

Statistical bulletin

Average household income, UK: financial year ending 2020 (provisional)

Provisional estimates of median and mean disposable income for people in the UK for the financial year ending 2020.

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Next release: To be announced

Table of contents

- 1. Other pages in this release
- 2. Main points
- 3. Analysis of average income
- 4. Comparisons of provisional and final estimates
- 5. Average household income data
- 6. Glossary
- 7. Measuring the data
- 8. Strengths and limitations
- 9. Related links

1. Other pages in this release

Alongside this release, estimates of changes in income inequality in financial year ending 2020 are presented in a separate bulletin:

Household income inequality, UK: financial year ending 2020 (provisional)

2. Main points

- In financial year ending (FYE) 2020, the period leading up to the implementation of measures against the coronavirus (COVID-19), average household disposable income (after taxes and benefits) was £30,800 up 2.3% (£700) compared with FYE 2019, after accounting for inflation.
- Over FYE 2020, real earnings increased by an average of 1.5%, however more recently total annual pay growth for March to May 2020 fell by 1.3%, after accounting for inflation, which will likely impact adversely on income growth rates in FYE 2021
- The increase in median income in FYE 2020 continues an upward trend seen since FYE 2013, where average household income increased by an average of 2.1% per year.

3. Analysis of average income

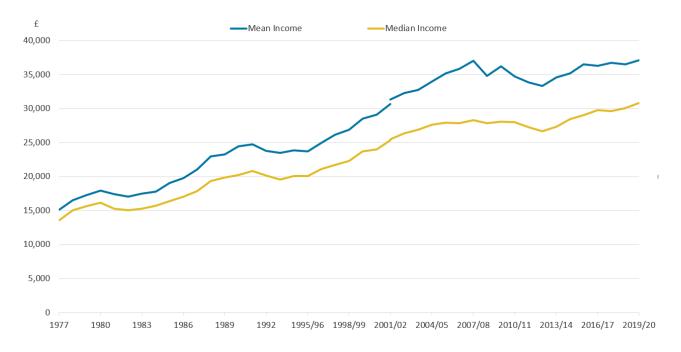
This bulletin looks at two measures of people's household disposable income: median and mean. Both measures are equivalised, meaning that they take into account that households with more people will need a higher income to achieve the same standard of living as households with fewer members. They are also measured before accounting for housing costs.

These provisional figures are "nowcasts" produced using a microsimulation model based on Living Costs and Food Survey (LCF) data, up-to-date information on tax and benefit policy, and the latest economic data in FYE 2020. More information about this process can be found in the <u>Measuring the data section</u>.

The provisional estimate of median disposable income in the UK is £30,800 in FYE 2020 – up 2.3% (£700) compared with the FYE 2019 (£30,100) shown in Figure 1.

Figure 1: Both median and mean disposable income increased in FYE 2020

Mean and median real equivalised household disposable income of individuals, UK, 1977 to FYE 2020



Source: Office for National Statistics

Notes:

- 1. 2019/2020, which represents the financial year ending 2020, (April to March), and similarly for all other years expressed in this format.
- 2. Incomes are adjusted for inflation using the Consumer Prices Index including owners occupiers' housing costs (CPIH) excluding Council Tax.
- 3. Estimates of income from FYE 2002 onwards have been adjusted for the under-coverage of top earners.

This increase in median income in FYE 2020 continues an upward trend in income growth since FYE 2013. During this time, median income has growth by an average of 2.1% per year.

Mean income also increased in FYE 2020, by 1.6% to reach £37,100 in FYE 2020. This is the highest rate of growth since FYE 2016 and continues the overall upward trend in mean income since FYE 2013, rising on average by 1.6% per year.

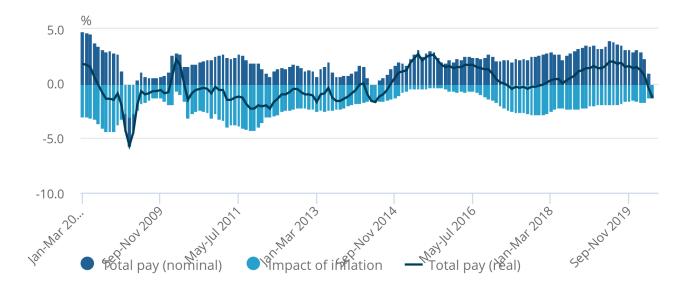
This increase in mean income means that it is now at similar levels to those just prior to the economic downturn in FYE 2008. Median income surpassed its pre-economic downturn levels in FYE 2015.

