

Advisory Panels for Consumer Prices

2021-2022 Annual Report to the National Statistician

United Kingdom Statistics Authority

July 2023

Contents

1. Introduction
2. Recommendations
3. Background
4. Topics discussed in the past year
5. Consumer Price Statistics Strategy and Forward Work Programme
6. Membership of the Technical Advisory Panel for Consumer Price Statistics
7. Membership of the Stakeholder Advisory Panel for Consumer Price Statistics
8. Papers presented to the Technical Advisory Panel of Consumer Prices during 2021 and 2022
9. Papers presented to the Stakeholder Advisory Panel of Consumer Prices during 2021 and 2022

1. Introduction

This is the sixth annual report from the Advisory Panels for Consumer Prices (APCP) to the National Statistician, the principal adviser on official statistics to the UK Statistics Authority. Historic annual reports are published on the [UKSA website](#).

During 2021 and 2022, the APCP Technical Panel and the APCP Stakeholder Panel each met eight times (quarterly) to discuss issues important to the ongoing progress of consumer price statistics in the UK, including one joint meeting in October 2022.

This report contains a summary of discussions held by the Panels in 2021 and 2022 and the resulting outcomes.

2. Recommendations

The APCPs recommend that the National Statistician:

- continues to prioritise work on transformation of consumer price statistics to use new data, methods, and systems, recognising the considerable progress ONS have made in recent years
- ensures that appropriate time is taken to fully understand the impact that transformation work has, including a sufficiently long test series and suitable contingency planning, before any such irreversible change is made to official measures
- provides necessary clarity as soon as possible over how transformation work might impact the RPI prior to 2030, following the consultation on the reform of the Retail Prices Index methodology in 2020
- endorses expediting the production of quarterly estimates of the Household Costs Indices (HCIs) in 2023, and commissioning research into capturing variations in the prices paid by different types of household
- endorses ONS using the same approach to calculate basket weights for 2023 as has been used since the onset of the coronavirus pandemic
- notes the progress towards producing sub-national measures of consumer price inflation, including a boost to the collection of price quotes in Northern Ireland
- notes the publication of a modelled historical series for CPIH back to 1950, and the remodelling of CPI estimates over the same period, that were published in May 2022 to help provide additional insight in the context of the cost-of-living debate
- recognises the progress ONS has made against the work programme for consumer price statistics, including additional work to help inform policy making and debate surrounding the rising cost of living

3. Background

In June 2015, the UK Statistics Authority (UKSA) announced the formation of two independent Advisory Panels on Consumer Price statistics: a Technical Panel (APCP-T) and a Stakeholder Panel (APCP-S).

The Technical Panel* functions to provide independent advice to the National Statistician on technical aspects of consumer price indices, as requested by ONS and/or the Stakeholder Panel. The Stakeholder Panel† functions to provide independent advice to the National Statistician on the uses and applications of consumer price indices, to ensure that these statistics meet the needs of users and serve the public good.

Their establishment was recommended by an [independent review](#) of the governance of price statistics in February 2014, which considered matters relating to the governance arrangements and structures underpinning the production of consumer price indices by the ONS.

The APCPs have continued to meet regularly (quarterly) throughout 2021 and 2022. The Technical Panel typically meets 1-2 weeks prior to the Stakeholder Panel and Stakeholder Panel members are able to request to see the papers from the Technical Panel if they wish, and vice versa. The APCP-T and APCP-S do not necessarily discuss the same papers, but there is inevitably overlap in the topics discussed.

4. Topics discussed

Topics discussed by both Panels in 2021 and 2022 included:

4.1. Introduction of alternative data sources into UK consumer price statistics

Both the Technical and Stakeholder Panel received regular progress updates regarding the inclusion of new data, methods, systems, and processes in the production of headline UK consumer price statistics. Both Panels were presented with details of proposed methods and impact analyses, with a particular focus on rail fares and second-hand cars, and provided guidance on timelines, priorities, and presentation of the indices, as well as risks and readiness. Both Panels provided helpful feedback on published documentation surrounding difficult topics such as the choice of index number method for use with alternative data sources.

