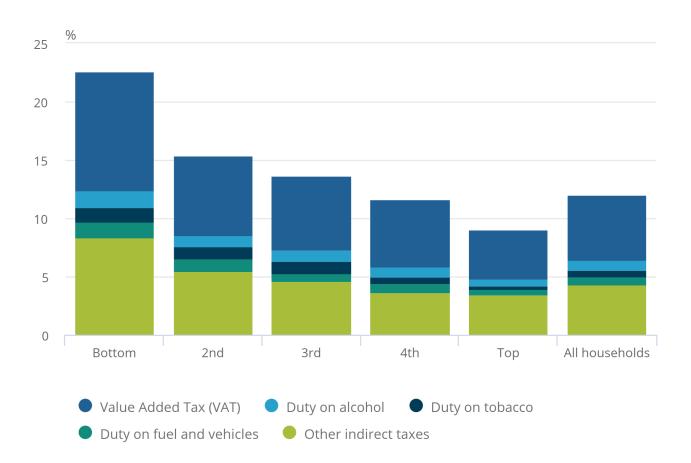
Indirect tax, such as Value Added Tax (VAT), is determined by household expenditure. The richest fifth of people pay 2.3 times more in indirect taxes (£8,500) than the poorest fifth (£3,800), driven by greater expenditure. However, richer households pay a smaller proportion of disposable income on indirect taxes (9%) than the poorest fifth (23%).

Figure 3: Poorer households paid a greater proportion of disposable income on indirect taxes than richer households

Indirect taxes as a percentage of disposable income for all households by quintile groups, financial year ending 2021, UK

Figure 3: Poorer households paid a greater proportion of disposable income on indirect taxes than richer households

Indirect taxes as a percentage of disposable income for all households by quintile groups, financial year ending 2021, UK



Source: Office for National Statistics - Household Finances Survey

Notes:

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

The effect of taxes and benefits increased household final income in FYE 2021

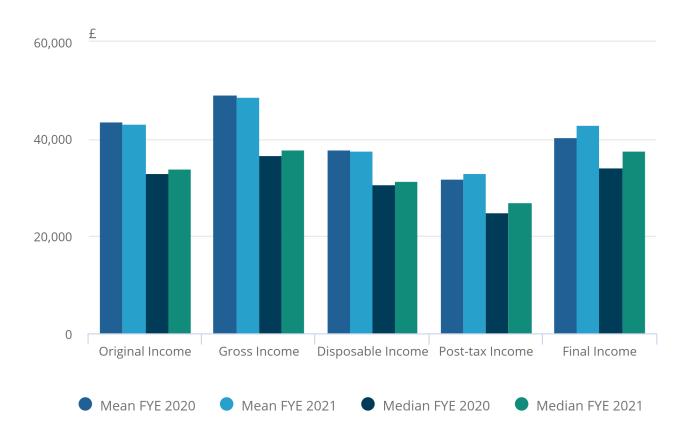
Between FYE 2020 and FYE 2021, both median and mean final income (after taxes and benefits) increased by 9.8% and 6.4%, respectively. This contrasts with a 2.0% increase in median disposable income (before taxes and benefits), and a 0.6% decrease in <u>mean disposable income</u>. Mean final income increased across all income quintiles. The richest fifth saw less relative growth than average (3.4% versus 6.4%). This was comparable in cash terms with an annual increase of £2,570 for both the richest fifth and all individuals. The poorest fifth saw an 8.4% increase (£1,670 in cash).

Figure 4: Mean and median income increased after taxes and benefits

Mean and median household original, gross, disposable, post-tax and final income, financial year ending 2021, UK

Figure 4: Mean and median income increased after taxes and benefits

Mean and median household original, gross, disposable, post-tax and final income, financial year ending 2021, UK



Source: Office for National Statistics - Household Finances Survey

Notes:

- 1. Incomes are equivalised using the modified Organisation for Economic Co-operation and Development (OECD) equivalisation scale.
- 2. Incomes are adjusted for inflation using the Consumer Prices Index including owner-occupiers' housing costs (CPIH) excluding Council Tax.
- 3. FYE 2021, represents the financial year ending 2021, (April to March), and similarly for all other years expressed in this format.

