ADVISORY PANELS ON CONSUMER PRICES - TECHNICAL

Minutes 15 September 2017 Board room, UK Statistics Authority, Drummond Gate, Pimlico, London SW1V 2QQ 10.30 – 13.00

Present

Mr Nick Vaughan (Chairman - ONS) Mr John Astin Prof. Bert Balk Prof. Ian Crawford Miss Tanya Flower (ONS) Mr Peter Levell Ms Jill Leyland Dr Jens Mehrhoff Mr Mike Prestwood (ONS) Dr Jeff Ralph (ONS) Mr Paul Smith Mr Rupert de Vincent-Humphreys

Secretariat

Mrs Ruth Donovan (ONS) Mr Chris Payne (ONS)

Apologies

Prof. Alberto Cavallo Ms Helen Sands (ONS) Dr Martin Weale

1. Introductions, apologies and actions

- 1.1. The chairman welcomed attendees to the APCP-Technical (APCP-T) meeting. A round table of introductions followed for the benefit of the two new members, Mr Peter Levell and Dr Jens Mehrhoff.
- 1.2. Prof. Alberto Cavallo has stepped down from the panel. The panel received this news with regret and collectively expressed their thanks for his contributions. Prof. Cavallo has offered to continue to provide advice to ONS on web-scraping projects.
- 1.3. There were no comments from the panel on the previous meetings minutes and actions. Actions from the previous meeting had been completed.

2. A theoretical framework for the Household Costs Indices (Paper APCP-T(17)11)

Paper APCP-T(17)11 – not for publication. This is a draft of a document that will be shared with the Stakeholder Panel as part of the APCP-S papers

- 2.1. Mr Payne provided an overview of the paper and ONS's proposal.
- 2.2. Ms Leyland and Mr Astin gave an overview of their proposal. They highlighted that the CPIH does not have an overarching principle and to define one for HCI has been difficult. Also, that semantics in the wording about the index can cause problems. They were complimentary about

the technical work being done by ONS. They did not consider the approach to calculating an HCI to be radical as the inputs are broadly similar to those in CPIH, CPI and RPI. They would like to see a name change and to see its multi-purpose nature written into the discussion around it. Their concerns are more about the presentation and wording of the HCI, rather than the calculation of it.

- 2.3. The chairman reiterated that the National Statistician has committed to producing HCIs and the purpose of the discussion was to debate the best approach.
- 2.4. One panel member expressed that there is a gap in the suite of inflation statistics for an index like this and getting an index that could be used for more accurate uprating of household groups was important.
- 2.5. There was discussion around the aggregate measure. Some members would prefer the focus to be on subgroups rather than an aggregate measure and noted that how you group the population affects the aggregate measure. Also that the subgroups shouldn't form a complete set and therefore can't be aggregated up. One panel member expressed that the HCI is a tool and tools are designed by their purpose so it is good to define a purpose to the HCI before it is calculated. There will be a lot of differences between the HCI and CPIH which won't be purely conceptual. This needs to be adequately explained to the public.
- 2.6. The feeling from the panel was that the wording used in either proposal was at times inappropriate and confusing. One panel member expressed that from an economic view that price and cost are not synonymous and the wording used should reflect this. Also that timescales needed defining more tightly, i.e. what is the near future? Several panel members thought that income should not be discussed when defining the index. ONS took a steer from the approaches the national statistical institutes in New Zealand and Australia took in their discussion around their household indices to try and follow a set precedent and best practice. Clarity was also sought by the panel as to whether the index that will be created will be constrained by any income measure it may be matched with. Mr Payne clarified that the index would not be constrained by an income measure but that one may be used for consistency of approach.
- 2.7. One panel member would like to see an updated version of the paper detailed with the relevant mainstream economic theory. They believed the distinction in the paper is not between a Cost of Living Index and a Cost of Goods Index but between a fixed basket based approach and another approach.
- 2.8. There was some discussion about the appropriate Owner-occupiers' housing costs (OOH) measure to use in the HCIs but no consensus was reached. One panel member pointed out that theoretically user cost would be the most appropriate measure of OOH but it is impractical to produce and tends to create a highly volatile index. Rental equivalence is the best available option but it would be difficult to explain to the public and the public need to have confidence in the index. Housing was argued to be a basic need and that payments, both interest and capital, need to be reflected. It was confirmed that the HCIs will be produced both including and excluding capital costs. A version of the HCIs excluding capital costs would allow them to be matched to an appropriate income measure.
- 2.9. The treatment of second hand goods was discussed. It was queried whether its exclusion from the index was consistent with a democratic approach or one measuring the household experience. It was also pointed out that its treatment was inconsistent with the approach taken to measuring insurance (gross expenditure used to weight).

- 2.10. There was consensus that a democratic approach to weighting should be used, there was agreement about insurance, overseas expenditure should be included and the inclusion of second hand goods needs further thought. There was agreement between ONS and Ms Leyland and Mr Astin about the principles and technical details of the HCl but different opinions about the presentation of it.
- 2.11. It was requested by a panel member that the differences between the proposed index and the CPIH are tabled clearly for comparisons to be made.