Figure 2: Real wages increased in financial year ending 2020

Average weekly earnings annual growth rates (seasonally adjusted) and impact of inflation, Great Britain, January to March 2008 to March to May 2020

Figure 2: Real wages increased in financial year ending 2020

Average weekly earnings annual growth rates (seasonally adjusted) and impact of inflation, Great Britain, January to March 2008 to March to May 2020



Source: Office for National Statistics

Average weekly earnings estimates are based on the pay period including the last week of each month. For April and May 2020, this was after coronavirus (COVID-19) restrictions were introduced. For March 2020, only a low proportion of employees' pay was affected, as payrolls are often set by mid-month (before restrictions were introduced).

Improvements in average incomes between FYE 2019 and FYE 2020 have occurred during a period of increases in both earnings and levels of employment. Between FYE 2019 and FYE 2020, total pay (which includes bonuses) increased by an average of 1.5% after accounting for inflation. (Figure 2).

However, towards the end of FYE 2020 and into FYE 2021, during a period when the economic impacts of the coronavirus have started to take hold, growth in real wages started to fall, to reach negative 1.3% in March to May 2020 compared with the same period a year earlier.

The employment rate for those aged 16 years and over increased from an average 61.3% during FYE 2019 to 61.7% during FYE 2020. In addition, there were some policy changes that will have had an impact on changes in household income. In FYE 2020, the personal allowance rose from £11,850 to £12,500, while the starting point for the 40% higher tax rates increased from £46,350 to £50,000. The National Living Wage for those aged 25 years and over also increased from £7.83 per hour to £8.21 per hour (up 4.9%).

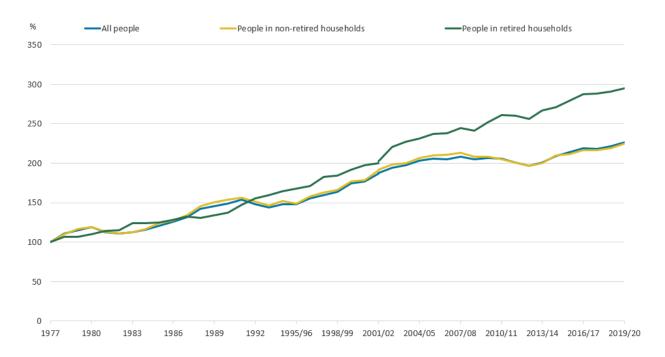
In addition, the basic State Pension increased in line with the "triple guarantee" (or "triple lock") that was introduced in FYE 2012. The current guarantee ensures that it increases by the highest of the increase in earnings, price inflation (as measured by the Consumer Prices Index (CPI)) or 2.5%. From April 2019, the basic State Pension increased by 2.6%, matching the rate of average earnings growth.

However, there was also a continued freeze on certain working-age benefits, such as Child Benefit and tax credits, which remained at FYE 2016 cash values, and will likely have had a negative impact on average household income growth.

There has been a focus in recent years on the change in income of non-retired households compared with those in retired households. The level of income for both groups, relative to their respective values in 1977, can be seen in Figure 3.

Figure 3: Income in retired and non-retired household increased in FYE 2020

Median real equivalised household disposable income of individuals by household type, UK, 1977 to FYE 2020, 1977 = 100



Source: Office for National Statistics

Notes:

- 1. 2019/2020, which represents the financial year ending 2020, (April to March), and similarly for all other years expressed in this format.
- 2. Incomes are adjusted for inflation using the Consumer Prices Index including owners occupiers' housing costs (CPIH) excluding Council Tax.
- 3. Indices are calculated relative to 1977 values.
- 4. Estimates of income from FYE 2002 onwards have been adjusted for the under-coverage of top earners.

Median income for people living in retired households grew by 1.3% in FYE 2020. This was likely to be influenced by the rise in State Pension, which grew by 2.6%, meaning a real-term increase compared with FYE 2019.

Median income for individuals living in non-retired households increased by 2.6% in real terms in FYE 2020 to £32,100. This was the seventh consecutive increase, during a period in which non-retired households grew by an average of 1.9% per year.

Following the economic downturn starting during FYE 2009, the average income of people living in retired households was relatively unaffected, with levels in FYE 2020 20.6% higher than pre-economic downturn (FYE 2008) levels.

This compares with people living in non-retired households, where incomes fell by 7.8% between FYE 2008 and FYE 2013. It took nine years (FYE 2017) for average incomes to recover to their pre-economic downturn levels (FYE 2008), and they were 5.4% higher in FYE 2020.

