Article

Inflation and the cost of living for UK households, overview: June 2022

Inflation and cost of living article collating and updating analysis of different price measures.

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1 . Main points

- Household Cost Indices (HCIs) saw similar inflation rates as the Consumer Prices Index (CPI) and the Consumer Prices Index including owner occupiers' housing costs (CPIH) at the end of 2021, reflecting common drivers of inflation.
- All three measures of consumer price inflation have seen sharp rises since March 2021.
- Transport has contributed more to rising inflation for higher income households than lower income households over recent months. This resulted in Households in the ninth income decile seeing higher inflation rates than those in the second income decile at the end of 2021, as measured by the HCIs.
- Current drivers of inflation include essentials such as food and non-alcoholic beverages, transport and housing, water, electricity, gas and other fuels; which combined account for over 50% of the CPIH basket by weight.
- Experimental data found that a group of 30 lowest-cost grocery items had a similar 12-month growth rate as the food and non-alcoholic beverages component of CPIH in the year to April 2022, but there was wide variation between products.
- Around 60% of adults report spending less on non-essential items in response to rising costs.

2 . Overview

Consumer price inflation has risen sharply in recent months, with the 12-month growth rate reaching 7.9% for the Consumer Prices Index including owner occupiers' housing costs (CPIH) in May 2022, and 9.1% for the Consumer Prices Index (CPI) in the same month. This was largely driven by food and non-alcoholic beverages, transport and housing, water, electricity, gas and other fuels, as detailed in Section 5: Drivers of inflation. High inflation affects different households differently depending on a range of factors including their expenditure patterns and their ability to absorb increased outgoings.

In recent months the Office for National Statistics (ONS) has published several alternative measures of inflation – shown in the list of releases below – to show how different households are affected by the rising price level. This article brings those measures together, as well as qualitative evidence of how consumers experience inflation, to show how the various parts of the picture fit together.

Regular and ad hoc inflation releases, coverage and frequency

Consumer Price Index

- Whole economy: monthly
- Equivalised disposable income deciles: ad hoc
- Equivalised disposable income quintiles: ad hoc
- Equivalised expenditure deciles: ad hoc
- Retirement status: ad hoc
- Child status: ad hoc
- Tenure status: ad hoc
- Disability status: no

Consumer Price Index including owner-occupiers' housing costs

- Whole economy: monthly
- Equivalised disposable income deciles: quarterly
- Equivalised disposable income quintiles: quarterly
- Equivalised expenditure deciles: quarterly
- Retirement status: quarterly
- Child status: quarterly
- Tenure status: quarterly
- Disability status: no

Household Cost Indices

- Whole economy: ad hoc
- Equivalised disposable income deciles: ad hoc
- Equivalised disposable income quintiles: no
- Equivalised expenditure deciles: no
- Retirement status: ad hoc
- Child status: ad hoc
- Tenure status: ad hoc
- Disability status: ad hoc

Lowest-cost grocery items

- Whole economy: experimental analysis
- Equivalised disposable income deciles: N/A
- Equivalised disposable income quintiles: N/A
- Equivalised expenditure deciles: N/A
- Retirement status: N/A
- Child status: N/A
- Tenure status: N/A
- Disability status: N/A

