

Statistical bulletin

Consumer price inflation, UK: April 2015

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



Contact:
Richard Campbell
cpi@ons.gsi.gov.uk
+44 (0) 1633 456900

Release date:
19 May 2015

Next release:
To be announced

Table of contents

1. [Main points](#)
2. [A brief description of Consumer Price Inflation](#)
3. [Consumer Prices Index \(CPI\)](#)
4. [Consumer Prices Index \(CPI\): What are the main movements?](#)
5. [CPIH](#)
6. [Retail Prices Index \(RPI\) and RPIJ](#)
7. [Guide to data](#)
8. [Background notes](#)

1 . Main points

- The Consumer Prices Index (CPI) fell by 0.1% in the year to April 2015, compared to no change (0.0%) in the year to March 2015
- This is the first time the CPI has fallen over the year since official records began in 1996 and the first time since 1960 based on comparable historic estimates
- The largest downward contribution came from transport services - notably air and sea fares, with the timing of Easter this year a likely factor
- CPIH (not a National Statistic) grew by 0.2% in the year to April 2015, down from 0.3% in March 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. Consumer price indices are published monthly.

A [video](#) and an [infographic](#) explain how consumer price inflation is calculated.

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 April 2015, so the 12-month rate measures changes in prices between April 2014 and April 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 April 2014 and April 2015 stood at a negative 0.1%. This means that a basket of goods and services that cost £100.00 in April 2014 would have cost £99.90 in April 2015. This is the first time that the CPI 12-month rate has been negative since official records began in 1996.

An annual fall in prices is often referred to as "negative inflation" or "deflation". Based on comparable historic estimates, the last time the UK saw consumer price deflation was in the year to March 1960, when prices fell by an estimated 0.6%.

In the year to April 2015, food prices fell by 3.0% and prices of motor fuels fell by 12.3%. In both cases, the falls are smaller than in the year to March 2015 but the 2 groups still provided the largest downward contributions to the 12-month rate for April. In total, the food and motor fuels groups reduced the CPI 12-month rate by approximately 0.7 percentage points. An article was published in November 2014 which outlined some [possible factors that may be affecting prices \(477.2 Kb Pdf\)](#) .

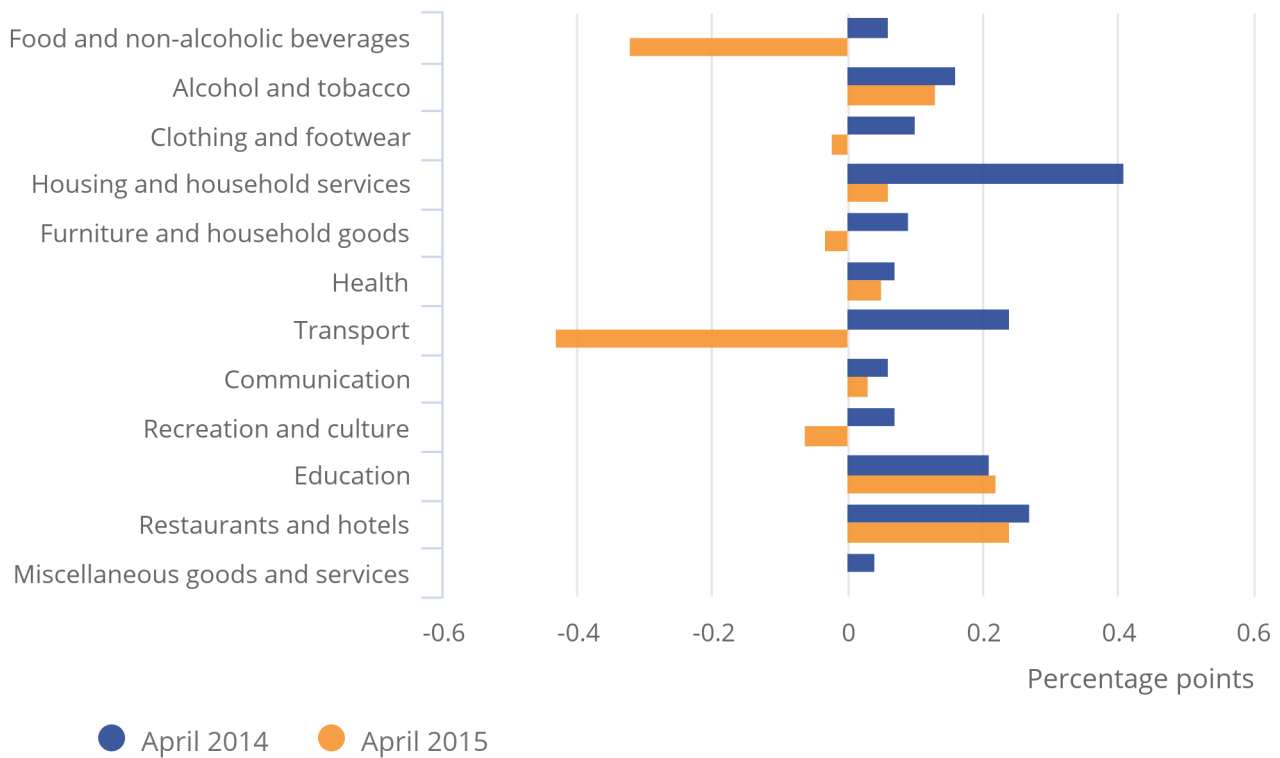
Figure A shows the contributions to the CPI 12-month rate in April 2015 compared with the contributions to the 12-month rate a year earlier. A larger version of the chart can be viewed by clicking on it (HTML version only).

