Office for National Statistics

Effects of taxes and benefits on household income (ETB) QMI

Analysis of how household incomes in the UK are affected by taxation and benefits, and the changing levels of income inequality over time.

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Next release:
To be announced

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1 . Methodology background

Output name	Effects of taxes and benefits on household income
Frequency	Annual
How compiled	Voluntary sample survey of private households in the UK
Geographic coverage	Sample - UK
Sample size	Approximately 5,000
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Last revised	15 June 2018
Related bulletins	Effects of taxes and benefits on UK household income, Household disposable income and inequality in the UK

2 . Important points about the effects of taxes and benefits (ETB) estimates

- The effects of taxed and benefits (ETB) estimates are the only statistics available that provide a complete picture of the distribution of household income including indirect taxes and benefits in kind.
- ETB estimates provide long-term trends in household income of retired and non-retired households, for income quintiles and deciles, with detailed breakdowns by income component (including individual taxes and benefits).
- They inform on long-term trends in income inequality, measured through the Gini coefficient and S80/S20 and P90/P10 ratios.
- They provide characteristics of income quintile or decile groups (including number of adults or children, household type, tenure, age or employment status of chief economic supporter).

3 . Overview

The effects of taxes and benefits on household income (ETB) has been produced annually since the early 1960s, with comparable estimates available from 1977 onwards. The main purpose of ETB is to provide quantitative analysis of the effects of government intervention (through taxes and benefits) on the income of private households in the UK, allowing analysis of long-term trends.

From 2014 to 2015, the ETB data are split into two annual statistical bulletins. The first release – Household disposable income and inequality (HDII) – provides headline estimates from the ETB data, to disposable income, and has been designed to provide more timely figures of main indicators relating to the distribution of household income and inequality, ahead of the main article. The HDII release currently provides the earliest survey-based analysis of the household income distribution available each year, allowing people insight into the evolution of living standards as early as possible.

The main ETB statistical bulletin is published later in the year, building on the first release, and includes indirect taxes (for example, Value Added Tax (VAT)) and imputed income from benefits in kind (for example, NHS, education). The first HDII bulletin is based on the same dataset as the main ETB release and the data are not revised on a scheduled basis, meaning that the figures in the first release are fully consistent with those in the full ETB publication.

In addition to the two annual statistical bulletins there is a supplementary Methodology and coherence article. This supplementary article has not been published since 24 May 2016 and is scheduled to be replaced with a technical report covering the concepts and methodologies that underpin the income components in detail. Analysis covering the coherence with other sources will be included in future statistical bulletins.

ETB data are from the Office for National Statistics's (ONS's) Living Costs and Food Survey (LCF), a voluntary sample survey of around 5,000 private households in the UK. In addition, ETB uses a number of administrative sources to improve the quality of estimates, particularly to estimates of indirect taxes (for example, VAT) and benefits in kind (for example, education, NHS).

The data cover the UK as a whole, with a number of published, three-year average estimates at a regional level. ETB also provides estimates for retired and non-retired households.

The final anonymised ETB microdata are supplied to the UK Data Archive under an end user licence and to the Secure Research Service (SRS) managed by ONS. Due to the need to maintain respondents' anonymity, certain variables (such as age of the chief economic supporter and region) have not been released to the UKDA.

We are committed to improving the quality of household income statistics and are currently working on transforming statistics on household finances. The first part of this work has concentrated on combining the samples from the LCF and another of ONS's household surveys, the Survey on Living Conditions (SLC). Harmonising the income component in these questionnaires will mean that ETB estimates from 2017 to 2018 onwards will benefit from a larger sample size of around 17,000 households.

In addition, ONS is working towards linking data from administrative and other non-survey sources, including HM Revenue and Customs (HMRC) Real Time Information (RTI) and Department for Work and Pensions (DWP) benefits data. Although these other sources also have their own limitations, by using them together with surveys we should be able to produce better data on household income.