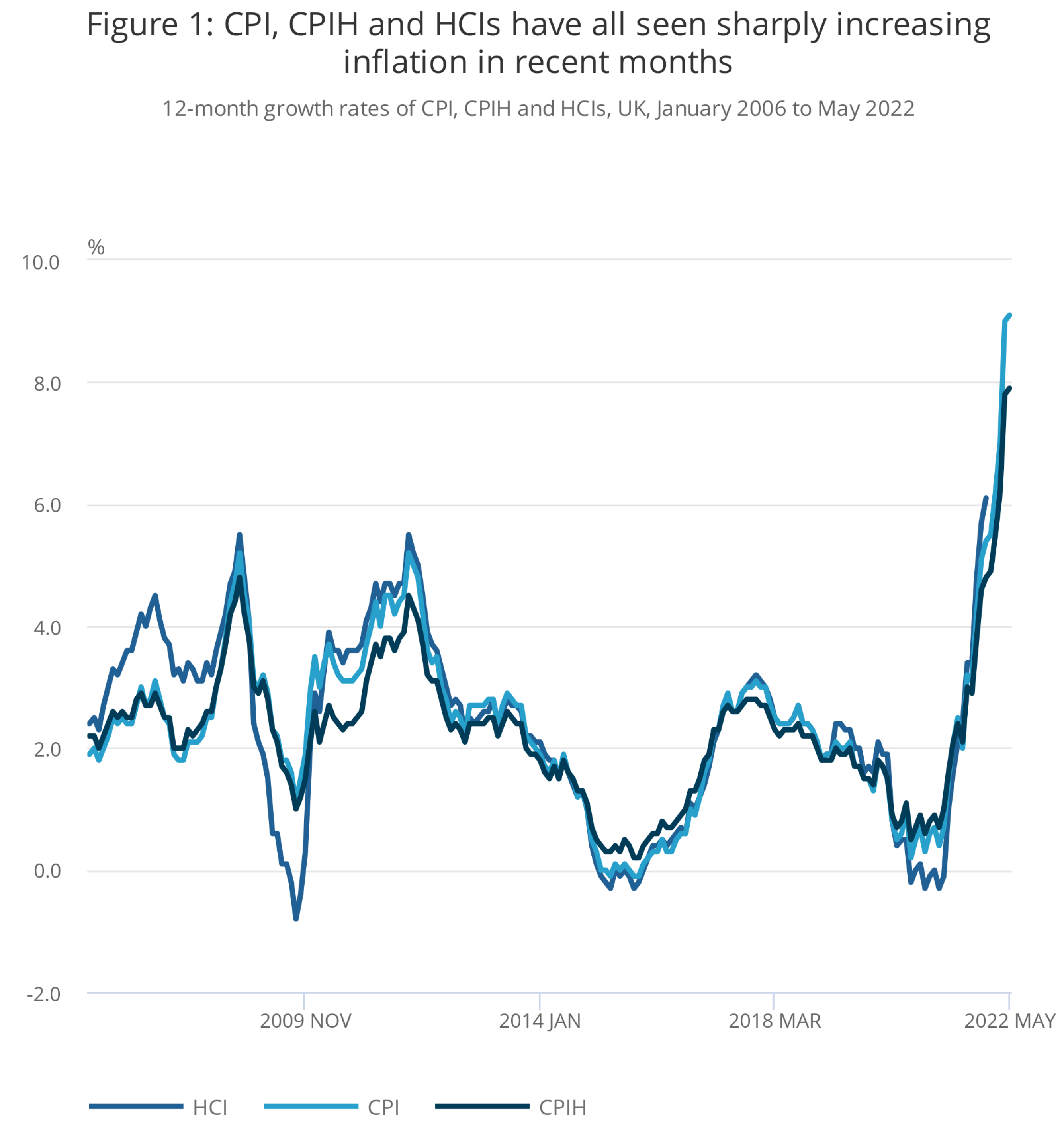
CPIH is our preferred measure of consumer price inflation as it includes a measure of owner occupiers' housing costs, making it more comprehensive than the CPI. In recent months the 12-month growth rate of CPIH has been lower than the 12-month growth rate of CPI, as owner occupiers' housing costs have seen lower price increases than other parts of the basket, which are common between the two measures.

Both CPI and CPIH provide aggregate measures of movements in the price level in the UK, based on total expenditure within the economy. An alternative set of measures, the Household Cost Indices (HCIs) focuses more directly on particular households' experiences of inflation.

One of the important differences in these measures is the approach to housing costs, as explained in our Household Costs Indices methodology article. CPIH focuses on the consumption of housing as a service and uses rental equivalence to estimate a value for the housing services consumed by owner occupiers. HCIs take a more direct, payments-based approach, and include mortgage payments as part of monthly expenditure for owner occupiers.

Figure 1: CPI, CPIH and HCIs have all seen sharply increasing inflation in recent months

12-month growth rates of CPI, CPIH and HCIs, UK, January 2006 to May 2022



Source: Office for National Statistics – Consumer price inflation

Between April and December 2021 (the period covered by the most recently available HCIs), the 12-month growth rates of HCIs, CPI and CPIH were all broadly similar. Prior to this, HCIs saw considerably lower inflation rates than CPI or CPIH between July 2020 and March 2021. This difference reflected trends in housing costs at the time, specifically the role of stamp duty (as explained in our latest Household Costs Indices bulletin) which is included in HCIs but not in CPI or CPIH.

Since April 2021, inflation has been broad based but driven mainly by energy and motor fuels, which have similar effects on the 12-month growth rates of CPI, CPIH and HCIs. These similarities outweigh the differences from housing costs in the different measures, resulting in similar inflation rates.

