

Developing an Index of Household Payments, full responses: Feb 2017

This document contains the full comments received in response to our paper “Developing an Index of Household Payments”. Responses are ordered alphabetically within each group. The responses have been grouped as follows:

- Government
- Pension groups and trade unions
- Utility companies
- Other organisations
- Individuals

Two individual respondents have not provided consent for their responses to be published, and as such, these responses are withheld from this document.

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BANK OF ENGLAND

Helen Sands
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3 November 2016

Dear Helen,

THE ONS CONSULTATION ON DEVELOPING AN INDEX OF HOUSEHOLD PAYMENTS

I am writing to you in response to the ONS's recent consultation on the production of an Index of Household Payments (IHP). Although I have already made all of the points that follow in the context of the ONS's Stakeholder Advisory Panel on Consumer Prices (APCP), I apologise for the belated response in setting them out in writing. I hope this will nevertheless still be of some use to you.

The origin of the proposal for an IHP lies in two things.

(i) The removal by the UK Statistics Authority (UKSA) of 'National Statistic' status from the RPI, on the basis of the widely held view (which the Bank of England shares) that its statistical construction falls short of international best-practice.

(ii) A sense from some users of price statistics that the CPI and, prospectively, CPIH do not adequately reflect households' perceptions of the broad range of outgoings that matter to them on a day-to-day basis, and/or the relative importance to them of the items which are included in CPI and CPIH. Hence there is a desire to develop statistical measures that enable a more granular, and somewhat different, examination of the financial situation of different groups of households than is possible with aggregate indices intended to measure the average price of consumption (such as the CPI).

Within the second factor, a particular point of contention for some is the measurement of owner occupiers' housing costs in CPIH. This uses the 'rental equivalence' approach – that is, it uses rental price data to produce an estimate of how much it would cost owner-occupiers to rent a property similar to their own. This is an economically sound concept and, in my view, remains the most coherent and operationally practical method of overcoming the fundamental problem that one cannot directly observe the consumption 'cost' of owner occupied housing.

While rental equivalence is a relatively straightforward concept for users to understand, it is obviously an imputed one: no-one really pays rent to themselves to live in their own home. And this raises the question of whether there is a case for incorporating within *different* statistics a 'payments-based' approach similar to the one utilised in the RPI – albeit one that conflates the economic 'consumption cost' of housing with the financing costs of acquiring an asset (i.e., mortgage payments). The aim of those different statistics would not be to capture consumer prices per se, but rather the broader range of household incomings and outgoings that describe different types of households' financial situations.

These are good questions, and they relate closely to the proposals set out by Paul Johnson in his recent independent review of consumer prices statistics. As the IHP proposal stands, however, I do not think that it addresses these questions either adequately or coherently.

Inflation is a fundamental underlying economic concept related to a generalised decline in the value of money. No single statistic can directly measure this concept in all its fullness. But we can, and do, measure many of the consequences of inflation. We measure the changes in final consumer prices, those of prices at various stages of the production process – such as input prices or producer output prices. And we compute implied price deflators, for instance, for GDP and its expenditure components. Moreover, inflation matters for a wide range of other economic variables. It influences households' saving and spending decisions, businesses' investment decisions, the public finances and so on. The ONS already produces a wide range of statistics regarding these variables. So the question is: what is the specific purpose of the proposed IHP? What gap is it trying to fill?

If one were to think that the measurement of consumer prices could be improved in some way – relative, say, to that embodied in the ONS's main consumer price index, the CPI – then the right response would be to improve the CPI. The development work that has gone into incorporating owner-occupiers' housing costs into the CPIH variant is one example of how this works. In future, as the economy evolves and as further development work is undertaken by the ONS, there will, no doubt, be other proposed improvements to the ONS's main measure of consumer prices for the new technical and stakeholder advisory groups to help take forward. The right response is not, however, to introduce an entirely new index, thereby adding to the proliferation of such measures that Paul Johnson's recommendations sought to avoid – indeed, to reduce. Such a proliferation of indices purportedly aimed at measuring the same thing risks resulting in confusion and undermining of the credibility of any one of them.