For further information on other sources of income and earnings data, including the appropriate uses of and limitations of each data source, see A guide to sources of data on earnings and income.

Please contact us by emailing hie@ons.gov.uk if you have queries relating to these statistics.

4 . Output quality

This section provides a range of information that describes the quality of the data and details any points that should be noted when using the output.

We have developed Guidelines for measuring statistical quality, based on the five European Statistical System (ESS) quality dimensions. This report addresses these quality dimensions and other important quality characteristics related to house price statistics for small areas (HPSSAs), which are:

- relevance
- timeliness and punctuality
- coherence and comparability
- accuracy
- output quality trade-offs
- assessment of user needs and perceptions
- accessibility and clarity

5 . About the output

Relevance

(The degree to which statistical outputs meet users' needs)

The effects of taxes and benefits (ETB) has been produced for over 50 years. Its main purpose is to provide quantitative analysis of the effects of government intervention (through taxes and benefits) on the income of private households in the UK.

The data cover the UK as a whole, with a number of published estimates at a regional level. ETB provides estimates for retired and non-retired households and the characteristics of the ETB data mean that they are the best source for analysis of household income that includes a breakdown by source or individual taxes or benefits. This analysis looks at two main measures of average household income, the mean and the median. The median is used when summarising the average income of a particular group of households, while the mean is used when summarising the sources of earnings, benefits and taxes that make up the overall income measures.

ETB statistics 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 Living Costs and Food Survey (LCF) dataset, are published alongside the budget and autumn statement. 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.

In addition to policy uses in government, the ETB statistics are frequently used and referenced in research work by academia, think tanks and articles in the media. These pieces often examine the effect of government policy, or are used to advance public understanding of tax and benefit matters.

ETB statistics also contribute to ONS's Economic well-being release and ONS's Household Costs Indices (HCIs). HCIs are a set of experimental measures, currently in development, that aim to reflect UK households' experience of changing prices and costs.

There are considerable difficulties in moving from estimates of government expenditure and financing published in the UK National Accounts, to apportioning taxes and benefits to individual households. It is well recognised that survey-based measures and national accounts aggregates do not always corroborate each other and ONS has been doing further work on this area. Examples include the production of experimental real household disposable income (RHDI) statistics to a "cash only" measure within the ONS Alternative measures of real household disposable income and the saving ratio article, and our Distribution of household income, consumption and savings article, which links survey and national accounts data.

It is possible to get information about the types of households that receive benefits and pay taxes through the LCF. But there are other kinds of financing, such as Corporation Tax and government receipts from public corporations: no attempt is made in this analysis to apportion them to households because of the complexities involved.

Similarly, there are other items of government expenditure, such as capital expenditure and expenditure on defence and on the maintenance of law and order, for which there is no clear conceptual basis for allocation to households, or for which we do not have sufficient information to make an allocation.

ETB statistics play an important role in providing an insight to the public on how material living standards and the distributional effect of government policy on taxes and benefits have changed over time for different groups of households.

Timeliness and punctuality

(Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the gap between planned and actual publication dates.)

The effects of taxes and benefits on household income (ETB) data are split into two annual statistical bulletins, from financial year ending 2015.

The first release, titled Household disposable income and inequality (HDII), provides headline estimates from the ETB data to disposable income. These estimates are published approximately nine months after the end of the income reference period.

The second release, titled The effects of taxes and benefits on household income, is published approximately 14 months after the end of the income reference period. This release builds on HDII by including indirect taxes (for example, VAT) and imputed income from benefits in kind (for example, NHS, education).

Additionally, experimental "nowcast" estimates are published a few months after the end of the income year. This experimental release is designed to provide provisional estimates of measures of the distribution of household income significantly ahead of the main estimates produced from household surveys.