3 . Inflation for different household types

Both the Consumer Prices Index including owner occupiers' housing costs (CPIH) and Household Cost Indices (HCIs) can be calculated for different subgroups to derive inflation rates for different household types, based on their spending patterns.

Figure 2 shows 12-month growth rates of consumer prices for the second and ninth income deciles of households, for both CPIH and HCIs, from January 2006 to December 2021. We avoid using the first (lowest income) and tenth (highest income) deciles as these are often volatile and can include, for example, households with low income but high wealth, which distorts the picture. Using the second and ninth deciles instead provides a more realistic picture of the experience of households at the lower and higher end of the income scale, respectively.

There has been considerable volatility over the period, and at times, large variation in the experience of those on the lower and higher end of the income scale. This was most notable during the 2008 to 2009 financial crisis when households with higher incomes saw negative growth in the HCI measure for several months.

More recently, inflation for higher and lower income households has been rising in both the CPIH and HCI measures, although to a different extent between higher and lower income households in the HCI measure. This shows households in the ninth income decile seeing an HCI 12-month growth rate of 6.5% in December 2021, compared with a rate of 5.6% for those in the second income decile. The CPIH consistent inflation rate for the second and ninth income deciles was equal for the three months between October and December 2021, as varying contributions from the different components offset one another, leading to the same aggregate 12-month growth rate.

Figure 2: Higher income households have seen higher rates of inflation than lower income households over recent months

12-month growth rates of HCI and CPIH for second and ninth income decile households, UK, January 2006 to December 2021

Figure 2: Higher income households have seen higher rates of inflation than lower income households over recent months

12-month growth rates of HCI and CPIH for second and ninth income decile households, UK, January 2006 to December 2021

Source: Office for National Statistics – Consumer price inflation

The higher HCI inflation rate for higher income households reflects current drivers of inflation and the different expenditure patterns of these households. Higher income households see a considerably higher contribution from transport. This may reflect the types of transport used by those with different income levels. Higher income households typically use cars more than public transport and are more likely to experience the high price increases seen for motor fuels over the last year.

Higher income households also have higher contributions from restaurants and hotels, and recreation and culture, likely because they have more disposable income to spend on eating out and recreational activities.

Figure 3: Transport has contributed more to rising inflation for higher income households than lower income households over recent months

Contributions to the 12-month growth rate of HCI for the second and ninth income deciles, UK, October to December 2021

Download the data

.xlsx

The main drivers of consumer price inflation over recent months have been energy, transport and food. These make up a large part of essential spending for most households and have a relatively low price elasticity of demand as there is a limit to how much consumers can reduce their consumption of food, energy and transport, even as prices rise. As such, when prices for these essentials increase, consumers may be forced to reduce spending elsewhere to maintain at least a minimum level of consumption of the essentials. This is likely to have a disproportionate effect on lower income households as they have less disposable income that can be switched from non-essential spending to cover necessities.

These estimates of inflation by income decile use data from the Living Costs and Food Survey (LCF) to weight the expenditure of different households and derive inflation rates accordingly. The Household Costs Indices use LCF data at a two-year lag, so 2019 is the most recently used period, and therefore reflect expenditure patterns in 2019, rather than the experience of households during the recent period of unusually high inflation.

4 . Drivers of inflation

Three of the biggest drivers of consumer price inflation over recent months have been "housing, water, electricity, gas and other fuels", "transport" and "food and non-alcoholic beverages". These three components collectively account for over 50% of the Consumer Prices Index including owner occupiers' housing costs (CPIH) basket by weight and contain many essential items for which a certain amount of consumption is required.

Price growth for "housing, water, electricity, gas and other fuels" has largely been driven by energy since the Ofgem price cap rose in April 2022. Prices for electricity, gas and other fuels rose by over 46% in one month between March and April 2022 and rose slightly again in May 2022.

Transport has also been a big driver of consumer price inflation over recent months, with motor fuels putting particular upward pressure on the annual growth rate. In May 2022, 12-month growth rates for petrol and diesel reached 32.8%, the highest the rate has been since the constructed consumer price inflation series began in January 1989.

Data from the Producer Price Index (PPI) show that crude oil and petroleum products have seen even higher price growth over recent months, as shown in figure 4.

