ADVISORY PANELS ON CONSUMER PRICES – TECHNICAL

Minutes
27 September 2024
Teleconference
14:00 – 15:00

Members in attendance
Mr Grant Fitzner (ONS) (Chair)
Mr Mike Hardie (ONS)
Mr Stephen Burgess (ONS)
Professor Paul Smith
Professor Ian Crawford
Dr Jens Mehrhoff
Mr Peter Levell

Guest Presenters
Professor Huw Dixon
Ms Monica George Michail

Secretariat
Ms Aimee North (ONS)
Ms Rifah Abdullah (ONS)

ONS attendees
Mr Chris Payne (ONS)
Ms Abi Casey (ONS)
Mr Ian Boreham (ONS)
Mr Anthony Luke (ONS)
Mr Peter Bailey (ONS)
Mr Chris Bloomer (ONS)

Apologies
Professor Rebecca Killick
Dr Martin Weale
Professor Bert Balk
Mr Rupert de Vincent-Humphreys

1. **Introduction and apologies**
   1.1. Mr Fitzner opened the meeting and passed on apologies from members unable to attend.

2. **Seasonal adjustment of CPI and CPIH.**
   2.1. Professor Dixon from the National Institute of Economic and Social Research (NIESR) presented an initial draft paper circulated with Panel members on producing seasonally adjusted consumer price index (CPI) and consumer price index including owner occupiers' housing costs (CPIH). The aim of the paper was to get feedback from Panel members on the methods chosen.

   2.2. Professor Dixon presented the planned milestones for the research, before describing the seasonality in the data at various Classification Of Individual Consumption by Purpose (COICOP) levels. He explained that seasonal adjustment for certain months (such as April) are more challenging due to economic events. Professor Dixon outlined the pros and cons of using a direct approach as opposed to an indirect one. An indirect approach would preserve additivity between headline and low-level series; also, other national statistical institutes use it and it had previously been utilised by ONS for estimates on seasonally-adjusted retail prices index excluding mortgage interest payments and indirect taxes (SARPIY).

2.3. Professor Dixon mentioned the possibility of not removing all seasonal aspects particularly those that would be of interest to the users and wanted guidance from the panel. For example, if there was an annual feature that is useful to users which they would want to be retained in the seasonally-adjusted series, would we want to seasonally-adjust its influence out of the seasonally-adjusted series? i.e. remove the elements that you want to keep, seasonally-adjust the remaining series, then re-add the elements you want to keep. Professor Dixon then presented the potential software (WinX13, running the X-13-ARIMA-SEATS methodology) that could be used to conduct this work, outlining what other countries used as well as ONS' preferred software systems. Mr. Fitzner supported the use of the suggested software, highlighting that it would fit into existing ONS pipelines and raising wariness of creating bespoke software with limited user knowledge. Ms. North commented that WinX13 is already used for seasonal adjustment within Prices division's statistics, by the UK House Price Index.

2.4. Professor Dixon then raised the question regarding the frequency of revisions, asking what the panel's preferred period would be for reviewing the seasonal adjustment model, such as quarterly or annually. Mr. Fitzner stated that annual updates would be most fitting and work alongside other CPI processes. Ms. North agreed and highlighted that the seasonal adjustment model is also reviewed and updated annually in the UK House Price Index. Professor Dixon agreed and mentioned that other national statistics institutes do the same. The presentation then concluded and discussion was opened for comments.

2.5. A panel member commented that it was not clear whether the index or the month-on-month series was being seasonally-adjusted. They advised that this needs to be made clear in the paper. Professor Dixon agreed that the index would be adjusted, and that the month-on-month series was only used to present the data in a more digestible way. The panel member also raised concern regarding Professor Dixon's earlier point on potentially leaving some annually-occurring movements in the seasonally adjusted data. Professor Dixon explained it would be possible to do this if there were interest from users. The panel member highlighted that it was important to be explicit in what the target for seasonal adjustment is, and that we want to remove things that happen annually. Additionally, the panel member suggested that the difference in mean R squared between COICOP levels was an artefact of the method and not underlying seasonality as the lower-level indices have more movement which leads to more variation. The panel member explained that it is not seasonality that is changing but the residual error that is compared. The panel member suggested it would be better to directly input the data into established seasonal adjustment software packages. For example, X-13 will report various recommended measures of seasonality including F and Kruskal-Wallis statistics.

