

Advisory Panels for Consumer Prices

2020 Annual Report to the National Statistician

United Kingdom Statistics Authority

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Contents

1. Introduction	3
2. Recommendations.....	3
3. Background.....	4
4. Topics discussed in 2020	5
4.1 Consumer prices collection and expenditure weights during the COVID-19 pandemic.	6
5. Strategy and forward work programme for consumer price statistics.....	12
6. Membership of the Technical Advisory Panel for Consumer Prices.....	13
7. Membership of the Stakeholder Advisory Panel for Consumer Prices.....	14
8. Papers presented to the Technical Advisory Panel for Consumer Prices in 2020	15
9. Papers presented to the Stakeholder Advisory Panel for Consumer Prices in 2020.....	16
Annex A – Forward Work Programme for Consumer Price Statistics.....	17
Annex B – Technical Advisory Panel note to Eurostat on proposals for Harmonised Index of Consumer Prices weights in 2021	18
Annex C - HMT-UKSA Consultation on the Reform to Retail Prices Index Methodology: Response of the Technical Advisory Panel for Consumer Price statistics (APCP-T), August 2020.....	19
Annex D – Consumer Prices Stakeholder Advisory Panel response to HMT/ONS consultation on the reform of the RPI.....	22

1. Introduction

This is the fifth 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.

During 2020, the APCP Technical Panel and the APCP Stakeholder Panel both met five times to discuss issues important to the ongoing progress of consumer price statistics in the UK. Although the coronavirus (COVID-19) pandemic had an impact on the topics under discussion, it did not disrupt the operation of the two panels. Both moved from face-to-face meetings to teleconference in line with public health guidance. Indeed, the Panels' ongoing advice has been crucial in shaping the ONS response to the pandemic.

This report contains a summary of discussions held by the Panels in 2020, and the resulting outcomes. These discussions address the development of indices to meet user needs, the forward work programme for consumer price statistics, the consultation on the reform to Retail Prices Index (RPI) methodology and other methodological changes to consumer price statistics in the UK.

ONS would like to thank Advisory Panel members for their comments, contributions, and expertise. They have played an important role in helping to improve UK consumer price statistics over the past year.

2. Recommendations

The Advisory Panels on Consumer Prices (APCPs) recommend to the National Statistician that:

- The National Statistician notes the Office for National Statistics' (ONS') response to the coronavirus (COVID-19) pandemic for consumer price inflation statistics, which has involved several changes in the mode of collection and the introduction of new imputation strategies at very short notice, as well as changes to the usual procedure for the calculation of annual expenditure weights. The APCPs were warm in their commendation of the ONS' skilled and prompt response.
- The National Statistician also notes the range of supplementary analysis that ONS has produced to support its range of consumer price inflation measures over the COVID-19 pandemic; most notably, the new faster indicators, and analysis of the impact of changing the weights in the basket to reflect current consumption patterns.
- The National Statistician notes the progress on moving towards the use of alternative data sources in consumer price statistics. Work on this should continue as a high priority; however, it is imperative that the appropriate time is taken to fully understand the impact that the new data sources will have, including a sufficiently long test series before any such irreversible change is made to the official measures. The Panels are supportive of ONS' proposed implementation date of 2023, but the Stakeholder Panel would prefer delay to undue risk of an unforeseen issue arising after the change was made.
- The Household Cost Indices (HCIs) roadmap should be endorsed, with the aim of producing a quarterly measure with National Statistic status by the first quarter of

2025. In the interim, ONS should continue to produce annual experimental publications, with a focus for 2021 on reviewing the measure of mortgage interest payments.

- ONS should model and publish historical estimates for the Consumer Prices Index, including owner occupiers' Housing costs (CPIH) back to 1947, as a priority.
- The National Statistician notes the progress that the Office for National Statistics (ONS) has made against the work programme for consumer price statistics, and endorses the forward work programme and the three [use cases](#) for consumer price inflation statistics, as defined by his predecessor.

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) to advise the National Statistician on technical aspects of the statistics; and a Stakeholder Panel (APCP-S) to provide advice on the uses and applications of consumer price indices.

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 met regularly throughout 2020. The Technical Panel typically meets 1-2 weeks prior to the Stakeholder Panel and the Chair of the Technical Panel then provides an update to the Stakeholder Panel on the discussions that have taken place. The APCP-T and APCP-S do not necessarily discuss the same papers, but there will inevitably be some overlap in the topics discussed.

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'.

On 8 January 2015, the UKSA published an independent [review of UK consumer price statistics](#) led by Paul Johnson, Director of the Institute for Fiscal Studies. A number of recommendations were made, and the Authority launched a formal [public consultation](#) in the summer of 2015. In addition, on 11 March 2016, the government published an [independent review of UK economic statistics](#), led by Professor Charles Bean of the London School of Economics. Professor Bean supported Johnson's recommendations, but placed greater emphasis on alternative data sources.

On 17 January 2019 The House of Lords Economic Affairs Committee published a report, [Measuring Inflation](#), which made a number of recommendations, in particular

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

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

in relation to the Retail Prices Index (RPI). On 4 September 2019 the [UKSA](#) and the [government](#) responded to the Lords report. The UKSA proposed to the Chancellor of the Exchequer* (the Chancellor) that the shortcomings of RPI should be addressed by bringing the methods and data sources of CPIH into it. Following a joint UKSA and HM Treasury [consultation](#), the Chancellor wrote to the Authority Chair notifying him that he intended to withhold his consent during the remaining life of the specific index-linked gilts. It is UK Statistics Authority policy to address the shortcomings of the RPI in full at the earliest practical time.

Many of the topics discussed by the APCPs in 2020 follow from recommendations in the Johnson and Bean reviews. Topics included the introduction of alternative sources of data, the Household Costs Indices, a CPIH historical series, contingency planning during the COVID-19 pandemic, as well as the 2020 [consultation on Reform to the Retail Prices Index \(RPI\) Methodology](#).