Figure 4: High price growth for crude oil has fed through to price growth for petroleum products and fuels and lubricants

12-month price growth for crude oil in Input PPI, petroleum products in Output PPI and fuels and lubricants in CPIH, UK, January 2020 to May 2022

Source: Office for National Statistics – Producer Price Inflation and Consumer Price Inflation

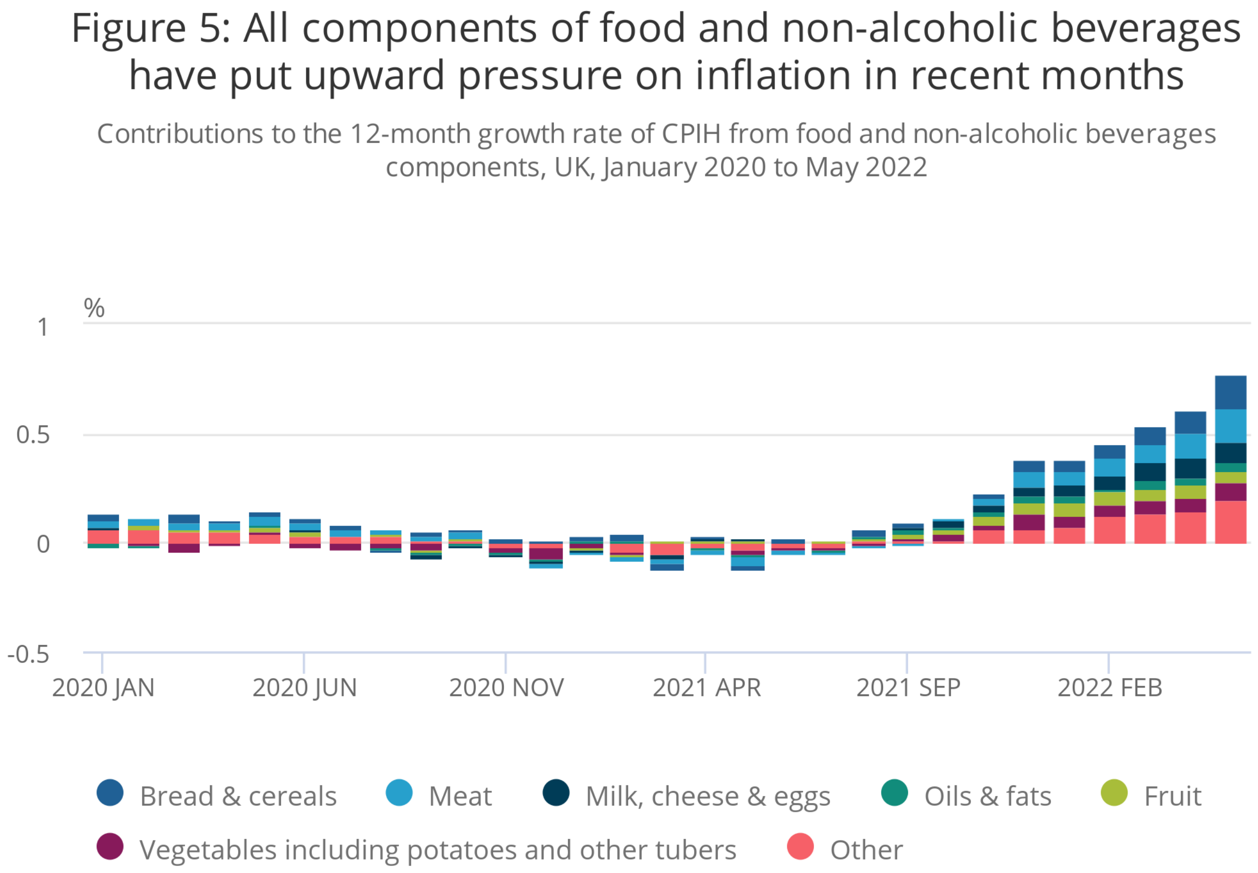
Price movements for crude oil tend to feed through very quickly to consumer prices for fuels and lubricants but consumer price movements are typically more muted. This partly reflects the role of fuel duty, as well as other costs such as distribution and retail costs, which make up a relatively large part of the end price of motor fuels and reduce the direct impact of crude oil price changes on consumer prices.

In May 2022 the average consumer price for petrol was 165.9 pence per litre (ppl) while the average price for diesel was 179.7 ppl. From March 2022 the fuel duty for both petrol and diesel was 52.95 ppl, accounting for around 32% and 30% of the end prices of petrol and diesel, respectively in May 2022.