Prior to financial year ending 2015, ETB data were released approximately 15 months after the end of the income reference period, in one annual statistical bulletin. Acting in response to user consultations, in 2015, a thorough review of the production process was carried out that identified the production of estimates of indirect taxes and social transfers in kind as the most time-consuming part of the production process, due to the complexity of the methodologies and required updates. Producing estimates to disposable income was identified as a relatively quick process. Changes to existing processes were implemented resulting in the production of the two annual statistical bulletins, from 2016, with the Household disposable income and inequality (HDII) release designed to provide more timely figures of main indicators relating to the distribution of household income and inequality.

This approach is consistent with the Code of Practice for Statistics: in particular, it is consistent with principle T3. 5: Statistics and data should be released on a timely basis and at intervals that meet the needs of users as far as practicable. The statistics should be released as soon as they are considered ready, under the guidance of the Chief Statistician or Head of Profession for Statistics.

In February 2017, the Living Costs and Food Survey (LCF) changed from reporting on a calendar year basis to a financial year basis. This has the potential for further improvements to publication-ready data in a timely manner.

ETB estimates have been for the UK financial year from financial year ending 1995 onwards, prior to this ETB estimates were for calendar years.

Publication dates are pre-announced on the ONS website. Notification of the provisional date on which statistics are due for publication is made approximately a year in advance. Notification of the exact date on which statistics are published each year is made public approximately three months beforehand.

For more details on related releases, the GOV.UK release calendar provides up to 12 months' advance notice of release dates. If there are any changes to the pre-announced release schedule, public attention will be drawn to the change and the reasons for the change will be explained fully at the same time, as set out in the Code of Practice for Statistics.

6 . How the output is created

The estimates in this analysis are based mainly on data derived from the Living Costs and Food Survey (LCF). The LCF is a UK household survey, designed to provide information on household income and expenditure. The LCF is a voluntary sample survey of private households. People living in hotels, lodging houses and in institutions, such as old people's homes, are excluded. Each individual in a selected household is asked to complete a household interview and then an expenditure diary for two weeks. The LCF is a continuous survey with interviews spread evenly over the year to ensure that estimates are not biased by seasonal variation.

The LCF collects income (including cash benefits received from the state) and payments of Income Tax. Information on age, occupation, education received, family composition and housing tenure are also obtained.

The LCF technical report describes technical aspects of the sampling, fieldwork and data processing and includes information on response rates. Quality and methodology information for the LCF is also available.

Outputs from the effects of taxes and benefits (ETB) data look at how taxes and benefits affect the distribution of income in the UK and breaks this process into five stages:

1. household members begin with income from employment, private pensions, investments and 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; gross income minus direct taxes 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"

ETB uses a number of administrative sources to improve the quality of estimates, particularly to estimates of indirect taxes (for example, VAT) and benefits in kind (for example, education, NHS).

The households are ranked by their equivalised disposable income, which the analysis uses as a proxy for standard of living. Equivalisation is a process that adjusts households' incomes to take account of their size and composition, recognising that this affects the demand on resources. For example, a couple with a child would need a higher income than a childless couple for the two households to achieve the same standard of living. Equivalisation was based on McClements scale prior to financial year ending 2010. Since then, disposable income has equivalised using the modified-Organisation for Economic Co-operation and Development (OECD) scale, in line with other major surveys that collect income data.

The LCF data used in this analysis are grossed so that totals reflect the total population of private households in the UK. The weights are produced in two stages. First the data are weighted to compensate for non-response (sample-based weighting). The non-response weights are then calibrated so that weighted totals match population totals for males and females in different age groups and for different regions and countries (population-based weighting). The results in the analysis are weighted so that statistics represent the total population in private households in the UK based on 2011 Census data. In financial year ending 2014, an additional calibration to Labour Force Survey (LFS) employment totals was applied.

7 . Validation and quality assurance

Accuracy

(The degree of closeness between an estimate and the true value.)

Confidence intervals and coefficient of variation

Estimates produced from a sample survey will rarely match corresponding figures for the whole population. This is because the characteristics of subsets are not usually representative of the population from which they are sampled. When the characteristics of estimates are highly variable (perhaps due to small sample sizes or heterogeneity) we describe them as being less precise. Statistical theory allows us to estimate, understand and compare the precision associated with survey results. A commonly used approach for achieving this is to compute a "confidence interval" for a given estimate. A confidence interval is defined such that when computed, we can be reasonably sure that it contains the true value of what we seek to estimate. The larger the confidence interval for a given estimate, the less precise that estimate is considered to be.

