

ADVISORY PANELS ON CONSUMER PRICES – TECHNICAL

Minutes**14 December 2018****Board room, UK Statistics Authority, Drummond Gate, Pimlico, London SW1V 2QQ****10:30 – 13:00****Members in attendance**

Mr John Astin
 Prof. Bert Balk
 Prof. Ian Crawford
 Mr Grant Fitzner (ONS)
 Mr Mike Hardie (ONS)
 Dr Martin Weale
 Mr Peter Levell
 Dr Jens Mehrhoff
 Mr Paul Smith
 Mr Jonathan Athow (Chairman – ONS)
 Mr Rupert de Vincent-Humphreys

Guests

Ms Jill Leyland
 Ms Domenica Rasulo

Secretariat

Mr Chris Payne (ONS)
 Miss Joanna Corless (ONS)

Apologies

Dr Antonio Chessa

1. Introductions and apologies

- 1.1. The chairman welcomed attendees to the APCP-Technical Panel (APCP-T) meeting and passed on apologies from those who were unable to attend.
- 1.2. The chairman welcomed Mr Grant Fitzner, who has taken over from Mr Nick Vaughan as Chief Economist at ONS and will be taking on the role of chairman for the APCP-T meetings from January 2019.
- 1.3. There has not been much progress on the academic paper on standard errors in consumer prices indices so far, but ONS will continue to work with Paul Smith on this. Panel members were reminded to submit any relevant literature for a literature review of standard errors in consumer prices indices.

Action 1. Panel members to send the APCP-T secretariat any literature relevant to standard errors for consumer price indices to expand the ongoing literature review

- 1.4. Action 5 for Dr Chessa to apply methods of creating proxy expenditure weights to scanner data at Statistics Netherlands was ongoing. Dr Chessa will provide an update when work has progressed further. The remaining actions were completed.

2. Calculating a price index for capital mortgage repayments

Paper APCP-T(18)16 – Work in progress

This is work in progress and will be published in the future when additional analysis has been undertaken.

- 2.1. Mr Payne gave an overview of the paper. The paper presents two alternative price indices for capital mortgage repayments; the first based on the methodology used to calculate mortgage interest payments (MIPs) in the Retail Price Index and the second based on data from the Understanding Society Survey (USS). Mr Payne explained that ONS hope to publish a variant of HCIs with mortgage capital payments (MCPs) as well as one without these capital costs, since the appropriateness of including capital costs in a price index is a subject of debate.
- 2.2. There was considerable discussion around the conceptual foundation of HCIs, which several members felt needed clarifying further:
 - 2.2.1. Prof. Crawford believed the population object of interest needed more clearly defining. Prof. Balk advised writing a paper which clearly explains the concept of HCIs. Another panel member suggested creating a table of issues relating to the concept, methodology and data, while another suggested constructing a flowchart of issues and how they link.
 - 2.2.2. Dr Weale outlined the arguments in his note, Student Fees in the Household Cost Indices, which discusses how to treat elements in HCIs which involve making payments for goods or services at a time distinct from when they are consumed. Dr Weale raised the possibility of constructing a cash flow index as part of a solution, which was met with support from some panel members. Mr Athow agreed that the concept of cash flow was key to consider and suggested devising a framework for this.
 - 2.2.3. Dr Weale raised a point about savings: MCPs are a form of savings, and savings are made for later consumption. A principle of HCIs is that consumption should be recorded when it is paid for. However, currently only one form of savings is taken into account, but not all savings. There are both contractual savings and other types of savings; these should all be put on the same basis. Another panel member asked whether pension contributions should be included in HCIs.
 - 2.2.4. Prof. Balk asked whether ONS intend the index to be an index of cost or price, as a price index requires a quantity component, but the methods proposed for an MCP index don't have a quantity component.
 - 2.2.5. Mr Astin suggested that ONS should clarify its definition of welfare if HCIs are to answer the question of how much income has to change to maintain a constant level of welfare.
 - 2.2.6. There was some discussion around whether MCPs should be considered as expenditure, since households are using income to purchase capital. Ms Leyland argued that housing payments for owner occupiers are an important cost, and that although the purchase of housing is an investment, it is also for many other purposes fundamental to our living.
- 2.3. There was discussion around the proposed methods and data sources:
 - 2.3.1. There were concerns around the volatility of the index calculated with USS survey data. It was suggested that this could be due to churn in the sample. Prof. Crawford suggested