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

United Kingdom

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

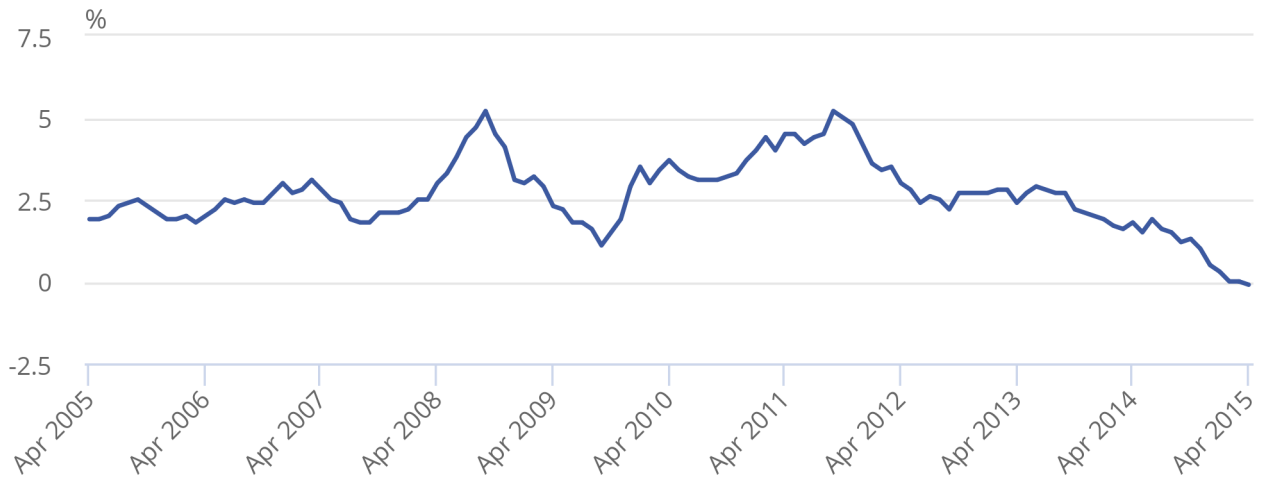
Figure B shows the CPI 12-month rate over the last 10 years. Table A shows the CPI 1-month rate (the amount prices change between 2 consecutive months), 12-month rate and index values for the last year. A larger version of the chart can be viewed by clicking on it (HTML version only).

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

United Kingdom

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

United Kingdom



Source: Office for National Statistics

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

United Kingdom			
	Index ¹ (UK, 2005 = 100)	1-month rate	12-month rate
2014 Apr	128.1	0.4	1.8
May	128.0	-0.1	1.5
Jun	128.3	0.2	1.9
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

Source: Office for National Statistics

Notes:

1. All items Consumer Prices Index

4 . 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 March and April 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 rose by 0.2% between March and April 2015 compared with a larger rise of 0.4% between the same 2 months a year earlier. The 1-month movement was therefore 0.2 percentage points lower this year compared with a year ago, resulting in a fall in the CPI 12-month rate. The difference between the movements in the annual and monthly rates is due to rounding.

The largest downward contributions to change in the CPI 12-month rate between March and April 2015 came from price movements for:

- **transport services:** prices, overall, rose by 2.4% between March and April 2015, compared with a larger rise of 7.9% a year earlier. The majority of the downward contribution came from air and sea fares. Price changes for these fares between March and April vary notably year on year, with the timing of Easter a likely factor.

