

Consumer Price Inflation (includes all 3 indices – CPIH, CPI and RPI) QMI

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1 . Output information

- Accredited official statistic: CPIH and CPI, yes; RPI, no
- Frequency: monthly
- How compiled: representative sample based on approximately 760 goods and services (reviewed annually), with broader coverage from large alternative data sources in some areas
- Geographic coverage: UK
- Sample size: approximately 180,000 price quotations per month (sample data only)
- Last revised: 25 March 2026

2 . About this Quality and Methodology Information report

This quality and methodology report contains information on the quality characteristics of the data (including the [European Statistical System five dimensions of quality \(PDF, 3.0MB\)](#) as well as the methods used to create them.

The information in this report will help you to:

- understand the strengths and limitations of the data
- learn about the existing uses and users of the data
- understand the methods used to create the data
- help you to decide suitable uses for the data
- reduce the risk of misusing data

3 . Important points

- Consumer price inflation is the rate at which the prices of goods and services bought by households rise and fall; it is estimated using consumer price indices.
- A price index can be used to measure inflation in a number of ways; the most common is to look at how the index has changed over a year, which is calculated by comparing the price index for the latest month with the same month a year ago.
- To give an accurate picture of price changes, our consumer price indices are compiled using a large and representative sample of over 760 goods and services, and their price movements are regularly measured in approximately 20,000 outlets within the UK.
- As of 21 March 2017, the Consumer Prices Index including owner occupiers' housing costs (CPIH) became our lead inflation index; it is the most comprehensive measure of inflation as it includes owner occupiers' housing costs and Council Tax, which are excluded from the CPI.
- The CPI continues to be published; it is used in the government's target for inflation and is produced to international standards in line with European regulations.
- The [accredited official statistics](#) status of the Consumer Prices Index including owner occupiers' housing costs (CPIH) was reinstated on 31 July 2017; [a letter](#) (PDF, 160KB) from the Director General for Regulation to the National Statistician detailed the actions that were taken to meet the requirements as set out in the [CPIH assessment report](#).
- The Retail Prices Index (RPI) and its derivatives have been assessed against the [Code of Practice for Statistics](#) and found not to meet the required standard for designation as accredited official statistics; the RPI, its sub-components and the RPIX continue to be published as they are tied to long-term contracts.

4 . Overview

Consumer price inflation is the rate at which the prices of the goods and services bought by households rise or fall, and is estimated by using consumer price indices. One way to understand a price index is to think of a very large shopping basket containing the goods and services typically bought by households. The price index estimates changes to the total cost of this basket. [Consumer Price Indices - A brief guide](#) gives an overview of the methodology, and also explains the main features of the suite of indices and their uses.

As we spend more on some things than others, the components of the index are "[weighted](#)", which ensures that they reflect the importance of the items in the average shopping basket, and the amounts we spend in different regions of the country and in different types of shops.

Consumer price indices are important indicators of how the UK economy is performing. The indices are used in many ways by the government, businesses, and society in general. They can affect interest rates, tax allowances, wages, state benefits, pensions, maintenance, contracts and many other payments. They also show the impact of inflation on family budgets and affect the value of the pound in your pocket. For more information see [Users and uses of consumer price inflation statistics \(2016\)](#).

[Advisory Panels](#) were established in 2015 to provide advice to the National Statistician on the uses and applications of prices indices, and on technical aspects of their measurement and construction.

As of 21 March 2017, the Consumer Prices Index including owner occupiers' housing costs (CPIH) became our lead measure of inflation. Although otherwise identical to CPI, it is our most comprehensive measure as it includes costs associated with owning, maintaining and living in one's own home (known as owner occupiers' housing costs, or OOH), along with Council Tax. The [CPIH compendium](#) provides further information, including the rationale for the choice of methodology for measuring OOH, which is still extensively debated.

We also publish quarterly articles that compare [the different approaches to measuring OOH](#) (data for alternative measures of OOH are also available with this article) and the [different data sources for the OOH component](#). The CPI continues to be published as an [accredited official statistic](#) and is widely used; including in the government's target for inflation. It is also the measure produced to comply with European regulations.

The accredited official statistic status of CPIH was suspended in 2014 due to concerns over the methods and processing of the private rents data used to estimate owner occupiers' housing costs. These issues have now been [resolved](#) and the accredited official statistic status of the Consumer Prices Index including owner occupiers' housing costs (CPIH) was [reinstated](#) on 31 July 2017.

