ADVISORY PANEL ON CONSUMER PRICES – STAKEHOLDER

Minutes

25 May 2018
Board room, UK Statistics Authority, Drummond Gate, Pimlico, London SW1V 2QQ
10:30 – 13:00

Members in attendance

Dame Kate Barker (Chairman)

Mr Jonathan Athow (ONS)

Mr Richard Barwell (BNP Paribas)

Mr Daniel Gallagher (HM Treasury)

Mr Geoff Tily (Trades Union Congress)

Ms Sally West (Age UK)

Mr Matthew Whittaker (Resolution Foundation)

Ms Jill Leyland (Royal Statistical Society)

Ms Rebecca Maule (Bank of England)

Mr Chris Payne (ONS)

Mr Ian Rowson (Civil Aviation Authority)

Mr Nick Vaughan (ONS & Chair of the Technical Panel)

Secretariat

Dr James Tucker (ONS)

Ms Jaya Jassi (ONS)

Apologies

Mr Mike Hardie (ONS)

Mr Andrew Sentance (PricewaterhouseCoopers)

1. Introduction, apologies and actions
Paper APCP-S(18)05 - published

1.1. The chairman welcomed the attendees to the APCP-Stakeholder (APCP-S) meeting and passed on apologies from those who were unable to attend.

1.2. The actions and minutes from the previous meeting held on 2 February 2018 were discussed. A panel member felt it would be useful if ONS were to publish the clothing literature review that was circulated, following an action from a previous meeting.

1.3. Dr Tucker explained that the Methodology team within the ONS are looking at some alternative sources of data that displays how car prices may be behaving, across all ages of cars. ONS have not yet contacted industry experts.

Action 1: ONS to make contact with industry experts

1.4. There were no further comments from the panel on the previous meetings minutes and actions.

2. Technical Panel Update

2.1. Mr Payne gave an update on the outcomes of the discussions at the Technical Panel (APCP-T) meeting on 11 May 2018. It was noted that Dr Antonio Chessa has joined the panel as Prof Alberto Cavallo had stepped down from APCP-T in September. It was also noted that Mr Mike Hardie has taken over from Mr Mike Prestwood as head of the Prices Division, for the foreseeable future.

2.2. With regards to calculating a price index for student loan repayments in the HCIs, Technical Panel members queried why ONS haven't used real data, such as Living Costs and Food Survey (LCF) data or HM Treasury data. The APCP-T also discussed that the index was a cost index rather than a price index and that the HCIs should be conceptually consistent. Panel members also advised that taking the mean of graduate salaries would be more appropriate than using the median.

2.3. The classification structure for the HCIs was also discussed and panel members felt that ONS should include as much detail as possible, within the structure, for both goods and services. The need for the local collection and stratification of different price points were also discussed.

2.4. Members of the Stakeholder Panel discussed what the ONS are trying to measure with student loans in the HCIs and discussed the differences between measurement in CPIH. In HCIs a payments approach is taken, so they aim to capture repayments at the time the loan is being paid off. In CPIH an acquisitions approach is used, so the cost of tuition fees is captured at the point that the student loan is acquired.

3. Draft work programme for consumer price statistics
Paper APCP-S(18)06 – not for publication

3.1. Dr Tucker gave details of the work included in the consumer prices work programme and highlighted a list of changes and progress that has been made. Dr Tucker thanked both Technical and Stakeholder Panel members for their advice and support, which has been important in making progress with the work programme. It is a draft programme and ONS welcomes suggestions from Stakeholder Panel members with regards to additions, removals or amendments to the programme.

3.2. A panel member pointed out that web-scraping enables you to capture the list price and not the sale price, and that the list price doesn't always equal the sale price. It was queried whether ONS are looking at this as part of their work plan. Mr Payne responded that currently ONS do not have scanner data and so cannot look deeper into this, but it will be a part of the alternative data sources work plan. It was noted that ONS are hoping to acquire scanner data in the future but need to negotiate with retailers for this. Another panel member pointed out that the problem, specific to clothing, is with finding comparability between items which may not be solved with scanner data.