Specifically, the Stakeholder Panel discussed the length of time required to ascertain the impact of changes, suggesting a year would be the minimum time period required to understand seasonal effects. The Stakeholder Panel also noted concerns around the reliance of the new indices on contracted data feeds rather than physical collections and requested detailed contingency plans be discussed in early 2023.

In addition, the Technical Panel discussed several topics related to the theoretical and practical calculation of price indices using new data sources including:

* Technical Advisory Panel for Consumer Prices [Terms of Reference](#)

† Stakeholder Advisory Panel for Consumer Prices [Terms of Reference](#)

- methods specific to the production of indices for rail fares and second-hand cars, in particular how a homogeneous product should be defined within these categories;
- choosing a suitable index method for elementary aggregate calculation within alternative data sources, and how to integrate this with the traditional annual fixed basket approach;
- choosing an appropriate method of data cleaning to remove dubious observations within big data;
- additional research into the use of scanner data (namely groceries) in UK consumer price statistics, including accounting for refunds, discounts, size changes, classification methods, aggregation, imputation and weights;
- research into the use of web-scraped data in UK consumer price statistics, including handling products with high churn and approximating expenditures for web-scraped data.

4.2. Private rental price statistics transformation

ONS engaged with both Panels regarding the development of private rental price statistics using data from the Valuation Office Agency (VOA), including methods, timelines, and communication. As well as impacting users who use the Index of Private Housing Rental Prices (IPHRP), these rental statistics are also used in constructing the private rentals index within CPIH, CPI and RPI, and the owner occupiers' housing costs (OOH) index in CPIH. These discussions have been redacted due to their market sensitive nature.

4.3. Continuing development of the Household Costs Indices and Sub-group measures

The publication of Household Costs Indices (HCIs) and CPIH-consistent subgroups was suspended over the coronavirus pandemic, and ONS discussed with the Advisory Panels how estimates should be calculated for this period of time. As a result of this discussion, no changes were made to the lag in Living Costs and Food Survey data used to derive democratic weights and subgroup-specific baskets; however, bespoke subgroup-level imputations for unavailable items were made in the HCIs. The fourth preliminary estimates of the HCIs were successfully published in May 2022.

Both Advisory Panels discussed ONS's review of the methodology for calculating the change in mortgage interest payments. The existing RPI approach was compared with the simple revaluation approach (used by other countries) and a new "lenders' formula" method, based around amortised loan repayments. The Technical Panel also suggested an alternative approach – the Benet – that had been used by Eurostat. The Stakeholder Panel were supportive of a method such as the lenders' formula method, which reflects what households actually pay, but requested some supporting sensitivity analysis to understand how the method works in different scenarios. It was also clarified that no changes to RPI would be made based on this research.

Future plans for the HCIs were also discussed. The Stakeholder Panel supported the letter from the Royal Statistical Society, that asked that a more frequent publication be expedited in response to the ongoing cost of living debate. In response, ONS aim to move the HCIs onto a quarterly publication in 2023. In the meantime, ONS have resumed the quarterly publication of subgroup inflation measures on a CPIH-consistent basis. The Panels supported ONS plans to commission research into ways to capture variations in the prices paid by different types of households.

4.4. Considerations for the consumer prices collection and compilation, and production of annual weights

ONS continued to engage with both Panels on plans for the annual updating of weights, where it has been necessary to adapt usual processes to account for large shifts in the expenditure distribution between years as a result of the coronavirus pandemic. Following discussion with the Panels, the approach for 2022 was consistent with that used in 2021, and the same approach was endorsed for the 2023 update.

4.5. The Retail Prices Index

The Advisory Panels were kept informed of the Judicial Review that followed the response to [the consultation on the reform of the Retail Price Index \(RPI\) methodology](#).

ONS also shared thoughts on how future minor errors in the RPI should be presented. However, there are no plans to change the current RPI revisions policy that, once the RPI is published, the indices are never revised.

