The Actuarial Profession
making financial sense of the future

Consultation Response

Office for National Statistics

National Statistician's consultation on options for improving the Retail Prices Index

30 November 2012

About the Institute and Faculty of Actuaries

The Institute and Faculty of Actuaries is the chartered professional body for actuaries in the United Kingdom. A rigorous examination system is supported by a programme of continuous professional development and a professional code of conduct supports high standards, reflecting the significant role of the Profession in society.

Actuaries' training is founded on mathematical and statistical techniques used in insurance, pension fund management and investment and then builds the management skills associated with the application of these techniques. The training includes the derivation and application of 'mortality tables' used to assess probabilities of death or survival. It also includes the financial mathematics of interest and risk associated with different investment vehicles – from simple deposits through to complex stock market derivatives.

Actuaries provide commercial, financial and prudential advice on the management of a business' assets and liabilities, especially where long term management and planning are critical to the success of any business venture. A majority of actuaries work for insurance companies or pension funds – either as their direct employees or in firms which undertake work on a consultancy basis – but they also advise individuals and offer comment on social and public interest issues. Members of the profession have a statutory role in the supervision of pension funds and life insurance companies as well as a statutory role to provide actuarial opinions for managing agents at Lloyd's.

Office for
National Statistics

Consultation

National Statistician's consultation on options for improving the Retail Prices Index

Feedback form

October 2012

In responding to the consultation it would be helpful if you could use this feedback form to answer the following questions

The National Statistician's consultation on options for improving the Retail Prices Index can be found in the following link: http://www.ons.gov.uk/ons/about-ons/user-engagement/consultations-and-surveys/national-statistician-s-consultation-on-options-for-improving-the-retail-prices-index/index.html

a) Options for improving the Retail Price Index

Which option proposed would you prefer? Please enter ✓ in the box to indicate your response	
Option 1) No change. The reasons for the formula effect have been identified, explained and understood.	☐
Option 2) Stop using the Carli to estimate price change for clothing, with options of the method to be used in its place. This would reduce but not remove the formula effect as some differences between the RPI and CPI formulation would remain.	☐ If you support this option which formula do you prefer? ☐ Dutot ☐ Jevons
Option 3) Stop using the Carli for all items in the RPI. Replacing the Carli with either the Dutot or the Jevons would reduce the formula effect to a minimum, although some difference between the RPI and CPI formulation would remain.	✓ If you support this option which formula do you prefer? ☐ Dutot ✓ Jevons
Option 4) Change the RPI so that its formulae align fully with those used in the CPI. This would remove the formula effect between the RPI and CPI, though there would remain differences in estimates because of the different coverage, weights and scope used in each.	☐

What are the methodological considerations behind your preference?
From a statistical perspective, the Carli methodology behaves inappropriately across time periods – a price reversal should lead to the index returning to its original level. In addition, the Dutot methodology has inappropriate cross-sectional behaviour due to the arbitrary weighting required for different prices. Since price relatives can be any positive number, the implicit model within Carli that these will fall symmetrically around unity is only appropriate when the relatives are all close to unity. The Jevons approach of modelling the logarithms of the price relatives as lying symmetrically around zero is an approximation that should be expected to be much more robust to dispersion in the survey data. A (more complicated) approach could be explicitly to correct for the bias in the Dutot or Carli estimates – the estimation error is a function of the dispersion in the underlying data and so this could be estimated using the same survey data. For these reasons, we do not believe either that the status quo is sustainable or that a 'quick fix' on clothing is appropriate: there should be a reasoned approach to the methodology used in each sector. Although our experience in risk management supports a greater focus of resources on the areas where there is most uncertainty, it also leads us to suggest that any lessons learned there should then be applied more broadly. While the process of increasing the clothing data collection has led to an estimator that turns out to be (arguably) *less* reliable than the original, this has allowed an underlying problem to surface and this should now be resolved across all sectors, even if the impact is currently lower on other sectors.
Do the options for improving the RPI have any impacts you would like to make the National Statistician aware of?
We do not believe that there is some 'true' underlying inflation rate which the competing methodologies are trying to tease out from the data. A purely statistical approach, based on theoretical models that are more or less plausible in practice, can therefore only reach so far and we appreciate the ONS' emphasis on the importance of economics, and the *users* of the retail price index, in order to reach a decision. A change in the inflation rate has most impact on long-term contracts which contain an explicit linkage to RPI. Our response highlights the impact on the main areas where actuaries work. In general, the anticipated reduction in RPI would benefit those who make payments based on the value of the index; however, those who receive benefits linked to the value of the index will be more likely to receive lower future benefits. <u>Pensions:</u> Many employer sponsored pension schemes have to pay benefits linked to RPI. Although recent legislative changes permit a link for benefit increases to CPI, this is not universal. For the remaining schemes that have benefit increases linked to RPI, the likely reduced cost of