We have been transforming areas of our consumer prices statistics, including identifying new data sources, improving methods and moving to sustainable statistical systems. For the first time, in March 2023, we published headline consumer prices statistics including alternative data sources, marking a major milestone in this transformation process. Our [Research and developments in the transformation of UK consumer price statistics](#) series provides more information on our work. Our [Consumer Prices Development Plan](#) provides more information on our development priorities for the future.

The following quality and methodology information provides further detail, and recent articles can be found on our [methodology pages](#). Further historical methodology can be found on our [archive site](#), and our [Consumer prices indices technical guidance](#) covers the concepts and methodologies underpinning the indices in detail.

We are committed to improving the quality of consumer price statistics, and our [work programme](#) outlines planned developments. Please contact us by emailing cpi@ons.gov.uk if you have queries relating to these statistics.

5 . Quality characteristics of the data

Relevance

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

As of 21 March 2017, the Consumer Prices Index including owner occupiers' housing costs (CPIH) became our lead measure of inflation. It is our most comprehensive measure of UK consumer price inflation, as it includes owner occupiers' housing costs (OOH) and Council Tax. OOH costs are the costs of housing services associated with owning, maintaining and living in one's own home and are an important component of household expenditure that are not included in the CPI. OOH does not include costs such as utility bills, minor repairs and maintenance, which are already included in the index.

CPIH uses an approach called rental equivalence to measure OOH. Rental equivalence uses the rent paid for an equivalent house as a proxy for the costs faced by an owner occupier. In other words, this answers the question "how much would I have to pay in rent to live in a home like mine?" for an owner occupier. OOH does not seek to capture increases in house prices. Although this may be inconsistent with some users' expectations of measures of OOH, the inclusion of an asset price and therefore capital gains would make the index less suitable for a measure of consumption. OOH currently accounts for 16.5% of the expenditure weight of CPIH. This compares with a weight of 19.5% in 2005.

The Consumer Prices Index was first published in 1997 as the Harmonised Index of Consumer Prices (HICP) -- a consistent measure of inflation across Europe. The HICP was developed across the European Union (EU) for the purpose of assessing whether prospective members of the European Monetary Union would pass the inflation convergence criteria and of acting as a measure of inflation used by the European Central Bank in assessing price stability in the EU member countries.

In December 2003, the National Statistician decided the name of the UK version of the HICP would change to the CPI in all National Statistics (now accredited official statistics) publications. This decision was concurrent with the Chancellor of Exchequer's Pre-Budget Report 2003 announcement that the UK inflation target would be based on the HICP, replacing the RPI excluding mortgage interest payments (RPIX).

The CPI continues to be published and is widely used. In particular, it is used by the government for inflation targeting, and for uprating state pensions and benefits.

The RPI was initially developed as a compensation index, derived from an index designed as an aid to protect ordinary workers from price increases associated with the First World War. The RPI provides estimates of inflation from 1947 onwards with the first official release of consumer price inflation being produced in January 1956. Until the introduction of the UK CPI (also known at the time Harmonised Index of Consumer Prices, HICP) in 1996, the RPI and its derivatives, were the only measures of UK consumer price inflation available to users.

Following a [consultation](#) on options for improving the Retail Prices Index (RPI), the National Statistician, Jil Matheson, concluded that one of the formulae used to produce the RPI does not meet international standards and recommended that a new index be published. The Retail Prices Index (RPI) and its derivatives have been assessed against the [Code of Practice for Statistics](#) and found not to meet the required standard for designation as accredited official statistics. As of 21 March 2017, the publication of RPI-related data was scaled back, limited to the information required for critical needs of existing users to be met. Further detail can be found in [Clarification of publication arrangements for the RPI and related indices](#).

The CPIH, CPI and RPI all measure the average change from month to month in the prices of consumer goods and services purchased in the UK, although there are differences in coverage and methodology. The most significant differences in coverage relate to the treatment of housing costs, particularly owner-occupier costs, which are included in CPIH and RPI but excluded from the CPI. There are also differences in the population covered, RPI covers only private households but excludes the top 4% of households by income and pensioner households who receive at least three-quarters of their income from benefits. The CPIH and CPI, by contrast, cover the expenditure of all private households, institutional households and visitors to the UK.