There were smaller downward contributions from price movements for: housing and household services; clothing and footwear; furniture, household equipment and routine maintenance; and alcoholic beverages and tobacco.

The largest upward contribution to change in the CPI 12-month rate between March and April 2015 came from price movements for:

- **motor fuels:** prices, overall, rose by 1.6% between March and April 2015 compared with a fall of 0.1% between the same 2 months a year ago. Average petrol prices rose by 2.0 pence per litre between March and April this year compared with no change between the same 2 months a year ago. Diesel prices also rose this year, by 1.2 pence per litre, but fell by 0.5 pence per litre a year ago.

There were smaller upward contributions from price movements for: recreation and culture; miscellaneous goods and services; and food and non-alcoholic beverages.

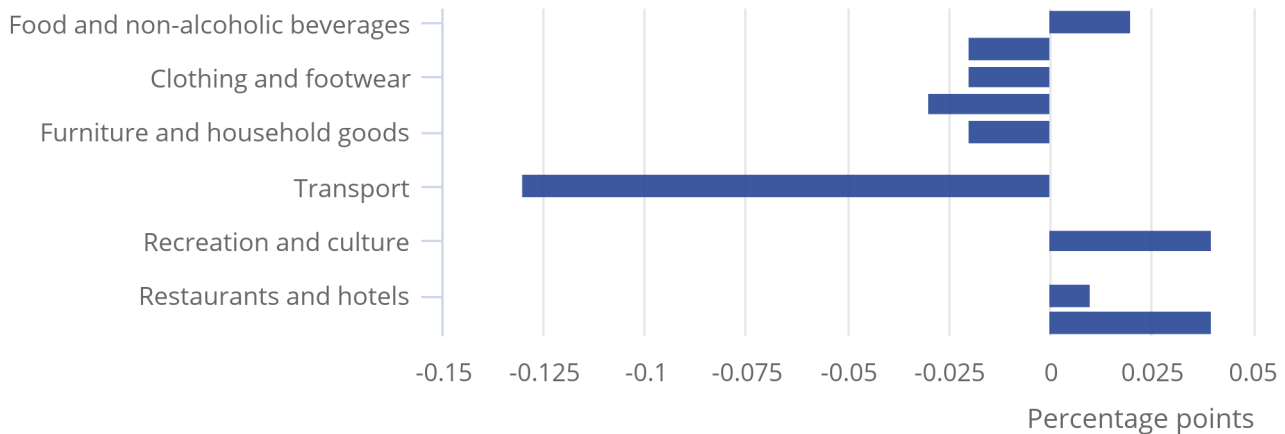
Figure C shows the contributions to change from each part of the CPI basket of goods and services. A larger version of the chart can be viewed by clicking on it ([HTML version only](#)).

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

United Kingdom

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

United Kingdom



Source: Office of 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

5 . 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 April 2015, the 12-month rate (the rate at which prices increased between April 2014 and April 2015) for CPIH stood at 0.2%, down from 0.3% in March 2015. The difference between the CPI and CPIH annual rates in April 2015 was 0.3 percentage points, the same as the difference in March, despite a small downward contribution from owner occupiers' housing costs.

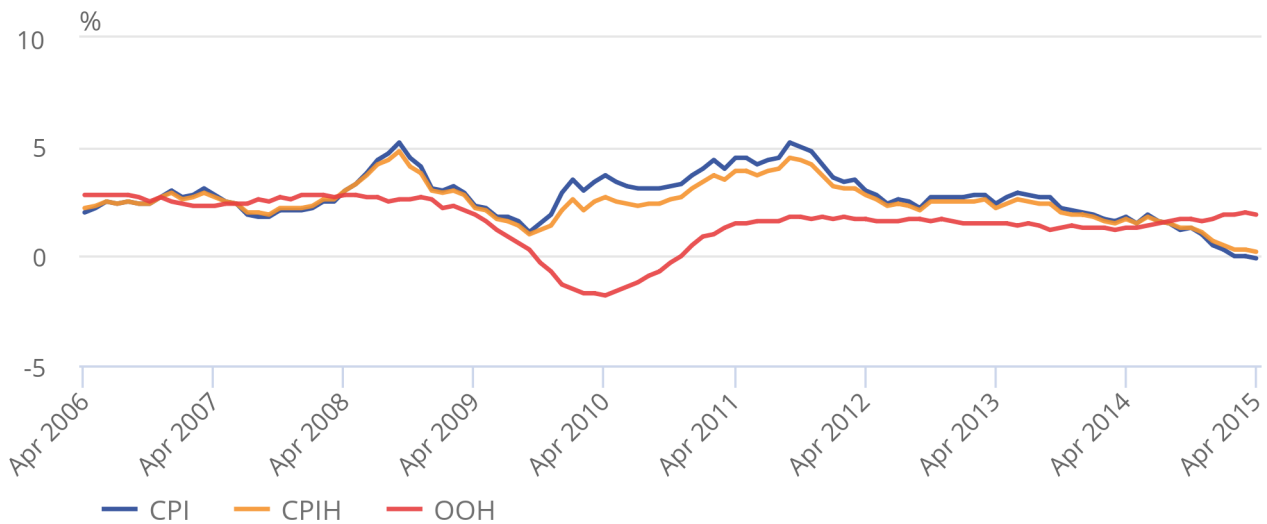
Figure D shows the CPIH and OOH component 12-month rates since January 2006 (the earliest date for which the CPIH 12-month rate can be calculated). The CPI 12-month rate has been included for comparative purposes. Table B shows the CPIH and OOH component 1-month and 12-month rates and index values for 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

