

Statistical bulletin

Consumer price inflation, UK: July 2015

Price indices, percentage changes and weights for the different measures of consumer price inflation.



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1 . Main points

- The Consumer Prices Index (CPI) grew by 0.1% in the year to July 2015, up from 0.0% in the year to June 2015
- A smaller fall in clothing prices on the month compared with a year ago was the main contributor to the rise in inflation
- Falling prices for food and non-alcoholic beverages partially offset the rise
- CPIH (not a National Statistic) grew by 0.4% in the year to July 2015, up from 0.3% in June 2015

2 . A brief description of Consumer Price Inflation

Consumer price inflation is the speed at which the prices of goods and services bought by households rise or fall. Consumer price inflation is estimated by using price indices. A way to understand a price index is to think of a very large shopping basket containing all the goods and services bought by households. The price index estimates changes to the total cost of this basket. An [infographic](#) explains how consumer price inflation is calculated. Consumer price indices are published monthly.

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. This is calculated by comparing the price index for the latest month with the same month a year ago. This is known as the 12-month inflation rate. This bulletin measures inflation to July 2015, so the 12-month rate measures changes in prices between July 2014 and July 2015.

A range of measures of consumer price and other price inflation are published. [A tale of many price indices](#) summarises information on the different measures.

3 . Consumer Prices Index (CPI)

What is the CPI?

The CPI is a measure of consumer price inflation produced to international standards and in line with European regulations. First published in 1997 as the Harmonised Index of Consumer Prices (HICP), the CPI is the inflation measure used in the Government's target for inflation.

The CPI is also used for purposes such as uprating pensions, wages and benefits and can aid in the understanding of inflation on family budgets. For more information see [Users and uses of consumer price inflation statistics \(100.5 Kb Pdf\)](#).

Latest figure and long-term trend

The CPI 12-month rate (the amount prices change over a year) between July 2014 and July 2015 stood at 0.1%. This means that a basket of goods and services that cost £100.00 in July 2014 would have cost £100.10 in July 2015. This continues the trend of the previous 5 months when inflation had been at or around 0.0%.

In the year to July 2015, food prices fell by 2.7% and prices of motor fuels fell by 11.4%. These 2 groups have provided some of the largest downward contributions to the 12-month rate during 2015. In July 2015, the food and motor fuels groups in total reduced the CPI 12-month rate by approximately 0.7 percentage points. Historically, price movements for these products have been among the main causes of inflation. An article was published in November 2014 which outlined some [possible factors that may be affecting prices \(477.2 Kb Pdf\)](#).