Mean cash benefits remained broadly constant (nominal increase of £44) between FYE 2020 and FYE 2021 and direct taxes reduced slightly (2%). Benefits-in-kind increased by 15%, with increases in NHS spending during the coronavirus pandemic as the main driver. Indirect taxes reduced by 24% between FYE 2020 and 2021, driven by changes in policy (such as a temporary reduction in Value Added Tax (VAT)) and consumer behaviour (lower overall spending) in response to the coronavirus-19 pandemic. The poorest fifth of people saw a 1.9% increase in cash benefits (nominal increase of £217) between FYE 2020 and FYE 2021 and a 17.3% decrease in direct taxes, driven by reduced Income Tax and National Insurance contributions. The poorest fifth of people also saw a 20.6% reduction in indirect taxes and 17.2% increase in benefits-in-kind.

Figure 5: Summary of the effects of taxes and benefits on all households

Financial year ending 2021, UK

Figure 5: Summary of the effects of taxes and benefits on all households

Financial year ending 2021, UK



Source: Office for National Statistics - Household Finances Survey

Notes:

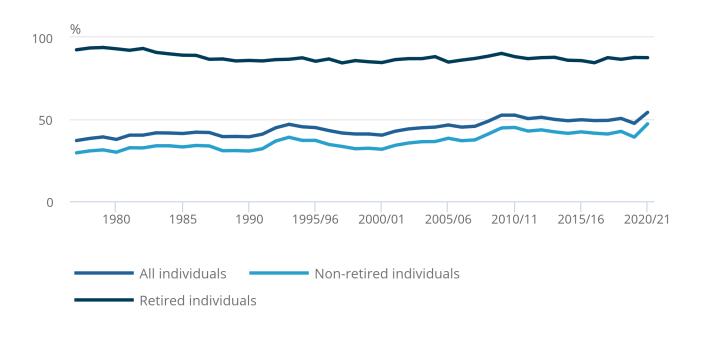
- 1. Incomes are equivalised using the modified Organisation for Economic Co-operation and Development (OECD) equivalisation scale.
- 2. Incomes are adjusted for inflation using the Consumer Prices Index including owner-occupiers' housing costs (CPIH) excluding Council Tax.
- 3. Estimates up to and including 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.

In FYE 2021, 54.2% of individuals received more in benefits than they paid in taxes. This is both the greatest proportion since 1977 and the largest annual increase, rising 7 percentage points since FYE 2020. Retired individuals received more in benefits than they paid in taxes (87.6%) compared with 47.2% of non-retired individuals, largely because of the classification of State Pension and Pension Credit as cash benefits. The number of non-retired individuals increased the annual change, with an increase of 8 percentage points between FYE 2020 and FYE 2021.

Proportion of individuals receiving more in benefits than paying in taxes, 1977 to financial year ending 2021, UK.

Figure 6: Over half of individuals received more in benefits than paid in taxes

Proportion of individuals receiving more in benefits than paying in taxes, 1977 to financial year ending 2021, UK.



Source: Office for National Statistics - Household Finances Survey

Notes:

- 1. Incomes are equivalised using the modified Organisation for Economic Co-operation and Development (OECD) equivalisation scale.
- 2. Incomes are adjusted for inflation using the Consumer Prices Index including owner-occupiers' housing costs (CPIH) excluding Council Tax.
- 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.
- 4. 2020/21 represents the financial year ending (FYE) 2021, (April to March), and similarly for all other years expressed in this format. Estimates prior to FYE 1995 are measured on a calendar year basis.