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 CPIH, CPI and RPI are produced monthly. Data are intended to refer to average prices over the month. However, in practice, much of the price collection takes place at a set point in time, which is usually the second or third Tuesday of each month.

Where large, alternative sources of data are used, it is possible to calculate an average price over most of the month. Further exceptions in the CPIH and CPI are the collection of petrol and diesel prices, which both reflect average prices over the month, and fruit and vegetable prices, which are also collected on an additional day (the Friday preceding index day), reflecting the fact that their prices can change more frequently than other goods and services. Publication takes place four or five weeks later and has never been delayed or missed.

Publication dates are pre-announced on the ONS website.

In August 2017, provisional publication dates for 2019 were announced alongside the 2018 dates. The practice of advance notice of a minimum of 18 months to a maximum of 30 months will be maintained in future years. In the unlikely event of a change to the pre-announced release schedule, public attention will be drawn to the change and reasons for the change explained fully at the same time, as set out in the Code of Practice for Statistics.

6 . Methods used to create the data

The CPIH, CPI and RPI are annually chain-linked indices: each year a series of index numbers is calculated which takes the value 100 in the most recent January, and each year's indices are then linked together to produce a continuous index series covering several years.

This procedure makes it relatively easy to change the items, outlets and locations each year to ensure the indices are kept up to date, although they must be held constant as far as possible within the year.

In order to produce these indices, prices need to be collected by following the following procedures.

Selection of items

Within each year, the CPIH, CPI and RPI are fixed quantity price indices: they measure the change in the price of a basket of fixed composition, quantity and as far as is possible quality. Specific items are chosen to represent price movements in the baskets; prices are collected for those items only. There are approximately 760 representative items.

When selecting these items there are some individual goods and services where expenditure is sufficiently large that they merit inclusion in their own right; these include personal computers, petrol and electricity supply. However more commonly, it is necessary to select a sample of specific goods and services that give a reliable measure of price movements for a broad range of similar items. The selection of these representative items is purposive or judgmental. The number of items chosen to represent price changes within each expenditure category depends both on the weight of the category and the variability of price changes between the various items that could be chosen to represent the category.

Since March 2026, we use "scanner data" (data collected by retailers at the point of sale whether in-store or online) for some grocery retailers. For these retailers, we know every sale that has taken place. This means that we are not limited to a sample of items.

Representative items are chosen to be representative of general expenditure across the whole of the UK; they are not necessarily representative for a particular individual or group of the population. In order that the indices remain representative of consumer spending patterns over time, the selection of items is reviewed each year.

New items may be introduced for a variety of reasons. These include the development of new products, particularly in high technology sectors such as audio-visual equipment; the need to improve coverage in areas where consumers spend a significant or growing proportion of their income, where price changes are very variable, or the replacement of existing items for very similar products that have become more popular. Additions to the basket of representative items each year are broadly matched by the number of items removed so that production costs and lags can be contained.

Price collection

There are three distinct collection methods used in reaching the total of over 180,000 prices collected. Each requires the selection in the base period (January) of a product conforming to the item description and the subsequent tracking of the price of this product on a month by month basis. If the product ceases to be available, a replacement product is chosen and quality adjustment may be required. The three methods are the following.

Local collection

Local price collectors visit 20,000 shops in around 150 locations to collect over 100,000 prices. This ensures that variations in price across the UK are captured. The price collectors visit the same shops each month to collect the prices of identical products to ensure they are collecting like for like. The shelf-price of an item is collected, and entered into a hand-held computer.

Central shops

For some larger chain stores, there is a central pricing policy which is used throughout their UK branches. These prices are collected centrally, and weighted according to the retailer's market share. The results are then combined with those from the local price collection.

Central collection

Prices are collected centrally for goods and services where the price is the same for all UK residents or the regional variation can be collected centrally (for example via the internet, telephone or e-mail enquiries). Index calculations are carried out separately from the main method of index production. This is the case for around 160 items. Prices are collected for most of these items on a monthly basis but some are collected either quarterly or annually.