Food and non-alcoholic beverages have also increasingly put upward pressure on the 12-month growth rate of CPIH in recent months with all categories seeing prices increase on the year, as shown in figure 5. Food price inflation seems to be driven largely by staples with "bread and cereals", "meat", and "oil and fats" seeing the largest increases in contribution between April and May 2022.

Figure 5: All components of food and non-alcoholic beverages have put upward pressure on inflation in recent months

Contributions to the 12-month growth rate of CPIH from food and non-alcoholic beverages components, UK, January 2020 to May 2022



Source: Office for National Statistics – Consumer Prices Index including owner occupiers' housing costs

Notes:

1. The category, "Other" includes "Fish", "Sugar, Jam, Honey, Syrups, Chocolate and Confectionery", "Food Products", "Coffee, Tea, Cocoa", and "Mineral Waters, Soft Drinks and Juices".

5 . Price movements for the lowest cost products

Within the Consumer Prices Index (CPI), the Consumer Prices Index including owner occupiers' housing costs (CPIH) and the Household Cost Indices (HCIs), the price quotes for specific items are the same for different household types. Differences come from the proportion that each household type spends on different categories. As such, the data do not reflect some likely differences in the specific products being bought by different households.

For example, the food and non-alcoholic beverages category has a higher expenditure weight for households in the second income decile than for those in the ninth income decile because spending on food accounts for a higher proportion of lower income households' monthly outgoings. However, the same price quotes are used to calculate inflation for both groups. To create an accurate picture of price movements over time, price collectors aim to collect the price of the same brand and size of product each month. As such, these data do not tell us how inflation may differ between premium or budget brands of specific products.

We have recently produced experimental analysis tracking price movements for the cheapest available items for a range of grocery products, to specifically address the question of how inflation is affecting the lowest-cost items. Using web-scraped data, we tracked prices each month for the lowest-priced product of a particular type, in seven supermarkets, to see how these prices changed over time.

Focusing on 30 common grocery products, the analysis showed that for 24 of the items, the average lowest price, across the seven retailers, increased in the year to April 2022. Average prices for the other six products fell.

For 13 of the products, the average lowest price rose at a faster rate than the official consumer price inflation measure for food and non-alcoholic beverages in the year to April 2022, which was 6.7%. The average growth in the lowest prices for these 30 items over the year to April 2022 was 6%. This is slightly below but broadly in line with the official inflation rate for food and non-alcoholic beverages.

Figure 6: There was a substantial range of price movement for the lowest prices

Lowest price of selected 30 everyday groceries, item-level price changes, April 2022 compared with April 2021

Download the data

.xlsx

This analysis was necessarily more limited in scope than the official series for food and non-alcoholic beverages and the resulting average price growth reflects only the 30 items tracked. It is likely that a different set of items would have produced a different average growth rate.

While producing these experimental data, it became apparent that, in many cases, there was a big price difference between the lowest-cost product and the next lowest-cost item of the same type. This highlights a particular challenge for consumers on low incomes – if the usual lowest-priced product is unavailable, the next cheapest item may be considerably more expensive and put more strain on a tight budget.

This is likely to be less of an issue for more expensive versions of the same product as there may be a range of suitable substitutes of similar price and quality to choose from. Likewise, when faced with increasing prices, consumers who purchase mid- or high-range products have the option to switch to lower-priced alternatives, whereas consumers who are already purchasing the lowest-priced version of a product are unable to do so. This is likely to compound the impact that even a similar inflation rate might have on lower income households.

