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Royal Statistical Society response to UK Statistics Authority Consultation on Measuring Consumer Prices: the options for change

The Royal Statistical Society (RSS) is a learned society and professional body for statisticians and data analysts. We are one of the world's leading organisations to promote the importance of statistics and data, and have done so since we were founded in 1834. One of our six key strategic goals for 2014-2018 is for statistics to be used effectively in the public interest, so that policy formulation and decision making are informed by evidence for the good of society. Our National Statistics Advisory Group has advised RSS' response to this consultation with this goal in mind. Please see overleaf for the response.

UK Statistics Authority Consultation on

Measuring Consumer Prices: the options for change

Section One: Measuring prices across the economy

1. Should ONS identify a main measure of price change across the economy?

a. ~~Yes~~

b. No – there should be two. One index cannot respond adequately to all main needs and would involve unacceptable compromises.

1a. Why? Please provide any comments below:

The first principle in compiling consumer prices index, as for all statistics, is to consider user needs. In our view the Johnson review failed to do this adequately. User needs fall into two main categories and some additional, more specialist, ones.

1. Measuring inflation from the perspective of the individual household. This was the original aim of consumer price indices and generally remained so until after inflation targeting was introduced around 1990. Indices with this perspective have a number of uses:

    a. For government to monitor the impact of inflation on individuals and households

    b. To assess trends in real income

    c. For uprating (eg in wage negotiation, pensions, tax brackets or contracts) where the aim is to compensate, or take into account, the impact of inflation on households.

2. Macroeconomic needs such as inflation targeting

3. Other, more technical, needs include deflating related economic statistics such as consumption in national accounts; international comparisons.

There need to be, therefore, two main indices related to 1) and 2) above. We acknowledge that a single "one size fits all" headline index has superficial attractions and would avoid "index rate shopping". But this must not override the key need of statistics being fit for purpose. A modern economy is complex and in many areas more than one overall major statistic is required. "Index rate shopping" can be minimised when the purpose of indices is clear.

Comments continue overleaf.

There are noticeable differences between a macroeconomic index and a household index. The former should be expenditure (plutocratic) weighted, the latter household (democratic) weighted or as near to this as possible. The former includes spending by overseas visitors, the latter should not. The former should not include interest payments; the latter is likely to include at least mortgage interest. The former considers the household sector as a whole; the latter individual households – this affects the treatment of owner occupier costs and insurance premiums in particular. The former, if it follows EU rules, should not include taxes other than those related to consumption. The latter should include Council Tax which is directly related to the consumption of household services. Coverage of owner occupier housing costs is a difficult area but a household index would almost certainly include some items considered inappropriate for a macroeconomic index.

A macroeconomic index must accord with economic theory and its focus must be on consumers as a whole while a "household" index should be compiled from the perspective of an individual household.

Two further points need to be made. Firstly, the UK's Consumer Price Index (CPI) is the EU Harmonised Index of Consumer Prices (HICP) for the UK. The HICP was compiled solely for comparison between EU countries and later used as the target for interest rate setting by the European Central Bank. It was not designed to measure inflation from a household perspective. Nearly all EU countries, and all the major ones, use their own national indices as their main uprating index. The UK would therefore be out of line with most international practice if it adopted the CPI, or a close derivative such as CPIH, as its main uprating index.

Secondly, because it is expenditure weighted the CPI has been found to be "broadly representative of the price experience of households around two-thirds of the way up the expenditure distribution" according to Tanya Flower and Philip Wales of the ONS in their research *"Variations in the Inflation Experience of UK Households: 2003-2014"* published in December 2014. Clearly it cannot as it stands be considered a suitable measure of the median or modal household. (While the RPI is expenditure based, the exclusion of the top 4% of households by income, and of pensioners mainly dependent on state benefits, means that it is noticeably closer in practice to a household weighted index than the CPI.)

If yes:

2. What should this measure be?

~~a. the CPIH, as recommended in the Johnson review. The CPIH includes owner-occupiers' housing costs. It does not currently hold the *National Statistics* designation (although its re-assessment is due to commence shortly). The index is a UK measure, designed by ONS to meet UK needs.~~

~~b. the CPI, ONS's current headline measure. The CPI is an EU measure, designed by Eurostat to ensure comparable consumer prices statistics across the EU.~~

c. other (please provide details).

The two indices should be:

a. *the Consumer Price Index including Owner Occupied Housing measured using Net Acquisitions (which is likely to be the UK HICP before long under current proposals)*

b. *A Household/Household Inflation Index*

2a. Why? Please provide any comments below:

As outlined above there need to be two main measures. The CPI was designed specifically for macroeconomic purposes and meets these needs well, with the exception of its current lack of coverage of owner occupier housing costs (OOH). In addition it largely meets the specialist, but crucial, need of deflating relevant elements of national accounts since it is consistent, in most parts, with national accounts theory. It is also the best index currently available for international comparisons since it is calculated by all EU countries and by a number of others.

