

Article

Research and developments in the transformation of UK consumer price statistics: July 2023

Research to modernise the measurement of consumer price inflation in the UK: sixth in a series of biannual articles to update users.

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1. Other pages in this release

In this iteration of our research series, we present two articles:

- Using Auto Trader car listings data to transform consumer price statistics, UK: July 2023
- Date trimming for consumer prices alternative data sources

2. Overview

- This is the sixth in aseries of biannual articles on the transformation of consumer price statistics that aims to update users on our research to modernise the measurement of consumer price inflation in the UK, while maintaining the quality and integrity of our outputs.
- Alternative data sources and new methods to use these data were introduced for rail fares within 2023, as detailed in our<u>Transformation of consumer price statistics: July 2023 article</u>.
- In 2024, we aim to introduce alternative, big data for second-hand cars and private rents, and in 2025 for groceries.
- The other pages in this release provide an update on our second-hand car research and our research into date trimming on grocery scanner data.

3. Updates on our transformation work

As discussed in <u>Transformation of consumer price statistics: July 2023</u>, we have delayed our introduction of webprovided data for improving the measurement of second-hand car inflation by a year, from March 2023 to March 2024. This is to address some quality assurance challenges.

In our <u>Using Auto Trader car listings data to transform consumer price statistics, UK: July 2023 article</u>, we cover the work we are doing, and the changes we are making, to address these challenges. We also provide updated research indices using these data.

In our <u>Date trimming for consumer prices alternative data sources methodology article</u>, we present theory as well as our research plans in investigating the suitability of date trimming for measuring inflation from grocery scanner data. Date trimming involves measuring inflation from sub-periods of each month, as was first discussed in our <u>Research into the use of scanner data for constructing UK consumer price indices</u>.

In addition to the above articles, we also recently presented two papers at the UNECE (United Nations Economic Commission for Europe) meeting of CPI experts. Both papers are published on the UNECE website. The first paper, <u>Developing reproducible analytical pipelines for the transformation of consumer price statistics: rail fares.</u> <u>UK</u>, covers how we are developing reproducible analytical pipelines to transform our consumer price statistics; the second paper, <u>Outlier detection for alternative data sources</u>, <u>United Kingdom</u>, covers our use of outlier detection techniques for alternative data.

4. Future developments

The research presented in these articles should not be considered as final but should begin to demonstrate how some traditional methods will need to be transformed to process the magnitude of information that is becoming available to us. All results and statistics within this article should therefore be treated as experimental. A full research programme is outlined in our<u>Consumer prices development work plan</u>.

During this period of research, we will continue to work with our<u>Advisory Panels for Consumer Price Statistics</u> and broader users. We welcome feedback on any of the research completed to date, which may help shape the ongoing transformation of consumer price statistics to include new data and methods. Share your feedback with us by emailing <u>cpi@ons.gov.uk</u>.

5. Related links

Impact analysis on transformation of UK consumer price

Article series

This series demonstrates the indicative impacts on our headline consumer price statistics of introducing new data and methods into our consumer price inflation statistics.

Transformation of consumer price statistics: July 2023

Article | Released 6 July 2023

Our plans to transform UK consumer price statistics by including new improved data sources and developing our methods and systems for production from 2023.

Consumer price inflation, UK

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

Consumer Prices Indices Technical Manual, 2019

Methodology | Revised 22 March 2023 This technical manual is a reference tool for anyone wanting to understand how measures of consumer price inflation and associated indices are compiled.

6. Cite this article

Office for National Statistics (ONS), released 28 November 2022, ONS website, article, <u>Research and</u> <u>developments in the transformation of UK consumer price statistics: July 2023</u>