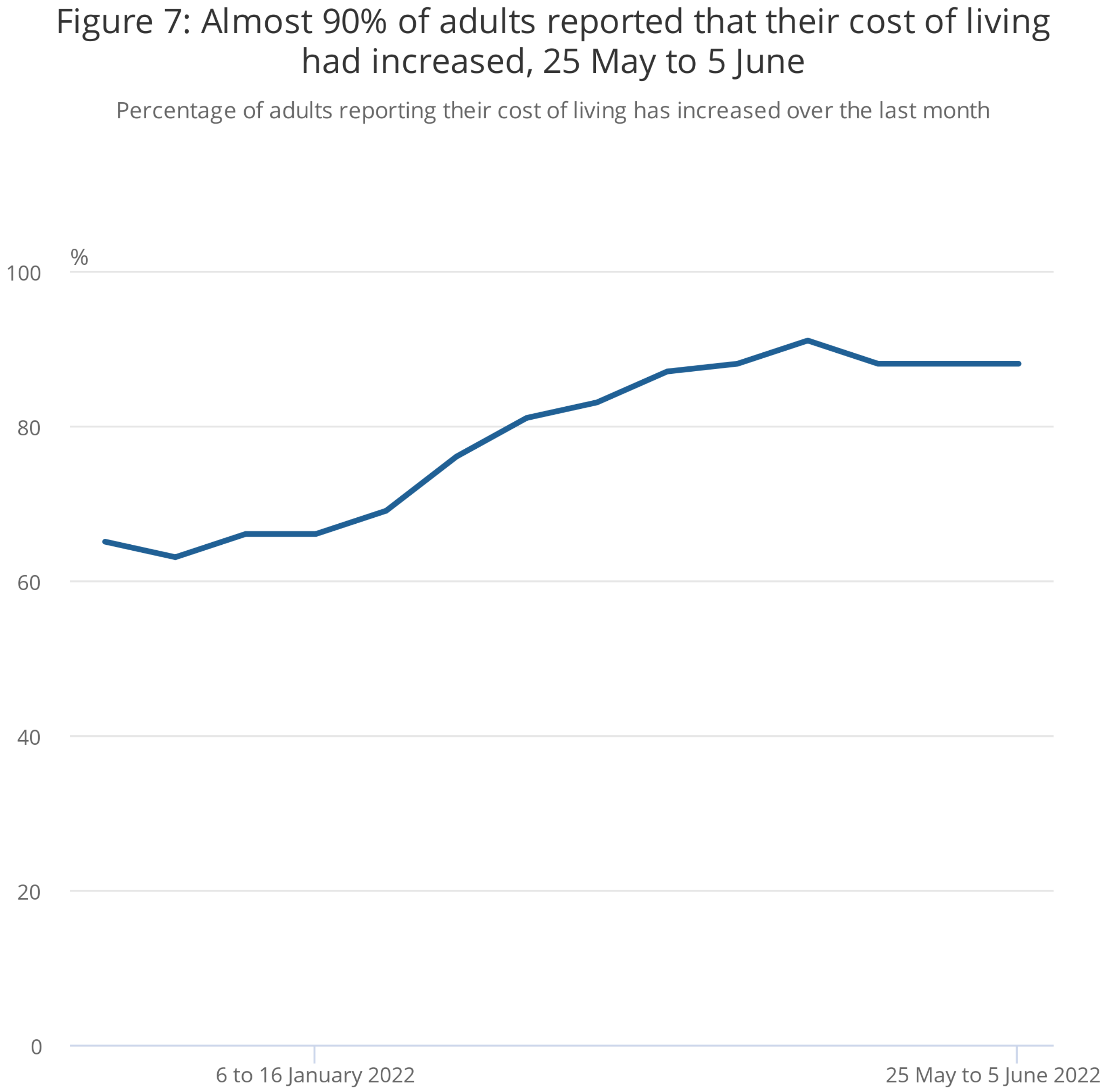
6 . Individual experiences of inflation

Based on current inflation data, we are not able to see how households may have responded to changes in prices by reducing or redirecting their spending. However, data from the Opinions and Lifestyle Survey (OPN) can provide insights into the experiences of individuals and the decisions they may be making in response to the increased cost of living.

Between 25 May and 5 June 2022, 88% of adults reported that their cost of living had increased over the last month, a considerable increase from the 62% of adults reporting the same between 3 and 14 November 2021.

Figure 7: Almost 90% of adults reported that their cost of living had increased, 25 May to 5 June

Percentage of adults reporting their cost of living has increased over the last month

