

Article

Consumer prices alternative basket analysis: May 2020

Data and analysis of an alternative consumer prices basket, rescaled to remove unavailable items, for the period April to May 2020 in the UK during the coronavirus (COVID-19) pandemic.

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1. Main points

- The Consumer Prices Index including owner occupiers' housing costs (CPIH) 12-month inflation rate was 0.7% in May 2020, down from 0.9% in April 2020; the Consumer Prices Index (CPI) was 0.5% in May 2020, down from 0.8% in April 2020.
- Compared with the official CPIH and CPI series, experimental series that update the baskets to remove unavailable items result in an annual growth rate 0.1 percentage points lower than the official rates, at 0.6% and 0.4%, respectively.
- Differences between the official and experimental series are primarily driven by transport services, where seasonal imputation methods used in the official series have negated the impact from international travel (air fares, sea fares and Eurotunnel fares); when these services are excluded in the rescaled basket, their absence has a downward drag on the annual rate of the experimental series.

These series are experimental and should not be used instead of <u>official measures of consumer price inflation</u>. They are based on underlying assumptions about consumption changes because of the coronavirus (COVID-19). Updating the basket of goods and services within the year to consider consumption changes means that the final index value is not consistent over time or with other countries' official rates.

2. Updating the rescaled basket for May 2020

Last month we explored the impact of the approach taken to calculate the official Consumer Prices Index including owner occupiers' housing costs (CPIH) and the Consumer Prices Index (CPI) series, given the impact of social distancing policies and movement restrictions. We compared it with experimental series looking at what would happen to inflation if we re-weighted the basket for April 2020 so that unavailable items are excluded from the rescaled indices. We also adjusted the weight for fuel as there was evidence to suggest that fuel consumption had fallen considerably in April 2020.

This article updates the rescaled basket analysis using data for May 2020, concentrating only on adjusting for unavailable items, rather than a further adjustment for the fall in fuel consumption. There were 74 unavailable items in the basket for May, down from 90 in April.

3. Comparing the experimental chain-linked and rescaled series with the official CPIH and CPI series

Tables 1 and 2 show indices, 12-month growth rates and 1-month growth rates for the Consumer Prices Index including owner occupiers' housing costs (CPIH) and the Consumer Prices Index (CPI), respectively, under the following scenarios:

- Official published CPIH and CPI series (referred to as "official")
- Official CPIH and CPI series, chain-linked to April 2020 for consistent comparison with the experimental series (referred to as "chain-link", for details see <u>Prices economic analysis</u>, <u>quarterly</u>: <u>May 2020</u>)
- CPIH and CPI baskets updated to remove <u>unavailable items</u> and their weight applied proportionately to available items (referred to as "rescaled")

Table 1: Index and growth rate values for CPIH official, chain-link and rescaled UK, May 2020

May 2020 CPIH CPIH (2015=100) YoY% MoM%

Actual	108.6	0.7	0.0
Chain-link	108.7	0.7	0.1
Rescaled	108.6	0.6	0.1

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

Table 2: Index and growth rate values for adjustments to CPI official, chain-link and rescaled UK, May 2020

May 2020 CPI CPI (2015=100) YoY% MoM%

Official	108.5	0.5	0.0
Chain-link	108.5	0.5	0.1
Rescaled	108.3	0.4	0.1

Source: Office for National Statistics - Consumer Prices Index

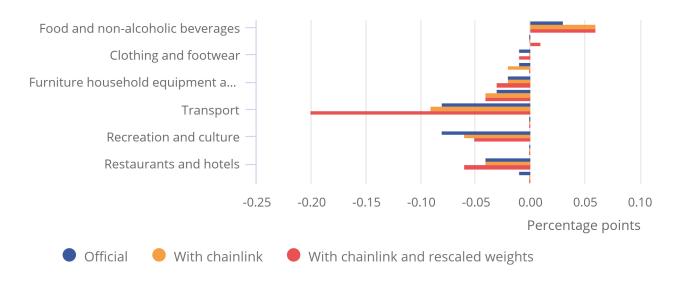
Figure 1 shows the contribution that each division made to the change in the 12-month growth rate of CPIH between April and May 2020, for the official rates and for the experimental series. More than half of the divisions, including clothing and footwear, housing, transport, recreation and culture, and restaurants and hotels, contributed to the fall in the headline rate between April and May 2020. More details on these movements can be found in the Consumer Price Inflation statistical bulletin.

Figure 1: Transport shows the largest difference in contribution between the official and experimental series

Contributions to the change in the 12-month growth rate of CPIH for the official and experimental series, UK, May 2020

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Contributions to the change in the 12-month growth rate of CPIH for the official and experimental series, UK, May 2020



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

While the experimental series show similar contributions to the change in the 12-month rate across most divisions, the primary driver of the differences between series lies within the transport division; this difference is explored further in Section 4.

4. Transport and its effects on the CPIH 12-month growth rate

Figure 2 shows the contribution that different components of transport have made to the 12-month growth rate for the official and experimental series of the Consumer Prices Index including owner occupiers' housing costs (CPIH). The equivalent data for the Consumer Prices Index (CPI) show similar trends and are included in the <u>full</u> <u>dataset</u>.

Figure 2: Rescaling the basket increased the downward contribution of transport to the 12-month growth rate of CPIH

Contributions to the 12-month growth rate of CPIH by component of transport, UK, May 2020

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Contributions to the 12-month growth rate of CPIH by component of transport, UK, May 2020



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

Notes:

1. "International travel" is a bespoke category made up of air fares, sea fares and Euro tunnel fares, "other transport goods and services" covers all other available transport-related goods and services, such as the purchase and maintenance of vehicles, and transport within the UK.

Compared with the chain-linked version of the official series ("chain-link"), rescaling the basket to remove unavailable items increases the downward contribution to the 12-month growth rate from transport. This is primarily driven by international travel, a category made up of air fares, sea fares and Eurotunnel fares.

International travel is subject to seasonal price effects and broadly increases throughout the year, peaking in the summer months, with smaller peaks around Easter and Christmas. However, prices were deemed unavailable in April and May 2020 as non-essential movement was restricted. In the official series, prices for unavailable seasonal items such as international travel were imputed for April and May 2020. This imputation was calculated by applying the all-items annual growth rate to the index values from April and May 2019, respectively.

By removing these unavailable seasonal items in our experimental rescaled basket, we remove the rise in prices that generally occurs this time of year, whereas in the official measures the unavailable international travel items are imputed to negate their impact on the headline rate. The contribution to the 12-month growth rate of the rescaled basket, therefore, reflects the fall in prices in the year to March 2020, the last month for which data were available, resulting in a downward contribution to the annual rate.

The difference in the growth rates between the official and experimental series also reflects the impact of increasing the weights of available goods and services, amplifying the effect of their price movements. This is particularly apparent for motor fuels, which was one of the biggest drivers of the change in the 12-month growth rate for the official series in May 2020. Figure 2 shows that the downward contribution to the 12-month growth rate from motor fuels was even more pronounced for the rescaled basket as it has a higher weight.

5. Related links

Coronavirus and the effects on UK prices

Article | Published 6 May 2020

Plans for data collection, compilation and publication of our various prices statistics following movement restrictions as a result of the coronavirus (COVID-19) pandemic.

Consumer price inflation, UK

Bulletin | Monthly

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

Prices economic analysis, quarterly: May 2020

Article | Published 6 May 2020

Additional economic analysis of the latest Consumer Prices Index including owner occupiers' housing costs (CPIH), Producer Price Index (PPI), and long-term trends.