

Statistical bulletin

CPI-consistent inflation rate estimates for UK household groups: 2005 to 2021

Estimates of Consumer Prices Index (CPI) inflation rates for different types of households in the UK 2005 to 2021.

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1 . Main points

- This article provides preliminary and experimental subgroup estimates on a Consumer Prices Index basis as an early indication of the impact of inflation on different household groups; it is important to emphasise these are experimental statistics that have been produced in isolation of the normal prices production process, to provide a clearer picture on how inflation impacts different households and are therefore subject to revision.
- Going forward, we will continue to develop our Household Costs Indices (HCIs), which are a more detailed set of measures that aim to better reflect UK households' experience of changing prices and costs; these are currently due for release in May.
- High-income and low-income households have experienced similar annual inflation rates since 2014.
- High-income households' experience of inflation is being driven by rising transport costs, on which they spend a larger proportion of their expenditure when compared with low-income households, while for low-income households housing-related costs are more of a factor.
- Retired and non-retired households have experienced similar levels of inflation rates since April 2021.

2 . Advice when using these statistics

There are different ways of reflecting changing prices and costs, to ensure that they meet current and emerging user needs. These are outlined in our article [Measuring changing prices and costs for consumers and households, proposed updates](#). Our lead measure of inflation is the Consumer Prices Index including owner occupiers' housing costs (CPIH), which is our most comprehensive measure. It builds on the CPI framework – a similar measure that is internationally comparable – to include a measure of owner occupiers' housing costs.

To reflect the change in costs as experienced by households, we are continuing to develop the Household Costs Indices (HCIs), with engagement and feedback from our users. We are in the process of producing estimates for the HCIs for 2020 and 2021, and we will also publish subgroup estimates on a CPIH-consistent basis. These are due to be published in May 2022, which will allow us time to gather all the relevant data, analyse the impact of the coronavirus (COVID-19) pandemic on spending patterns, and conduct a more detailed analysis.

The Office for National Statistics (ONS) also recently produced [Inflation rates for discretionary and non-discretionary spending](#). Since January 2005, average prices for non-discretionary items have increased by around 49.1%, compared with an increase of around 41.3% for discretionary items. The index for non-discretionary items has remained consistently above that for discretionary items since July 2005. Much of this difference emerged around the financial crisis in 2008 and 2009, with the gap narrowing more recently.

This article provides preliminary and experimental subgroup estimates on a CPI basis as an early indication of the impact of inflation on different household groups, which are subject to revision. This only applies to the analysis at a household group level; the headline measure of CPI is of the usual high quality and will not be revised.

However, there are several limitations to be aware of when interpreting these statistics. This analysis has been compiled in a timely manner to provide informative statistics. Because of this there has been less quality assurance of these statistics than usual and they are subject to revision. Further limitations include using spending patterns based on a two-year lag, which means changes in spending patterns during the coronavirus (COVID-19) pandemic will not be accounted for. The analysis also uses the same 700 items collected in Consumer Prices Index (CPI), along with the same prices, so the differences between the household groups are driven by differing spending patterns, rather than differing items, price increases or substitutions.

Small sample sizes can cause some erratic movements in Education, so these should be interpreted with caution.

Further details can be found in [Section 8: Strength and limitations](#).