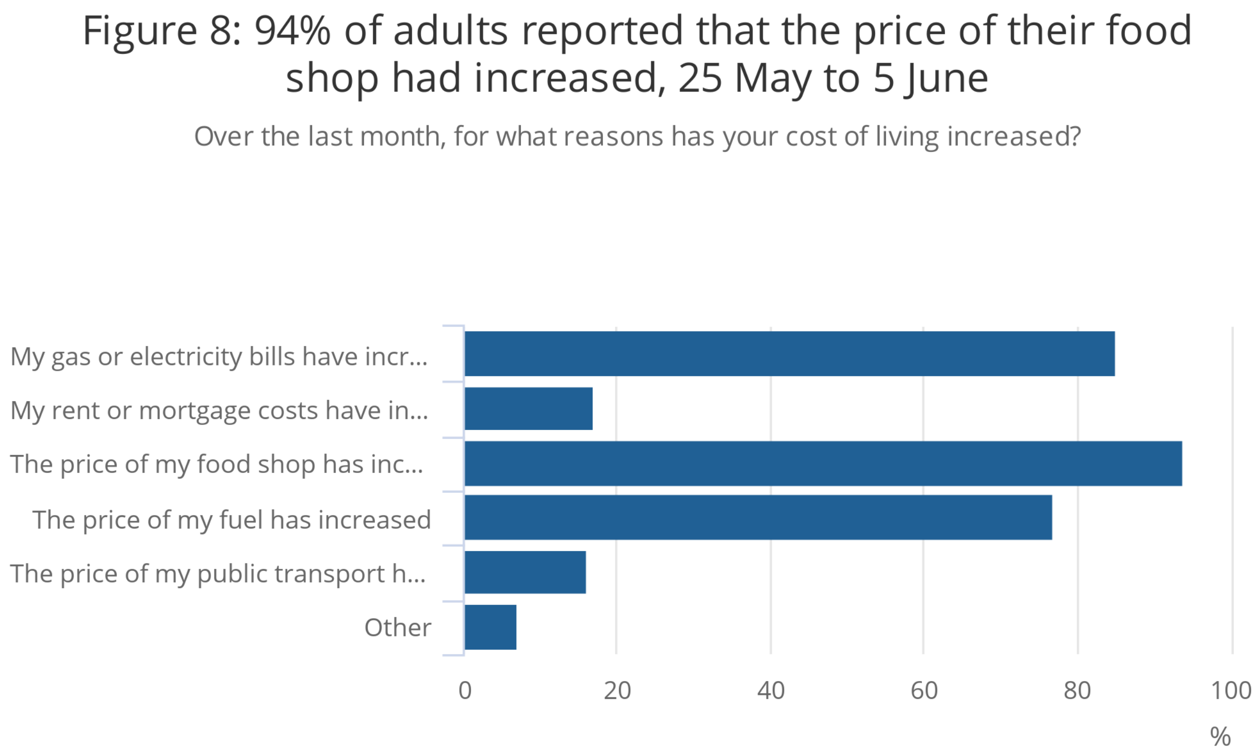


Source: Office for National Statistics – Opinions and Lifestyle Survey: Public opinions and social trends, Great Britain: Household finances, 25 May to 5 June 2022

The three main factors cited for a rise in the cost of living were food, energy and fuel, which aligns with the trends seen in inflation over recent months. The difference in price movements between motor fuels and public transport may also help explain why higher income households have seen larger contributions to inflation from transport than lower income households have. Higher income households are more likely to drive and use motor fuels, which have seen annual price growth of 32.8% in May 2022. Lower income households are more likely to use public transport, where for example, bus fares have seen annual price growth of 0.2% in May 2022.

Figure 8: 94% of adults reported that the price of their food shop had increased, 25 May to 5 June

Over the last month, for what reasons has your cost of living increased?



Source: Office for National Statistics – Opinions and Lifestyle Survey: Public opinions and social trends, Great Britain: Household finances, 25 May to 5 June 2022