only including in the sample those who did not move residence or those who did not move up or down the housing ladder. There was also a suggestion that a qualitative survey may not provide accurate data on mortgage payments, since responses may be imprecise.

- 2.3.2. Dr Mehrhoff questioned why the moving average with the survey-based method was always lower than the index made with the original survey data. It was suggested that this was because all indices were set to a value of 100 in January 2010. Mr Payne said ONS would look at this.

Action 2. ONS to look into why the index for MCPs based on the moving average with the USS survey data was always lower than the index made with the original USS data.

- 2.3.3. There was discussion around the substantial divergence between the growth rates using the two different methods after January 2015. It was suggested that the MIP-based model may have broken down due to changes to mortgages. It was suggested that the Building Society Association or the Bank of England may be able to provide insight into any changes to mortgages that have come about.

- 2.3.4. Dr Weale noted that the Bank of England has a database containing details of all mortgages and suggested this could be used as a data source for an MCP index. Other potentially useful statistics and data sources raised included Monetary Financial Institution (MFI) interest rate statistics, which the UK contributes to, a credit register held by the Bank of England and the Household Finance and Consumption Survey (HFCS).

- 2.3.5. Ms Leyland highlighted that with the MIPs-based method the index is standardised for a constant mix of house types, but the survey-based method is not. She suggested that the survey could be used in the short term with the constant population being a proxy for a constant housing mix, and the MIP-based model could be refined in the longer term.

- 2.4. Further points raised by Panel members for consideration included:

2.4.1. The need to account for the changing value of money and capital over time.

2.4.2. Because of low interest rates, interest payments on mortgages have reduced but this has enabled mortgage repayments on the capital part of the loan to rise. However, should these higher payments be considered a change in price that should be captured or a change in quality?

2.4.3. Indices for MIPs are constructed using an arithmetic mean, which is appropriate for plutocratic-weighted indices, but since HCIs are weighted democratically, a geometric mean should be used.

2.4.4. The particular significance of housing costs for first time buyers and the need to reflect this in HCIs. Some panel members suggested that house prices should be included in the index.

- 2.5. There was discussion around the validity of the model used to estimate MIPs in RPI, in light of the divergence between MCP estimates using this method and the USS. Mr Payne outlined some known limitations of the model: it is restricted to 23-year mortgages although evidence shows that people are taking out longer mortgages; there is also an assumption that 45% of the capital is paid off upfront, which is very large. Mr Payne raised the question of whether, if the survey approach is better for measuring MCPs, ONS should also use the survey approach for the MIPs index in HCIs, which there was some support for in principle.

- 2.6. Mr Payne outlined further work that could be done, including making an index based on different survey data and comparing with the index made with USS data, making an index for first time buyers only, as proposed in Towards a Household Inflation Index (Astin, J and Leyland J), and exploring methodological improvements to the MIP-based index.
- 2.7. Mr Athow summarised that there were two things that were not fully resolved: how to account for savings in a way which is internally consistent, and how close this measure should be to a cashflow measure. He acknowledged that there had been valid challenges to the data presented in the current paper and accepted that neither method as it currently stood was robust enough to use in a publication. He suggested holding an ESCoE seminar to facilitate a conversation about the conceptual foundations for HCIs.

Action 3: ONS to set up an ESCoE seminar to discuss the conceptual foundations for HCIs.