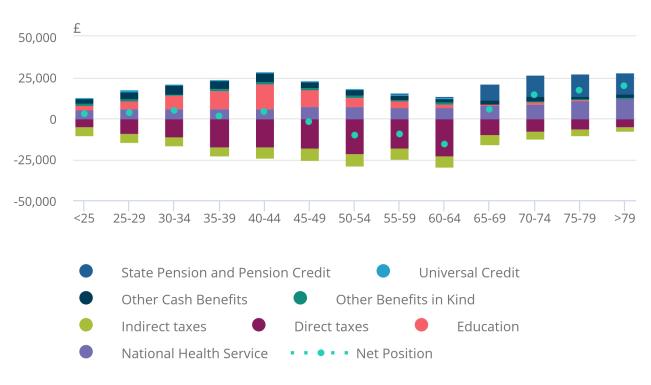
In FYE 2021, households with a household reference person (HRP) aged between 45 and 64 years paid more in taxes than received in benefits. State Pension and Pension Credit were the largest components of benefits received for households with the HRP aged 65 years or over in FYE 2021, followed by benefits derived from the National Health Service. For households with an HRP aged 44 years or below, benefits derived from education were the largest component of benefits received. Households where the HRP was aged 60 to 64 years paid the most in direct taxes (£22,600), followed by those aged 50 to 54 (£21,400).

Figure 7: Households whose heads are aged between 45 and 64 years paid on average more in taxes than they received in benefits

Effects of taxes and benefits by age of household reference person, financial year ending 2021, UK

Figure 7: Households whose heads are aged between 45 and 64 years paid on average more in taxes than they received in benefits

Effects of taxes and benefits by age of household reference person, financial year ending 2021, UK



Source: Office for National Statistics - Household Finances Survey

Notes:

1. Incomes are equivalised using the modified Organisation for Economic Co-operation and Development (OECD) equivalisation scale.

3. Effects of taxes and benefits on UK household income data

Average incomes, taxes and benefits of all individuals, retired and non-retired by decile group Dataset | Released 29 July 2022

Average annual incomes, taxes and benefits and household characteristics of retired and non-retired households in the UK. Data for financial years, by quintile and decile groups, country and region, and tenure type.

Average incomes, taxes and benefits of all individuals, retired and non-retired by quintile group Dataset | Released 29 July 2022

Average annual incomes, taxes and benefits and household characteristics of retired and non-retired households in the UK. Data for financial years, by quintile and decile groups, country and region, and tenure type.

Summary of the effects of taxes and benefits of individuals by household type

Dataset | Released 29 July 2022

Average annual incomes, taxes and benefits and household characteristics of retired and non-retired households in the UK. Data for financial years, by quintile and decile groups, country and region, and tenure type.

Effects of taxes and benefits on household income

Dataset | Released 29 July 2022

Average annual incomes, taxes and benefits and household characteristics of retired and non-retired households in the UK. Data for financial years, by quintile and decile groups, country and region, and tenure type.

4. Glossary

Stages in the redistribution of income

There are five stages in the redistribution of income.

Firstly, household members begin with income from employment, private pensions, investments, and other nongovernment sources. This is referred to as "original income".

Households then receive income from cash benefits. The sum of cash benefits and original income is referred to as "gross income". Cash benefits can refer to state-funded benefits such as Jobseeker's Allowance, Universal Credit, Child Benefit, State Pension and Personal Independence Payment. This is the second stage.

Thirdly, households then pay direct taxes. Direct taxes, when subtracted from gross income, are referred to as "disposable income". Direct taxes include deductions such as Income Tax, National Insurance contributions, student loan repayments and Council Tax (less Council Tax benefits or rebates).

Indirect taxes are then paid via expenditure. Disposable income minus indirect taxes is referred to as "post-tax income", where indirect taxes refer to those on goods and services such as Value Added Tax, duty on tobacco, alcohol and fuel, and Stamp Duty.

Finally, households receive a benefit from services (benefits-in-kind); benefits-in-kind plus post-tax income is referred to as "final income", where benefits-in-kind relate to non-cash benefits such as the National Health Service, education, free childcare, and travel subsidies.

Note that at no stage are deductions currently made for housing costs.

Equivalisation

Comparisons across different types of individuals and households or over time are made 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 modified <u>Organisation for Economic Co-operation and Development (OECD) equivalisation</u> scale.

Our analysis ranks individuals by their equivalised household disposable incomes, using the modified OECD scale.

Mean and median income

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.

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.