This relatively weaker growth over the past decade likely reflects differences in the composition of income between these two groups. Individuals in retired households were not as exposed to the earnings stagnation during the economic downturn, as the majority of their income is derived from the basic State Pension and private pensions, both of which increased during this time.

4. Comparisons of provisional and final estimates

Figure 4 highlights the accuracy of the provisional estimates of median household income over the five years in which subsequent outturn data are available.

Figure 4: Provisional estimates of median income are broadly in line with final estimates

Provisional estimates and final estimates of median income, UK, financial year ending (FYE) 2015 to FYE 2019

Notes:

- 1. Values are in nominal prices
- 2. These estimates have been adjusted for the under-coverage of top earners. This was introduced in FYE 2019, and so they are not comparable with previous provisional estimates.

The provisional estimate of median income provides a good indication of the final estimate over time. Over the five years in which the nowcast can be assessed, the provisional estimate consistently lies within the 95% confidence intervals of the final estimate.

5. Average household income data

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

Dataset | Released 22 July 2020

Provisional estimates of income and inequality measures, alongside historical data.

6. Glossary

Disposable income

Disposable income is the amount of money that households have available for spending and saving after direct taxes (such as Income Tax 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. More information on the different stages of income can be found in the <u>Things you need to know about this release section of Effects of taxes and benefits on UK household income: financial year ending 2017</u>.

Equivalisation

Comparisons across different types of individuals and households (such as retired and non-retired, or rich and poor) or over time is done 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>.

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 breaking down 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.

Real total pay

Real total pay measures the average weekly earnings per employee. It includes bonus payments, unlike regular pay, which excludes them.

Retired households

A retired person is defined as anyone who describes themselves (in the Living Costs and Food Survey) as "retired" or anyone over minimum State Pension age describing themselves as "unoccupied" or "sick or injured but not intending to seek work". A retired household is where the combined income of retired members amounts to at least half the total gross income of the household.

7. Measuring the data

Statistics that reflect the experience of a typical person, such as median income reported here, are important to properly understand changes in material living conditions. However, the complexities involved in collecting, processing and analysing household and individual financial survey data mean indicators concerning the distribution of income are typically only available with a sizeable time lag.

For example, estimated median income (estimated using survey data) for the financial year ending (FYE) 2019 was published more than 11 months after the end of the reference period. Meeting the considerable user demand for more timely data on the distribution of household income, we have developed these Experimental Statistics, which are produced using so-called "nowcasting" techniques.

Nowcasting is an increasingly popular approach for providing initial estimates of economic indicators, such as median income. In contrast to forecasting, which relies heavily on projections and assumptions about future economic circumstances, nowcasting uses data that are more timely and already available for the period of study.

Although, at the time of producing these statistics, detailed survey data on household incomes are not yet available for FYE 2020, a lot is known about its individual components and the factors that affect them. This includes data on earnings, employment and inflation, as well as details of how changes to the tax and benefits system affect different types of households and individuals. This information is used to adjust income survey data for recent years to reflect the current period and measures such as median income are published earlier than was previously possible.

While nowcast estimates do not perfectly reflect changes in the distribution of income, particularly when examining smaller sub-groups of the population, they provide an early indication of what the full survey-based data may show when published later this year, or early next.

The methodology used in this bulletin has undergone significant testing and benefitted from having a range of external experts to ensure it is as robust as possible. As Experimental Statistics, the content of this bulletin and the associated dataset will continue to be evaluated to ensure that user needs are met.

How are these estimates adjusted?

All measures of income for the UK given in this article are calculated without adjusting for expenses relating to housing costs. The measures have been deflated to FYE 2020 prices using the Consumer Prices Index including owner occupiers' housing costs (CPIH), excluding Council Tax, to give a better comparison of households' standards of living. These deflated measures are referred to as "real". This contrasts with "nominal" measures, which have not been deflated. Changes in income in this publication are "real" changes unless explicitly stated.

The provisional estimate income publication requires a deflator dating back to 1977. The CPIH, excluding Council Tax, is currently available from January 2005. The Consumer Prices Index (CPI) is available from 1996, with a modelled historical series available from 1950. For this analysis, the owner occupiers' housing costs (OOH) component is estimated using the actual rental series available from the Retail Prices Index (RPI). The OOH component is factored into the CPI (and modelled CPI prior to 1996) using the average OOH weight. Prior to 2005, this series is classed as experimental.