3. Calculating a price index for student loan repayments

Paper APCP-T(18)17 – Work in progress

This is work in progress and will be published in the future when additional analysis has been undertaken.

- 3.1. Mr Payne gave an overview of the paper. The paper addresses feedback on *APCP-T(18)06 Calculating a price index for student loan repayments* discussed in May 2018. It presents a student loans repayments index based on Living Costs and Food Survey (LCF) data, and gives an alternative version of the previous model presented in APCP-T(18)06 which used graduate salaries and the loan repayment threshold; this time using the mean rather than median graduate salary.
- 3.2. There was discussion around the volatility of the index constructed with LCF data. Prof. Balk did not think the volatility in the index was likely to reflect actual experiences of individuals. One Panel member suggested that the volatility could be related to inconsistency in the types of jobs done by graduates in the sample from month to month, which could mean quality is not constant.
- 3.3. There was some discussion around the “threshold” model. Dr Mehrhoff suggested that as a check of the threshold model, microdata from LCF could be used to apply the repayment threshold to each individual before aggregating rather than applying the threshold to the mean or median wage. This would reveal whether using the mean or median was skewing results.
- 3.4. There was discussion around whether any elements of maintenance loans should be included in HCIs in principle. Mr Astin argued that the interest on maintenance loans should be included. It was suggested that this may be correct in principle but difficult to separate out in practice. Dr Weale argued that in principle, to be consistent with the payments approach, capital repayments of the maintenance loan should also be included in HCIs. It was initially suggested that this would lead to double counting since expenditure on the items that the loan is used to purchase is already accounted for. However, Dr Weale argued that there may not be an issue of double counting as the index has democratic weights; if the maintenance loan is on average spent on the same things as the rest of the expenditure accounted for, including these repayments wouldn't change the democratic weights so they wouldn't distort the index.

- 3.5. There was further discussion about Dr Weale's paper which suggested treating student loans as a tax. Mr Smith agreed that this approach might be the best solution, since it simplifies issues such as the declining value of money used to repay the loan over time and the fact that student loans are written off after a certain time. Prof. Crawford thought student loans shouldn't be treated differently from other taxes such as income tax in principle, although taxes are not included in HCIs. Dr Weale argued that in principle taxes should be included in HCIs since these are significant outgoings for households.
- 3.6. Prof. Balk queried whether there was a distinction between what is referred to as cost and price in the paper. He suggested it be considered that education is investment in human capital which could be regarded as similar to an investment in other capital.
- 3.7. Mr Levell raised that the IFS is working on something which tracks graduate salaries over time and links this data to student loans, which could be a useful source for ONS. He offered to provide ONS with a contact to pursue this.

Action 4: ONS to pursue IFS measure on graduate salaries and student loans data.
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4. AOB

- 4.1. Mr Athow suggested bringing a paper to January's Technical Panel meeting on the relative merits of the unweighted index formulae, where Panel members will be invited to provide their thoughts.

Action 5: Mr Payne to draft a paper setting out recent arguments around unweighted indices.

- 4.2. Mr Athow raised the decision by the European Commission to not implement the net acquisition approach for measuring OOH in HICP at this stage due to issues with frequency and timeliness of data. Dr Mehrhoff reported that the Commission plans to continue to work on developing a measure of OOH to include in HICP.

No.	Action	Person responsible
1	Panel members to send the APCP-T secretariat any literature relevant to standard errors for consumer price indices to expand the ongoing literature review	All
2	ONS to look into why the index for MCPs based on the moving average with the USS survey data was always lower than the index made with the original USS data.	Ms Rasulo
3	ONS to set up an ESCoE seminar to discuss the conceptual foundations for of HCIs.	Mr Payne
4	ONS to pursue IFS measure on graduate salaries and student loans data.	Ms Rasulo
5	Mr Payne to draft a paper setting out recent arguments around unweighted indices	Mr Payne