Background

Please confirm you have read and understood this important background information.

Yes, I have read and understood the information on this page.

About you

1 What is your name?

Name:

2 What is your email address?

Email:

3 What is your organisation?

Organisation:
n.a.

Section one: Measuring prices across the economy

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

Yes

Why? Please provide comments.:
Inflation measures are used for many purposes, such as macroeconomic monitoring, index-linking gilts, uprating welfare benefits, general index-linking, informing wage negotiations. Often, these different uses require different indices because the requirements cover different populations or different sets of products, so no one index is suitable for all purposes. Nonetheless, it is helpful to have a standard index that defines the framework within which these various inflation measurement needs may be met. As these needs relate, in effect, to different subsets, by population and/or product set, of a more comprehensive index, the obvious choice for a standard index is the overall index for the aggregate population and the aggregate product set. In this way, the different inflation measures produced by the different required subsets may be related to each other through their different coverage of population and products relative to the comprehensive, standard index. This addresses the problem identified in the Johnson review of the plethora of different indices (RPI, RPIJ, CPI, CPIH) that cause confusion because of the lack of clarity regarding their different forms and functions but still allowing for different subset indices for different purposes, their relationships being defined by their relationships to the comprehensive, standard index. My preference for the form of such a standard index is described in my response to question 2 below.

2 If you answered 'yes' to question 1a, then what should this measure be?

Other (please provide details).

Why? Please provide comments.:
A “Household Inflation Index” along the lines of that defined in the paper Towards A Household Inflation Index by John Astin and Jill Leyland, available on the RPI/CPI User Group website
(http://www.statsusernet.org.uk/communities/community-home/librarydocuments/viewdocument?DocumentKey=e4f517b3-f381-417b-8233-fdce26f40f20&tab=librarydocum
Although I fully support the principle of the type of index proposed in this paper, I disagree with some points of detail. I therefore include this paper as part of my response to the consultation, subject to the following alterations.
1. The approach to timing of price movements for both CPI and RPI is to use acquisition costs, which is my preferred method. The paper Towards A Household Inflation Index purports to prefer a payments approach, only using acquisition costs when the timing is similar to the payment. However, this preference is mainly motivated by the desired treatment of mortgage and other loan interest payments and is based on a misunderstanding of what the payment of interest means. As I show in paragraph 4 below, in most cases the monthly interest payment is the actual acquisition cost and the acquisition approach is the correct one to use throughout the index. This approach also allows a more coherent and sensible approach to the treatment of interest on student loans.
2. The proposed use of a “household-weighted” index is completely contrary to standard international practice and is therefore untenable. Furthermore, an expenditure-weighted index maintains the important index number theoretical concept of the total expenditure index being a product of a price index and a quantity index. Nonetheless, the concept could provide a meaningful comparison with standard expenditure-weighted practice, allowing an assessment of the effect of different expenditure distributions for different households on the aggregate index. My response to question 4 below presents a way of approximating to this comparison within the framework of a comprehensive, standard index, as discussed in my response to question 1 above.
3. The proposal to use the Jevons formula for elementary aggregates is misconceived. If the products in an elementary aggregate sample are randomly selected with probability proportional to size (pps), the Carli index is an unbiased estimator of the target base-weighted index. This incontrovertible result is well-known and openly acknowledged by all experts in the field of index numbers, including those who would prefer “superlative” index number formulae for the target index. Although it is not known whether actual elementary aggregate samples are truly pps, ONS puts a great deal of effort into designing its samples to ensure that they