4.6. Additional measures to support public understanding of changes in supply chains and the cost of living

ONS shared with the panels how they had been collaborating with several areas in the organisation, such as the Data Science Campus and Digital Content, to:

- release the [personal inflation calculator](#) in May 2022, providing users a personalised inflation rate based on their spending behaviour,
- publish experimental estimates [tracking the lowest cost grocery items](#) in May and October 2022; using web scraped data and showing how those on a lower income were affected by rising food prices,
- coordinate a large ONS hybrid event in October 2022, to help with the debate and understanding of cost of living and where it may be heading.

Topics specifically discussed by the Stakeholder Panel included:

4.7. Sub-national measures of consumer prices and the Northern Ireland boost

Having previously expressed interest in sub-national measures of consumer prices, the Stakeholder Panel were updated on progress towards producing sub-national measures of consumer price statistics, including a pilot survey to boost the number

of prices collected in Northern Ireland, and considering how best to integrate scanner data in a way that will allow for future production of sub-group estimates.

4.8. Development of the Statistics User Network

The Stakeholder Panel specifically discussed the development of the Statistics User Network and proposed improvements. The panel welcomed the development but suggested ONS should build on existing content and improve the presentation, engagement on and promotion of the forum.

4.9 Johnson Review of UK Consumer Price Statistics

The Stakeholder Panel reviewed progress against the recommendations in the Johnson Review of UK Consumer Price Statistics noting that the majority of recommendations had been completed. The Panel further noted that any incomplete recommendations had been included within the [ONS Consumer Prices Development Plan](#) and prioritised accordingly so they were either in progress or were not currently being worked on but had been assigned an expected completion date. As a result, the Panel agreed that their Terms of Reference would be amended so they no longer mentioned the Johnson Review.

Topics specifically discussed by the Technical Panel included:

4.10 Faster indicators methodology

In early 2021, the Technical Panel discussed challenges in the methodology for producing weekly price indices, including issues with drift with frequent chaining. These weekly indicators were set up as part of the ONS response to the COVID-19 pandemic and ceased production in September 2021.

4.11 Treatment of the UK Government support package rebates

Following the announcement by the UK Government that a package of support would be provided to help households to manage rising energy bills, a paper was sent to the Technical Panel by correspondence to seek advice on the treatment of the Council Tax rebate in consumer price statistics. The Technical Panel endorsed the proposal to not reflect the rebate in consumer price inflation statistics, consistent with the decision to treat the rebate as income in the National Accounts. The Panel also endorsed the proposal to use the [ONS decision](#) for future classifications, unless there was a good reason not to.

5. Strategy and forward work programme for consumer price statistics

The Office for National Statistics (ONS) has a programme of research and development aimed at improving and maintaining its range of consumer price inflation statistics. The programme aims to ensure that the statistics continue to meet user needs, make use of new and innovative methods and data sources, and follow international best practice.

The [Consumer Prices Development Plan, published in July 2022](#), reflects how ONS's consumer prices development work contributes to the strategy. Items on the development plan are prioritised through discussion with the Advisory Panels on Consumer Prices.

Since the previous iteration of the work programme, a considerable amount of progress has been made, as reflected in the topics discussed with the Panels through the course of 2021 and 2022.

6. Membership of the Technical Advisory Panel for Consumer Prices*

Members

Grant Fitzner	Chief Economist and Director, Macroeconomic Statistics and Analysis, Office for National Statistics (Chair)
Prof Guy Nason*	
Dr Antonio Chessa [†]	
John Astin [†]	
Prof Bert Balk	
Dr Gareth Clews [†]	Methodology, Office for National Statistics
Prof Ian Crawford	
Rupert de Vincent-Humphreys	
Michael Hardie	Prices Division, Office for National Statistics
Matthew Corder*	Prices Division, Office for National Statistics
Peter Levell	
Dr Jens Mehrhoff	
Prof Paul Smith	
Dr Martin Weale	
Corinne Becker Vermeulen*	

Secretariat

Huw Pierce	Prices Division, Office for National Statistics
Christopher Payne [†]	Prices Division, Office for National Statistics
Helen Sands*	Prices Division, Office for National Statistics

The Chair, Grant Fitzner, would like to thank Dr Antonio Chessa and John Astin for their contributions to the Technical Panel. Grant Fitzner would also like to welcome Corinne Becker Vermeulen and Professor Guy Nelson.