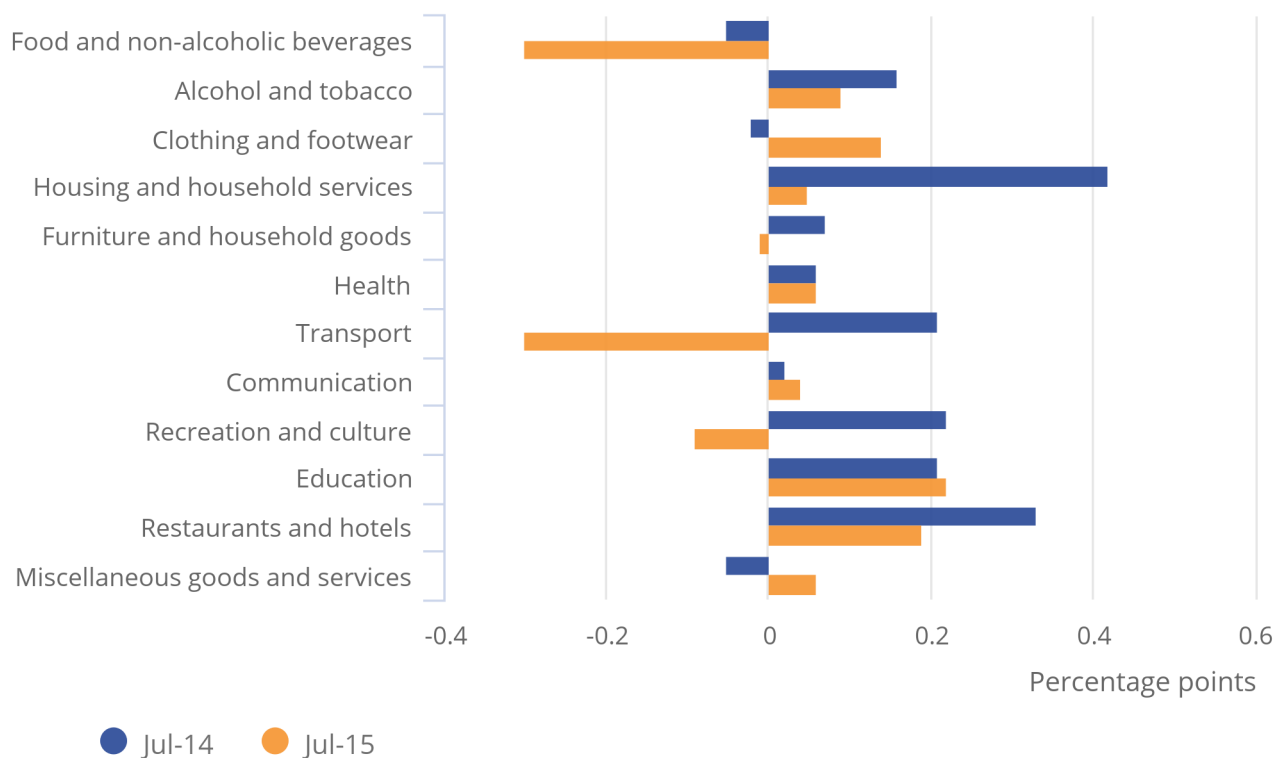
Figure A shows the contributions to the CPI 12-month rate in July 2015 compared with the contributions to the 12-month rate a year earlier. A larger version of the chart can be viewed by clicking on it (HTML version only).

Figure A: Contributions to the CPI 12-month rate: July 2014 and July 2015

United Kingdom

Figure A: Contributions to the CPI 12-month rate: July 2014 and July 2015

United Kingdom



Source: Office for National Statistics

Notes:

1. Individual contributions may not sum to the total due to rounding
2. More information on the contents of each group can be found in Table 3 in the accompanying consumer price inflation reference tables

Figure B shows the CPI 12-month rate over the last 10 years. Table A shows the CPI 1-month rate (the amount prices change between 2 consecutive months), 12-month rate and index values for the last year. A larger version of the chart can be viewed by clicking on it (HTML version only).

Figure B: CPI 12-month inflation rate for the last 10 years: July 2005 to July 2015

United Kingdom

Figure B: CPI 12-month inflation rate for the last 10 years: July 2005 to July 2015

United Kingdom



Source: Office for National Statistics

Table A: CPI index values, 1-month and 12-month rates: July 2014 to July 2015

United Kingdom

	Index ¹ (UK, 2005 = 100)	1-month rate	12-month rate
2014 Jul	127.8	-0.3	1.6
Aug	128.3	0.4	1.5
Sep	128.4	0.0	1.2
Oct	128.5	0.1	1.3
Nov	128.2	-0.3	1.0
Dec	128.2	0.0	0.5
2015 Jan	127.1	-0.9	0.3
Feb	127.4	0.3	0.0
Mar	127.6	0.2	0.0
Apr	128.0	0.2	-0.1
May	128.2	0.2	0.1
Jun	128.2	0.0	0.0
Jul	128.0	-0.2	0.1

Source: Office for National Statistics

Notes:

1. All Items Consumer Prices Index

Consumer Prices Index (CPI): What are the main movements?

This section explains which goods and services had the biggest impact on the change to the 12-month rate between June and July 2015 and, where relevant, considers the longer-term inflationary trends for these goods and services.