Household reference person

The household reference person is the householder who either:

- owns the household accommodation
- is legally responsible for the rent of the accommodation
- has the household accommodation as an emolument or perquisite
- has the household accommodation by virtue of some relationship to the owner who is not a member of the household

If there are joint householders, the household reference person will be the one with the higher income. If the income is the same, then the eldest householder is taken.

5. Measuring the data

Data in this release are calculated using the <u>Household Finances Survey</u> (HFS) data, a combination of the <u>Living</u> <u>Costs and Food Survey</u> (LCF) and <u>Survey on Living Conditions</u> with harmonised income collection from approximately 17,000 private households in the UK. Estimates up to disposable income are calculated from the full HFS sample, further estimates up to final income are calculated from the LCF component (approximately 5,000 households), which provides both income and expenditure data.

Data are adjusted for effects of inflation and 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 with the average for a different group in the next period. These statistics are fully compliant with the <u>Code of Practice for Statistics</u> and are designated as <u>National Statistics</u>. See the <u>Effects of taxes and benefits on household income QMI</u> for further detail on quality and methodology.

A newly released <u>income and earnings interactive tool</u> enables data comparisons across multiple sources, and can be filtered by topic area, data source, and geographic coverage.

Transformation of data

The ONS is conducting research into using administrative data on income, including Department for Work and Pensions benefits data and HM Revenue and Customs tax data. While other sources also have limitations, combining survey and administrative data will likely improve measurements of household income. See the <u>effects</u> of taxes and benefits on household income QMI and the Government Statistical Service's <u>income and earnings</u> coherence workplan for further detail.

Coronavirus (COVID-19)

Throughout the coronavirus (COVID-19) pandemic, household finances have been affected by restrictions and subsequently, financial support measures were introduced. Notably, financial support schemes were made available across FYE 2020 and FYE 2021 to employed and self-employed people through the Coronavirus Job Support Scheme (CJRS) and Self-Employment Income Support Scheme. More information can be found in <u>our</u> Interpreting changes in UK income estimates during the coronavirus pandemic article.

6. Strengths and limitations

Comparable estimates are available back to 1977, which allows analysis of long-term trends. Information on income and expenditure levels provide insight into indirect taxes paid by different household groups. This, combined with estimates of benefits-in-kind, provides the most complete assessment of the redistributive role of taxes and benefits in the UK.

Data remain subject to some limitations. The Household Finances Survey (HFS) is a sample of the private household population and does not include those living in institutionalised households, such as care homes and hostels, or people experiencing homelessness. Therefore, many of the poorest in society are likely not captured.

Household income surveys can suffer from under-reporting at the top and bottom of the income distribution. While an <u>adjustment to address survey under-coverage</u> of the richest people has been introduced for statistics covering financial year ending (FYE) 2002 onwards, measurement issues at the bottom remain. The <u>Effects of taxes and benefits on household income QMI</u> provides further details.

The <u>Gini coefficient</u> is used as a measure of income inequality in this publication and is one of the most widely used measures of income inequality. It is particularly useful for making comparisons over time, between countries and before or after taxes and benefits. The ONS publish a range of income inequality metrics to supplement the Gini coefficient. In doing so, we aim to overcome limitations of using single summary indicators such as changes to the shape and composition of the income distribution.

7. Related links

Top income adjustment in effects of taxes and benefits data: methodology

Chapter | Released 25 February 2020

Analysis of a recently introduced approach to addressing survey under-coverage of the highest earners in effects of taxes and benefits data, using tax record information.

Average household income, UK: financial year ending 2021

Bulletin | Released 28 March 2022

Estimates of median and mean disposable income for people in the UK for the financial year ending (FYE) 2021.

Household income and inequality, UK: financial year ending 2021

Bulletin | Released 28 March 2022 Estimates of income inequality in the UK for the financial year ending 2021

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

Methodology | 8 June 2021

This technical report provides an update on how the effects of taxes and benefits on household income (ETB) datasets for financial year ending (FYE) 2018 to FYE 2020 are produced. It contains information relating to questionnaire changes and new or changed methodology for these years.

Income and earnings statistics guide

Article | Released 2 March 2020

This guide outlines the different data sources and outputs that feed into the analysis of income and earnings within the UK.