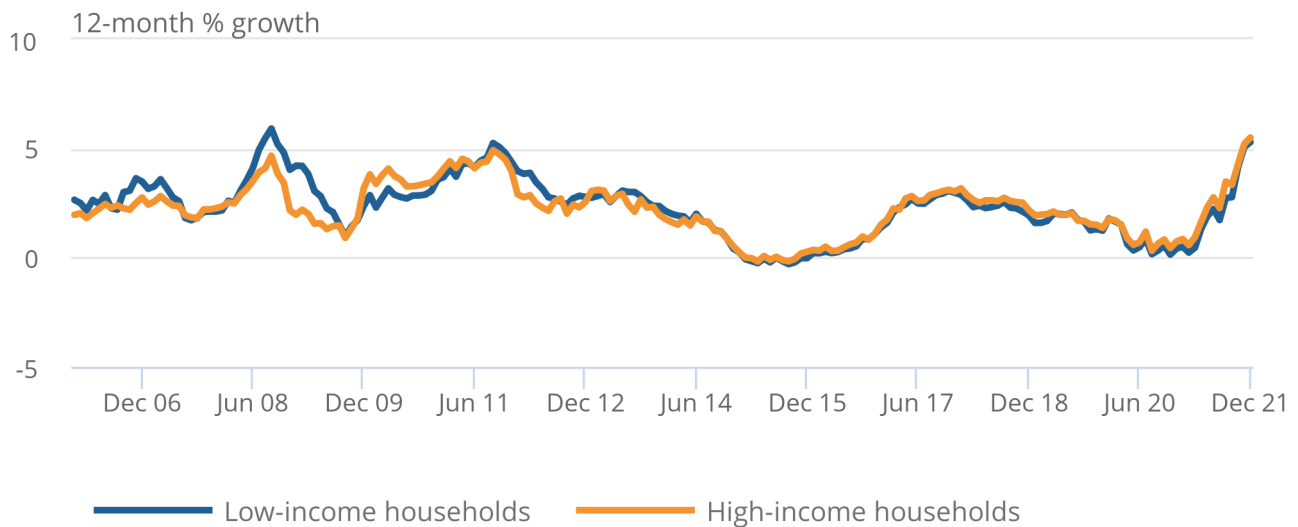
3 . Low- and high-income households

Figure 1: Low- and high-income households have experienced similar inflation rates since 2014

Consumer Prices Index (CPI) 12-month inflation rates for low- and high-income households, UK, January 2006 to December 2021

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Consumer Prices Index (CPI) 12-month inflation rates for low- and high-income households, UK, January 2006 to December 2021



Source: Office for National Statistics – Consumer Prices Inflation

Around the time of the economic downturn in 2008 and early 2009, low-income households experienced higher inflation rates than high-income households. Annual inflation rates for low-income (second income decile) and high-income (ninth income decile) households have tracked each other closely since 2014.

In December 2021 high-income households have experienced similar inflation (5.5%) to the low-income households (5.3%), but this hides differences at the lower level. High-income households spend a higher proportion of their expenditure on transport, which has seen the highest price increases across the basket in recent months. Other areas that have contributed more to the inflation rate for high-income households than low-income households in the most recent month include:

- restaurants and accommodation services
- furniture and household goods
- recreation and culture
- health

Conversely, low-income households' experience of inflation has been driven by rising prices in housing-related costs, which low-income households spend a higher proportion of their expenditure on.

Spending patterns are based on a two-year lag, e.g., the 2021 estimates are using household spending patterns from 2019. Spending patterns changed as a result of the coronavirus (COVID-19) pandemic, so this is a limitation of the analysis.

Based on the [Consumer Prices Inflation weights update for 2021](#), the proportion of expenditure on transport has decreased while the proportion of expenditure on food- and housing-related costs have increased. The data at a household subgroup level are not yet available to analyse differences in spending patterns across groups. We will be publishing an update to the Household Costs Indices in May 2022, which will include an analysis of the changes in costs on different household groups based on more up to date spending patterns.

4 . Retired and non-retired households

Figure 2: Retired and non-retired households have experienced similar inflation rates in recent months

Contributions to the Consumer Prices Index (CPI) 12-month inflation rates for retired and non-retired households, UK, January 2006 to December 2021

Figure 2: Retired and non-retired households have experienced similar inflation rates in recent months

Contributions to the Consumer Prices Index (CPI) 12-month inflation rates for retired and non-retired households, UK, January 2006 to December 2021



Source: Office for National Statistics – Consumer Price Inflation

Retired and non-retired households have experienced similar inflation rates since the April 2021, with both at 5.4% in December 2021.