The change in the CPI 12-month rate can be calculated by comparing the 12-month rates for 2 consecutive months. An alternative, and equally valid, approach is to calculate it by comparing the price change between the latest 2 months and the price change between the same 2 months a year ago. [Explaining the contribution to change in the 12-month rate \(37.1 Kb Pdf\)](#) is a diagram explaining the calculation.

The CPI fell by 0.2% between June and July 2015 compared with a larger fall of 0.3% between the same 2 months a year earlier. The 1-month movement was therefore 0.1 percentage points higher this year compared with a year ago, resulting in a rise in the CPI 12-month rate.

By far the largest upward contribution to the change in the CPI 12-month rate between June and July 2015 came from:

- **clothing and footwear:** prices, overall, fell by 3.4% between June and July this year compared with a larger fall of 5.7% between the same 2 months a year ago. Prices always fall between June and July during the summer sales period. The price fall between June and July this year was in line with recent years. However, the price fall between June and July last year was larger than usual between these 2 months and followed an atypical price increase between May and June 2014. At the time there were reports of a shift in the timing of the summer sales compared with previous years. The downward contribution came from price movements across the garments sector

There were smaller, but notable, upward contributions to the change in the CPI 12-month rate from:

- **transport services:** prices, overall, rose by 6.6% between June and July this year, compared with a smaller rise of 4.6% between the same 2 months a year ago. The upward contribution came from most transport fares – notably air fares
- **recreation and culture:** prices, overall, rose by 0.2% between June and July this year, compared with a fall of 0.2% between the same 2 months a year ago. The main upward contribution came from price movements in the games, toys and hobbies sector – notably computer games and consoles
- **miscellaneous goods and services:** prices, overall, remained little changed between June and July this year, compared with a fall of 0.5% between the same 2 months a year ago. The upward contribution came from a range of services – notably bank overdraft charges, where a number of banks removed or reduced some of their charges last year

The largest downward contributions to the change in the CPI 12-month rate between June and July 2015 came from:

- **food and non-alcoholic beverages:** prices, overall, fell by 0.7% between June and July this year, compared with a smaller fall of 0.2% between the same 2 months a year ago. The downward contribution came from price movements in most sectors – notably in the milk, cheese and eggs sector – where the prices of 2 pint cartons of shop bought milk have fallen. There was a partially offsetting contribution from rising prices in the bread and cereals sector
- **fuels and lubricants:** average petrol prices rose by 0.1p and diesel prices fell by 2.5p between June and July this year to stand at 116.5p and 118.7p per litre respectively. This compares with a rise of 1.0p per litre on petrol and no change on diesel between the same 2 months in 2014
- **restaurants and hotels:** prices, overall, rose by 0.1% between June and July this year, compared with a larger rise of 0.4% a year ago. The downward contribution came from price movements across the whole sector

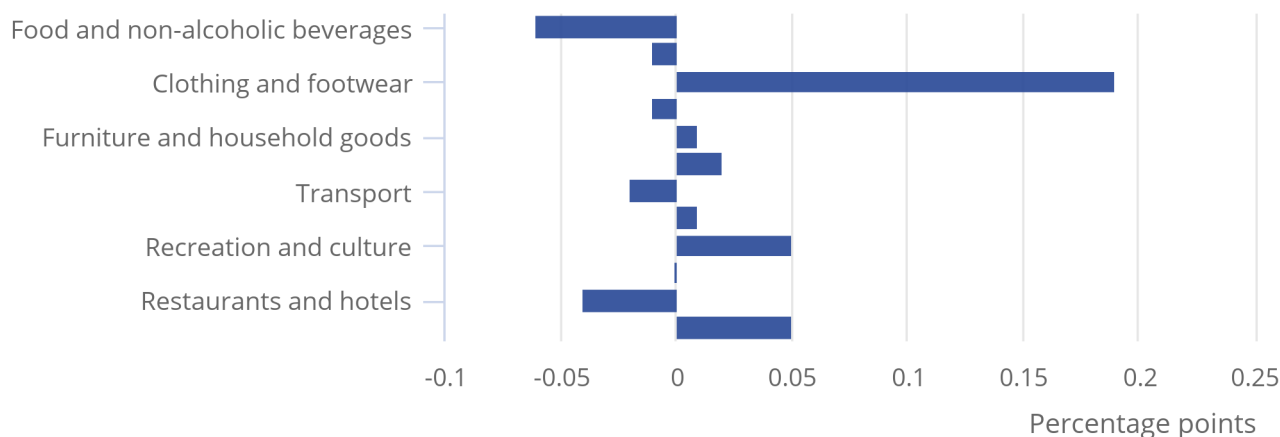
Figure C shows the contributions to change from each part of the CPI basket of goods and services. A larger version of the chart can be viewed by clicking on it (HTML version only).