Quarterly

Onboard catering

Registered social landlord (RSL) rent

Butane gas

Electrical service charge

Home delivery charges

Trade union and professional organisation subscriptions

Surveyor's fee for house valuation

Driving test fees

Passport fees

Pet insurance

Banker's draft

Packaged current account charges

Money transfer fees

Household services maintenance policy

Dating agency fees

Subscription to internet

Private healthcare subscriptions

Slimming club fees

Dental insurance

Private surgery/self-pay operation fees

Caravans

Car spare parts

Taxi fares

Boats

Watersports equipment

Digital television subscriptions

Television rentals

DVD rental/video on demand subscription services

Attractions

Golf green fees

Cinema admission

Admission to cultural event

Music streaming subscriptions

Games consoles online subscription services

Foreign holidays insurance

Annually or Bi-annually

Local authority rent

University accommodation fees

Council Tax and Northern Ireland rates

Water and sewerage charges

Birth, death and marriage certificates

University tuition fees

Private school fees

Part-time education/leisure classes

NHS dental charges

Vehicle Excise Duty

London Transport and other underground/metro fares

Television licence

Historical monuments admission

Football admission

Social subscriptions

Selection of locations and outlets

Prices are collected in around 150 locations across the 12 government regions within the UK. Location selection takes place separately within each region, with the probability of a particular location being selected proportional to the number of employees in the retail sector in that location.

Within a location, outlets are selected randomly. To do this, the outlets in a location are first enumerated to produce a sampling frame. This enumeration is carried out by price collectors visiting the postcodes in each location and noting details of all retail outlets found, including an estimate of the net retail floor space, which is used as a proxy for turnover.

For department stores and other shops selling a wide variety of goods, the floor space devoted to each commodity group is measured. Outlets are selected with the probability of selection being proportional to floor space or, for some categories of shops (for example independent green grocers), by simple random sampling. Approximately one-fifth of locations are either changed or re-enumerated each year.

Selection of products

For most goods, the selection of products and varieties within outlets is purposive. In each outlet, collectors choose one product "representative of what people buy in the area" from all products matching the specification of each item to be priced in that outlet. To facilitate this, they ask the retailer what are the most popular brands and those that are stocked regularly. The chosen products are reviewed each January to ensure that what is being priced still reflects these criteria.

Local probability sampling is used for some household appliances and durable goods (for example washing machines, fridge freezers and digital camcorders). Under this approach, individual models are defined in terms of their main price determining attributes (for example, for washing machines these include capacity, brand and energy consumption). Regression modelling is then used to put these products into homogeneous attribute groups to create a representative sampling frame.

Using probability proportional to size sampling, a list of six prioritised attribute groupings are then selected for each price collector. Each collector is asked to find an item matching the first attribute group on the list in their outlet; if this is not possible they move on to the second, and so on. They have six choices and if the sixth is not found they revert to the current method of looking for the best sold product in the outlet.

Alternative data sources

We have also introduced new, large alternative sources of data for many types of goods and services. This includes rail fares, second-hand cars and much of the grocery market (with the remainder of the grocery market still collected through an in-person price collection). This allows us to make use of many more data points than can be collected in-person, and we are not limited to a sample of items. Instead broader "consumption segments" are defined, which allow us to make use of all of the data.

Weights and aggregation

The CPIH, CPI and RPI are produced in stages, with indices obtained at each stage [weighted](#) together to give higher level indices. At the lowest level (the elementary aggregate or stratum index level), weighting data are not available and stratum indices are calculated using predominantly the geometric mean for the CPIH and CPI, and arithmetic means for the RPI. These methods are described in our [Traditional data aggregates in consumer prices article](#).

For alternative data sources, we use new "multilateral" index methods to compile elementary aggregate indices, as described in our [Alternative data aggregates in consumer prices article](#). See also our video, [How scanner data and the GEKS-Tornqvist method are improving the way we track prices](#), for an overview of the approach, and our [How multilateral index methods help us understand grocery scanner data](#) article gives a summary description of the method.

Indices for the strata are arithmetically weighted together according to expenditure shares to produce the CPIH, CPI and RPI consumption segment indices. Consumption segment indices are then arithmetically weighted into broader categories for publication.

The data used to produce the weights come from a variety of sources. The published CPIH and CPI weights are derived from the National Accounts' estimates of household final monetary consumption expenditure in the UK and include the expenditure of all private households, residents of institutional households, and foreign visitors to the UK. The lower-level weights use estimates of household expenditure derived from a variety of sources, including the most recent Living Costs and Food Survey (LCF), and Annual Business Survey. On 21 March 2017, we introduced an additional level of detail within the classification structure for which weights and indices are produced. The structure is called the European classification of individual consumption according to purpose (ECOICOP).