In any event, the IHP proposal described in the consultation document does not appear to be a measure of the price of consumption. For instance, mortgage payments are not a measure of the 'consumption price' of owner-occupied housing services because they conflate it with both asset values (house and land prices) and the cost of financing the acquisition of the housing asset (mortgage interest). Mortgage capital repayments are economically akin to saving, not to consumption. Similarly, gross insurance premium payments, while clearly an important household cash-flow, do not really represent the economic 'price' of insurance, since the purchased insurance contract necessarily implies that a proportion of those premiums are returned to households in the form of insurance claims.

Alternatively, if the IHP is not a measure of consumer prices, perhaps the idea is to form the basis of a 'flow of funds' type broad index of household outgoings. Although this would raise questions about the overlap between such a measure and the information already available in the National Accounts, one can certainly imagine that detailed statistics of this kind could help build up a comprehensive picture of the financial situations of households. Were one to do this, it would certainly be of most use if it were compiled alongside a comparable measure of household incomings, so that, for example, one could compare both households' interest payments (as in the IHP proposal) and their interest receipts, or outgoings on gross insurance premiums with insurance claim receipts.

However, in its current form the IHP proposal does not quite do this, either, because it appears to select which outgoings are included and which ones are not in a way that is hard to understand. Why are outgoings on 'savings' in the form of mortgage capital repayments and housing deposits included, but those in the form of contributions to pension or life assurance products excluded, for instance? It is not at all clear what frame of reference is being used to guide these choices. Is it intended to describe 'consumption' or a fully comprehensive range of household outgoings?

Moreover, if the objective is to help us gain a fuller picture of the different financial situations of households, then it seems to me that such statistics (regarding both outgoings and incomings) should focus specifically on those diverse groups of households of most interest to potential users, rather than some aggregation which is an accurate representation of none of them. For instance, one can certainly think of plenty of potentially important uses of statistics regarding the financial situations of households in different age groups, of net savers and net borrowers, of home-owners and renters, of lower-income households and higher-income households and so on. Paul Johnson made this point in his recent

independent review, and it is a good one. It is in this context, of measures for different household groups, that weights informed by their different expenditure patterns would be necessary and illuminating.

In summary, it is not at all clear to me what gap the current IHP proposal is aiming to fill. It does not seem to be an index of consumer prices, and even if it were, why would one choose to develop yet another alternative index rather than focussing our efforts on making the one we have as good as it can be? Neither is it a comprehensive measure of the broader range of household outgoings that one could set alongside comparable measures of incomings to build up a more detailed picture of households' financial situations. Furthermore, if a detailed picture of households' financial situations is what we are after, then heterogeneity matters a lot. To reflect this properly, we really ought to be focussing on producing statistics that shed light on the wide variety of experience across different groups of households, and not on statistics that obscure that variety of experience with a focus on the aggregate.¹ With some modification of the proposals, one could seek to produce valuable statistics that met what are unquestionably important objectives and user needs. But, without it, it is rather hard to see what the IHP would add. And it would be a shame if its production diverted resources away from the development of those more valuable statistics.

Finally, since it appears a relatively important part of the motivation for the current IHP proposal, let me add a word on the significance of households' perceptions of inflation. There is no question that official statistics ought to be understandable to as wide a range of users as possible – statistical experts, analysts, researchers and members of the general public alike. It is vital that users understand and trust that official statistics are measuring what they say they are measuring, and that what they are measuring makes sense. I know from my interactions with ONS staff at all levels that this principle is taken very seriously indeed. The aim of making statistics understandable, however, need not come at the expense of coherency and accuracy. If we are seeking to measure consumer spending, then we should measure consumer spending, not users' perceptions of consumer spending. And if we are seeking to measure consumer prices, then we should measure consumer prices, and not users' perceptions of consumer prices. Of course, there is a great deal of value for economists and others in seeking *specifically* to measure, say, households' perceptions of consumer price inflation in and of themselves. Indeed, on behalf of the Bank, TNS runs a regular survey of households with precisely this aim.² But that is a rather different thing from what we are trying to achieve here.

Although we have been around these issues once or twice before in the stakeholder and technical advisory panel groups, and in their predecessor advisory committee, over a number of years, I would of course be very happy to discuss this further with you if it would help.