Formally, we define the concept of "reasonably sure" as being the probability that a given confidence interval contains the true population value. This level is preselected, with 95% being perhaps the most commonly used. A confidence level of 95% is also used in the effects of taxes and benefits (ETB) publication.

The confidence intervals for a given parameter are based on the parameter estimate and the standard error of this estimate, which are themselves both based on survey results.

Formally, the 95% confidence interval around a survey estimate is calculated as follows:

$$X \pm 1.96 * s.e.(X).$$

Where X is a given parameter estimate (for example, an estimate of the median disposable income in the UK based on ETB data) and $s.e.(X)$ is the associated standard error.

While the standard error does give useful information about how variable an estimate is, its main weakness is that it can be influenced by changes in scale. For example, the standard error of the UK median disposable income estimate changes if the currency is converted from GDP (pounds sterling) to USD (US dollars), despite there being no difference in the underlying data used.

The coefficient of variation is an alternative measure of variability, defined as the ratio of the parameter standard error to the parameter estimate.

This is calculated using the following formula:

$$C.\ V.\ (X)\ =\ \frac{s.e.\ (X)}{X}.$$

The main advantage of using the coefficient of variation (cv) to measure variability is that it is dimensionless. This means that the cv remains the same when converting between units (for example, from USD to GDP). Since differences in scale are adjusted for, the cv can also be used to compare variability among different parameter estimates, even when some are very small and others very large. In general, we describe estimates with smaller cv values as being more precise.

Statistical significance

Changes in the ETB estimates, produced from the Living Costs and Food Survey (LCF), from the one period to the next may occur simply by chance. In other words, a change may be due to which individuals were selected to answer the survey, and may not represent any real changes in income, expenditure and household structures.

Statistical tests can be used to determine whether any increases or decreases that we see in the ETB estimates are due to chance, or whether they are likely to represent a real change. When comparing two estimates, a t-test at the 95% confidence level is used to assess whether changes between years are statistically significant. This means that the probability of an observed change occurring by chance is low (1 in 20 or less).

Types of error

The main types of error that affect the accuracy of data used in these analyses are:

- sampling error
- non-sampling errors, which include: coverage error; non-response bias; measurement error; systems error; and editing error

More information is provided about these accuracy dimensions in the following sections.

Sampling error

Estimates produced from a survey sample will rarely match corresponding figures for the population. This is because the characteristics of subsets are not usually representative.

Differences between survey estimates and population values can be reduced by minimising bias in the sampling procedure. In practice, this means addressing sources of non-sampling error, including those discussed in the following section, so that certain values for a given variable are not systematically over- or under-represented.

However, even in a perfectly unbiased sample, some error will still arise as a result of random differences between sample estimates and their true population values. These discrepancies are referred to as “sampling error”.

Sampling error is typically less for measures based on large groups of households who have similar characteristics of interest. When there is a high degree of sample variability in what is being measured (for example, original income), the sampling error for estimating associated statistics (for example, mean original income) tends to be higher.

A measure of sampling variability is provided by the standard error. There will be greater sampling variability associated with estimates for decile and quintile groups, and for particular household types mainly because the sample sizes are smaller.

Non-sampling errors

Coverage error

Coverage error occurs when households relevant to the population being analysed are not included within the sampling frame. The LCF draws its sample using the Small User Postal Address File (PAF). It is acknowledged that this source contains some errors in content and in coverage. The PAF is used as the sample frame for ONS’ s social surveys, therefore any error or bias will be in line with other surveys. In Northern Ireland, field work for the LCF is conducted by the central survey unit of the Northern Ireland Statistics and Research Agency (NISRA). A systematic random sample of private addresses is drawn from the Land and Property Services Agency’s (LPSA) property database.