Although transport costs are the main driver of recent inflation rates in the two groups, transport costs are more heavily driving the inflation rate of non-retired households than retired households. This is also the case for education. The second highest driver of inflation rate in both groups is housing related costs, however this is driving the inflation rate of retired households more than non-retired households. Other areas that made a larger contribution to the inflation rate for retired households than non-retired households include:

- recreation and culture
- food and non-alcoholic beverages
- furniture and household goods
- health

5 . CPI-consistent inflation rate estimates for UK household groups data

[CPI-consistent inflation rate estimates for UK household groups \(plutocratic weighting\)](#)

Dataset | Released 28 January 2022

Data on plutocratically weighted and CPI-consistent indices, annual inflation rates, expenditure shares and contributions for UK household groups.

6 . Glossary

Low- and high-income households

For the purpose of our analysis, low-income households are those within the second income decile and high-income households are those within the ninth income decile.

Retired and non-retired 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.

Housing-related costs

Housing-related costs include housing, water, electricity, gas and other fuels (COICOP code 04). This includes items such as materials and services for maintenance and repair of the dwelling. It does not include owner-occupiers' housing costs.

7 . Measuring the data

Methodology

These statistics have been created in a similar way to the [CPIH-consistent inflation rates for UK household groups](#) , however we have used the Consumer Prices Index (CPI) instead of Consumer Prices Index including owner occupiers' housing costs (CPIH). Further information on how the CPIH-consistent inflation rates for UK household groups statistics are calculated is available in the [methodology to calculate CPIH-consistent inflation rates for UK household groups](#).

Household Costs Indices

In May 2022 we will be publishing an update to the [Household Costs Indices](#). The household costs indices measure UK households' experience of changing prices and costs. The publication will also include an analysis on how the coronavirus (COVID-19) pandemic may have changed spending patterns, and how these changes affect different groups of households' experience of inflation. This analysis will be more in depth than the analysis in this bulletin, with fewer limitations.

Plutocratic and democratic weighting

The Consumer Prices Index (CPI) is designed as a macro-economic index that measures the average change in prices of goods and services as consumed by all households. Each item in the CPI basket, for which prices are collected, is given a weight based on household spending on that particular item, relative to total household spending across the basket to reflect the fact that we spend more money on certain items than others. Implicitly, using this weighting approach, higher spending households have a greater influence over changes in the measured rate of inflation. The price experience of different groups of households may differ from the average figure for all households as presented by CPI. In this analysis we have used the same weighting method (plutocratic) as the CPI to make them consistent. However, the experimental Household Cost Indices uses democratic weighting, which assigns equal weight to each household's share of expenditure. This should be used to understand the different UK households' experience of changing prices and costs.

8 . Strengths and limitations

This analysis has been compiled in a timely manner to provide informative statistics. Because of this there has been less quality assurance of these statistics than usual and they are subject to revision (this only applies to the analysis at a household group level; the headline measure of Consumer Prices Index (CPI) is of the usual high quality and will not be revised).

The analysis uses the same 700 items collected in CPI, along with the same prices, so the differences between the household groups are driven by differing spending patterns, rather than differing items, price increases or substitutions.

The spending patterns used in this analysis are at a two-year lag, for example, the 2021 data uses spending pattern information from 2019. Given that spending patterns have changed throughout the coronavirus (COVID-19) pandemic, it is important to bear this in mind as a limitation. We are planning to publish an analysis alongside the Household Costs Indices publication in May 2022 that will take account of spending patterns during the pandemic – this will be the first step towards understanding households' experiences of inflation during this time.

9 . Related links

[Consumer price inflation, UK: December 2021](#)

Bulletin | Released 19 January 2022

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

[Household Costs Indices, UK: third preliminary estimates, 2005 to 2019](#)

Article | Released 21 July 2020

UK households' experience of changing prices and costs. These are the third preliminary estimates for 2005 to 2019 of the Household Costs Indices, a set of measures which are currently in development.

[CPIH-consistent inflation rate estimates for UK household groups: 2005 to 2019](#)

Article | Released 19 February 2020

An update to estimates of inflation rates for different types of households in the UK on a Consumer Prices Index including owner occupiers' housing costs (CPIH)-consistent basis.

[Inflation rates for discretionary and non-discretionary spending](#)

Article | Released 15 December 2021

Experimental data estimating consumer price inflation rates for discretionary and non-discretionary spending.