I am copying this letter to Dame Kate Barker, the Chair of the Stakeholder APCP.

Very best wishes,

James.

James Bell
Head of Structural Economic Analysis Division
Head Secretary to the Monetary Policy Committee
Bank of England

¹ It would obviously be for the ONS to decide with which frequency it would be best to produce such numbers, so as to best balance the costs associated with their production with the benefits to users. Bearing in mind all of the other demands on ONS resources, I would imagine that annually or semi-annually would be a reasonable place to start.

² Details of the Bank of England/TNS Inflation Attitudes Survey are available on the Bank of England website: <http://www.bankofengland.co.uk/publications/Pages/other/nop.aspx>

Developing an Index of Household Payments

Response from Greater London Authority to the ONS paper August 2016

1. Do you believe that there is a need for this type of index? If so, why?

There is a perception among both professional and lay users of inflation measures that CPI and CPIH do not reflect households' experience of inflation. We believe that this is due, at least in part, to the fact that the national accounts system for calculating costs does not reflect households purchasing decisions and the way that they make payments. We therefore believe that an index that is specifically constructed to monitor the price changes experienced by households is needed.

2. What is your need for this index and why do you believe it would be suitable for your need?

An index of household costs or prices would have widespread applications in economic monitoring, wage setting and income/poverty measurement, and many other individual exercises, such as evaluating the true cost of education (student loans).

In particular, having indices that reflect inflation as experienced by different parts of the population, for example by region (particularly important for the GLA), by income decile, by tenure, by life stage (eg households with children, pensioner households, WA without children) would allow us to monitor whether changes in the wider economy are reflected throughout the population or whether some parts of the population experience greater increases in their costs than others, (and ultimately whether this is reasonably reflected in their income).

3. How frequently would the index need to be published to meet this need?

Such an index should ideally be published monthly, or at least quarterly to allow users to have an index close to the time point relevant for each purpose. Some uses might relate to a calendar year, a financial year or an academic year, or indeed any other time point.

To best meet the need stated above:

4. What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

As a measure of changing prices experienced by households it would need to be household expenditure weighted.

5. What is your preferred population (for example, all UK or private UK) coverage?

As a measure of changes in household costs, it should be constructed for all households in the UK. However, “institutional households” represent a very small portion of all households in the UK, and it is not clear whether changing prices experienced by this group would be significantly different to those experienced by private households (or indeed whether this would impact on the index). Some sensitivity analysis around this would be welcome.

6. **What is your preferred expenditure (for example, national or domestic) coverage?**

In an ideal situation, the index would measure national spending. However, we recognise that this is a difficult proposal and may be an area that can be improved over time.

7. **What is your preferred approach to timing?**

We believe that a payments approach should be adopted, as this again reflects households’ spending decisions. This may be for small items, such as purchasing non-perishable items in bulk or taking advantage of lower rates for early booking or the true costs of a large purchase (from a sofa to a house) taking into account interest payments (see below).

8. **What is your preferred treatment for the following items?**

interest payments – we agree that these should be included. Any interest costs are taken into account by households making purchasing decisions. Interest accrued from investments should form part of any income measure produced either alongside an index or separately. This does not affect the prices paid.

student loans – we agree that these should be included. This should be consistent with the approach to other forms of loan, reflecting the costs paid at the time of payment.

insurance premiums – we agree that the full cost of premiums should be included on a gross basis. Replacing goods or paying for services through payments from insurance companies should then not be included in the index.

life insurance premiums – we agree that life insurance premiums should be included. Life assurance, except for the life insurance part of it, should not. Life insurance may be a requirement of some types of loan (for example, mortgage). Any payouts would then be eligible for inclusion as income if appropriate.

Taxation – we agree that indirect taxes including VAT, Council Tax and Stamp Duty should be included in the index but direct taxes, such as NI and income tax should not.

owner occupier housing costs excluding capital costs – we agree that these should all be included (Stamp Duty already listed under taxation above)

capital housing costs – we agree that these should be included on the basis of payments made as with other purchases. This reflects households’ spending decisions as for other goods, as advocated above and is consistent with the “at point of payment” approach. Unless capital housing costs are included, then the low housing costs once purchase is completed (ie any mortgage is paid off) cannot be reflected in a household price index. This is particularly necessary when considering indices for sub groups of the population.