Figure C: Contributions to the change in the CPI 12-month rate: July 2015

United Kingdom

Figure C: Contributions to the change in the CPI 12-month rate:
July 2015

United Kingdom



Source: Office for National Statistics

4 . CPIH

The National Statistics status of CPIH has been discontinued pending work to investigate and improve the method for measuring owner occupiers' housing costs in this index. [Full details](#) can be found on the UK Statistics Authority website and in an [explanatory note \(313.9 Kb Pdf\)](#) on our website. The improvements from the resulting development work were introduced as part of the February 2015 dataset with the historical series revised back to 2005. Further information on the changes is available in 2 articles: [Improvements to the measurement of Owner Occupiers' Housing Costs and Private Housing Rental Prices \(2.48 Mb Pdf\)](#) and [Revising the weight of Owner Occupiers' Housing in CPIH \(197.4 Kb Pdf\)](#).

CPIH is a measure of UK consumer price inflation that includes owner occupiers' housing costs (OOH). These are the costs of housing services associated with owning, maintaining and living in one's own home. 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 17.8% of the expenditure weight of CPIH. This compares with a weight of 19.5% in 2005.

Currently, the method of calculation, the population coverage and the basket of goods and services are the same as the Consumer Prices Index (CPI), with the exception of OOH. The method of deriving the weights for CPIH and the data used for these are also the same as for CPI, with the exception of OOH. This can result in some differences from the CPI.

In July 2015, the 12-month rate (the rate at which prices increased between July 2014 and July 2015) for CPIH stood at 0.4%, up from 0.3% in June 2015. The difference between the CPI and CPIH annual rates in July 2015 was 0.3 percentage points, the same as the difference in June, despite a small downward contribution from owner occupiers' housing costs.

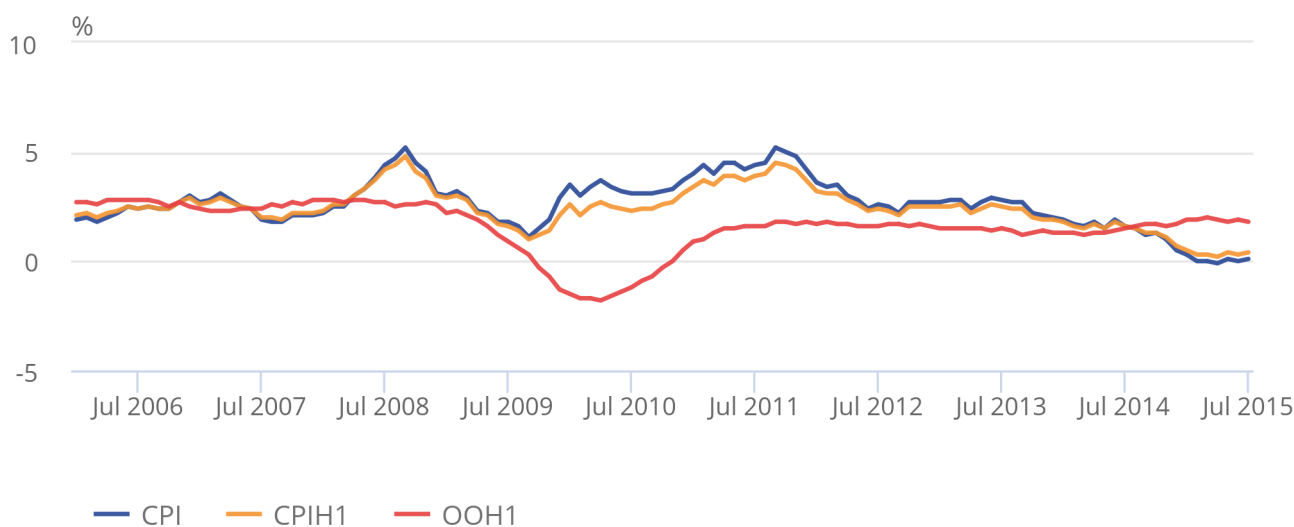
Figure D shows the CPIH and OOH component 12-month rates since January 2006 (the earliest date for which the official CPIH 12-month rate can be calculated). The CPI 12-month rate has been included for comparative purposes. Table B shows the CPIH and OOH component 1-month and 12-month rates and index values for the last year. A larger version of the chart can be viewed by clicking on it (HTML version only).