3.3. One panel member asked if the CPIH and RPI reconciliation could be structured in a way to infer the CPI and RPI reconciliation. Another panel member pointed out that a criticism of the CPI and RPI reconciliation is that too much weight was given to the formula effect as CPI weights were used, rather than RPI weights. It was queried whether ONS were looking at an alternative methodology to this. Dr Tucker responded that this is a low priority on the work programme, as the main focus was on producing something that is consistent with CPI.

3.4. Developing a regional price index for Scotland was discussed. This has been left as medium priority on the work programme as there are limitations to developing a regional index, because current collection methods are optimised at a national level. A feasibility study is being conducted to look at developing this index but it is hoped that scanner data will be a big help with this aspect of the work programme.

3.5. It was asked if the work within the clothing project would specifically address the formula effect. Mr Payne replied that, as a result of a previous panel discussion, it was decided that the best way to add value to this particular area was to improve the measurement of clothing price inflation as that has the most impact on the formula effect. Some panel members felt that this item on the work programme should be renamed to include reference to the formula effect, as it involves reviewing the selection criteria for different elementary aggregates, which is wider than clothing.

Action 2: ONS to update the work programme according to comments

3.6. There was further discussion on whether the changes made to the measurement of clothing prices in 2010 were an improvement. A panel member suggested that further work should be conducted to investigate the extent to which the change in the collection method in 2010 had introduced noise into the microdata (increasing the incidence of large month on month increases in prices when comparisons are made between similar items) which had then contributed to the increase in the formula effect, and until evidence was presented which demonstrated that the change had not led to a significant increase in the number of large price increases then the change should no longer be described as an improvement. Mr Athow suggested that we should consider how to move forward, drawing on the opportunities presented by alternative data sources. Some panel members felt that there should be a better framework in place for the maintenance of the RPI, and that this should be included in the work programme.

Action 3: ONS to do some further analysis on the impact of the 2010 change in methodology on the incidence of large price changes in the microdata

Action 4: ONS to stop describing the change as an "improvement" unless and until evidence can be produced which justifies that claim at the micro level.

3.7. One panel member felt that the CPIH historical series should be a high priority and that HCIs should be less so. Another member raised that having an authoritative and trusted backward view of CPIH, going back to around 1900, would be useful. Mr Athow stated that there are many demands for long-term back series and there is an Economic Statistics Centre of Excellence (ESCoE) project focussing on how to bring all these back series together, and that this is a priority. There is the potential for ESCoE to also consider Prices. A panel member noted that ESCoE appears throughout the work programme and that there would be merit in having an ESCoE representative on the panel. Mr Athow responded that as ESCoE becomes more established, ONS will consider this.

3.8. There was some discussion around what ONS is doing to help raise awareness of CPIH. The ONS have met with a range of users to explain the approach to inflation measurement.

3.9. Another panel member pointed out that ESCoE is mentioned in the work programme, but ONS Data Science Campus is not. Mr Athow stated that the Data Science Campus' focus is on highly innovative uses of data.

4. Investigating the use of web scraped data to improve clothing measurement
Paper APCP-S(18)07 – This is work in progress and will be published once the development work has been completed

4.1. Mr Payne gave an overview of the paper and the work that ONS has been doing to produce an index using web-scraped data. The clothing items focused on items that matched closely to COICOP categories. The different methodological approaches used to calculate the price indices were explained. When using a chained Jevons price index the index is shown to fall quickly, which we do not consider to be reflective of the true consumer experience. Even after data cleaning methods there were varying degrees of an implausible decrease.

4.2. Mr Payne relayed the APCP-T's explanation behind the implausible decrease in the price index, which is due to tracking the decreases of the prices of items over time which results in a downwards index and a month-on-month chaining approach further exacerbates the downwards trend. A panel member pointed out that the Jevons is known to be sensitive to low price values and that the downwards trend shows the weakness of the Jevons formula. Another panel member asked for the results of a Carli index to be shown in the paper. Mr Payne stated that the APCP-T's view was that the Carli index would increase rapidly.