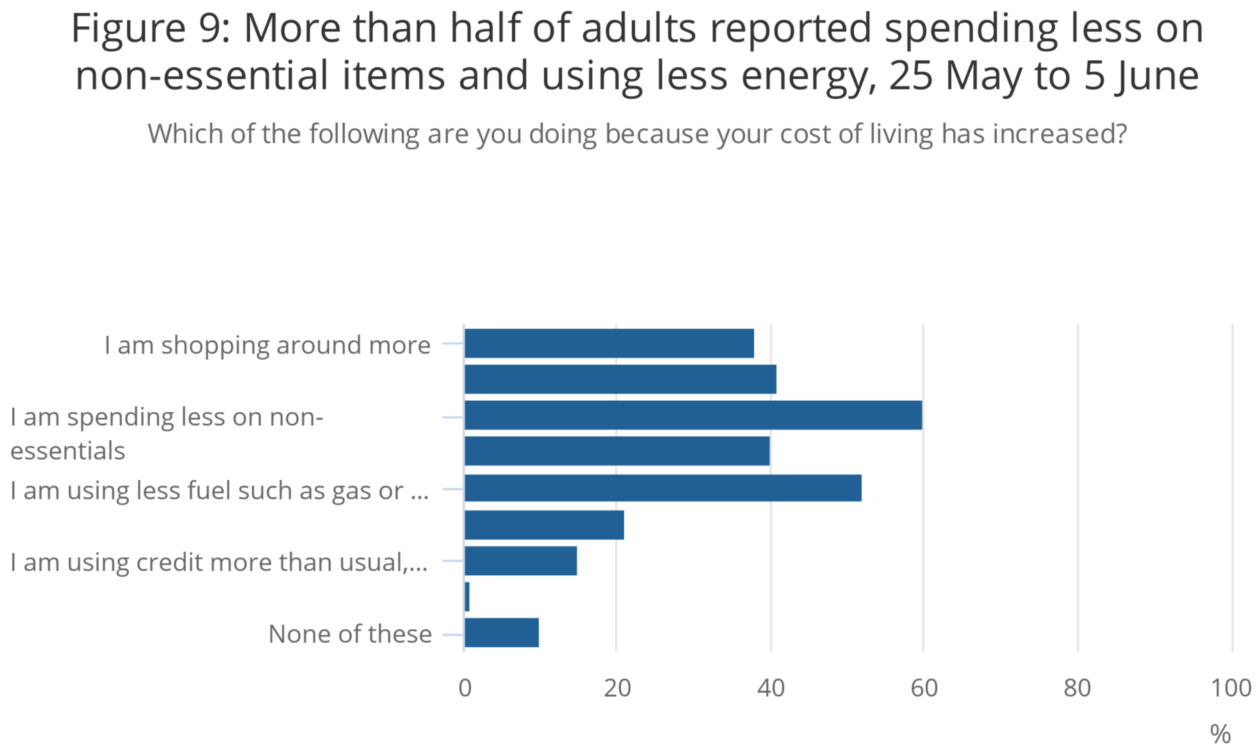
Notes:

1. Respondents were able to choose more than one option.

Figure 9 shows steps that people are taking to mitigate the impacts of the rising costs they face. Over half of adults report spending less on non-essentials and using less energy in their homes in the month to 5 June 2022. Around 40% report spending less on food shopping and essentials, shopping around more and cutting back on non-essential journeys in their vehicles.

Figure 9: More than half of adults reported spending less on non-essential items and using less energy, 25 May to 5 June

Which of the following are you doing because your cost of living has increased?



Source: Office for National Statistics – Opinions and Lifestyle Survey: Public opinions and social trends, Great Britain: Household finances, 25 May to 5 June 2022

Notes:

1. Respondents were able to choose more than one option.

Around 15% of adults report using more credit than usual, while in a separate question, around 21% report that they have had to borrow more money or use more credit in the last month compared with a year ago. Similarly, around 45% of adults reported that they do not think they will be able to save any money over the next 12 months. Around 42% of adults reported finding it somewhat difficult or very difficult to afford their energy bills.

These reports may compound the different experiences seen since the beginning of the coronavirus (COVID-19) pandemic when higher income households were able to save more than before the coronavirus pandemic (as explained in our article, [Economic modelling of forced saving during the coronavirus (COVID-19) pandemic]()), but lower income households were not. Our [analysis of OPN data from March 2022]() found that around 23% of adults living in the most deprived areas of England reported that they have borrowed more money compared with a year ago, while the rate was 11% in the least deprived areas.

7 . Related links

[Consumer price inflation, UK: May 2022](#)
Bulletin | Released 22 June 2022
Price indices percentage changes and weights for the different measures of consumer price inflation.

[Household Costs Indices, UK: fourth preliminary estimates, 2005 to 2021](#)
Bulletin | Released 4 May 2022
UK households' experience of changing prices and costs. These are 2005 to 2021 estimates of the Household Costs Indices, a set of measures currently in development.

[Consumer Prices Index including owner occupiers' housing costs (CPIH)-consistent inflation rate estimates for UK household groups: October to December 2021](#)
Bulletin | Released 13 May 2022
Estimates of inflation rates for different types of household in the UK on a CPIH-consistent basis.

[Household Costs Indices: methodology](#)
Methodology | Released 19 December 2017
The methodology used in the Household Costs Indices and how it differs from the methodology used in our lead measure of consumer price inflation.

[Tracking the price of the lowest-cost grocery items, UK, experimental analysis: April 2021 to April 2022](#)
Article | Released 30 May 2022
How the prices of the lowest-cost products for 30 everyday items have changed since April 2021.

[Coronavirus and the social impacts on Great Britain: 1 April 2022](#)
Bulletin | Released 1 April 2022
Indicators from the Opinions and Lifestyle Survey (covering 16 to 27 March 2022) of the impact of the coronavirus (COVID-19) pandemic on people, households and communities in Great Britain.