Figure D: CPIH, OOH component and CPI 12-month rates since January 2006

United Kingdom

Figure D: CPIH, OOH component and CPI 12-month rates since January 2006

United Kingdom



Source: Office for National Statistics

Table B: CPIH and OOH component index values, 1-month and 12-month rates: July 2014 to July 2015

	RPI Index ¹ (UK, 1987 = 100)	RPIJ Index (UK, 1987 = 100)	RPI 1- month ¹ rate	RPIJ 1-month rate	RPI 12- month ¹ rate	RPIJ 12-month rate
2014 Jul	256.0	237.5	-0.1	-0.1	2.5	1.8
Aug	257.0	238.3	0.4	0.3	2.4	1.8
Sep	257.6	238.8	0.2	0.2	2.3	1.6
Oct	257.7	238.9	0.0	0.0	2.3	1.7
Nov	257.1	238.3	-0.2	-0.3	2.0	1.4
Dec	257.5	238.6	0.2	0.1	1.6	1.0
2015 Jan	255.4	236.5	-0.8	-0.9	1.1	0.5
Feb	256.7	237.2	0.5	0.3	1.0	0.4
Mar	257.1	237.4	0.2	0.1	0.9	0.3
Apr	258.0	238.0	0.4	0.3	0.9	0.3
May	258.5	238.5	0.2	0.2	1.0	0.4
Jun	258.9	238.7	0.2	0.1	1.0	0.4
Jul	258.6	238.4	-0.1	-0.1	1.0	0.4

Source: Office for National Statistics

Notes:

1. The RPI has been de-designated as a National Statistic

5 . Retail Prices Index (RPI) and RPIJ

In accordance with the Statistics and Registration Service Act 2007, the Retail Prices Index and its derivatives have been assessed against the Code of Practice for Official Statistics and found not to meet the required standard for designation as National Statistics. [The full assessment report](#) can be found on the UK Statistics Authority website.

The RPI is a long-standing measure of UK inflation that has historically been used for a wide range of purposes such as the indexation of pensions, rents and index-linked gilts. For further information see [Users and uses of consumer price inflation statistics](#) (100.5 Kb Pdf) .

RPIJ is an improved variant of the Retail Prices Index, which is calculated using formulae that meet international standards. The rationale for creating RPIJ was to give users a better alternative to the RPI if their needs were for a measure of inflation based on the same population, classifications, weights etc, as the RPI. Currently, RPIJ also acts as an analytical series in that it allows users to see the impact of using the Jevons (which meets international standards) in place of the Carli formula (which does not meet international standards) in the RPI. The use of the different formulae at the elementary aggregate level is currently the only difference between the 2 indices. Detailed goods and services indices are not produced for RPIJ.

In July 2015, the 12-month rate for RPIJ stood at 0.4%, unchanged from June 2015.