providing these benefit increases will be positive for employers. However, pensioners will receive reduced benefits.

Life Insurance: Many annuities paid by life insurers are linked to the value of RPI. As with pension funds, the cost of purchasing these annuities should be lower, whilst the benefit payments will also be lower. Those most affected will be current annuitants, who purchased annuities priced using a formula that generated a higher RPI assumption.

Investment: Many actuaries will be involved in areas of work where assets held include index-linked bonds. The proposed change will result in a reduction of income and capital, reducing the value of assets. However, the reduced payments will benefit government and other issuers of index-linked securities.

General Insurance: Most insurance contracts will not be affected due to the short-term length of the contracts. However, damages claims awarded by courts are frequently linked to RPI. Any potential reduction in RPI would reduce the value of these awards.

Health Insurance: Health insurance payments are generally short term so most claimants would not see a material change in benefit payments. However, a small number of claims (for the long-term disabled) are for longer periods and those claimants would see the largest reduction in future income. Most policyholders would see a small reduction in premiums.

b) Private housing rentals

Do you support the proposal to change the source for the data for private housing rental prices?

YES	✓	NO	☐

Please provide any comments you would like to make in respect of this proposed change:

No comments to make.

c) Any additional comments

Please use this space provided for any additional comments.

No comments to make.

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Are you content for your response to be made public?
Please enter ✓ in the box to indicate your response:

- [x] Yes I am content for my response to be made public
- [ ] No I want my response to remain confidential

Would you like an individual response?
Please enter ✓ in the box to indicate your response:

- [ ] Yes I would like an individual response
- [x] No I am happy to receive a summary of responses

Is this a personal response or on behalf of an organisation?
Please enter ✓ in the box to indicate your response:

- [ ] Personal response
- [x] On behalf of an organisation (please state which organisation above)

If on behalf of an organisation, please state how the views of the members were assembled:

The Practice Executive Committees within the Institute and Faculty of Actuaries provided practice

area specific content for this response.

Please respond by email or post to:

Responses to the consultation can be submitted by email to: RPIConsultation@ons.gsi.gov.uk

Alternatively, responses can be sent to:

National Statistician (RPI consultation)
Government Buildings
Cardiff Road
Newport
South Wales
NP10 8XG

Please submit your response by **30 November 2012**.

Thank you for taking the time to take part in the consultation. Individual responses will not be acknowledged unless specifically requested.

Confidentiality and data protection

Information provided in response to this consultation, including personal information, may be subject to publication or release to other parties or to disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you would like the information, including personal data, that you submit to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, among other things, with obligations of confidence. In view of this it would be helpful if you could explain to ONS why you regard the information as confidential. If ONS receives a request for disclosure of the information ONS will take full account of your explanation, but cannot give an assurance that confidentiality can be maintained in all circumstances. Before disclosing any information that is personal to you, ONS will inform you of this in advance of any disclosure. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on ONS.

If you would prefer for your response and your name to be kept confidential, please make this clear in your response. Confidential responses will be included in any summary of comments received and views expressed.

Consultation timetable

This consultation will run from 8 October to 30 November 2012.

After the consultation

A response to the consultation, with a summary of the responses provided, will be published within 12 weeks of the consultation closing.

How to comment on the consultation process

If you would like to make any comments about the consultation process ONS has followed, please contact:

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Government Buildings
Cardiff Road
Newport
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