* Members of the panel that joined during 2021 or 2022

[†] Members of the panel that left during 2021 or 2022

7. Membership of the Stakeholder Advisory Panel for Consumer Prices

Members

Dame Kate Barker	Chair
Jonathan Camfield	Lane Clark & Peacock
Daniel Gallagher	HM Treasury
Richard Gibson	Barnett Waddingham
Simon Hayes	Bank of England
Jenny King	Which?
Ashwin Kumar	Manchester Metropolitan University
Jill Leyland	Royal Statistical Society
Ian Rowson	Independent Policy Analyst
Daniela Silcock*	Pensions Policy Institute
Matthew Whittaker†	Resolution Foundation
James Smith*	Resolution Foundation
Dr Geoff Tily	Trades Union Congress
Jonathan Athow†	Deputy National Statistician for Economic Statistics, Office for National Statistics
Michael Keoghan*	Deputy National Statistician & Director General, Economic, Social and Environmental Statistics Group, Office for National Statistics
Grant Fitzner	Chief Economist and Director, Macroeconomic Statistics and Analysis, Office for National Statistics
Michael Hardie	Prices Division, Office for National Statistics
Matthew Corder	Prices Division, Office for National Statistics
Secretariat	
Andrew King	Prices Division, Office for National Statistics

Dame Kate Barker would like to thank Matthew Whittaker for his contribution to the Stakeholder Panel, and welcome James Smith, who will represent the Resolution Foundation following Matthew's departure. Dame Kate would also like to welcome Daniela Silcock, who joins representing the Pensions Policy Institute.

* Members of the panel that joined during 2021 or 2022

† Members of the panel that left during 2021 or 2022

8. Papers presented to the Technical Advisory Panel for Consumer Prices in 2021 and 2022

*Where links have not been provided the papers have not been published, reasons are documented in the published minutes for each Panel meeting, and typically relate to the paper being a draft of a future publication or containing market sensitive material. Publication of each specific paper is discussed at each meeting.

Date	Title	Summary
January 2021	APCP-T(21)01 Research indices using scanner data*	The latest research undertaken into the use of scanner data in our consumer price indices
January 2021	APCP-T(21)02 Refunds in scanner data*	Preliminary advice on how to consider refunds in scanner data
January 2021	APCP-T(21)03 Classification of Alternative Data Sources*	An update on clothing classification and research for grocery classification
January 2021	APCP-T(21)04 Weekly online price changes for food and drink items methodology*	Challenges presented by producing weekly price indices, as well as our plans for improving the indices in the coming months
April 2021	APCP-T(21)07 Lenders' formula method for mortgage interest repayments APCP-T(21)08 Current mortgage interest payments methodology: a review	These papers present work to review the method used to calculate mortgage interest payments in the current Household Costs Indices estimates.
April 2021	APCP-T(21)09 Dealing with product churn in web-scraped clothing data: product grouping methods	Methods and metrics under consideration for forming homogenous groups of products in web-scraped data, to reduce the effect of product churn.
April 2021	APCP-T(21)10 Approximating Sales Quantities for Web Scraped UK Grocery Data*	Methods for producing sales quantity approximates for products at the elementary aggregate level.
April 2021	Outlier detection and filtering methods for UK web-scraped and scanner data	Methods for anomaly detection to apply to scanner and web-scraped CPI data.
July 2021	APCP-T(21)11 Integration of scanner and web-scraped data into consumer price statistics: aggregation and weights	Proposals and remaining challenges for the integration of scanner and web-scraped data into consumer price statistics
October 2021	New index number methods in Consumer Price Statistics*	Through the Economic Statistics Centre of Excellence, the ONS commissioned a review of the framework, led by Kevin Fox and Peter Levell
October 2021	APCP-T(21)14 Redeveloping private rental market statistics*	Discussions of the proposed method to measuring rental price statistics
October 2021	APCP-T(21)15 Weights update, 2022	An approach for calculation of weights for the CPIH and CPI for 2022
October 2021	APCP-T(21)16 Measuring mortgage interest payments in the Household Costs Indices	Research on the methodology for mortgage interest payments
January 2022	APCP-T(22)01 Transformation of UK consumer price indices: Impact Analysis, 2022*	An outline of the updated consumer price transformation timeline and a summary of the impact analysis of the inclusion of Alternative Data Sources in the measures of consumer price inflation