are as near to pps as it can manage with the resources available, so the samples are at least approximately pps. The Carli formula therefore provides, at least, an approximately unbiased estimator for the target index. This is not the case for the Jevons formula, which is irrevocably biased because of its transformation bias. Only the Carli formula has any hope of providing an unbiased estimator for the proposed index (or, indeed, for RPI and CPI). Commentators do not give enough consideration to the bias of elementary aggregate formulae with regard to the target index. Variance may be reduced through aggregation over product items but bias always remains. Combining Jevons elementary aggregate indices with base-weighted aggregation is a useless mismatch that produces an index whose status is totally unclear: it is neither a “basket of goods” index because of the use of a biased elementary aggregate index nor an economic index (measuring the change in cost of a constant utility) because of the base-weighted aggregation. It has no meaningful interpretation. Only a base-weighted index with a Carli elementary aggregate formula has a meaningful interpretation, as a “basket of goods” index.
4. The proposed treatment of mortgage and other loan interest payments is complicated and muddled. To understand and handle the treatment of interest it is necessary to realise that interest is a rental payment for the use of someone else's money. If we lease a car for a few months, we pay a monthly rental for the use of the car and at the end of the period return the car to the owner. Similarly, if we “lease” (borrow) some money for a period, we pay a monthly “rental” (interest) for the use of the money and at the end of the period return the money to the owner (lender). With this in mind, it is clear that the monthly interest payment is the acquisition cost for the use of the money during that month. For student loans and other cases of deferred interest, the acquisition cost is still applicable, even if no interest payment is actually made, because the liability has been incurred. In effect, the student, or some other borrower, has received from the lender a top-up loan equal to the amount of interest deferred, thereby increasing their liability to the lender. The price change for interest payments is then conceptually straightforward: it is merely the change in the monthly interest cost, arising from changes in interest rates, on the fixed amount of outstanding loans included in the fixed basket.
5. The proposed treatment of capital repayments is also muddled. It should be clear from the previous paragraph that a capital repayment is merely the return of money to its rightful owner (in National Accounts parlance, a “transfer payment”). It is not a purchase of anything and has no place in a price index. The confusion arises because of the belief that the capital part of a mortgage repayment is a deferred payment for the purchase of the relevant property. It isn't. The vendor has received the full purchase price for the property (I don't think any vendor would be willing to accept deferred purchase payments over 20-30 years). The buyer has merely supplemented their own money for the purchase with a loan from a lender and monthly capital repayments are merely partial returns of the lender's own money. Because of this, there is no need to treat first-time buyers differently and the only appearance of capital payments should be as the full purchase price of owner-occupied housing at the time of purchase. The same principle also applies to other purchases using borrowed money, such as student fees.
6. For the proposed treatment of general insurance premiums, I have the minor caveat that the subsidiary proposal to allocate portions of these premiums to ECOICOP categories other than insurance is misguided. The payments by insurance companies to repairers and car dealers, to fulfil their contractual obligations to their policyholders, would rightly be classified to such categories as intermediate consumption for the insurance industry but this is not relevant to policyholders' premium payments, which are directly to the insurance industry only. The only relevant payments from policyholders to repairers and car dealers in this context are those arising from compulsory and voluntary excesses.
7. The proposal to exclude share purchases is on the ground that they are deemed to be investment assets, rather than assets used for or to facilitate household consumption, but I think share purchases should be included in the index because they are genuine purchases – of shares in the ownership of companies with real assets. I have no problem with this purchase being for investment. The prejudice against including asset prices in price indices arises from the production-based approach of National Accounts (usually referred to as the “macroeconomic” approach), where the legitimate concern is with factors affecting production. However, experience over the last 20 years (indeed, over the last 400 years) shows that asset price bubbles are a major cause of economic problems and willfully ignoring these bubbles is to miss out on extremely important price signals. This is why I support the inclusion of shares and owner-occupied housing with gross weights. The net assets basis for weights also harks back to the production-based approach of National Accounts but gross weights are essential in a household inflation index to ensure that measured inflation reflects the actual experience of households. I would, however, exclude purchases of government and corporate bonds, which are purely financial transactions – in effect, providing loans to governments and corporations.

CPI is a deeply flawed index because of its use of the downwardly biased Jevons elementary aggregate index (relative to a base-weighted target index) and because of its domination by National Accounts production concepts. This is particularly noticeable in the nonsensical use of rental equivalence for OOH costs in CPIH. Rental equivalence is a reasonable approximation in the context of National Accounts volume indices but it is totally ridiculous, at least in the short to medium term, for price indices. Everybody knows that house prices are far more volatile than rental prices, leading to the danger of booms and busts, as happened over the last few years, but the warning signs were totally ignored by policy makers because the official inflation figures were so benign. CPI's domination by National Accounts concepts also leads to erroneously small weights for items such as OOH and general insurance because it is geared to the net production weights, rather than to the gross input and output weights, which are the true signifiers of the importance of price movements. ONS should restrict developments in CPI (preferably reverting to the abbreviation HICP) to Eurostat's legal requirements.
A possible alternative is to revert to the RPI but this, too, is a flawed index because of its inadequate coverage with regards to housing and the target population (I have no objection to its use of the Carli formula for elementary aggregate). It is out of date. The "working population" it was designed for is no longer paramount and we need a new index covering all households. Its residual use in contracts, especially for index-linked gilts, is not something we need worry about. The Bank of England can easily buy up RPI index-linked gilts at market prices and replace them by gilts linked to a new index but that is not the concern of ONS.
The proposed Household Inflation Index, with the amendments presented in my response to question 2 above, provides a comprehensive, coherent system of indices that allows different subset indices to be used for different purposes but avoids the incoherent confusion caused by using two different sets of incompatible, substandard indices (namely RPI and CPI).