Stratum weights, item weights and the published RPI weights are mainly obtained from the LCF. The LCF is a continuous survey of the expenditure patterns of private households based on a sample of around 6,000 households per annum. Response rates and sampling errors are given in sections B1 and B3 of the Family Spending report.

When using LCF data for RPI purposes, the following households are excluded: the top 4% of households by income and pensioner households dependent on state benefits for at least 75% of their income.

Rates of change

Rates of change for the CPIH and CPI are calculated from unrounded index levels rather than on the published indices, which are rounded to one decimal place. The use of unrounded indices increases the accuracy of the calculation. Rates of change for the RPI are calculated from the rounded published indices.

More detail on the methods and terminology used are covered above in the Consumer Price Indices Technical Manual.

7 . Validation and quality assurance

Accuracy

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

The methodology for estimating the accuracy of the CPIH, CPI and RPI has not yet been fully developed because of the complexity of the sample design. Work is underway to aid users in understanding the accuracy of these statistics and work in the field of estimating the accuracy of indices is continuing.

Data are collected from two distinct sources, survey data and administrative data. Survey data have been collected for a statistical purpose using assured methodology, and its quality is known. Administrative data have been collected for non-statistical purposes by government departments and the private sector. To ensure the quality of this data in the production of official statistics, the UK Statistical Authority has published a regulatory standard for the Quality Assurance of Administrative Data. The article [Quality assurance of administrative data](#) presents this information for CPIH and CPI.

Coherence and comparability

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

Coherence

The CPIH, CPI and RPI all measure the average change from month to month in the prices of consumer goods and services purchased in the UK. However, they differ in both coverage and methodology. A detailed description of these differences is given in the article entitled [Users and uses of the consumer price inflation statistics](#).

The differences are summarised with the following explanations.

For the CPIH and CPI, where weights are not available at the first stage of aggregation, the geometric mean is mostly used to combine the individual prices at the first stage of aggregation; with a combination of arithmetic mean (ratio of average prices), weighted and other formulae used for the remainder. The RPI uses a combination of arithmetic means (average of price relatives and ratio of average prices), weighted and other formulae.

The CPI excludes a number of RPI series mainly relating to housing costs (for example, Council Tax), and in particular to owner occupiers' housing costs (including mortgage interest payments, house depreciation and buildings insurance).

The CPIH and CPI include series for university accommodation fees, foreign students' university tuition fees, and unit trust and stockbrokers' charges, none of which are included in the RPI.

The CPIH includes the same series as the CPI, but includes a measure of owner occupiers' housing costs measured using an internationally recognised approach known as rental equivalence, along with council tax.

The CPIH and CPI are categorised according to the international classification system, [COICOP \(Classification Of Individual Consumption According to Purpose\)](#). The RPI uses a unique and bespoke classification system. An additional level of detail was added to the COICOP classification on 21 March 2017 (known as COICOP5).

The way in which COICOP maps to the RPI system is shown in Table 1:

Table 1: How COICOP maps to the RPI system

COICOP Divisions	RPI Groups
01 - Food and non-alcoholic beverages	Food
02 - Alcohol and tobacco	Alcoholic drink (off sales) Tobacco
03 - Clothing and footwear	Clothing & footwear
04 - Housing and household services	Housing (exc. Mortgage interest payments, depreciation, council tax & building insurance) Fuel & light
05 - Furniture and household goods	Household goods Domestic services
06 - Health	Personal goods & services (health-related items)
07 - Transport	Motoring expenditure Fares & other travel costs
08 - Communication	Household services (exc. domestic services & fees and subscriptions)
09 - Recreation and culture	Leisure goods Leisure services
10 - Education	Fees & subscriptions (education-related items)
11 - Restaurants and hotels	Catering Alcoholic drink (on sales)
12 - Miscellaneous goods and services	Personal goods & services (non health-related items) Fees & subscriptions (non education-related items)

Source: Office for National Statistics

The CPIH and CPI weights are based on expenditure by all private households, foreign visitors to the UK and residents of institutional households. In the RPI, weights are based on expenditure by private households only, excluding the highest income households and pensioner households mainly dependent on state benefits.

In the construction of the CPIH and CPI weights, amounts paid out in insurance claims are distributed among the COICOP headings according to the nature of the claims' expenditure, with the residual (the service charge) being allocated to the relevant insurance heading. For the RPI weights, total expenditure (that is, gross of claims paid out) is assigned to the relevant insurance heading.