The RPI 12-month rate for July 2015 stood at 1.0%, meaning that it was 0.6 percentage points higher than it would have been had it used formulae that meet international standards.

Figure E shows the RPI and RPIJ 12-month rates for the last 10 years. Over this period the RPIJ 12-month rate has been, on average, 0.5 percentage points lower than the RPI but the difference has increased to an average of 0.6 percentage points over the last 3 years. Cumulatively, inflation as measured by the RPI is 34.5% over the 10-year period, compared with 27.6% as measured by RPIJ. The use of the Carli formula has therefore added 6.9 percentage points to the change in prices over the last 10 years. A larger version of the chart can be viewed by clicking on it (HTML version only).

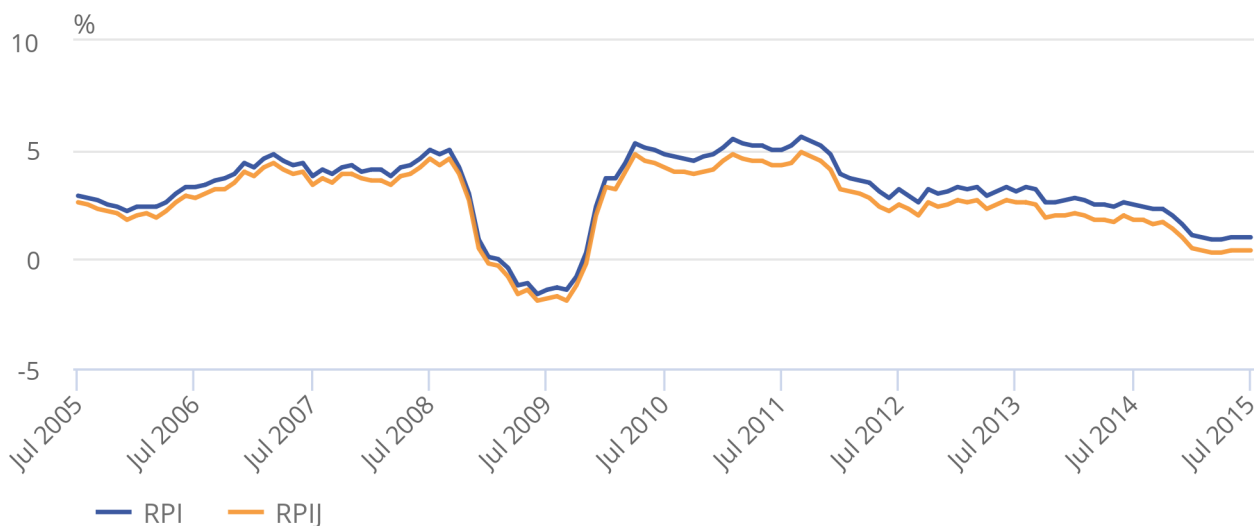
Table C shows the RPI and RPIJ 1-month and 12-month rates and index values for the last year.

Figure E: RPI and RPIJ 12-month rates for the last 10 years: July 2005 to July 2015

United Kingdom

Figure E: RPI and RPIJ 12-month rates for the last 10 years: July 2005 to July 2015

United Kingdom



Source: Office for National Statistics

Table C: RPI and RPIJ index values, 1-month and 12-month rates: July 2014 to July 2015

	RPI Index ¹ (UK, 1987 = 100)	RPIJ Index (UK, 1987 = 100)	RPI 1- month ¹ rate	RPIJ 1-month rate	RPI 12- month ¹ rate	RPIJ 12-month rate
2014 Jul	256.0	237.5	-0.1	-0.1	2.5	1.8
Aug	257.0	238.3	0.4	0.3	2.4	1.8
Sep	257.6	238.8	0.2	0.2	2.3	1.6
Oct	257.7	238.9	0.0	0.0	2.3	1.7
Nov	257.1	238.3	-0.2	-0.3	2.0	1.4
Dec	257.5	238.6	0.2	0.1	1.6	1.0
2015 Jan	255.4	236.5	-0.8	-0.9	1.1	0.5
Feb	256.7	237.2	0.5	0.3	1.0	0.4
Mar	257.1	237.4	0.2	0.1	0.9	0.3
Apr	258.0	238.0	0.4	0.3	0.9	0.3
May	258.5	238.5	0.2	0.2	1.0	0.4
Jun	258.9	238.7	0.2	0.1	1.0	0.4
Jul	258.6	238.4	-0.1	-0.1	1.0	0.4