9. **Are there any other areas you believe we need to consider with regards to this index?**

The collection of data needed for such as Index, particularly in relation to whether or how it could/should be applied to any potential sub groups, including regional splits, needs to be discussed more fully.

10. **Do you have any additional comments?**

It is difficult for a non-expert to understand the term “Index of Household Payments”, and how this differs from Household Spending, which may be more discretionary – more one year than another. A term that used the term prices rather than payments might have a wider comprehension in terms of what this index is trying to do, even if less accurate. ONS officials described their proposal as not being a measure of inflation, which is likely to lead to even greater confusion if that were to be broadcast more widely.

The documentation and explanation produced alongside this index will be particularly important and accessible to all users to help understand any differences. This means that work to understand how and where the differences arise and their effects, needs to be completed, including the methodological differences as well as content, and made available to users.

We strongly welcome ONS’ plans to publish income statistics alongside this new index. However, we recognise that this will be a challenging task, to produce for the sub groups as well as a national figure on a monthly basis. We therefore urge that production of such income statistics should be developed alongside the new index, but should not inhibit publication of the new index if the income statistics are not available to the same schedule.

HM Treasury response to ‘Developing an Index for Household Payments’

1. Do you believe that there is a need for this type of index? If so, why?

Our priority remains the continued publication of high quality statistics to give HMT, other institutions and the public full trust and confidence. We welcome ongoing ONS work to improve transparency and support users’ understanding, particularly in relation to CPIH, as well as ongoing work to develop price indices in general.

It is important that resources are not diverted away from delivering the priorities identified by the National Statistician’s technical and stakeholder Advisory Panels on Consumer Prices, including the CPIH regaining its National Statistics accreditation. The panels also noted the importance of ONS communicating the appropriateness of CPIH (notably the OOH component) from a user perspective in order to achieve these priorities.

As noted in “UK Consumer Price Statistics: A review” publishing an Index of Household Payments represents a risks in this regard:

- It would be no better than CPIH as a measure of prices faced by any individual group and could be misleading for some if taken as the “household cost measure”.
- It could create confusion and inflation rate “shopping”, where users may seek the rate of inflation that gives the right number, rather than the appropriate measure.

“UK Consumer Price Statistics: A review” recommended that the ONS explore disparities in costs faced by different households and demographics but came to the conclusion that a single household index was less useful. Whilst a case has been made for developing an index which better aligns with household perceptions of increased costs, we do not believe such an index would be meaningful in isolation. In order to be of value it would need to be accompanied by measures that also capture changes to household incomes.

2. What is your need for this index and why do you believe it would be suitable for your need?

As noted in Paul Johnson’s UK Consumer Price Statistics: A Review (2015), such an index would not be meaningful in isolation. In order to be of value, the proposed index would need to be accompanied by comparable measures that capture the

changes to household income. As currently presented, the index will not be comprehensive enough to deliver this.

For example, the technical panel advice supported the inclusion of interest payments (notably mortgage interest payments) in the context of measures for different household groups. However, this is subject to the inclusion of interest received (for example, from savings) in comparable measures of income. As it stands the index only appears to look at household outgoings and not comparable incomings. In addition, there appears to be little justification in the proposal about the selection of outgoings that are included and those that aren't. For example, mortgage repayments are included while savings for housing deposits aren't.

As noted, in technical panel advice, the majority of members agreed that the right starting point for empirical testing and credibility building in this area would be to consider the experience and impact of price change for different household groups. However, the approach set out would not be disaggregated in a way to enable this.

3. How frequently would the index need to be published to meet this need?

As noted such an index would not be meaningful in isolation.

Publication could also create some communication challenges for the ONS and may risk confusing the inflation narrative. For example ONS would need to provide clarity regarding any different methodologies and approaches used in their compilation, including how the index relates to comparable changes in household income. If developed, these should be published less frequently, to avoid competition or confusion with a regularly-published main measure of inflation.

To best meet the need stated above:

4. What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

N/A – the approach to compilation of statistics is properly a matter for the independent UKSA and ONS.