4. Topics discussed in 2020

The Technical (APCP-T) and Stakeholder (APCP-S) Panels both met five times during 2020. A number of topics were discussed, including:

- Considerations for the consumer prices collection and compilation, and production of annual weights for 2021 during the COVID-19 pandemic
- The consultation on the reform to Retail Prices Index methodology
- Continuing development of the Household Cost Indices
- Developments associated with the use of alternative data sources in consumer price statistics, including:
 - Index methods for use on web scraped and scanner data
 - Classification of web scraped data
- Reinstatement of the House Price Index (HPI) after its temporary suspension during the COVID-19 pandemic
- The forward work programme for consumer price statistics

The Technical Panel discussed additional topics, including:

- Modelling of a CPIH historical series back to 1947
- A review of the literature on standard errors in CPIs
- The National Statistician's priorities for consumer price statistics

The Stakeholder Panel discussed additional topics, including:

- Development of new statistics for the private rental market, including the measure of owner occupiers' housing costs used in CPIH
- Changes to the format of ONS inflation publications.

* In certain circumstances, changes to the RPI require the consent of the Chancellor of the Exchequer before they can be implemented. The circumstances giving rise to this requirement to seek the Chancellor's consent expire in 2030.

4.1 Consumer prices collection and expenditure weights during the COVID-19 pandemic

In April 2020, the Technical Panel discussed contingency planning for the consumer prices collection during the COVID-19 pandemic, when certain types of goods were not available to consumers and the price collection in the field had to be temporarily suspended. In July, the Technical Panel discussed the proposed strategy for resuming normal price collection after the affected periods. In the October and December meetings, the production of expenditure weights for 2021 were discussed.

Initially, the Panel made a number of recommendations on how to handle items that were unavailable for consumers to purchase, either due to market closures or stock shortages. A range of imputation methods were discussed as well as the idea of collecting prices for items temporarily out of stock, contrary to usual procedures, and investigating whether chain shop prices could be used as a proxy for imputing local shop prices. There were mixed views about how to address items exhibiting seasonality, with some in favour of imputing seasonality and others opposed.

The Panel made suggestions for work that could be done retrospectively, where it was not feasible in the short-term. Some members advised considering revisions to published indices when better methods for dealing with outstanding problems had been developed. It was also suggested that the short-term and long-term impacts of COVID-19 on consumption patterns should be investigated. Prof. Smith proposed expanding his work on estimating variance in the CPI to look at this period in greater detail.

In the discussion on returning to price collection in stores, the Panel emphasised that the primary objective should be to measure inflation in a valid way and that measuring price change between the pre-lockdown and post-lockdown periods without introducing bias should be a priority. Following this advice, the products collected in March 2020, prior to the field collection being suspended, were used as the basis for the collection in August 2020, when the field collection began to be resumed.

Much of the weights discussion focussed on the [Eurostat guidance](#) on the Harmonised Index of Consumer Prices (HICP), which recommended basing 2021 expenditure weights on 2020 spending patterns, to the extent that this was possible, rather than the 2019 expenditure that would have been used in normal circumstances. Panel members were concerned that the usual 'fixed weights' approach would not be appropriate for 2021 given the uncertainty around the period. The Panel believed there should be flexibility in the guidelines to enable national statistical institutes to adapt their weighting schema in real time to respond to events as they unfold, and therefore better reflect spending patterns. They advised that changes should only be made where it became clear that existing weights were not reflective of consumer spending. It was agreed that ONS would provide feedback to Eurostat on the weights guidance on behalf of APCP-T. The APCP-T feedback is reproduced in Annex B.

Within the context of the Eurostat guidelines, the Panel were supportive of ONS' proposed framework for calculating 2021 weights, including the intended approach of only adjusting the most severely affected spending categories.

The Stakeholder Panel generally supported the production of a supplementary index based on rescaled expenditure weights to reflect the changes in consumer spending patterns during the pandemic. The Panel also encouraged ONS to reflect the impact of COVID-19 in the Household Cost Indices (HCIs), especially since the rescaling would vary between different groups of individuals.

At their meeting in May 2020, the Stakeholder Panel urged ONS to consider the effect from [suspension of the House Price Index](#) (as a result of there being insufficient transactions to produce a robust HPI estimate) on RPI, particularly given the use of September's RPI in pension calculations.

The Stakeholder Panel thanked ONS for their work in developing a strategy to account for [reductions to VAT and the Eat Out to Help Out scheme](#) that were introduced in July/August 2020, and encouraged ONS to providing clear guidance on its implementation. They noted the potential for a step change to the indices in August, as the policies come into effect, and the importance of the September index for pension and benefit calculations.

The Stakeholder Panel also discussed the approach to calculating annual weights and agreed that flexibility is important. A Panel member asked if there is scope to report results on varying weight structures, but it was felt this would be confusing to users. However, Panel members considered that having a research paper outlining the different approaches would be beneficial. Panel members also raised the issue of public perception of the changes, as it was difficult to understand the theoretical considerations for basing the weights on different time periods.

There was resounding positive feedback and appreciation of ONS from both Panels for the ongoing work to continue the regular production of consumer price statistics during this pandemic, and to keep the public informed about price developments.

Consultation on the reform to Retail Prices Index methodology

The Technical Panel discussed the consultation on the reform to the RPI. The panel had previously agreed that the method presented in the consultation was the only statistically appropriate approach, as noted in the [minutes from the meeting of November 2019](#). A joint Technical Panel response was discussed and ONS agreed to prepare a draft reflecting their views. Whilst panel members agreed on the linking method, it was recognised that there were different views around other aspects of the consultation, and panel members may wish to opt out of a combined response. The APCP-T response to the RPI consultation is provided in Annex C.

The Stakeholder Panel discussed the RPI consultation at a meeting on 3 April 2020. There was consensus on some of the issues – but also a wide range of views on others. There was general support from the Panel for the proposed method for transition – which was recognised as straightforward – and no alternative method was proposed. The Panel reiterated their strong view that, were the changes to bring RPI in line with CPIH data sources and methods to take place in 2025, there should be no subsequent divergence between RPI and CPIH in the period before 2030 (after which the ONS would be able to continue improvements to RPI and CPIH without needing to refer to the Bank of England and the Chancellor).