Source: Office for National Statistics

Notes:

1. The RPI has been de-designated as a National Statistic

For users who want to understand the causes of the difference between the CPI and RPI, please see Table 5 in the [Consumer Price Inflation Reference Tables of the July 2015](#) release.

6 . Guide to data

Table D outlines where data for all consumer price inflation statistics can be found.

Table D: Guide to data

	Statistical bulletin	Detailed briefing note	Reference tables (excel format)	Time series dataset
CPI	H, T, D ²	H, D	H, T, D	T, D
CPIY	:	H	H, T	T
CPI-CT	:	H	H, T	T
CPIH ¹	H, T, D	H	H, T, D	T, D
CPIHY ¹	:	H	H, T	T
RPIJ	H, T	H	H, T	T
RPI ¹	H, T	H, D	H, T, D	T, D
RPIX ¹	:	H	H, T	T
RPIY ¹	:	H	H, T	T
TPI ¹	:	H	H, T	T
RPI pensioner indices ¹	:	:	H, T	T
International comparisons	:	:	H, T	T

Source: Office for National Statistics

Notes:

1. These statistics are not National Statistics
2. H = Latest headline figures, D = Detailed data (including disaggregations), T = Time series data

7. Background notes

1. News

Re-referencing of CPI and CPIH and introduction of the COICOP5 classification

On 17 August 2015, the note [Re-referencing of the CPI and CPIH and Introduction of the COICOP5 Classification \(24.3 Kb Pdf\)](#) was published. The note sets out 2 important forthcoming developments for the Consumer Prices Index (CPI) and CPIH (a measure of inflation that includes owner occupiers' housing costs). The first of these is a re-referencing of the indices to 2015=100. The second is the introduction of a more detailed level of sub-category known as COICOP5.

The re-referencing of the indices is due to take place with the publication of the January 2016 data. Regular re-referencing of indices is methodological good practice as it avoids rounding issues that can arise from small index values. Published CPI and CPIH inflation rates are calculated from unrounded indices, meaning that re-referencing will not impact on published inflation rates. Re-referencing will result in revisions to the CPI and CPIH indices. Full back series of the revised indices will be published, with further details to come later this year. Users of indices (as opposed to inflation rates) will want to ensure that, in using these data to calculate their own rates of inflation, they use indices calculated using the same reference year.

Update on research into web scraping price data

On 1 September 2015, we are planning to publish an update of our research into producing price indices from web scraped data. The update will include an extension to the time series of the [previously published web scraped data \(611.7 Kb ZIP\)](#) and an article providing analysis of the different methods for using these data.

Consultation on consumer price statistics

The UK Statistics Authority launched a [public consultation](#) on consumer price statistics on 15 June. The consultation follows a [review of consumer price statistics](#) led by Mr Paul Johnson (Director of the Institute of Fiscal Studies) and seeks users' views on the issues raised in that review. After the consultation closes on 15 September, the Authority will summarise the responses and publish a report.

2. Understanding and accessing the data

A full description of how consumer price indices are compiled is given in the [Consumer Price Indices Technical Manual \(674.4 Kb Pdf\)](#). This is supplemented by infographics and textual information available from the [guidance and methodology section](#) of our website.

A more detailed [quality report \(174.5 Kb Pdf\)](#) for this statistical bulletin is available. The report assesses consumer price inflation statistics against standard dimensions of quality such as relevance, accuracy and accessibility. The report was last updated in October 2013.