A breakdown of the difference between the CPIH and RPI, and the CPI and RPI, annual rates of inflation is shown in Table 5 of the Consumer Price Inflation Dataset.

Comparability

CPIH

The official CPIH series (based on 2015 equals 100) started in 2013 and is published in the Consumer Price Inflation statistical bulletin. Aside from the inclusion of OOH and Council Tax, the CPIH basket of goods is identical to that for CPI.

[The full back series of CPIH](#) was revised and published on 14 March 2017, incorporating the inclusion of Council Tax and revision of owner occupiers' housing cost weights to align with revised national accounts data published in the Blue Book 2016. An assessment of the impact of these revisions is [available](#).

CPIH was re-referenced to 2015 equals 100 on publication of the January 2016 figures.

CPI

The official CPI series started in 1996. The methodology and index construction are consistent through time, although the coverage of the CPI has been extended in stages since its official launch.

With effect from the January 2000 index, the coverage of goods and services was extended to include the following services which had been previously excluded: out-patient services (Group 06.2); some education services, such as university tuition fees (part of Division 10); childcare services (part of Group 12.4); and insurance services (Group 12.6). At the same time, the population basis for the weights was broadened from private households to also include expenditure by foreign visitors and residents of institutional households.

Further extensions to coverage took place with effect from the January 2001 index, with the inclusion of hospital services and nursing homes (Group 06.3) and retirement homes (part of Group 12.4). From January 2002, coverage of the CPI was extended again to include service charges expressed as a proportion of the transaction value, for example unit trust and stockbrokers' charges, and foreign currency exchange commission (part of Group 12.6).

These extensions to coverage only came into effect from the point of their introduction; indices for earlier periods were not revised to make their coverage consistent with later periods. More details about these extensions to coverage can be found in a series of [CPI Methodological Articles](#) on our website.

CPI was re-referenced to 2015 equals 100 on publication of the January 2016 figures.

RPI

RPI data are available back to 1947 but have been re-referenced on several occasions since then: in 1952, 1956, 1962, 1974 and 1987. Referencing has generally been accompanied by changes to the coverage and/or structure of the detailed sub-components. Details of these changes are given in Appendices 1 and 2 of the above Consumer Price Indices Technical Manual.

Most recently, housing depreciation was included in the RPI in 1995, as an element of owner- occupier' housing costs. UK holidays were introduced in 1994 and foreign holidays in 1993. Improvements to the way that mortgage interest payments, seasonal items, new car prices and private rents were measured were introduced in 2010, 2011 and 2012 respectively. In January 2013, following a consultation on the RPI, the National Statistician [announced](#) that, in future, changes to the RPI would be limited to routine changes such as the update of the basket of goods and services.

Changes in the quality of products being priced

One of the more difficult issues in producing the inflation measures is the accurate measurement and treatment of quality change due to changing product specifications. As a measure of price change alone, the indices should reflect the cost of buying a fixed basket of goods and services of constant quality. However, products often disappear or are replaced with new versions of a different quality or specification, and brand new products also become available. When such a situation arises, one of the following methods is adopted:

- direct comparison
- direct quality adjustment
- imputation

In all cases, a nominal price in the base month (January) is needed for the new or replacement product.

Direct comparison

If there is another product which is directly comparable, for example a garment identical except that it is a different colour, then the new one directly replaces the old one and its base price remains the same.

Direct quality adjustment

This is the preferred method of dealing with the situation where a replacement product is of a different quality or specification. An attempt is made to place a value on the quality (or specification) difference and the base price is adjusted accordingly. There are three methods used in the UK.

Option costing

This can be used when a product changes in specification and it is possible to value separately the components that have changed. This method is used for the quality adjustment of new cars in the CPIH and CPI.

Quantity adjustment

This is used when there is a permanent size change in homogenous goods such as food and drink. An adjustment is made to the base price pro rata to the change in the weight or quantity

Hedonic regression

This technique uses a set of ordinary least square regressions to relate the price of an item to its measurable characteristics. It is used for the quality adjustment of PCs, laptop computers, tablet computers, digital cameras, pre-pay mobile phone handsets and smartphones.

Imputation

If the replacement product is of a different quality or specification, and no information is available to quantify the difference, a base price is calculated for the new product by assuming that its price change from the base month up until that month equals the average change in the elementary aggregate for that item.

Further details about quality adjustment are given in sections 8.2 and 8.4 of the Consumer Price Indices Technical Manual.