January 2022	APCP-T(22)02 Transformation of UK consumer price indices for rail fares	Using new transaction level data to produce price indices for rail fares, and the impact of these on UK consumer price statistics.
January 2022	APCP-T(22)03 Transformation of consumer price indices for second-hand cars	Proposed methods for the calculation of second-hand car indices in the UK using online car listings data
May 2022 (correspondence)	Treatment of the upcoming energy rebate (Council Tax)	Proposed treatment of the April 2022 Council Tax rebate in consumer price inflation statistics.
July 2022	APCP-T(22)07 Terms of reference for the APCP-T*	The terms of reference for the operation of the Advisory Panel on Consumer Prices – Technical
July 2022	APCP-T(22)09 Multilateral index methods: introducing the GEKS Törnqvist*	Materials to provide step-by-step guidance on using the GEKS-Törnqvist and splicing techniques to improve the accessibility of these methods to wider audiences
July 2022	APCP-T(22)10 Research indices using scanner data*	An update on the latest research undertaken into the use of scanner data
October 2022	APCP-T(22)12 Index methods: framework for using multilaterals	Lower-level index methods choices needed in preparation for introducing alternative data sources in 2023
October 2022	APCP-T(22)13 Data cleaning within alternative data sources	Data cleaning methods (primarily outlier detection and junk filtering) for use with alternative data sources
October 2022 (Joint with APCP-S)	APCP-S(22)06 Transformation of UK consumer price indices: rail fares and second-hand cars*	Progress and readiness assessment in implementing new data for rail fares and second-hand cars in consumer price statistics.

9. Papers presented to the Stakeholder Advisory Panel for Consumer Prices in 2021 and 2022

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Date	Title	Summary
January 2021	APCP-S(21)01 ADS Roadmap Update January 2021	An update on the progress made against the Alternative Data Sources Roadmap and the plans over the next two years
April 2021	APCP-S(21)02. Revisions Policy for the RPI*	Presentation of the proposed changes to the RPI Revisions Policy
October 2021	APCP-S(21)04 Update on the Alternative Data Sources Discovery	Progress to implement ADS data within the measures of consumer price inflation
October 2021	APCP-S(21)05 Measuring mortgage interest payments in the Household Costs Indices APCP-S(21)06 Accompanying slide pack	Summary of the Measuring MIPs in the HCIs paper presented at the Technical Panel
October 2021	APCP-S(21)07 Weights update, 2022	An approach for calculation of weights for the CPIH and CPI for 2022
January 2022	APCP-S(22)01 Transformation of UK consumer price indices: Impact Analysis, 2022 APCP-S(22)02 Transformation of UK consumer price indices: second-hand cars APCP-S(22)03 Transformation of UK consumer price indices: rail fares	Overview of the work to prepare indices for second-hand cars and rail fares in consumer price inflation measures
July 2022	APCP-S(22)04 GEKS-Törnqvist guidance: multilateral indices within inflation statistics	Panel feedback on the ONS's initial draft of multilateral index methods guidance.
July 2022	APCP-S(22)05 Research indices using scanner data: progress report	An update on the latest research undertaken into the use of scanner data
October 2022 (Joint with APCP-T)	APCP-S(22)06 Transformation of UK consumer price indices: rail fares and second-hand cars*	Progress and readiness assessment in implementing new data for rail fares and second-hand cars in consumer price statistics.