While CPIH includes a measure of owner occupier costs, this is based on rental equivalence. Leaving aside the problems which led it to be deprived of its national statistic status last year, we do not find this a credible way of measuring OOH, since rental markets can diverge from owner occupational costs over long periods of time and it also makes substantial use of imputation. Neither do we feel the Johnson report set out any credible arguments for preferring this series as a headline index.

Since a Net Acquisitions approach is being developed by the EU as a way of including OOH, and the UK is already well advanced along this path, we suggest that CPI including Net Acquisitions should become the main macroeconomic indicator. It has to be said that we do not find Net Acquisitions entirely plausible because of its exclusion of land when its weight is determined (although not in the evolution of prices). However, it seems very likely that the UK will be obliged to include OOH on this basis anyway. We question therefore the need to continue with CPIH at all once this is included in CPI. Discontinuing CPIH would also bring a small but welcome reduction in ONS costs. No further changes to CPI should be made other than those agreed, or permitted, for the HICP in the EU as a whole.

The second main measure should be a Household Index. Astin and Leyland set out, at the RSS's request, a proposal for what such an index could cover*. (Note that this differs in certain important respects from the proposals set out in Chapter 5 of the Johnson report.)

The RPI was originally intended to measure inflation from the household perspective. To a large extent it could still fulfil the role of a household index but its use of Carli has made it unacceptable to the UKSA. It still enjoys far wider public confidence than the CPI, as demonstrated, for example, by the results of the 2012 consultation and the number of signatures to the e-petition protesting about the change from RPI to CPI for uprating public sector pensions. Some of this confidence may stem from the higher estimates of inflation it generally gives, or from its time honoured status, but other factors, such as its inclusion of mortgage interest, also count. Whatever the reason, it can only be supplanted in public confidence by an index which clearly reflects actual household expenditures.

This is an important point. It will be difficult, and take much time, to phase the RPI out not just because it is widely embedded in contracts but due to the extent of public confidence in it. If the UKSA wishes its use to decline as quickly as possible, an alternative that people can recognise as reflecting their own experience is vital. Neither the CPI, nor any index closely derived from it or established on similar principles, will do.

It is also vital for policy purposes that government and analysts can assess inflation, and trends in real income, as households experience them, rather than on some more theoretical basis.
We note that the RPI could still fulfil this role provided it was fully reviewed. The perceived problems with the use of the Carli formula (and we note that there are credible challenges to the current expert consensus) could be addressed (see, for example, the RSS document, *Explaining the Formula Effect for Clothing*). More subtle problems arise from the "dual role" it held under inflation targeting prior to 2003 since the need for it (or rather RPIX) to be a credible inflation target prevented it evolving to meet its original purpose. These problems too could be addressed.

* *Towards a Household Inflation Index, Compiling a consumer price index with public credibility,* John Astin and Jill Leyland, May 2015

3. Should its production be governed by legislation?

a. ~~Yes~~

b. No

3a. Why? Please provide any comments below:

We strongly oppose legislating for any specific series. This would undermine the professional independence of the ONS and would be a breach of the code of practice (and the EU code). It could also limit or delay necessary improvements. The RPI was only covered in the 2007 Statistics and Registration Service Act due to specific conditions in pre-2002 index-linked Gilts which will in due course expire (2030). There can, however, be no harm in the UKSA guaranteeing the production of key indices and having a formal and publicised procedure, under the forthcoming governance arrangements for consumer price indices, for agreeing major changes.

Section Two: Measuring consumer price inflation for different household types

4. Should ONS seek to measure changes in prices, as experienced by different households?

i. Yes
~~ii. No~~

4a. Why? How often? Please provide any comments below:

These should be subdivisions of the main household index. Indeed given that a household index should be household ("democratic") weighted, or the closest practical approximation to this, aggregating sub-indices would be one route to this goal. Sub-indices would have different baskets of goods and services and, where necessary and feasible, different sources of price information (eg for housing).
There are needs for sub-indices by income group, type of household and by region. Consultation results should guide priorities. Unless there are practical reasons to the contrary, all sub-indices should be monthly like the main index.

If yes:

5. How should ONS seek to do so?

~~i. Using a payments-based approach.~~
~~ii. On the same basis as existing measures such as CPI.~~
iii. Via another means (please provide details)

A combination of i) and ii) – see below

5a. Why? Please provide any comments below:

In concept household indices should be payments based since that is when purchases hit the household budget. However, in practice for many items there will be little difference from an acquisitions approach and we note that defining the timing of payments can be difficult. Further, there is a need to avoid any radical change to price collection which would have a major impact on ONS costs.