The members of the Stakeholder Panel were divided on the merits of the proposal. A minority of panel members felt strongly that the proposal was a mistake, and that not all the ‘flaws’ in RPI identified by the ONS were in fact flaws. In particular, the majority of the Stakeholder Panel did not support moving to one price index for all purposes and considered there was a risk that this would be the de facto outcome from the proposal. It was notable that the consultation document did not refer to the Household Cost Indices (HCIs). And while the majority view favoured a move towards either CPI or CPIH, the advice from the Panel was clear that a minority strongly disagreed. The APCP-S response to the RPI consultation is provided in Annex D.

Household Cost Indices (HCIs)

The Technical Panel discussed a paper presented by Martin Weale which explored the theoretical underpinning of the HCIs. Most of the panel members felt the paper made a useful attempt to relate the concepts of the HCIs to mainstream economic theory; there was a view that the paper was important for helping with interpretation and understanding of the HCIs. One member argued that greater importance should be placed on simplicity and practical considerations rather than economic theory, and this view was supported by a Stakeholder Panel member in their subsequent meeting.

The Technical Panel also discussed [the higher education component of the HCIs](#), including methods to calculate tuition fee repayments, to include tuition fees paid upfront and to remove maintenance loans.

The Panel suggested that a general approach for voluntary and mandatory payments was required for the HCIs, beyond the tuition fees component. It was suggested that voluntary student loan repayments should be included in the weight of the student loans repayment component, rather than including a price component for these. To calculate repayments, the Panel recommended applying the repayment threshold to microdata on graduate salaries from the Labour Force Survey (LFS), rather than applying the threshold to an aggregate measure of graduate salaries such as the mean.

The Technical Panel also discussed the measurement of interest payments on financial debt. The panel made various suggestions for how to treat specific types of

financial debt, as well as discussing more generally the principles for measuring interest payments.

The Stakeholder Panel were grateful to ONS for the rich analysis in the [third preliminary estimates of the Household Costs Indices](#), and for continuing to develop the HCIs in the current circumstances. They also discussed the roadmap to National Statistic status for HCIs, and noted that 2025 was an appropriate date to aim for, and that the timeline was achievable. The Panel overall felt that the HCIs will be an invaluable resource for policy makers and others who need to reflect the experience of people and households.

Alternative Data Sources

Index number framework

The Technical Panel was presented with the criteria and scoring system ONS have developed to assess [the appropriateness of elementary aggregate methods for use on web scraped and scanner data](#), and the resulting shortlist of methods obtained. There was discussion around the value of the exercise being undertaken, with a Panel member expressing that similar research comparing index number methods already exists and shows that there is no single best index method. Another Panel member expressed that a more holistic method should ultimately be used to choose out index methodologies, as an inflexible scoring system may have flaws. ONS clarified that the framework exists to guide and to provide focus on a subset of methods, not to dictate. Other advice included avoiding using more than one approach for the index method, extension method or window length, expect possibly for the different data sources (scanner data and web scraped data).

Classification methods

The Technical Panel was presented with the progress to date on developing automated methods to classify web-scraped clothing data. The Panel made several suggestions to feed into the work, including on how to train and assess the performance of the classifier. The Panel also raised international work being done on the subject of classification: The UN High-Level Group for the Modernisation of Official Statistics (UNECE HLG-MOS) had created a [Machine Learning Project](#) and the UN Global Working Group (GWG) on Big Data planned to look into classification soon. It was also noted that research by Eurostat showed that the way in which features were generated and the percentage of labelled data were more important than the algorithm used to classify the data.

The Stakeholder Panel was enthusiastic about the prospect of broadening consumer price collection to include alternative data sources. However, Panel members considered that they should fulfil a due diligence role encompassing the likely cost benefits and risks. In particular, the Panel queried what thought ONS has given to the risk of retailers withdrawing their data. ONS advised that it has data access agreements in place with retailers which include a notice period, and, as a contingency plan, ONS would revert to current central and local price collection.

CPIH historical series (1947 to 1987)

In April 2020, the Technical Panel discussed a proposed approach for producing a historical series for the Consumer Prices Index including owner occupiers' housing costs (CPIH) from 1947 to 1987, based on the modelled CPI historical series over the same period. This followed revision of CPI data between 1988 to 1996 which affected the earlier CPI estimates. Results from work undertaken to recreate the CPI historical series and to investigate the impact of revised data were also presented.

The Panel felt that it would be useful to have a consistent CPIH series for people to refer to, despite the limitations of the estimates – a view reinforced by many members of the Stakeholder Panel.

In October 2020, the modelled estimates for CPI and CPIH were presented. The presentation of the series to be published were discussed; the Panel emphasised the need to communicate the fact that the estimates were modelled rather than based on observed data. ONS plans to publish the CPIH historical series as a table in an appendix in an analytical article; however, the Panel felt there was some value in also presenting the estimates as a time series dataset, but with a separate identifier to the official CPI and CPIH historical series.

Consumer Prices Development Plan 2021

The Consumer Prices Development Plan for 2021 was discussed by the Technical and Stakeholder Panels.

As part of the Technical Panel discussion, Panel members were invited to ask the National Statistician about his priorities for consumer price statistics. Sir Ian stated that his highest priorities for price indices were clarity on the future, long-term consistency, and insight. He emphasised the need for ONS to provide data in real time and reduce manual collections, and to provide more insight into what their data means. He also emphasised the need for flexibility, since the economy and society being measured are changing, citing the rapid development of the COVID-19 Infection Survey and Faster Indicators of economic activity.

The Stakeholder Panel fully supported the development of the Household Cost Indices (HCIs), especially the development of further indices for different household groups and moving from an annual to a quarterly basis. They also noted that the alternative data sources project is ONS' highest priority for consumer prices, and strongly agreed that care should be taken to ensure that the use of alternative data sources in ONS' headline measures of consumer price statistics is adequately resourced and is not rushed. They also discussed the extent to which ONS' response to the coronavirus (COVID-19) pandemic would impact on the proposed development plan. They also expressed an interest in private rents development given that ONS now have access to Valuation Office Agency (VOA) microdata.

