ADVISORY PANELS ON CONSUMER PRICES - TECHNICAL

Minutes

8th October 2021

Teleconference

10:30 - 13:00

Members in attendance

Dr Jens Mehrhoff

Mr Mike Hardie (ONS, chair)
Prof. Guy Nason
Dr Martin Weale
Mr Rupert de Vincent-Humphreys
Mr Peter Levell
Ms Corinne Becker Vermeulen
Dr Antonio Chessa
Prof. Bert Balk
Prof Paul Smith

Secretariat

Mr Huw Pierce (ONS)
Mr Chris Payne (ONS)

Presenters

Prof. Kevin Fox Ms Natalie Jones (ONS) Dr Domenica Rasulo (ONS)

Apologies

Mr Grant Fitzner (ONS)
Dr Gareth Clews (Methodology, ONS)
Prof. Ian Crawford

1. Introduction and apologies

- 1.1. Mr Hardie opened the meeting and passed on apologies from members unable to attend.
- 1.2. Mr Hardie summarised progress on outstanding actions from previous sessions, all of which have been completed.

2. New index number methods in Consumer Price Statistics

- 2.1. Mr Levell presented research funded by the Economic Statistics Centre of Excellence (ESCoE), produced with Professor Fox and Martin O'Connell, investigating the properties of multilateral index methods when applied to a set of UK scanner data covering a range of product categories. It aimed to empirically assess the impact of chain drift associated with various index numbers, extension methods and window lengths. The research complements work carried out by ONS (see APCP-T 17th January 2020) to rank index number methods. In contrast to the ONS work, which favours a Geary-Khamis index with a fixed base expanding window, this research favours a CCDI (a.k.a. GEKS-Tornqvist) index with a mean splice.
- 2.2. Dr Weale asked Mr Levell and Professor Fox for their views on the ONS criteria for ranking multilateral indices. Mr Levell and Professor Fox stated that some of the criteria chosen by ONS were subjective (e.g.: explainability) and the weighting attached to them arbitrary such that a small change in weight could lead to a different outcome. Mr Hardie agreed that the choice of method was finely balanced and the environment surrounding the decision was a challenging one.

- 2.3. Dr Chessa highlighted his own <u>research</u> examining the notion of chain drift in a multilateral context. This demonstrates that mean splice methods are susceptible to the compound effects of chain drift from the movement and window splicing methods they are built upon, leading to a recommendation to link on published indices. On decomposition methods, Dr Chessa contrasted NSIs' preference for additive approaches with the observation that product contributions need not be additive and the implications of this are a live topic of research. Finally, Dr Chessa explored the paper's analysis of seasonal products, noting that while multilateral methods in general tend to downweight seasonal products this was especially true of the GEKS as demonstrated by an analysis of chocolate products from Germany.
- 2.4. Professor Fox emphasised the value of multilateral methods for analysing month-on-month rather than year-on-year changes, suggesting that they are not the complete solution for seasonal products. There was some discussion of the case of chocolate products in Germany, with differing views on how this example should be interpreted. Dr Chessa promoted Geary-Khamis' non-reliance on imputations as a benefit.

ACTION: Dr Chessa to share analysis of the German dataset, illustrating the relative performance of Geary-Khamis and GEKS.

- 2.5. Dr Mehrhoff asked if the paper altered any of ONS's thinking since the January 2020 presentation of their index number framework. Mr Hardie replied that the paper and any feedback will be taken into consideration before ONS takes their decision on a preferred method. Ideally a single method will be adopted for the parallel run scheduled for 2022.
- 2.6. Professor Balk praised the paper and the work of ONS as contributions to a long-running challenge for index number methods. He suggested clarifying the meanings of the terms "bias", "drift" and "quality adjustment" and gaining a better understanding of the benchmark against which index numbers can be judged. Professor Fox referred to a separate publication where he established a set of benchmarks for this type of analysis.
- 2.7. Professor Balk also questioned the convention among NSIs for a no revisions policy as month-on-month changes can only be judged against a longer-term perspective. Professor Fox cited the US Bureau of Labour Statistics as one agency that publishes an analytic series alongside its headline measures. Mr Hardie related the limited appetite within the UK for an analytic series, adding that the range of competing supplementary analyses published by ONS during the pandemic may have resulted in confusion for some stakeholders.

ACTION: Dr Chessa to provide further feedback on the presented paper.

3. Rents Development

3.1. Ms Jones presented an update on the redevelopment of private rental market price statistics. The discussion following the presentation has been redacted owing to market sensitivity.

4. Weights 2022

4.1. Mr Payne presented a paper outlining the considerations for calculating weights for 2022.

The proposed approach is to estimate expenditure that is reflective of 2021 using 2019 data

- as the base, subject to feedback from the panel and adhering to prevailing international guidance.
- 4.2. Professor Smith supported the reasoning for ONS's proposed approach but invited clarification on the 25% threshold, rather than using either the 2020 or 2019 data directly. He noted that targeting 2022 expenditure for an estimate implies a current weighted index. Mr Payne explained the empirical analysis that led to the 25% threshold and signposted the supplementary analysis that is expected to accompany the 2022 weights release.
- 4.3. Ms Becker asked if any retrospective analysis on the estimated 2020 expenditure had been carried out now that data was available for comparison. Mr Payne referred to Figure 1 of the paper to demonstrate that the pattern of differences between estimated and actual expenditure was reasonably consistent with previous years.
- 4.4. Dr Weale asked if any analysis of expenditure had been carried out below the division level, and whether the proposed approach was coherent with that taken by National Accounts. Mr Payne suggested including a class level analysis in the communication accompanying the weights release and offered to liaise with National Accounts colleagues.
- 4.5. Dr Mehrhoff observed that the proposed approach implies an assumption that the economic situation will have reverted to normal in 2023.
- 4.6. Professor Nason suggested looking for proxies in the expenditure data to indicate which years the current situation might resemble the most and cautioned against assuming expenditure should change smoothly from one year to the next as some sharp changes might be real.

5. HCIs Mortgage Interest

- 5.1. Dr Rasulo presented analysis of three alternative measures of mortgage interest payments (MIPs) under consideration for inclusion in the Household Costs Indices (HCIs): simple revaluation, the RPI method and the lender's formula approach, incorporating feedback from previous discussions of the panel.
- 5.2. Dr Mehrhoff asked if the results matched expectations given the conceptual basis of the HCIs. Discussing the treatment of fixed rate mortgages, Dr Rasulo explained that the models use cohorts of mortgages which could be updated quarterly or monthly.
- 5.3. Owing to time constraints, Mr Hardie invited the panel members to submit any further contributions by correspondence.

ACTION: Panel members to provide further comments on the HCIs Mortgage Interest papers by correspondence.

6. AOB and date of next meeting

- 6.1. All papers apart from Rents Development will be published. The multilateral index methods paper will be published through ESCoE and eventually linked to from the APCP-T page of the UKSA website. The remaining papers will be published there directly.
- 6.2. The next meeting will be held on Friday 20th January 2022.

ACTION: Secretariat to circulate dates of further meetings in 2022.

| No. | Action | Person Responsible |
|-----|---|--------------------|
| 1 | Dr Chessa to share analysis of the German dataset, | Dr Chessa |
| | illustrating the relative performance of Geary-Khamis | |
| | and GEKS. | |
| 2 | Dr Chessa to provide further feedback on the paper | Dr Chessa |
| | presented in item 2. | |
| 3 | Panel members to provide further comments on the | Panel members |
| | HCIs Mortgage Interest papers by correspondence. | |
| 4 | Secretariat to circulate dates of further meetings in | Secretariat |
| | 2022. | |