Office for National Statistics

Article

CPIH-consistent inflation rate estimates for UK household groups: April to June 2018

Estimates of inflation rates for different types of household in the UK on a Consumer Prices Index including owner occupiers' housing costs (CPIH)-consistent basis.

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1 . Summary

The Consumer Prices Index including owner occupiers' housing costs (CPIH) is our most comprehensive measure of consumer price inflation. It measures the change in the prices of the goods and services as consumed by households. However, because the consumption baskets of specific households differ and because prices do not all change at the same rate, the price experience of different groups of households may differ from the average figure for all households. Producing CPIH-consistent inflation rates for different household groups therefore provides an insight into how these price changes can vary between different groups, within an established framework based on economic principles.

2 . Things you need to know about this release

This summary note is intended as a useful reference guide alongside the quarterly results that are available to download alongside this release. These include both the democratic and plutocratic weightings from January 2005 until the most recent quarterly update, in this case Quarter 2 (Apr to June) 2018. For more information about the weighting methodologies see Section 7.

Users should note that the CPIH-consistent inflation rates for different household groups are experimental indices and therefore we would caution against any use other than for research purposes.

3 . Which household groups are included?

These datasets cover the following household groups:

- retired households and non-retired households

- households grouped by equivalised disposable income deciles and quintiles

- households grouped by equivalised expenditure deciles

- households with children and without children

- households grouped by tenure type; renters, owner-occupiers and subsidised renters

The democratically-weighted dataset also includes the aggregate democratically-weighted CPIH index, as well as a version of this index excluding housing costs (updating an ad hoc user request first published in Democratic measure of CPIH excluding housing, UK, 2005 to 2016).

For definitions of these terms, please see the glossary at the end of this article.

If you would like to provide feedback on the choice of household groups presented, please send your comments to cpi@ons.gov.uk.

4 . Related publications

Alongside this release, we published an analysis of CPIH-consistent inflation rates, which have been calculated for different income groups by category of spend. The 12-month inflation rate for food and non-alcoholic beverages has followed a similar trend over the period 2005 to 2018, for households at both ends of the income distribution. In comparison, price changes in tobacco have had a greater impact on the alcoholic beverages and tobacco inflation rate for households in income decile two compared with income decile nine.

We published the first preliminary estimates of the Household Costs Indices (HCIs) in December 2017. The HCIs are a set of measures that aim to reflect UK households' experience of changing prices and costs. More information on the HCIs, including why they are being developed, how they differ from consumer price indices and progress towards their development, can be found in the Developing the Household Costs Indices (HCIs) article.

5 . Quality and methodology

More information on the methodology used to calculate these indices can be found in the related Methodology to calculate CPIH-consistent inflation rates for UK household groups publication .

6 . Limitations

While the calculation of inflation rates for household groups is straightforward analytically, a range of data constraints make their estimation challenging in practice. For instance, an analysis of household group specific inflation rates would ideally use price indices and expenditure weights specific to each household group. This would reflect the fact that different households will purchase goods and services from different outlets and therefore face different prices.

However, data are not available on specific price indices, and therefore we have had to use national price indices as an approximation. There are also a number of challenges that arise from the data sources that we have available for us to calculate the expenditure shares. These limitations do not impede the validity of the chosen methodology and its robustness. For more information, please see the related methodology publication.

7 . Weights

Price indices are constructed using price and expenditure data. These expenditure shares can be calculated using different methodological approaches; the main two are democratic and plutocratic weighting. Indices for both methodological approaches can be found in the data downloads section. An overview of these approaches and their associated concepts can be found in Section 7.2 of the Consumer Price Indices Technical Manual (PDF, 674.44KB). We have also produced a methodology article, Investigating the impact of different weighting methods on CPIH, that compares the two approaches, alongside additional approaches to weighting a price index.

8 . Glossary

Equivalised

Income and expenditure groups are based on a ranking of households by equivalised income and expenditure. Equivalisation is the process of accounting for the fact that households with many members are likely to need a higher income to achieve the same standard of living as households with fewer members.

Equivalisation takes into account the number of people living in the household and their ages, acknowledging that while a household with two people in it will need more money to sustain the same living standards as one with a single person, the two-person household is unlikely to need double the income. This analysis uses the modified Organisation for Economic Co-operation and Development (OECD) equivalisation scale.

Disposable income

Disposable income is that which is available for consumption and is equal to all income from wages and salaries, self-employment, private pensions and investments, plus cash benefits less direct taxes.

Disposable income deciles

Households are grouped into deciles (or tenths) based on their equivalised disposable income. The richest decile (decile 10) is the 10% of households with the highest equivalised disposable income. Similarly, the poorest decile (decile one) is the 10% of households with the lowest equivalised disposable income. It should be noted that the second and ninth deciles are more stable so users may wish to consider these in their analysis.

Expenditure deciles

Households are grouped into deciles (or tenths) based on their equivalised expenditure. The highest-expenditure decile (decile 10) is the 10% of households with the highest equivalised expenditure. Similarly, the lowest-expenditure decile (decile one) is the 10% of households with the lowest equivalised expenditure.

Households with children

A child is defined as any person less than 16 years of age. For the purposes of the Family Spending report, people who are under the age of 18 years and unmarried are also classed as children. A household is classified as a household with children if at least one member of the household is a child.

Owner-occupier households

Owner-occupier households are defined as any household in which the residents own the property outright or are buying the property with a mortgage. This includes shared owners (who own part of the property, paying both rent and mortgage).

Renter households

Renter households are defined as any household that rents their property from a private sector landlord. It excludes households who live in their property rent-free.

Subsidised renter households

Subsidised renter households are defined as any household that rents their property from a council or a registered social landlord, or lives in their property rent-free.

Retired persons and households

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