Reinstatement of the House Price Index

The Technical Panel discussed the reinstatement of the HPI after it was suspended from April onwards due to insufficient data on housing transactions. The Panel suggested that the variance of the HPI could be investigated in the longer-term, while the residuals in the hedonic model could be examined in the short-term. The Panel also advised testing the resilience of the model to biased data in case the transactions after the HPI was reinstated were not representative of those before its publication was paused.

Review of standard errors in CPI

Prof. Smith presented a review of published work in estimated errors for a Consumer Price index to the Technical Panel. The Panel found the paper to be very useful, with a suggestion made that a further metanalysis could be performed with data across various countries. However, the Panel had mixed views on which of the methods detailed in the paper was the best approach to take.

Development of new statistics for the private rental market

The Stakeholder Panel discussed ONS' progress to produce new statistics for the private rental market based on prices microdata from the Valuation Office Agency (VOA). The Panel acknowledged the importance of accurate rental statistics given their future inclusion in the CPIH for private rents and owner occupiers' housing costs, which together account for a fifth of the 2020 CPIH basket of goods and services.

Since the January 2020 Stakeholder Panel meeting, when this topic was first discussed, the development work has continued apace and the outcome of this development work will be presented at future Technical and Stakeholder Panel meetings. When the methodology update is published ONS will enter a user consultation period in Spring to Summer 2021, as outlined in their updated [private rental prices development plan](#).

Changes to the format of ONS inflation publications

The Stakeholder Panel were given an overview of a project to improve the range of price statistics publications available to users. The Panel welcomed the ONS' desire to make the UK's inflation statistics clearer and more accessible, and the ambition to reduce the volume of commentary to focus on key messages e.g. the key movements, drivers and contributions.

5. Strategy and forward work programme for consumer price statistics

ONS has a programme of research and development that is aimed at improving and maintaining the range of consumer price indices - ensuring that they continue to meet user needs and make use of new and innovative methods. Since the previous iteration of the work programme, a considerable amount of progress has been made. This includes:

- Publication of the [third preliminary estimates of the Household Costs Indices](#) in July 2020, including:
 - Improvements to the student loan repayments model to make greater use of the microdata
 - The addition of tuition fees paid upfront in the Education class
 - The removal of maintenance loans from student loan spending to avoid double counting
 - The expansion of interest items to include interest on secured and unsecured loans, overdrafts, and mail orders
 - The separation of subsidised renters and private renters into different classes to prevent confounding of price movements
 - Improvements to the stamp duty methodology to make greater use of the microdata
- Significant development of a CPIH historical series for 1947 to 1987, which is due to be published in the third quarter of 2021

In addition, like many other National Statistics Institutes, ONS has responded to the coronavirus (Covid-19) pandemic by implementing new procedures to collect data in challenging circumstances and introduced imputation strategies to deal with missing stock and inaccessible areas of the market. ONS has also published supporting analysis, including estimates of the impact that changes in the spending distribution have had on the headline consumer price inflation statistics.

The joint UK Statistics Authority and HM Treasury consultation on reform to the RPI methodology closed on 21 August 2020 and a [response](#) was published on 25 November 2020. We have therefore made no changes to the work programme at this time to reflect the outcome of the consultation.

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)
John Astin	Independent expert – nominated by RSS
Prof Bert Balk	Erasmus University, Netherlands
Dr Antonio Chessa	Statistics Netherlands
Dr Gareth Clews	Methodology, Office for National Statistics
Prof Ian Crawford	University of Oxford
Rupert de Vincent-Humphreys	European Central Bank
Mike Hardie	Prices Division, Office for National Statistics
Peter Levell	Institute for Fiscal Studies
Dr Jens Mehrhoff	Deutsche Bundesbank
Prof Paul Smith	University of Southampton
Dr Martin Weale	King's College London

Secretariat

Joanna Corless	Office for National Statistics
Christopher Payne	Office for National Statistics

* Members of the Technical Advisory Panel for Consumer Prices have been appointed for their expertise rather than their institution.

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
James Smith*	Resolution Foundation
Dr Geoff Tily	Trades Union Congress
Jonathan Athow	Deputy National Statistician for Economic Statistics, Office for National Statistics,
Grant Fitzner	Chief Economist and Director, Macroeconomic Statistics and Analysis, Office for National Statistics
Michael Hardie	Deputy Director, Prices, Office for National Statistics

Secretariat

Andrew King	Office for National Statistics
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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.

* New members of the panel that joined throughout the year.

8. Papers presented to the Technical Advisory Panel for Consumer Prices in 2020

Date	Title	Summary
January 2020	<i>APCP-T(20)01 Terms of reference</i>	The current terms of reference for review by the panel.
January 2020	<i>APCP-T(20)02 Refining the higher education component of the Household Costs Indices</i>	This paper addresses comments on the APCP-T(18)16 technical paper discussed in December 2019, as well as future developments discussed in the latest HCIs's methodological paper .
January 2020	<i>APCP-T(20)03 Expanding the measurement of interest payments on financial debt</i>	This paper addresses the future developments discussed in the latest HCIs's methodological paper in relation to interest payments on financial debt.
January 2020	<i>APCP-T(20)04 The winning formula? A framework for choosing an appropriate index method for use on web scraped and scanner data</i>	This paper lays out the criteria and scoring system ONS have developed to assess the appropriateness of elementary aggregate methods for use on web scraped and scanner data, and the resulting shortlist of methods we have obtained.
April 2020	<i>APCP-T(20)06 Contingency plan for ongoing price collection and compilation</i>	This paper sets out our proposed contingency plans for managing a price collection as well as compiling and publishing indices in the context of the ongoing COVID19 pandemic
April 2020	<i>APCP-T(20)07 CPIH Back Series Proposal</i>	This paper describes the proposed approach to be taken for a CPIH historical series from 1947 to 1987.
April 2020	<i>APCP-T(20)08 Progress on automated classification of web-scraped clothing data</i>	This paper discusses progress to date on developing automated methods to classify web-scraped clothing data.
April 2020	<i>APCP-T(20)09 Review of Standard Errors in CPI</i>	This paper reviews published work on estimating errors, especially sampling errors, for a Consumer Price Index.
October 2020	<i>APCP-T(20)12 Draft consumer prices development plan 2021</i>	ONS have committed to update the work programme annually to take into account changing priorities. Members of the panel will be asked to consider and comment on the draft work programme, and the priority that is assigned to each project.
October 2020	<i>APCP-T(20)13 CPIH: producing a historical series for the period 1950 to 1987</i>	This paper presents ongoing work to estimate a historical series for CPIH over the period 1947 – 1987, including reworked estimates for CPI over the same period.
October 2020	<i>APCP-T(20)14 On Household Costs Indices</i>	This paper aims to explore the theoretical underpinning for the ONS' Household Costs Indices