The LCF uses a complex stratified sample that draws sample characteristics from the census. While the census is not a sample survey it does have its own sources of non-sampling error, for example, non-completion and incorrect response. Any bias from the census will also be reflected in this analysis.

The LCF technical report provides further details on the sample design.

Non-response bias

Non-response includes both households not responding at all to the survey (unit non-response) and households who participate in the survey but do not provide a response to particular questions (item non-response). If non-responders and responders have the same characteristics then there will be no bias.

Respondents may not answer specific questions that households deem private or personal. This is particularly relevant for the LCF, a survey that asks a variety of questions based on household income and expenditure. The response rate to the income questions in the LCF is fairly high; where respondents do not answer income questions they are generally not included in the survey as this is a fundamental part of the LCF.

Some of the data that are used in the Effects of taxes and benefits on UK household income (ETB) are subject to imputation. This is where missing responses for a given household or individual are replaced with substituted values. Often these imputations make use of both administrative and survey data. A full list of the administrative data used is available on the statement of administrative sources.

Very little imputation takes place for non-response to income questions. While there are a number of alternative sources of income data, such as the Family Resources Survey (FRS), these all come with their own non-sampling error. Estimates from the Survey of Personal Incomes (SPI) are thought to be quite robust, particularly for cases at the higher end of the income distribution.

The LCF assigns weights to cases to correct for unit non-response in the survey sample. Factors influencing non-response that are within our control are the survey design and the interviewer characteristics. The LCF technical report provides further details on response including the characteristics of non-responding households, the technical aspects of the sampling, fieldwork and data processing. The report also covers incentives provided to households, interviewers training and the computer-assisted personal interviewing (CAPI) system and proxy responses (proxy cases occur where one member of the household answers questions on behalf of another member of the household), all of which aim to improve non-response.

A calibration weight is also calculated on the LCF, this ensures that the sample is reflective of the entire population when it is grossed to create population aggregates. This uses 2011 Census-based population projections. Weighted totals match population totals for males and females, in different age groups and for regions and countries in the UK.

Measurement error

Measurement error occurs when reported survey responses are different from the true value. This can occur for a variety of reasons, but the Living Costs and Food Survey (LCF) take a number of steps to minimise this error. In some cases, the respondent may be unable or unwilling to provide a true answer to the question. This is particularly relevant in areas that are sensitive, related to the LCF income questions.

Respondents are encouraged to consult their payslip where possible to aid the provision of accurate information. Measurement error can also occur if the question is unclear or if participants are unable to understand the question; this is addressed in the LCF through extensive testing of new questions, including cognitive testing. An example of cognitive testing is a new question on combined utility expenditure, data from which is used in estimates of indirect taxation. The use of computer-assisted personal interviewing (CAPI) minimises collection error, but it may be off-putting compared with other methods that allow anonymity and less pressure on interviewer time. A further source of measurement error is the participant's response to the interviewer; in some cases, the socio-economic characteristics of the interviewer make the participant feel uncomfortable in giving a true answer.

Assurances are given to respondents that their data will be treated in line with the Code of Practice for Statistics and the practicalities of what this means are explained. In the case of personal information, such as income and expenditure, this is particularly relevant; some respondents may report income that is in line with their tax returns rather than the true value. It is therefore likely that there will be some under-estimation of income.

Research suggests a larger level of under-reporting for self-employed income than income from wages and salaries. From an expenditure point of view, households may be reluctant to give true estimates of some items and there is known under-reporting of alcohol, tobacco and confectionery, an adjustment is made to the estimates aiming to account for this.

Effects of taxes and benefits (ETB) analysis deals with some income concepts that may differ from the common perception of income. Steps have been taken to break down the questions on income to components to ensure that the data are collected on the desired level of conceptual accuracy. Exact figures are requested where possible; where these are not available estimates are allowed, notably income from self- employment and interest and dividend income. In some cases, we anticipate that respondents may in reality provide a rounded figure. As previously stated, respondents are encouraged to consult documentation to increase the accuracy of their response.