3. Should its production be governed by legislation?

No

Why? Please provide comments.:
Index number construction is a continually developing science, with continuing innovations in methods and data sources. Apart from a basic legal requirement for ONS to produce a high-level inflation index, ONS should be free to produce, independently, a comprehensive index of this kind, with appropriate sub-indices, according to the best available methods and data sources and in response to users' continually changing needs without the constraint of ossifying legal requirements.

Section two: Measuring consumer price inflation for different household types

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

Yes

Why? How often? Please provide comments.:
A standard, comprehensive main index is only relevant to the “average” household and may not be appropriate as a measure of the inflation experienced by individual households or groups of households. A set of sub-indices relating to different types of household would provide measures more closely targeted to individual households, would allow an assessment of the variations in inflation experienced by these different types of household and would provide indices more appropriate for specific purposes, such as wage negotiations or uprating benefits. In addition, weighting these sub-indices by number of households rather than expenditure (as used for the main index) would provide an approximation to the household-weighted index originally proposed in the paper Towards a Household Inflation Index. Such an index would be relatively easy to understand by the general public and would provide a useful comparator to assess the effect of expenditure weighting on the main index.
As the only practicable difference between these household indices would be the weights applied to the various product indices, I see no reason why these sub-indices should not be published monthly in conjunction with the main index, although it may be preferable only to publish the high-level household indices on a monthly basis, to limit the volume of output in the monthly release, publishing full details of these indices only annually.

5 If yes, how should ONS seek to do so?

Via another means (please provide details)

Why? Please provide comments.:
I suggest using household subsets of the comprehensive, standard index presented in my response to question 1, according to the breakdown used in ONS's annual report on the effect of taxes and benefits on household income. This presents household income distributions split by deciles and by quintiles, separately for Retired Households, Non-retired Households with Children, and Non-retired Households without Children. For price indices, splitting by deciles as well as household type may be too detailed, but using quintiles would give 15 separate household indices, which may be manageable. An interesting point is that this report assigns households to income bands according to equivalised net income (that is, income after deducting taxes and adding benefits). Equivalising adjusts income for household size so that the measured income is a more accurate reflection of how well-off the household is. Coherence with this standard ONS report is a useful attribute.

This approach ensures coherence with the main index I propose in my response to question 1. Abolishing the RPI and removing attention from the CPI (to be treated merely as a technical index required for coherence with Eurostat requirements) allows the clear understanding that all subsidiary indices are merely subsets of the main index, thus avoiding the confusion caused by a multitude of different indices, with different coverages, different weightings, different treatments and different elementary aggregate formulae.

Section three: The RPI

6 Do you use the following indices? (Please select those that you use)

If yes, for what purposes? Please provide comments.:

7 Do you agree that the following indices should be discontinued? (Please select those that you suggest should be discontinued)

RPIJ, Tax and price Index, RPIY, RPI pensioner indices, Component indices of the RPI, Any other RPI index

Why? Please provide comments.:
As mentioned in my response to question 2a, the coverage of the RPI is inadequate and it has several methodological failings (although use of the Carli formula is not one of these failings), so it is no longer fit for purpose. Suitable sub-indices for index-linking, on a more rational basis, would be available from my proposed main index and the problem of RPI index-linked gilts can be resolved by a market-based replacement of gilts index-linked to my proposed main index or some suitable sub-index.

8 Do you have any views on what 'freezing' changes to the RPI should mean in practice?

No

Why? Please provide comments.:
The concept of 'freezing' changes to the RIP makes no sense to me. It would be better to abolish the RPI and stop worrying about it.

Section four: Evolving consumer price statistics

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

No

Why? Please provide comments.:
Although I approve of most of the components in the proposed work plan, I disagree on the following parts.