9. Papers presented to the Stakeholder Advisory Panel for Consumer Prices in 2020

Date	Title	Summary
January 2020	APCP-S(20)01 Alternative Data Sources Roadmap	An update on the progress made against the Alternative Data Sources Roadmap and plans over the next three years.
January 2020	APCP-S(20)02 Review of CPIH supporting material	A summary of the CPIH supporting material produced for the 2017 re-assessment of CPIH as a National Statistic.
January 2020	APCP-S(20)03 Redeveloping Private Rental Market Statistics	Presenting the progress and proposed methodology for the production of new statistics for the private rental market.
April 2020	APCP-S(20)05 ONS RPI Consultation	A presentation by Mr Jonathan Athow on RPI Consultation.
April 2020	<i>APCP-S(20)06 APCP-S The future of RPI*</i>	A presentation introducing the consultation and explaining how the market has reacted and the implications for pension schemes.
May 2020	APCP-S(20)07 APCP-S Contingency plan for consumer price statistics in response to the COVID-19 pandemic	Presentation detailing ONS' plans for maintaining the suite of consumer price inflation statistics in the face of the ongoing COVID-19 pandemic.
May 2020	APCP-S(20)08 Proposal of changes to Price inflation publications	Outlining the proposed changes to improve the range of price statistics publications.
July 2020	Strategy for resuming normal price collection / Temporary VAT reduction and Eat Out to Help Out scheme	Outline how we intend return to physical collection and the impact on consumer price inflation of the Chancellor's recent announcements.
July 2020	House Prices Index (HPI)	Overview of current situation with HPI being paused. Process for re-instating HPIs.
July 2020	Update on HCIs	Summary of latest HCI changes and results (published 21 July 2020), along an overview for the next release.
October 2020	<i>APCP-S(20)11 Draft consumer prices development plan 2021</i>	ONS have committed to update the work programme annually to consider changing priorities. Members of the panel will be asked to consider and comment on the draft work programme, and the priority that is assigned to each project.
October 2020	Updated timeline for HCIs Household cost indices – National Statistic Roadmap	An update on the HCI timeline for the further development of the HCIs.
October 2020	Weights for 2021	Panel members are asked to advise on the most appropriate approach for calculating 2021 weights for CPIH, CPI, and RPI in the context of shifts in the spending distribution due to the ongoing coronavirus pandemic.

* This paper is marked as Market Sensitive and will be withheld from publication.

Annex A – Forward Work Programme for Consumer Price Statistics

ONS expects its top priorities for the next few years will be to continue to develop the range of consumer price measures to meet the three user needs identified by the ONS – a set of measures consistent with recognised economic principles, measuring the household experience of changing prices and costs, and presenting ONS' legacy measure. It is also important that ONS provide clarity on the future of the Retail Prices Index. ONS' has therefore determined that its priorities are to:

- Continue to provide information and assurance on sources used to compile the CPIH, improve user understanding of the measure, provide users with a longer time series and more granular data, and embed CPIH as the national measure in the UK
- Continue to produce and improve the CPI so that there is a measure that is comparable internationally
- Work to develop a set of indices that reflect inflation as experienced by household groups and subnational areas
- Continue to publish the RPI as a legacy measure, until such a time as it is possible and practical to address its shortcomings in full. The change ONS proposes can legally and practically be made by the Authority in February 2030
- Improve all of its consumer price statistics through the use of alternative sources of price and transaction data.

ONS have committed to review and update this work programme annually and to provide an update to the Authority Board via the National Statistician. In updating the work programme, ONS will seek the guidance of the Advisory Panels on Consumer Prices and engage with users and experts of these statistics.

The ONS work plan can be found on the ONS website:

<https://www.ons.gov.uk/economy/inflationandpriceindices/articles/consumerpricesdevelopmentplan/updatedmarch2021>

Annex B – Technical Advisory Panel note to Eurostat on proposals for Harmonised Index of Consumer Prices weights in 2021

This note is on behalf of the Technical Advisory Panel for Consumer Price statistics (APCP-T) and is intended to provide feedback on the Eurostat proposals for HICP weights in 2021.

The APCP-T's remit is to provide independent advice to the UK's National Statistician on technical aspects of consumer price indices. APCP-T has an international membership, and members are appointed based on their expertise in the field of consumer price inflation, rather than because of an affiliation to any particular organisation. More information can be found in the published [Terms of Reference](#) and [membership list](#).

At the recent APCP-T meeting held on Friday 9 October Panel members discussed weights for 2021 and the draft Eurostat guidance on compilation of weights for the HICP. Panel members agreed that weights should be developed that provide the best estimates of spending in the upcoming year, and that the default position should be stability within the year.

However, Panel members were also concerned that the approach for 2021 could be problematic. In particular, it is impossible to know for sure what will happen over the next 12 months, and for how long the Covid-19 pandemic will continue. If the pandemic ends relatively quickly we would be in the reverse position to 2020, and HICP estimates would be produced – perversely - based on lockdown spending patterns.

There is a larger amount of uncertainty around the year ahead than we would normally experience. The best way to manage this uncertainty is to allow flexibility in the guidelines so that NSIs can adapt their weighting schema in real time to respond to events as they unfold, and therefore reflect relevant spending patterns. Flexibility of course should be applied carefully and within agreed boundaries, and changes should only be made where it becomes clear that weights are not reflective of consumer spending.