Methodology

The input data for this analysis come from the Living Costs and Food Survey (LCF) and the Effects of taxes and benefits on household income (ETB) dataset, which is derived from the LCF. Together, these provide information on income, expenditure and important family characteristics.

There are four main steps involved to produce nowcast estimates of disposable income. These are:

- compile base data this involves joining three years of historical LCF data
- uprate base data adjust the base data to reflect changes in the macro-economic conditions that have affected households at different points of the income distribution; for instance, taking into account wage growth from more timely earnings growth data
- model tax and benefit changes apply rules of the current tax and benefit system to the uprated base data
- recalibrate weights account for changes in labour market participation and the socio-demographic characteristics of the population between base data and reference period

For this analysis, historical LCF data covering the financial years ending (FYE) 2014, 2015, and 2016 were combined to produce nowcast estimates of disposable income for different household types and measures of inequality for FYE 2019 and FYE 2020. The growth rate between the various nowcasts are applied to the published FYE 2019 estimates presented within <u>Average household income</u>, <u>UK: Financial year ending 2019</u>.

While no explicit adjustment for the under coverage of the richest earners is applied in the nowcasting model, the growth rates are applied to published FYE 2019 estimates that have been adjusted. A more detailed description of the methodology is provided in the accompanying article, Nowcasting household income in the UK: Methodology, 2016, and methodology provides a detailed overview of the adjustment for the under coverage of the richest earners.

The historical data in this article are based on the Effects of Taxes and Benefits (ETB) series, produced by the Office for National Statistics (ONS), which itself is derived from the LCF. This series has been chosen for this article because of its long time series and its use as the primary input for the Intra-Governmental Tax and Benefit Model (IGOTM) used for producing the FYE 2019 provisional estimates.

More information about the accuracy and reliability of these statistics is contained in the Quality and methodology section of Effects of taxes and benefits on UK household income – flash estimate: financial year ending 2018.

How do these estimates fit in with other official statistics on household incomes?

These experimental estimates have been developed to serve as early or provisional estimates of figures that are currently published in within <u>Average household income</u>, <u>UK: Financial year ending 2019</u>. When the survey-based estimates for FYE 2019 are available they will supersede these estimates. We will also use these survey-based figures to evaluate the accuracy of these nowcasts.

The figures published in this bulletin use the same definition of disposable income used in these other releases, which in turn is consistent with the concepts set out in the second edition of the <u>United Nations Economic Commission for Europe Canberra Handbook (UNECE, 2011)</u>; this sets out the main international standards in this area.

8. Strengths and limitations

The nowcast estimates are subject to the same degree and types of statistical error as any other analysis based on survey data. As the LCF data are a sample survey, the estimates are subject to sampling error. Surveys gather information from a sample rather than from the whole population. The sample is designed carefully to allow for this and to be as accurate as possible given practical limitations such as time and cost constraints, but results from sample surveys are always estimates, not precise figures. This means that they are subject to a margin of error, which can have an effect on how changes in the numbers should be interpreted, especially in the short-term. In practice, this means that small, short-term movements should be treated as indicative and considered alongside medium- and long-term patterns in the series.

As well as sampling error, all statistics, including these nowcast estimates, are also subject to non-sampling error. Non-sampling error includes all sources of data error that are not a result of the way the sample is selected. There are a wide number of different types of potential non-sampling error, including coverage error, non-response and measurement error. It is not possible to provide a measure of non-sampling error.

Using micro-simulation and nowcasting techniques to estimate distribution of income provides an additional source of non-sampling error in the estimates because of, for example approximations in the simulation of tax benefit rules, adjustments for non-take up, uprating of financial parameters and socio-demographic characteristics to the simulation year or ignoring behavioural responses (see, for example, Navicke and others, 2013). On the other hand, simulation can arguably improve the accuracy of results relative to survey-based estimates through simulating the exact rules of the tax and benefit system.

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 uncertainty of a survey-based estimate.

9. Related links

Effects of taxes and benefits on UK household income: financial year ending 2019

Bulletin | Released 23 June 2020

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.

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

Article | 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 2019

Bulletin | Released 5 March 2020

Estimates of median and mean disposable income for people in the UK for the financial year ending 2019.

A guide to sources of data on income and earnings

Article | Updated 6 April 2020

Employee earnings in the UK: 2019

Bulletin | Released 29 October 2019

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

Average weekly earnings in Great Britain: July 2020

Bulletin | Released 16 July 2020

Estimates of growth in earnings for employees before tax and other deductions from pay.