Alternative data sources

For large alternative sources of data, a replacement strategy is not appropriate. Instead, we have made use of new methods to ensure that comparisons are on a like-for-like basis, and that we also capture the effects of new and discontinued product lines. Further information can be found in our [Introducing grocery scanner data into consumer price statistics article](#).

8 . Concepts and definitions

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

CPIH is defined as the Consumer Prices Index including owner occupiers' housing costs. This reflects the fact that it is identical to the CPI, with the exception of inclusion of owner occupiers' housing costs and Council Tax.

Internationally, the CPI is based on the HICP. The HICP is defined in a series of legally binding European Union regulations. The Council Regulation (EC) No 2494/95 of 23 October 1995 concerning "harmonised indices of consumer prices" provides the legal basis of the HICPs and a series of subsequent Council and Commission regulations define its construction and coverage.

The RPI as it exists today is very different from the first official consumer price index produced in 1914. That index was produced with unchanged weights until 1936 when the then Ministry of Labour announced its intention to update the RPI weights using the results of a large scale household survey. This new process was put on hold due to the onset of the Second World War. In 1946, a Cost of Living Advisory Committee was set up to oversee the production of an Interim Index of Retail Prices but it was not until 1956 that the first official Retail Price Index was introduced.

In 1989, responsibility for the production of the RPI moved from the Employment Dept to the newly re-organised Central Statistical Office (later to be renamed the Office for National Statistics). Details of the legislation passed in order to reach this position are included in Appendix 1 of the Consumer Price Indices Technical Manual.

Section 21 of The Statistics and Registration Service Act which came into force on 1 April 2008 stated that the Statistics Authority must "compile and maintain the Retail Price Index and publish it every month". The scope and definition of the index was and remains, though, the responsibility of the Chancellor of the Exchequer.

9 . Other information

Assessment of user needs and perceptions

(The processes for finding out about users and uses, and their views on the statistical products).

The indices are used in many ways by the government, businesses, and society in general. They can affect interest rates, tax allowances, wages, state benefits, pensions, maintenance, contracts and many other payments. They also show the impact of inflation on family budgets and affect the value of the pound in your pocket. For more information see [Users and uses of consumer price inflation statistics \(2016\)](#). There are also many mechanisms whereby users are able to provide views on these statistics:

- the [Advisory Panels on Consumer Prices](#) provide advice to the National Statistician on technical aspects of the statistics, and their uses and applications
- [UK consumer price statistics: a review](#) and a subsequent [consultation](#) provided in depth insight into user needs and perceptions
- additional public consultations are conducted on methodological improvements to the indices
- the CPIH, CPI and RPI are assessed by the UK Statistics Authority; as part of the assessment, views are sought from users
- a consumer prices user group was set up in early 2012
- the Bank of England and Treasury formally assess the performance of the ONS
- there is an active consumer price indices forum on [StatsUserNet](#)

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).

Our recommended format for accessible content is a combination of HTML web pages for narrative, charts and graphs, with data being provided in usable formats such as CSV and XLS. Our website also offers users the option to download the narrative in PDF format. In some instances other software may be used, or may be available on request. For further information please refer to the contact details at the beginning of this document.

The latest [Consumer Price Inflation statistical bulletin](#) and accompanying datasets can be downloaded free from our website.

Advance access to the data: ONS policy allows pre-release access to data before publication in exceptional circumstances. These would be where the public benefit likely to result from such access significantly outweighs the potential detriment to public trust in official statistics. When there is pre-release of data, the timing and purpose of the release are described in the statistical bulletin.

Time series data -- download free from our website.

General enquiries on the indices, compilation methods, quality information or difficulties in finding the latest figures can be e-mailed to the publication team at cpi@ons.gov.uk.

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

- [Terms and conditions \(for data on the website\)](#)
- [Pre-release access \(including conditions of access\)](#)
- [Accessibility](#)

In addition to this Quality and Methodology Information, quality information and advanced notice of any forthcoming major changes in methodology relevant to each release are available in the Consumer Price Inflation statistical bulletin.

Further information on the CPIH, CPI and RPI can be found [on our methodology page](#).

10 . Cite this methodology

Office for National Statistics (ONS), updated 25 March 2026, ONS website, methodology article, [Consumer Price Inflation \(includes all 3 indices -- CPIH, CPI and RPI\) quality and methodology information \(QMI\)](#)