Over the past year Eurostat's guidelines have enabled NSIs to respond flexibly to lockdowns through appropriate imputations of prices for unavailable items. A similar principle should be applied to the weights. We also need a way to reflect the additional uncertainty due to the weights used.

Annex C - HMT-UKSA Consultation on the Reform to Retail Prices Index Methodology: Response of the Technical Advisory Panel for Consumer Price statistics (APCP-T), August 2020

This document comprises the response of the Technical Advisory Panel for Consumer Price statistics (APCP-T) to the ongoing consultation on the reform to Retail Prices Index (RPI) methodology. A response is provided to question 1 only, as this is the only question that falls within the remit of APCP-T's role. APCP-T's response should not necessarily be seen as an endorsement - or indeed a rejection - of the UK Statistics Authority's proposals.

Q1 *Do you agree that this proposed approach is statistically rigorous?*

APCP-T discussed the question of the appropriate method for linking CPIH methods and data sources into RPI on two separate occasions. Firstly, on 8 November 2019, when it provided feedback to the UK Statistics Authority (the Authority) on a draft of the Authority's contribution to the consultation, and again on 10 July 2020, when it discussed its response to the consultation more generally.

APCP-T were of the view that the only statistically rigorous linking approach was that set out in the UK Statistics Authority's proposals.

In its November meeting, APCP-T considered additional options put forward by the Authority as well as further options not previously considered. These options are described below.

There is a monthly RPI index number series (having some base year) that will be terminated in month 2 of transition year b . There is also a, continuing, monthly CPIH index number series (having also some, not necessarily the same, base year). The *new* RPI, called RPI^* , is defined as

$$RPI^*(t, m) \equiv RPI(t, m) \text{ if } t = b \text{ and } m = 1 \text{ or } t < b \text{ and } m = 1, \dots, 12$$

where $t = b$ and $m = 2, \dots, 12$ or $t > b$ and $m = 1, \dots, 12$, where t denotes year and m denotes month. The following options were considered:-

Option	Index	Annual growth ¹	Monthly growth ¹
A	$RPI^*(t, m) = RPI(b, 2) \times \frac{CPIH(t, m)}{CPIH(b, 2)}$	$\left(\frac{CPIH(t, m)}{CPIH(t-1, m)} - 1 \right) \times 100\%$	$\left(\frac{RPI^*(t, m)}{RPI^*(t, m-1)} - 1 \right) \times 100\%$
B	$RPI^*(t, m) = RPI(b, 2) \times \frac{CPIH(t, m)}{CPIH(b, 2)}$	$\left(\frac{RPI^*(t, m)}{RPI^*(t-1, m)} - 1 \right) \times 100\%$	$\left(\frac{RPI^*(t, m)}{RPI^*(t, m-1)} - 1 \right) \times 100\%$
C	$RPI^*(t, m) = RPI(t-1, m) \times \frac{CPIH(t, m)}{CPIH(t-1, m)}$	$\left(\frac{RPI^*(t, m)}{RPI^*(t-1, m)} - 1 \right) \times 100\%$	$\left(\frac{RPI^*(t, m)}{RPI^*(t, m-1)} - 1 \right) \times 100\%$
D ²	$RPI^*(t, m) = \sum_{\mu} \frac{RPI(t-1, \mu)}{12} \times \frac{CPIH(t, m)}{\sum_{\mu} CPIH(t-1, \mu)/12}$	$\left(\frac{RPI^*(t, m)}{RPI^*(t-1, m)} - 1 \right) \times 100\%$	$\left(\frac{RPI^*(t, m)}{RPI^*(t, m-1)} - 1 \right) \times 100\%$

Notes:

1. With the understanding that $(t, 0) = (t-1, 12)$
2. Where $\mu = \text{months } 1, \dots, 12 \text{ of year } t-1$

APCP-T concluded that only option B was appropriate, and that there were significant limitations with the other approaches. APCP-T's advice to the Authority was to put forward option B as its preferred approach. Its reasons were as follows:

Option A is an artificial construct. RPI* annual growth is forced to be consistent with CPIH annual growth. This is not a statistically rigorous approach because annual growth rates should be derived directly from the index series itself. This means that annual growth rates cannot be calculated directly from the index series for the first year.

Option B uses the standard linking mechanism for price indices, and annual and monthly growths are derived directly from the index series. A consequence of this is that there will be a transition year, where RPI* annual growth rates will not match CPIH annual growth rates. This is statistically correct in the sense that annual growth rates should be calculated directly from the index series; however, this may be less clear for users, who may expect RPI* and CPIH to be identical from the outset.

Option C either simply delays the transition year, which arises with option B, or it requires a permanent change to the linking mechanism that is not consistent with best – or common – practice. This change would also result in inconsistent monthly growth between CPIH and RPI*, and so does not offer any real advantage over option B.

Option D is similar to option B in that annual growth rates align after the first year; however, it also requires a temporary change to the linking mechanism. Monthly growth is also not aligned in the first month of transition. It is difficult, therefore, to see what advantages option D offers over option B.

The discussion held on 10 July 2020 did not change APCP-T's view on this matter. Therefore APCP-T agrees with the UK Statistics Authority's proposal that option B is statistically rigorous and, indeed, is the *only* statistically rigorous approach for making the proposed change.

Annex D – Consumer Prices Stakeholder Advisory Panel response to HMT/ONS consultation on the reform of the RPI

The Stakeholder Panel discussed the consultation at a meeting on April 3. There was consensus on some of the issues – but also some deep disagreements. The Panel did not seek to answer in detail questions 2-4 which relate to the impact on the gilt market, but the debate was informed by a (commercially-sensitive) presentation on the impact on pension funds, their sponsors and their members. The HM Treasury and Bank of England representatives on the Panel did not contribute to this response.

Question 1: Do you agree that the proposed approach is statistically rigorous?

There was general support from the Panel for the proposed method for transition – which was recognised as straightforward – no alternative method was proposed. However, it was noted that it will take a year for the year-on-year changes (which attract the bulk of public commentary) to shift from RPI (old) to RPI (new). This will require careful communication.