The [mini Triennial Review \(1.75 Mb Pdf\)](#) of the CPI and RPI Central Collection of Prices is available.

The most efficient way to access the latest consumer price inflation data and briefing on our website is via the CPI key figure on the [homepage](#).

In response to user feedback, all consumer price inflation data are available in 1 location. The [Consumer Price Inflation Reference Tables](#) are provided via an Excel file.

To help users further, very detailed CPI data are now available including the [individual price quotes and item indices](#) that underpin the CPI. Please note, the data that are published are at a level which means that no individual retailer or service provider will be able to be identified. The data published covers January 1996 to March 2015. These data are updated once a quarter with around a 2-month lag with the latest CPI publication. For example, the data will next be updated when the August CPI is published on 15 September 2015, at which point the detailed data published will be extended to June 2015.

Internationally, the CPI is known as the Harmonised Index of Consumer Prices (HICP). HICPs are calculated in each member state of the European Union according to rules specified in a series of European regulations developed by the European Commission (Eurostat) in conjunction with the EU member states. Eurostat released figures for the Harmonised Index of Consumer Prices (HICP) for the month of July 2015 for EU member states, together with an EU average, on 14 August 2015. A summary of

the latest European data is available from [Eurostat's database tables](#). Further information on HICP for the European Union, Euro area and other EU member states is available from [Eurostat's HICP web page](#).

3. Methods - CPI and other measures of inflation

The CPI, CPIH, RPIJ and RPI are compiled using the same underlying price data, based on a large and representative selection of around 700 individual goods and services for which price movements are measured in around 140 randomly selected areas throughout the UK. Around 180,000 separate price quotations are used every month to compile the indices. The outlets in which the prices are collected are selected randomly. Expenditure weights are held constant for 1 year at a time.

The selection of goods and services that are priced to compile these indices is reviewed annually. The contents of the 2015 basket are described in an article [Consumer Price Inflation: The 2015 Basket of Goods and Services\(139.4 Kb Pdf\)](#). The expenditure weights used to compile the indices are also updated each year. Additional details of the updated weights for 2015 are available in an article published on 24 March 2015 entitled [Consumer Price Inflation: 2015 Weights\(431.9 Kb Pdf\)](#).

Rates of change for the CPI and CPIH are calculated from unrounded index levels, rather than from the published indices which are rounded to 1 decimal place. The use of unrounded indices increases the accuracy of the calculation. The unrounded index levels for the CPI and CPIH are available from tables 64 and 65 of the [Consumer Price Inflation Reference Tables](#). By contrast, rates of change for the RPI and RPIJ are calculated from the published rounded indices.

Further information on the methods used to construct the CPI, CPIH, RPI and RPIJ, including differences in the methods used for each index can be found in the [Consumer Price Indices Technical Manual \(49.6 Kb Pdf\)](#). [Users and uses of consumer price inflation statistics \(100.5 Kb Pdf\)](#) provides further details of how consumer price statistics are used more generally.

4. Revisions policy

On 15 October 2013, a [revisions policy \(49.6 Kb Pdf\)](#) was published for the suite of consumer price inflation statistics. The policy reaffirms the existing practices for CPI and RPI and sets out the policies for the new CPIH and RPIJ measures.

In summary, CPI, CPIH and RPIJ are revisable in theory though revisions only occur under exceptional circumstances. The RPI is never revised once published.

5. Publication policy

This bulletin includes the July 2015 data, collected on and around 14 July 2015. Future [publication dates](#) for this statistical bulletin are available to January 2018 (the publication of the December 2017 inflation figures). Publication dates from February 2017 onwards are provisional.

Details of the policy governing the release of new data are available from our Media Relations Office. Also available is a list of the names of those given [pre-release access](#) to the contents of this release.

Consumer price inflation for August 2014 to August 2015 will be published on 15 September 2015.

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6. Details of the policy governing the release of new data are available by visiting www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html or from the Media Relations Office email: media.relations@ons.gsi.gov.uk