Systems error

A number of the processes undertaken to conduct the Living Costs and Food Survey (LCF) and the effects of taxes and benefits (ETB) analysis are automated. Therefore, there is a possibility that error could arise as a result of a mis-specification of some of these computerised processes. However, the data undergo rigorous quality assessment processes to look for any indication that an error has occurred; this enables most errors to be rectified at an early stage. Using systems saves resource and limits non-sampling error that could occur as a result of carrying out the same processes manually. Aside from methodological improvements, the same processes are used year-on-year and are quality assured each year. Therefore, it seems unlikely that large error would emerge from the use of automated systems.

While the use of computer-assisted personal interviewing (CAPI) minimises data entry error, it is still possible that keying errors can occur when the interviewer enters the response.

Editing error

The Living Costs and Food Survey (LCF) undergoes a variety of editing checks, this is to ensure the quality of the data and to highlight and correct cases that are deemed to be in error. This process is mostly automated with software flagging erroneous cases. The number of edited cases is small and changes are only made where it appears clear that there is an error. Data editing may also occur during the interview, with the interviewer flagging responses that do not appear to be consistent. The Blaise computer-assisted interviewing program that is used by ONS for social surveys will not allow an interview to proceed where a response is not allowed by the system and will flag with the interviewer responses that seem unlikely, in order that it can be queried at the point of interview.

Coherence and comparability

(Coherence is the degree to which data that are derived from different sources or methods, but that refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain, for example, geographic level.)

Effects of taxes and benefits (ETB) data are produced using the Living Costs and Food Survey (LCF), with a published comparable time series going back to 1977. Differences in the methods and concepts used mean that it is not possible to produce consistent data for the years prior to 1977 and only relatively limited comparisons are possible for these early years. All comparisons with previous years are also affected by sampling error.

From financial year ending 2010, where equivalisation is applied, the rescaled modified-OECD scale is used whereas in previous ETB publications the McClements scale was used (equivalisation is a process that adjusts households' incomes to take account of their size and composition). This is in line with other major surveys that collect income data. For comparability, in any time series analysis that uses data prior to financial year ending 2010, these years have been recalculated using the rescaled modified-OECD scale.

The estimated values of taxes and benefits reflect the methodology used for the year of analysis. They are based on assumptions about which taxes and benefits should be covered and to whom they should apply. Where it is practical, the methodology used is similar to that used in previous years. However, there are likely annual changes in the underlying surveys and improvements made to the methodology. For this reason, some caution should be exercised when making direct comparisons with earlier years.

The LCF was previously carried out on a calendar year basis, whereas ETB is based on the financial year. As the LCF data for the final quarter of the financial year were not finalised by the time ETB was published, there were occasionally slight differences between the number of households in the calendar and financial year datasets. The LCF moved to a financial year reporting period from financial year ending 2016, which removed the differences between datasets.

There are a number of different measures of income used, the most common of which is probably household disposable income. This is the total income households receive from employment (including self-employment), income from private pensions, investments and other sources, plus cash benefits (including the State Pension), minus direct taxes (including Income Tax, National Insurance and Council Tax). Income is normally analysed at the household level as this provides a better measure of people's economic well-being; while income is usually received by individuals, it is normally shared with other household members (for example, spouse or partner and children).

In contrast, earnings statistics generally refer to gross pay for employees (not self-employed), before tax and excluding any in-kind benefits. Earnings are typically reported at the individual level, for full-time employees.

ONS has published a guide to sources of data on earnings and income, which aims to outline the different data sources and outputs that feed into the analysis of earnings and income within the UK. This guide also explains the strengths and limitations of all sources and provides guidance on the best source of data for different purposes.

The Department for Work and Pensions (DWP) publishes an analysis each year of the income distribution in their publication Households below average income (HBAI), based on data from the Family Resources Survey (FRS). This publication, along with a number of existing income and earnings measures, discussed in more detail in the guide, can be used to provide comparisons with data from ETB.