One member pointed out that the RPI is always rounded off to one decimal point, with monthly and annual changes constructed from the rounded figures. This is not the case for CPIH. One solution would be to start using unrounded figures for the RPI changes before this transition takes place – and that would in any case be a welcome improvement.

The Panel reiterated their strong view that, were the changes to bring RPI in line with CPIH methodology to take place in 2025, there should be no subsequent divergence between RPI and CPIH in the period before 2030 (after which the ONS would be able to continue improvements to RPI and CPIH without needing to refer to the Bank of England and the Chancellor).

Questions 2-4:

These questions relate primarily to the gilts market, and the Panel is aware that many gilt-market participants are likely to respond with their views. The Panel's discussion here focused on the differential impacts across Defined Benefit (DB) pension funds. With regard to their gilt holdings – pension funds are of course losers – but those with primarily RPI linked liabilities which are not fully hedged will be gainers overall. The losers will be pension funds with primarily CPI liabilities which have been hedged with RPI-linked gilts. Overall for DB funds it is probable that the gains will outweigh the losses if index-linked gilt assets and inflation-linked liabilities are considered.

However, the overall impact may be less favourable when other inflation-linked assets, such as rentals or infrastructure are taken into account. But the impact here will depend on how such contracts are able to be adjusted before the changes to RPI take effect.

Further, while as a whole DB funds may benefit, there will be some notable losers and these losses will have to be taken account of in upcoming valuations as the gilt and swap markets respond to RPI reform developments. For some pension

sponsors (mainly corporates) this will be an additional strain during the period of recovery from the adverse effects of Covid-19.

The proposed changes will also have an impact on other parties (particularly life insurers) seeking to hedge long-term inflation-linked liabilities (some will likely end up losers and some gainers).

It was commented that, as far as the reaction of the index-linked gilt market to the announcement on September 4 2019 could be ascertained, it suggested only a partial response to the statements that had been made.

Question 5: What other impacts might the proposed changes to address the shortcomings of the RPI have in areas or contracts where the RPI is used?

As the longest-running and most familiar measure of inflation, the RPI is pervasive across the economy. There are the obvious public sector uses, such as for rail fare increases or to index the interest payments on student loans. It is widely used to uprate rents, in mobile phone contracts, as a measure of preserved value in some endowments and in many commercial contracts. Wagebargainers frequently refer to the RPI in wage negotiations.

The Panel considers that there will prove to be a very wide range of uses and contracts. The ONS and HMT should ensure that in addition to this consultation it seeks out the fullest possible picture, and includes consideration of any legal implications around making alterations to these contracts so that the number of arbitrary winners and losers is reduced where possible. It might prove to be a lengthy and complex exercise; thinking through how to handle the various different contract types associated with RPI-linked annuities, and RPI-linked corporate bonds, are among the many problematic questions. A clear road map for handling these issues prior to any transition is essential.

Some of the economic regulators of price-controlled utilities (these include Ofwat, Ofgem, the CAA, Ofcom and the NI Utility Regulator) make use of RPI and/or RPI-derived market indicators in their control mechanisms. In general, the proposed changes should have minimal or no effect on current controls and, when we have clarity on timing, future control decisions can be designed to accommodate them. However, the existing price controls for electricity distribution networks in Great Britain effective through to 31 March 2023 include mechanisms for the remuneration of debt costs that employ market data on RPI-linked gilt yields for prospective periods. The proposed changes to RPI would be expected to affect these data. Ofgem expects to consider the consequences and any suitable remedies.

Question 6: Are there any other issues relevant to the proposal the Authority is minded to make of which the Authority or the Chancellor ought to be aware?

The members of the Stakeholder panel are divided on the merits of the proposal as it stands. A minority of the Panel feel strongly that the proposal is a mistake, and that not all the 'flaws' identified by the ONS are in fact flaws – for example the omission of the top 4% of households and pensioners dependent on state benefits arguably

gives a better picture of inflation as experienced by the majority of the population*. Similarly the focus on spending at home and abroad by UK residents might be preferred to the spending of resident and non-residents within the UK, if the purpose of the index is uprating of various costs and benefits for the resident population.

In passing, there was some element of selectivity in the references to the [Stakeholder Panel's advice to the National Statistician on February 19, 2019](#)[†] in the paper from the [National Statistician to the UKSA board on February 26, 2019](#)[‡]. In particular, the majority of the Panel did not support moving to one index for all purposes, and there is a risk that this will be the de facto outcome from the present proposal. It is notable that the consultation document does not refer to the Household Cost Indices (HCIs). And while the majority view favoured a move towards CPI or CPIH, the advice from the Panel was clear that a minority strongly disagreed. (The same division on the Panel existed at our meeting in April 2020).

Those in the minority observed that in their view this recommendation did not follow from the recommendations in the House of Lords Economic Affairs Committee (HLEAC) report on 'Measuring Inflation'. This report made a clear recommendation that the clothing prices formula issue in the RPI should be addressed by the ONS. However, in recommending that there should be a single measure of inflation, the HLEAC commented that, if certain improvements were made, the 'RPI would be a viable candidate for the single general measure of inflation'. Other members were less concerned about following the HLEAC report.

Among those who were generally content a number of additional points were raised:

- There was a need for clarity about who were the gainers and losers. In total the corporate sector (those who support DB schemes) looked to be a gainer at least initially – although some would be clear losers. It was also possible that lower DB pension contributions by companies would enable higher future investment, higher wages, or higher DC contributions to be paid to younger employees.
- Given the role of CPI, rather than CPIH, in relation to state pensions and public sector DB pensions, some consideration needs to be given to consistency.
- There should be more discussion of what the HCI and CPIH were each appropriate for – and greater clarity on the purpose of the HCIs, alongside continued development work.
- Regardless of the particular price index, there needed to be a picture of movement in living standards for different groups, and in particular a focus on intergenerational trends.