Action 1: Ms Leyland and Mr Astin to draft a table of differences between the HCIs and the CPIH and circulate to the panel

2.12. Panel members were invited to send detailed comments about Paper APCP-T(17)11 to the secretariat for inclusion in an updated paper at the Stakeholder panel on 28th September 2017.

Action 2: Panel members to send comments on Paper APCP-T(17)11 to the secretariat for inclusion in the Stakeholder board

2.13. Ms. Leyland left the meeting at this point.

3. A review of quality adjustment in UK consumer price statistics (Paper APCP-T(17)12)

Paper APCP-T(17)12 - This paper will be published alongside the minutes

- 3.1. The Chairman outlined the paper and invited opinions from the panel members.
- 3.2. One view was that implicit quality indices (IQIs) are rarely feasible and can only practically be applied to hedonically modelled quality adjustments which are not common and queried whether it made sense when used away from hedonics. Another was that some of the problems come from replacements rather than quality per se and that there were issues around the tightness of specifications, particularly in services. Another believed that focus groups could be used to define quality and what could be considered comparable or non-comparable.
- 3.3. One panel member raised the issue of the use of standard deviation in the quality review. It is important the correct element is being measured for this to be of any use. It is not appropriate with price relatives but could be used with IQI in the context of control charts.
- 3.4. There is some work, in the early stages, being done at Eurostat that may complement this workstream.
- 3.5. There was general feeling that this was an interesting workstream that is worth continuing with. As such it will remain as part of the work programme for consumer price inflation statistics.

4. Assessing the feasibility of web scraped data within current collection methods (Paper APCP-T(17)13)

Paper APCP-T(17)13 - This paper will be published alongside the minutes

4.1. Miss Flower explained that the paper was essentially a review of the work that had been done to date on web-scraping and that there had been a recent strategic change to focus more on scanner data. The Digital Economy Act has provided more opportunity to collect data from companies. The Australian Bureau of Statistics already include scanner data in their consumer

price statistics. The phased implementation of the data is a good example for ONS to replicate when it becomes viable.

4.2. One panel member believed the kernel densities needed reviewing to reflect the sample sizes more appropriately. Another would like to see the distribution of the price relatives and asked whether it was possible for ONS to share the underlying data.

Action 3: ONS to produce distribution charts of the price relatives and find out whether the underlying data can be shared with the panel.

- 4.3. The restrictions that arise from websites terms and conditions and the consequent impact on representativeness was raised.
- 4.4. Eurostat have a web-scraping workshop coming up. They have been provided with good examples across multiple countries where the NSI contacted companies and been given permission to scrape data from their websites.

5. Smoothing volatile weights follow up (Paper APCP-T(17)14)

Paper APCP-T(17)14 - This paper will be published alongside the minutes

- 5.1. Mr Payne gave an overview of the paper.
- 5.2. The panel felt that if a method is going to be used it should be applied to all items. Some criteria for choosing smoothing could be applied to all items. Also there are more appropriate ways to create a smoothed series given that it is essentially trying to forecast appropriate expenditure data, such as using time series techniques or outlier treatment.
- 5.3. The example of "gas" used in the paper was considered to be an outlier problem rather than a smoothing problem and therefore other ways of dealing with it should be considered. It was clarified that in HICP regulation where the T-2 data is an outlier, other data can be used to help deal with this.
- 5.4. The work could be taken further by exploring more appropriate techniques but in light of the work programme will not be prioritised. The panel were invited to send their opinions and observations to ONS.

Action 4: Panel members to send their opinions and observations on the analysis in the volatile weights paper to ONS.

6. AOB and date of next meeting

6.1. The paper APCP-T(17)AOB paper, raised by Mr. Arthur Barnett was discussed. Prof. Balk's draft paper on mixed-form indices should address this question somewhat and has been shared with Mr. Barnett. The panel thought this was sufficient to answer the question posed. A panel member suggested it may be interesting to look at the minutes for the RPI advisory panel when chain-linking was introduced. Prof Balk is happy to receive comments on his draft paper.

Action 5: Panel members to pass on any comments about the mixed-form indices paper to Prof. Balk

6.2. No further business was raised.

6.3. The next Technical Panel meeting will take place on Monday 15 January 2018. Panel members should contact the secretariat if this date is not suitable and a new date may possibly be found.

Action 6: Panel members to contact secretariat if the date of the next meeting is not suitable

7. Actions

No.	Action	Person Responsible
1	Ms Leyland and Mr Astin to draft a table of differences between the	Ms Jill Leyland and Mr
	HCI and the CPIH and circulate to the panel	John Astin
2	Panel members to send comments on Paper APCP-T(17)11 to the	Technical Panel
	secretariat for inclusion in the Stakeholder board	Members
3	ONS to produce distribution charts of the price relatives of web-	Miss Tanya Flower
	scraped data and find out whether the underlying data can be	
	shared with the panel.	
4	Panel members to send their opinions and observations on the	Technical Panel
	analysis in the volatile weights paper to ONS.	Members
5	Panel members to pass on any comments about the mixed-form	Technical Panel
	indices paper to Prof. Balk	Members
6	Panel members to contact secretariat if the date of the next	Technical Panel
	meeting is not suitable	Members