Notes:

1. 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. The improvements from the resulting development work were introduced as part of the February 2015 dataset with the historical series revised back to 2005
2. The time series for this chart will be gradually increased up to a time span of 10 years as more periods of data become available

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

United Kingdom

	CPIH Index ¹ (UK, 2005 = 100)	OOH Index ¹ (UK, 2005 = 100)	CPIH 1-month ¹ rate	OOH 1-month ¹ rate	CPIH 12-month ¹ rate	OOH 12-month ¹ rate
2014 Apr	125.5	114.1	0.3	0.2	1.7	1.3
May	125.5	114.3	0.0	0.2	1.5	1.3
Jun	125.7	114.4	0.2	0.1	1.8	1.4
Jul	125.4	114.7	-0.2	0.2	1.6	1.5
Aug	125.9	115.0	0.4	0.2	1.5	1.6
Sep	125.9	115.1	0.1	0.1	1.3	1.7
Oct	126.1	115.3	0.1	0.2	1.3	1.7
Nov	125.8	115.4	-0.2	0.1	1.1	1.6
Dec	125.9	115.6	0.0	0.2	0.7	1.7
2015 Jan	125.0	115.9	-0.7	0.2	0.5	1.9
Feb	125.3	116.0	0.2	0.1	0.3	1.9
Mar	125.5	116.1	0.2	0.1	0.3	2.0
Apr	125.8	116.3	0.2	0.1	0.2	1.9

Source: Office for National Statistics

Notes:

1. 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. The improvements from the resulting development work were introduced as part of the February 2015 dataset with the historical series revised back to 2005

6 . 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 April 2015, the 12-month rate for RPIJ stood at 0.3%, unchanged from 0.3% in the year to March 2015.

The RPI 12-month rate for April 2015 stood at 0.9%, 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 34.7% over the 10-year period, compared with 27.7% as measured by the RPIJ. The use of the Carli formula has therefore added 7.0 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).

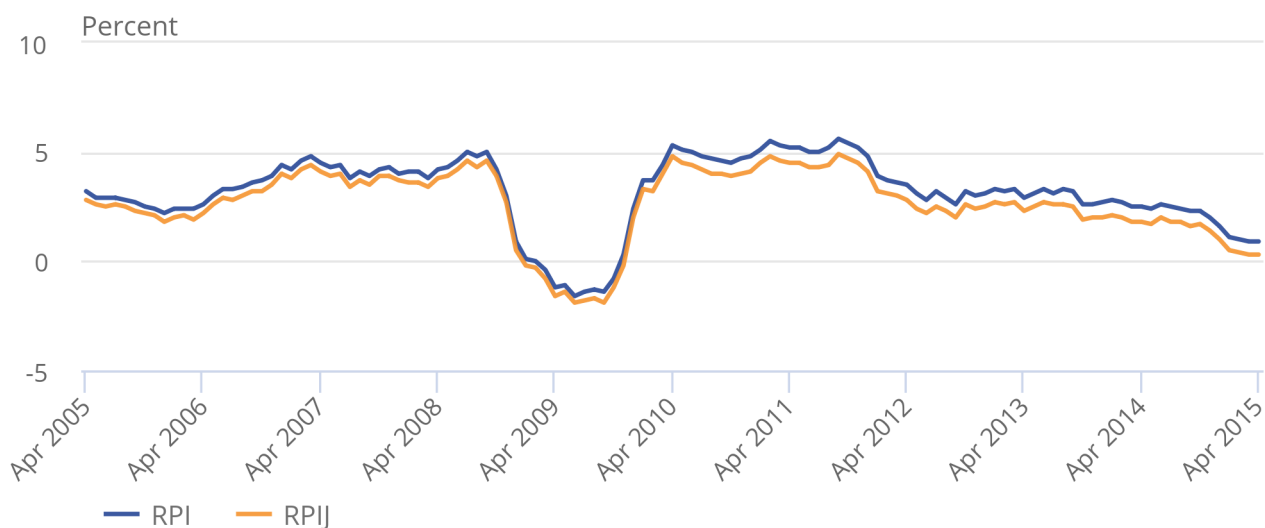
Table C shows the RPI and RPIJ 1-month and 12-month rates and index values for the last year.

