

Compendium

Conclusions

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Table of contents

1. [Introduction](#)
2. [Conclusions](#)
3. [Background notes](#)

1 . Introduction

Conclusions from the ONS analysis of the inflation rates experienced by different types of households in the UK between 2003 and 2014 are presented in this section.

2 . Conclusions

This paper presents ONS analysis of the inflation rates experienced by different types of households in the UK between 2003 and 2014. Using micro-level data from the Living Costs and Food Survey (LCF) and the Consumer Prices Index (CPI), it estimates price indices and inflation rates for households in each decile of the income and expenditure distributions, for households with and without children, and for retired and non-retired households.

This analysis draws a number of conclusions. First, the rate of inflation experienced by different types of household has varied markedly since 2003. These differences are most apparent when comparing households who spend relatively little with those who spend the most. Prices rose each year for the lowest-expenditure decile on average by 3.7%, compared with 2.3% for the highest-expenditure decile. Comparing the 2nd and 9th expenditure deciles – our preferred measure¹ – this difference remains substantial: prices for the former group have risen on average by 3.3% each year over this period, while for the latter they have risen by 2.3%. The CPI over this period – which is designed to capture price movement for the household sector as a whole – has risen by 2.6% each year on average.

While the extent of inflation differentials is largest among households with different levels of expenditure, this analysis also indicates that there are inflation rate differentials for other sub-groups in the population. Prices have risen faster on average for households in lower income groups, for retired households and for households without children than for high income, non-retired and households with children respectively. Supporting analysis suggests that housing costs have also played an important role: groups with a greater incidence of mortgaged owner-occupiers have experienced lower rates of price increase over this period as a consequence of lower mortgage interest payments.

While the movements in some prices have influenced all groups, their importance as drivers of inflation has differed substantially. Retired households were particularly exposed to the movements of energy and food prices over this period, but were much less affected by the increasing price of education (led by higher university tuition fees) and package holidays. Households with children, by contrast, were more exposed to price changes for education, and less exposed to movements in energy and transport costs. Comparing high and low expenditure groups, changes in the costs of utilities, food and drink account for most of the differences in inflation rates.

This paper also documents the degree of variation in rates of price increase within sub-groups. In particular, it concludes that the range of inflation outcomes for retired households is far broader than the range of inflation outcomes for non-retired households. Among the former group, a majority experienced broadly similar rates of price increase to the rest of the population. A minority of retired households experienced much faster rates of price increase, rising to more than 7% in 2008. This result for retired households suggests that the expenditure patterns of this group are diverse relative to non-retired households. Comparing the CPI with the inflation outturns for different groups, this paper concludes that the CPI is broadly representative of the price experience of households around two-thirds of the way up the expenditure distribution. An alternative, ‘democratic’ price index – which weights the inflation experience of households equally, rather than drawing on household sector expenditure weights – is around 0.3 percentage points higher on average than the plutocratic measure over this period.

Our findings have several implications, of which two are particularly clear. First, it is apparent that while the CPI captures movements in prices for the household sector as a whole, the degree of variation in the price experience of different households is relatively broad. Rates of price increase vary systematically across household types and composition, to differing degrees in different periods. That degree of variation needs consideration alongside movements in the headline rate of CPI inflation. A first step towards greater understanding and appreciation of these differences would be for a distributional analysis of inflation trends to be published on a regular basis. In line with our findings, this should incorporate estimates of within-group inflation differentials, as well as between group differences. This would allow these differentials to be monitored through time, to see whether the trends observed during this period are sustained as the economy continues to recover.

Secondly, the degree of variation presented here has broader implications for economic policy. In particular, it suggests that some sub-groups of the UK population have faced relatively strong headwinds in recent years, eroding both their real incomes and their capacity to spend. The results also suggest that when inflation is relatively high, the dispersion of inflation outcomes is relatively broad. Both effects suggest that distributional analysis of current macroeconomic developments can offer significant insights into conditions prevailing in the UK economy.

This paper presents a range of avenues for further study, developing on the methods we have employed here. First, future research could seek to quantify the extent to which different households face different prices for the same product. In common with previous studies, this paper assumes that all households face the same, CPI price indices and as a consequence, inflation differentials are driven by expenditure shares alone. If different households face different prices for the same products, and if these prices grow at different rates, then their experience of inflation may differ from the estimates presented here. Secondly, further work could be carried out to extend our findings from CPI to CPIH – allowing housing costs for all households to be included in the sub-group inflation estimates.

Notes for Conclusions

1. This measure is less affected by unusually low- or high-expenditure households who appear in our underlying data. Lower (higher) decile numbers denote lower (higher) expenditure groups.

3. Background notes

1. 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