In order for ETB and HBAI publications to be able to present a coherent narrative, some comparable statistics are presented in both statistical releases.

The methodologies and concepts used for HBAI are broadly comparable to ETB, although there are some small but important differences. For example:

- ETB includes benefits in kind provided by employers (for example, company cars) within income, but these are excluded from HBAI
- HBAI includes certain benefits in kind provided by the state (such as free school meals and Healthy Start vouchers) within Before Housing Costs (BHC) income, which is otherwise equivalent to the ETB measure of disposable income; in ETB, these are included with other benefits in kind as part of final income
- HBAI makes an adjustment for “very rich” households using data from HM Revenue and Customs’ (HMRC's) Survey of Personal Incomes
- ETB measures inequality on a household basis, whereas HBAI measures inequality on an individual basis
- HBAI is based on equivalised disposable household income applied to each individual in the household, while ETB uses household level data; this means that, over time, changes in household composition may have an impact on the comparability of these two series

These differences in approach and the different survey sources mean that HBAI and ETB estimates can differ slightly from each other. However, historical trends are broadly similar across the two sources.

It is also possible to compare components of the ETB income measure to other official statistics on earnings from employment. The average weekly earnings (AWE) measure is ONS’s lead indicator of short-term changes in earnings. AWE is the ratio of estimated total employee pay for the whole economy, to the total number of employees. The series is calculated from returns to the Monthly Wages and Salaries Survey (MWSS). The results are weighted to be representative of the UK economy, excluding the self-employed. Therefore, it is possible to compare the AWE with the value of average weekly earnings derived from ETB.

The aggregate movement in the ETB measure of equivalised household disposable income can also be compared with a range of other statistics, which capture average household incomes to differing degrees:

- EU Statistics on Income and Living Conditions (EU-SILC) – equivalised household disposable income: EU-SILC is the EU reference source for comparative statistics on income; it is coordinated by Eurostat and is collected jointly by ONS and DWP in the UK

- nominal gross domestic product (GDP) per household: this measure divides the total value of production and income in the UK economy by the number of households, to present the average value of income produced per household

- gross disposable household income (GDHI) per household: GDHI per household is the average income available to households for spending or saving after income distribution measures have taken effect; it is based on the data for the household sector in the national accounts

ONS works closely with other statistical producers such as DWP and other users to better understand differences between measures of household income, and to enhance coherence. ONS will continue to update guidance on the strengths, limitations and main uses of the income statistics published by ONS, as they evolve, in our outputs, publications and the user guide to income and earnings statistics.

8 . Concepts and definitions

(Concepts and definitions describe the legislation governing the output, and a description of the classifications used in the output.)

UK income statistics, mainly produced by Office for National Statistics (ONS) and Department for Work and Pensions (DWP), follow the definitions and concepts set out in the second edition of the United Nations Economic Commission for Europe Canberra Handbook (published by United Nations Economic Commission for Europe, 2011), which is the basis of internationally agreed standards in this area. This defines income as receipts (either monetary or in kind) that are received on a regular basis and are available for current consumption.

9 . Sources for further information or advice

Accessibility and clarity

(Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the release details, illustrations and accompanying advice.)

The recommended format for accessible content is downloadable content and web content for narrative, charts and graphs, with data being provided in usable formats such as CSV and Excel. The data for these statistics are available from our website; users can also download the narrative in PDF format. For further information, please email hie@ons.gov.uk.

For information regarding conditions of access to data, please refer to:

- terms and conditions (for data on the website)

- accessibility

Useful links

Household disposable income and inequality in the UK statistical bulletins

Effects of taxes and benefits on UK household income statistical bulletins

Nowcasting household income in the UK statistical bulletins

The effects of taxes and benefits on household income, historical datasets

Economic well-being, UK statistical bulletins

A guide to sources of data on earnings and income

United Nations Economic Commission for Europe Canberra Handbook