A payments approach therefore only needs to be explicitly adopted in cases where there are substantial differences between payment and acquisition. The treatment of University fees and Student Loans is an example as is house purchase. Other possibilities, where we understand ONS already collects the needed data, could be the advance purchases of holidays or event tickets.

Section Three: The RPI

6. Do you use the following indices?

i.	RPIJ[1]	Yes/No
ii.	Tax and price Index	Yes/No
iii.	RPIY[2]	Yes/No
iv.	RPI pensioner indices	Yes/No
v.	Component indices of the RPI	Yes/No
vi.	Any other RPI analytical- or sub- index	Yes/No

6a. If yes, for what purposes? Please provide any comments below:

7. Do you agree that the below indices should be discontinued?

i.	RPIJ	~~Yes~~/No
ii.	Tax and price Index	Yes/No
iii.	RPIY	Yes/No
iv.	RPI pensioner indices	Yes/No
v.	Component indices of the RPI	Yes/No
vi.	Any other RPI analytical- or sub-index	Yes/No
	See comments below	

7a. If yes, why? Please provide any comments below:

It is probable that most or all of these indices will be needed as sub-indices, or analytical indices, of a future household index. Pending that they should continue to be produced as sub-indices of the RPI unless there is a clear case for discontinuing them on the grounds that need for them does not make the limited additional cost worthwhile

There would be little point in calculating them as sub-indices of the CPI family.
RPIJ is a special case and is currently of value. As argued, the RPI approach is the closest that currently exists to a "household" index. For those that prefer the Jevons formula to the Carli formula, RPIJ is therefore currently the closest approximation to what a household index should be. Once a household index has been established and "run-in" the need for RPIJ is likely to be much reduced and would probably depend on its analytical value.

[1] RPI calculated using formulae that meet international standards
[2] RPI excluding Mortgage Interest Payments an indirect taxes

The RPI should not be “frozen”. It will necessarily continue in use, and in wide use, for decades to come. It should therefore be improved and updated along with all other consumer price indices calculated in order, first, to follow changes in household purchasing behaviour and, second, to take advantages of technological improvements that are applied to other consumer price indices. It seems to us that an index used in legally binding contracts which did not take account of such factors could itself be open to legal challenge.
The only constraint on changes to it should be those which would change its character in the ways proposed, and rejected, by the 2012 consultation, ie those which would change its character fundamentally, for example the wholesale replacement of the Carli formula by Jevons. We note also constraints arising from the combination of the terms of index-linked gilts issued prior to July 2002 and the 2007 Statistics and Registration Service Act.
See also 9a below.

8. Do you have any views on what ‘freezing’ changes to the RPI should mean in practice? Please provide comments.

Section Four: Evolving Consumer Price Statistics

9. Are the priorities identified by ONS in its forward work plan appropriate?

a. ~~Yes~~

b. ~~No~~

(c. In part)

9a. Why? Please provide your comments below:

As outlined, a key priority for the ONS is to develop a household family of indices. The "formula effect" (between the RPI and CPI and also the three way effect between RPI, RPIJ and CPI) will remain an ongoing issue at its current level and will continue to undermine confidence generally. High priority should therefore be given to further examination of this, picking up again the various strands of work carried out in 2011-12. In the view of the RSS, this work was more successful than ONS realised at the time (see the RSS document: *Explaining the Formula Effect for Clothing*), both in the potential it had to reduce the formula effect and in the improvement it could give to the accuracy of indices.

Calculation of superlative indices does not seem to us to be high priority since these would be of more academic than practical interest.
Otherwise there are three issues in the work plans outlined which seem to us to be particularly deserving of priority:

1) The development of the use of scanner and other data and techniques such as web scraping. Potentially these will be very powerful in the longer term both in improving the accuracy of indices and in extending their scope. Further, if scanner and other data enable more use of weighted formulae at the first stage of aggregation, this will reduce or even eliminate the formula effect. We note though that it appears legislative powers do not exist to enable ONS to oblige retailers to provide scanner data and this needs to be remedied at the next possible opportunity.

2) An examination of the treatment of quality change and when new models should and should not be treated as replacements or new products. The Johnson review highlighted concerns in this regard.

3) Examination of the impact of discounts. This said, this is a difficult area; discounts change frequently and the key question is whether the total impact of discounts is increasing or decreasing and by how much. Scanner data will eventually help here.

Transparency is essential as regards both methodology and changes.

10. Should ONS include council tax in the CPIH?

a. Yes

~~b. No~~

10a. Why? Please provide your comments below:

Council tax should be included in a household index. It cannot be included in the HICP under EU rules.

Response submitted by RSS Policy & Research Manager, 15 September 2015