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

United Kingdom

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

United Kingdom



Source: Office for National Statistics

Notes:

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

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

United Kingdom

	RPI Index ¹ (UK, 1987 = 100)	RPIJ Index (UK, 1987 = 100)	RPI 12- month ¹ rate	RPIJ 12-month rate	RPI 1- month ¹ rate	RPIJ 1-month rate
2014 Apr	255.7	237.4	2.5	1.8	0.4	0.3
May	255.9	237.5	2.4	1.7	0.1	0.0
Jun	256.3	237.8	2.6	2.0	0.2	0.1
Jul	256.0	237.5	2.5	1.8	-0.1	-0.1
Aug	257.0	238.3	2.4	1.8	0.4	0.3
Sep	257.6	238.8	2.3	1.6	0.2	0.2
Oct	257.7	238.9	2.3	1.7	0.0	0.0
Nov	257.1	238.3	2.0	1.4	-0.2	-0.3
Dec	257.5	238.6	1.6	1.0	0.2	0.1
2015 Jan	255.4	236.5	1.1	0.5	-0.8	-0.9
Feb	256.7	237.2	1.0	0.4	0.5	0.3
Mar	257.1	237.4	0.9	0.3	0.2	0.1
Apr	258.0	238.0	0.9	0.3	0.4	0.3

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 \(2.49 Mb Excel sheet\)](#) of the April release.

7 . 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

8. Background notes

1. News

On 8 June 2015, we are planning to publish trial consumer price indices constructed purely from price quotes that have been scraped from the web. Web scraping is a tool for extracting information from the underlying HTML code of websites. We have been conducting research into these technologies and, since May 2014, have been scraping daily prices from the websites of 3 major retailers. The indices will cover 35 grocery and alcohol items, and will be presented at daily, weekly, fortnightly and monthly frequencies. The indices will be accompanied by an explanatory methodological note and a brief overview of the project.

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 video, infographics and textual information available from the [guidance and methodology section](#) of our website.

A more detailed [quality report \(141.9 Kb Pdf\)](#) for this statistical bulletin is available on our website. 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 on our website.

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 \(2.49 Mb Excel sheet\)](#) are provided via an Excel file.

To help users further, very detailed CPI data are now available on our website 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 December 2014. 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 May CPI is published on 16 June 2015, at which point the detailed data published will be extended to March 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 releases figures for the Harmonised Index of Consumer Prices (HICP) for the month of April 2015 for EU member states, together with an EU average, on 19 May 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 \(2.49 Mb Excel sheet\)](#) . 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 \(674.4 Kb Pdf\)](#) . [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 April 2015 data, collected on and around 14 April 2015. Future [publication dates](#) for this statistical bulletin are available to January 2017 (the publication of the December 2016 inflation figures). Publication dates from February 2016 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 May 2014 to May 2015 will be published on 16 June 2015.

Follow us on [Twitter](#) or join us at [Facebook](#).

Media contact:

Tel: Luke Croydon +44 (0) 845 6041858
Out of hours media line: +44 (0) 7867 906553
Email: media.relations@ons.gsi.gov.uk

Statistical contact:

Tel: Richard Campbell +44 (0) 1633 651536
Email: richard.campbell@ons.gsi.gov.uk
Email: cpi@ons.gsi.gov.uk

Consumer Price Inflation recorded message (available after 9.45am on release day):

Tel: +44 (0) 800 0113703

Consumer Price Inflation Enquiries:

Tel: +44 (0) 1633 456900

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

These National Statistics are produced to high professional standards and released according to the arrangements approved by the UK Statistics Authority.