Action 5: ONS to include the Carli index in clothing analysis

4.3. One panel member suggested looking at unfashionable items to create a price index. Mr Payne responded that one of the suggestions from APCP-T was to look at a uniforms index. As uniforms were not products in the web scraped data a 'staple' index was created, that is included in the paper, which would serve a similar purpose to a uniforms index. An index was created based on items that appeared in the first and last month of the sample, assuming that these items are not subject to fashion, but this index also declined implausibly. It was pointed out that non-fashion items are extremely difficult to define, and are also subjective. ONS stated that there are other avenues they are looking at exploring, using alternative data sources.

4.4. A panel member pointed out that these results illustrated the fundamental problem, which is that only one effect, of a decreasing price of a product, is being captured without also capturing the second effect of new products at higher prices entering the market. It was stated that ONS have begun looking at machine learning techniques in order to identify comparable replacements, but there has been limited success due to the lack of appropriate data. However, with ONS obtaining more web scraped data it is hoped that some of these limitations will be overcome.

4.5. It was suggested that at the stage where a discount is applied to a product, to switch to another comparable product before that discounted price. Mr Payne stated that APCP-T made a similar suggestion to model the lifecycle of a product. A panel member questioned whether scanner

data would solve the issue. It was pointed out that literature on this topic shows that modelling scanner data to create a price index shows a similar decreasing index.

4.6. A discussion was had over large retailers and the use of different price points of products, for example, high, medium and low prices. One panel member proposed creating price indices out of this. It was noted that there is an element of quality adjustment to be considered. The panel asked if ONS had spoken to any clothing retailers on this topic. Mr Athow stated that ONS have a retailer event coming up to discuss scanner data.

4.7. Panel members noted that the Dutot index appears more sensible that the Jevons index, in this case. Mr Payne explained that the difference between the two indices is due to the variance of prices – if the variance of prices are high then the Dutot index will be higher than the Jevons index. The act of chaining the index month-on-month further intensifies the downward movement of the Jevons. A panel member asked for ONS to provide a technical reference for the point on the variance driving the difference between the two indices.

Action 6: ONS to provide a technical reference regarding the variance on prices

4.8. There was some discussion regarding where the U.K. is, compared with other countries, with regards to alternative data sources. It was pointed out that although the ONS are obtaining web scraped data now, a time series will be needed for impact analysis. It was pointed out that ONS have been exploring other items using alternative data sources, and not just clothing.

5. Household Cost Indices development plan
Paper APCP-S(18)08 – Draft for future publication

5.1. Mr Payne provided an overview of the paper, talked through the comments and responses received regarding the Household Cost Indices (HCIs) and outlined the three year development plan. Some of the responses were around improving the methodology used in the preliminary estimates, expanding the scope of the indices, coordination with other projects and additional considerations.

5.2. A panel member noted the small number of respondents providing feedback on the HCIs and future priorities regarding the development and production of the HCIs. It was pointed out that one response represents the views of a wider group of people, as ONS held a public meeting in February on HCIs, that was run by the RPI/CPI user group. It was asked for ONS to clarify this within the paper.

Action 7: ONS to update the HCIs paper according to comments prior to publication

5.3. The panel questioned whether ONS could share the respondents to the panel. ONS responded that they are working on getting permissions to share the responses.

6. AOB and date of next meeting

6.1. The panel noted that they would like to see the work programme again, by correspondence, before it is published.

6.2. The next Stakeholder Panel meeting will take place on Monday 17 September 2018.

6.3. Mr Vaughan discussed the recent ESCoE conference and recommended members of the panel to read the papers presented.

Actions

No.	Action	Person Responsible
1	ONS to make contact with industry experts on used car prices	Dr James Tucker
2	ONS to update the work programme according to comments	Dr James Tucker
3	ONS to do some further analysis on the impact of the 2010 change in methodology on the incidence of large price changes in the microdata	Ms Jaya Jassi
4	ONS to stop describing the change as an "improvement" unless and until evidence can be produced which justifies that claim at the micro level	ONS
5	ONS to include the Carli index in clothing analysis	Ms Jaya Jassi
6	ONS to provide a technical reference regarding the variance on prices and the effect on price indices	Mr Chris Payne
7	ONS to update the HCIs paper according to comments prior to publication	Mr Chris Payne