2.6. Another panel member also voiced not seeing the rationale behind keeping any annually-occurring movement in the data. They commented that it would be useful to see an example of something that we might potentially wish to keep, to better consider the question. The panel member also agreed that R squared is not useful in this context and would suggest that the authors do not rely on them. On the indirect versus direct methodology, the panel member suggested using a mixed approach rather than one or the other. At the lower COICOP level, you would do a direct adjustment and then as you aggregate up do an indirect adjustment, this would allow consistency in the aggregation up the COICOP hierarchy. The panel member also queried whether seasonal adjustment should be done by ONS or by another department like the Bank of England, which is done in some other countries. Additionally, the panel member highlighted that there was no mention on outlier calendar transformation of the series and offered to speak further to the authors regarding it.

2.7. Mr. Burgess queried how indirect taxes would be treated and whether this was one of the possible exceptions to not be taken out of the seasonally adjusted data. Additionally, Mr. Burgess questioned whether the authors intended to investigate into the effect of index day as that is known to move each year. Professor Dixon informed the panel that it is something they have planned to look at. On indirect taxes, Professor Dixon raised this is something that they are aware of and why previous work had been done on SARPIY rather than retail price index (RPI). It was raised that it would be difficult to remove the effect of indirect taxes, seasonally adjust the series and put indirect taxes back in, however this was one possibility they could look at. Another possibility would be to replicate SARPIY (although very complex) or apply seasonal adjustment and look at the outliers.

2.8. Mr. Fitzner commented that April will always be challenging due to tax changes and Easter. Mr. Fitzner commented that the most value from this work would be two things; provide an official measure of seasonally adjusted CPI and CPIH for users in the public domain, and the commentary ONS provides on price movements. Mr. Fitzner queried whether other countries were also communicating non-seasonally adjusted CPI as their headline measure and seasonally adjusted CPI for their month-on-month movements. Professor Dixon confirmed this was the case. Mr. Fitzner highlighted that communication and user consultation would be key prior to publishing any estimates and that it would be essential not to overcomplicate the information available to users.

2.9. Mr. Hardie agreed and suggested that a seasonally adjusted series could be published once a year. Mr. Hardie also raised that the impact of index day would not be as impactful in some areas of the basket once scanner data is introduced as that utilises data across the month.

2.10.   A panel member commented that they support production of a single official seasonally-adjusted series, but challenged the suggestion of an annual publication. They asked for clarification on whether the seasonally-adjusted series would be produced and published once a year, or produced and published every month with the factors updated once a year. The panel member explained that if you do not run the model every month there will be poorer quality adjustments therefore, they suggest running the model every month (i.e. each month, revise SA data for an agreed revision period length) and then annually conduct a seasonal adjustment review (i.e. review and revise seasonal factors, underlying ARIMA model).

2.11.   Mr Fitzner commented that Prices statistics already have an annual production round for updating weights annually. Mr. Fitzner asked Ms. North what is done within the UK House Price Index. Ms. North confirmed that the UK House Price Index does the latter: producing and publishing a seasonally-adjusted series every month, and reviewing the seasonal-adjustment model annually. The panel member was interested to see what will happen with the scanner data and raised that it would be 3 or 4 years before any new seasonal pattern can be established.

2.12.   On the challenges around communications of seasonally adjusted CPI and clear understanding for users, Ms. North asked whether the seasonally-adjusted data would become the headline measure in bulletins, to which the Panel responded in the negative. Ms. North asked if the seasonally-adjusted data would be provided for users in data tables only or whether narrative on the seasonally-adjusted outputs would be added to the monthly bulletins.

2.13.   The panel discussed revision policies for the seasonally-adjusted series and what would be the most appropriate for users. The length of revision period was discussed, acknowledging the complications of the entire seasonal-adjusted series being revised each time the model is run. Options discussed were: no revision period, revision of the entire time series each time, or partial concurrent adjustment (revision of a set number of time periods each time). Ms. North commented that this challenge is also present in the UK House Price Index, which has a 12-month revision period. In the UK HPI, the seasonally-adjusted data has the same 12-month revision period policy as the non seasonally-adjusted series.

3. **Publication status of papers**
   3.1. The seasonal adjustment paper will be published once finalised in 2025.

4. **AOB and date of next meeting**
   4.1. The stakeholder panel requested that the panel provide feedback on the papers presented on improving the energy component of CPI and CPI intensity.

4.2. Ms North provided an update on plans to re-reference the UK House Price Index, in line with the published methodology.

4.3. The panel is informed that an additional meeting will be held in November to discuss updates to the Prices transformation project and prospective dates will be sent out soon to ascertain panel availability.

No.	Action	Person responsible
1	Panel members requested to provide comments on Energy component and CPI intensity papers	Panel members
2	Poll requesting panel availability will be sent out to confirm next meeting	Secretariat