The main short-term priority should be to produce a comprehensive main index, with appropriate sub-indices, along the lines described in my responses to the previous questions. It is essential that ONS gets rid of the current, nonsensical mish-mash of incoherent indices and concentrates on a single set of rational indices that truly reflect the UK public's experience of inflation.

“Producing CPIH and CPI to the best possible standard” is not necessary and would be a waste of ONS's scarce resources. The CPI is a deeply flawed index, as discussed in my response to question 2a, and work on it should be confined to what is legally required for Eurostat.

Calculating “experimental retrospective superlative indices” would also be a waste of ONS's scarce resources and should not be attempted. There is no evidence that “superlative” indices do what they claim to do, which is to estimate the economic inflation index based on the notion of maintaining constant utility, because nobody has the foggiest notion what the relevant utility functions are. The justification for “superlative” indices is based on supposition and guesswork and ONS should not attempt to calculate such indices until (if) they are based on more solid evidence.

I see no need to produce regional inflation indices, although regular regional price comparisons should continue. Regional inflation indices have the same limitation as the main index, in that they are averages over a disparate set of households with different consumption patterns, but with the added disadvantage of increased volatility because of smaller sample sizes. Furthermore, as consumption patterns are much more similar between regions than between households within a region, inflation differences between regions are likely to be much smaller than inflation differences between households. Higher volatility and smaller differences mean it is unlikely that regional inflation indices would provide any meaningful information, any observed differences being mainly attributable to random error. ONS would make better use of its resources by developing indices for different households, where meaningful differences are likely to arise, preferably along the lines I proposed above.

10 Should ONS include council tax in the CPIH?

No

Why? Please provide comments.:
This question seems to be predicated on the assumption that CPIH would be ONS's main index, which I do not support. In principle, council tax should be included in ONS's main index but this index should not be CPIH. As noted above, I think that ONS should merely do the minimum with CPI and CPIH to satisfy the requirements of Eurostat, which would mean that council tax is not included for that specific purpose but this should have no effect on the choice for ONS's main index.

Additional information

Do you have any further comments relevant to this consultation?

Do you have any further comments relevant to this consultation?:
I am disappointed that the Johnson review accepted, without question, the standard international view that the Carli formula is not suitable for use in RPI elementary aggregates. This questionable view is based on the desire for the implementation of so-called “superlative” indices, that are claimed to reflect the economic measure of inflation based on constant utility. However, there is no evidence that these “superlative” indices actually do this or that the degree of product substitution they are claimed to allow for is appropriate with regard to the actual operation of the markets they are applied to. Furthermore, arguments based on the economic measure of inflation are not relevant to the RPI, which is not designed for this purpose but is designed is a “fixed basket of goods” index and is know to be so designed by all commentators on this matter. Under pps sampling, the Carli index is an unbiased estimator for the mean price relative, based on the fixed basket weights. That is, it is an unbiased estimator for the desired RPI elementary aggregate index. All other elementary aggregate indices are downwards biased in this regard (the Jevons, CSWD and Coggeshall formulae all suffer from transformation bias, this being particularly acute for the Coggeshall formula; for the Dutot formula, the bias arises from a negative correlation between price relatives and weights, which are the base prices in the Dutot index). Because the true weights are unknown, there is no definitively best elementary aggregate formula, so index number statisticians should use the most appropriate elementary aggregate for the target index. ONS does as much as it can, within the resources and information available, to design its outlet sampling and some of its product sampling to produce a pps sampling of products. Under the most plausible assumption of pps sampling, therefore, only the Carli formula is suitable for the RPI (and for my proposed HII). Using any other formula is to deliberately accept a high probability of a large downward bias to the estimated inflation rate (relative to the target Lowe index) and is a dereliction of duty. I hope that if ONS accepts my proposal for a Household Inflation Index, or something similar, it will not design is to be biased downwards but will use the Carli formula for elementary aggregates.

User satisfaction

Overall, how satisfied were you with this online consultation service today?

Satisfied

Please tell us if there are any specific areas for improvement, or if you have any other comments.:
After saving the responses for one set of questions, it was a bit of a pain having to scroll down to find the list of categories for the next set of responses. It would be better, when "returning to contents", to return to the list of categories rather than the introductory bumph.

I accidentally selected the "No" button for question 10 but actually wanted to leave both buttons blank and couldn't find any way to revert to blank buttons. It didn't matter for this particular question but it would be helpful to have a facility to revert buttons to blank.