* See also attached minority report from Geoff Tily, TUC

† <https://osr.statisticsauthority.gov.uk/correspondence/comments-from-the-stakeholder-advisory-panel-on-consumer-prices/>

‡ <https://uksa.statisticsauthority.gov.uk/correspondence/national-statisticians-advice-to-the-uk-statistics-authority-board-on-the-retail-prices-index/>

- It was clear that the large proportion of DB occupational scheme pensioners (4 million people were presently in receipt of such pensions, and a further 6 million would be in due course) with RPI-linked pensions were the key losers*.
- Several members considered it could be helpful to allow replacement of the RPI with the pensioner HCI for pensions uprating, and also for uprating private annuity contracts. This meant it would be preferable to make the change to RPI only after the HCIs had been fully developed. It was noted that the ability to adjust indexation for DB pensioners rested on often rather small differences in the wording of pension trust deeds.
- It was important that CPIH should carry confidence. In that regard it was welcome that the ONS now had full access to the private rental data collected by the VOA, and would be able to conduct its own analysis.

On the question of what date was preferable – if the change were to take place there was agreement that 2030 would allow more time for the issues around long-term contracts to be resolved, and for people’s expectations to adjust.

Almost all members of the group considered that the original six week period for the consultation, which now coincided with a period of ‘lockdown’ for pensioners, should be at least extended, and preferably postponed. The announcement of an extension to August 21 for the consultation was welcomed.

Questions 7 and 8 – relating to lower level or supplementary sub-indices

Panel members made little use of the RPI lower level or supplementary indices – and had no views on Question 8. However, the ONS’ commitment to maintain the richness of the supporting datasets was welcomed.

Kate Barker

Advisory Panel Chairman

* Estimates from the Pensions Policy Institute suggested a 65 year-old man in 2020 with the median pension receipt of £7700 would receive 8% less DB benefit over the remainder of his lifetime if RPI and CPIH were aligned in 2025

MINORITY OPINION BY DR GEOFF TILY OF THE TRADES UNION CONGRESS

In the main text the cited ‘flaws’ that not everyone considers to be flaws (under Question 6) omit the formula effect, by far the most material and controversial issue in recent (and past) debate.

Highly relevant here is the position of the House of Lords Economic Affairs Committee, who contested the official position and regarded the formula debate as unresolved. Their recommendation to repair clothing is in effect a compromise that should secure the viability of the RPI. Honouring a long-established measure that commands public confidence, the Lords argued “... the RPI had the potential to become a good measure of inflation”. Ahead of the present response, the Advisory Panel wrote to the Chancellor (on 19 February 2019) supporting the repair (though the majority of the Panel disagreed with the Lords Committee about the potential of the RPI measure).

The present consultation (and as a consequence the APCP–S response) has been framed in a way suggesting the Lords Report does not exist or is of only incidental interest. This has been the standard practice of the statistical authorities and other official bodies over more than a decade of controversy. Repeatedly, consultation responses and other interventions have been ignored in a manner that suggests an official ‘agenda’ all along. The Lords Committee were apparently sympathetic to my comments about ‘groupthink’ (report para 105).

At a theoretical level this is apparent in the case of the formula effect. Since the US Boskin Report of 1996 the Jevons approach has attracted economists and some theoretical statisticians. As well as his own contributions in refereed journals, Dr Mark Courtney has shown most specialists have subsequently found [Carli less problematic than Jevons in practice](#)^{*}. And members of the Royal Statistical Society have repeatedly contested the official position on the formula, most recently at their ‘Open Meeting on the Retail Prices Index (RPI)’ on 21st July 2020. On this rival view, the relevant approach is empirical on an item-by-item basis; previously this was the approach of the ONS, but has been discontinued. Conversely the UKSA justification for rejecting the position of the Lords Committee is tenuous: rejecting a compromise on the tautological grounds that it is only a partial fix, and over-playing other small issues with the RPI that could be easily handled.

The debate has not been aided by the processes for the newly constituted Advisory Panels. Previous Committees have made “recommendations”,[†] the present Panels provide “independent advice”. Unfortunately official opinion has throughout been disproportionately represented on the Stakeholder Panel. Moreover when the Panels were convened the direction of travel had already been set by the (February 2014) ‘UK Consumer Price Statistics: A Review’ by Paul Johnson of the Institute for Fiscal Studies. Under the Terms of Reference for the Stakeholder Panel, the first of several ‘functions’ is to “consider and take forward the outcomes of the Johnson review of

^{*} <https://www.unison.org.uk/content/uploads/2020/04/Arguments-in-Favour-of-the-RPI-v2.pdf>

[†] E.g. The Retail Prices Index Advisory Committee on the ‘Treatment of Holiday Expenditure and Other Matters in the Retail Prices Index’ which reported in July 1990.

the range of price statistics and subsequent consultation on measuring consumer statistics”.*

Nonetheless in the case of the current decision to dismantle the RPI, as above, the Panel’s advice was at odds with the present UKSA position. While recognising “major areas of disagreement”, the Panel “agree[d] that the clothing issue needs to be fixed”. Yet the UKSA chose to begin and motivate their statement of 4 September 2019 as follows: “The Advisory Panel on Consumer Prices provided advice to the National Statistician on the composition of the Retail Prices Index (RPI) in light of the House of Lords Economic Affairs Committee report Measuring Inflation, published in January 2019”.

The UKSA statement did not mention that the Committee supported the compromise, and had not considered the present nuclear option.

The Lords Committee took the exceptional step of warning of a dereliction of duty on the part of the UK Statistics Authority. Trade unions want those with the final decision to be clear sighted on the controversial nature of the process to date. Our prime concern is a measure that is fit for purpose and that does not understate inflation. But we warn too that the UKSA proposal will gravely damage the integrity of inflation measurement and the institutions involved.

At the meeting of Friday 24 July, the other members of the Stakeholder Panel were offered the opportunity to sign this minority opinion. The minutes report “Although several Panel members were sympathetic to some of the points raised in the minority report, the attending Panel members decided against signing the report”.

Geoff Tily

Trades Union Congress

10 August 2020

* https://uksa.statisticsauthority.gov.uk/wp-content/uploads/2020/07/APCP-S_Terms_of_Reference_2020.pdf