5. What is your preferred population (for example, all UK or private UK) coverage?

N/A – the approach to compilation of statistics is properly a matter for the independent UKSA and ONS.

6. What is your preferred expenditure (for example, national or domestic) coverage?

N/A – the approach to compilation of statistics is properly a matter for the independent UKSA and ONS.

7. What is your preferred approach to timing?

N/A – the approach to compilation of statistics is properly a matter for the independent UKSA and ONS.

8. What is your preferred treatment for the following items?

- interest payments
- student loans
- insurance premiums
- life insurance premiums
- taxation
- owner occupier housing costs excluding capital costs
- capital housing costs

N/A – the approach to compilation of statistics is properly a matter for the independent UKSA and ONS.

8. Are there any other areas you believe we need to consider with regards to this index?

10. Do you have any additional comments?

ONS Household Income and Expenditure Team (HIE) response to: Developing an Index of Household Payments - 26/09/2016

APPENDIX A: Questionnaire for responses to this paper

We have provided the following questions as a guideline for responses, but any additional comments or observations will be taken into consideration. Please ensure you include your name and organisation in your response and submit it by email to cpi@ons.gsi.gov.uk or in writing to Helen Sands, Prices Division, Office for National Statistics, Cardiff Road, Newport, NP10 8XG by 26 September 2016

1. Do you believe that there is a need for this type of index? If so, why?

Yes, this index would better reflect costs as understood and experienced by households.

2. What is your need for this index and why do you believe it would be suitable for your need?

This index would be used to deflate the income estimates in the 'Effects of Taxes and Benefits on Household Income' (ETB) and 'Nowcasting household income' publications. This index could replace the Household Final Consumption (HFFCE) deflator currently used, which is no-longer available for the time series required.

3. How frequently would the index need to be published to meet this need?

Annually would be preferable with a financial year time series available to 1977.

To best meet the need stated above:

4. What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

Economy-wide expenditure weighted

5. What is your preferred population (for example, all UK or private UK) coverage?

Private UK

6. What is your preferred expenditure (for example, national or domestic) coverage?

Domestic

7. What is your preferred approach to timing?

Time of payment

8. What is your preferred treatment for the following items?

- interest payments
- student loans
- insurance premiums
- life insurance premiums
- taxation
- owner occupier housing costs excluding capital costs
- capital housing costs

As the below table:

	Astin-Leyland proposed HII	ETB	Matched Payments Measure
a. Weighting	Household expenditure weighted	-	Economy-wide expenditure weighted
b. Coverage	All UK households	Private households	Private households
c. Timing	Payments-based approach	-	Payments-based approach
d. Interest payments	Gross interest paid	Gross interest received	Gross interest paid
e. University tuition	Included (payments approach)	Not deducted from income	Included (payments approach)
f. Insurance	Gross premiums	Excludes interest payouts	Net premiums
g. Taxation	Include certain taxes	Accounts for tax payments	Exclude tax
h. OOH costs	All costs associated with owning a home	Doesn't account for wealth realised	All costs associated with owning a home (provided they do not add to value of house)
i. Capital housing costs	Include first time buyers and go some way towards including full housing market	Doesn't account for wealth realised	Capital costs net of wealth realised (from selling or renting of housing)

9. Are there any other areas you believe we need to consider with regards to this index?

N/A

10. Do you have any additional comments?

Quarterly estimates are not required as income estimates are only published on an annual basis.

Key issues with producing quarterly income estimates are as follows:

- Analysis has suggested that the precision of the estimates would not be sufficient to reliably identify quarter on quarter change in income
- Many of the changes that affect income (e.g. pay rises, tax and benefit changes) happen on an annual basis
- The required changes to produce quarterly income estimates would take time and resources to develop and implement. The ongoing production costs would also increase
- A review of the sample design would be required to identify if the sample could provide robust, representative estimates for the UK on the quarterly basis
- There is currently not a user demand for quarterly income estimates, improvements to the components of income and the measurement of benefit in kind (BIK) estimates are of a higher priority to users

Nathan Thomas

Head of Outputs Team

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Incomes Monitoring statistical teams within the Department for Work and Pensions (DWP) response to ‘Developing an Index of Household Payments’

Immediately, we welcome work to look at developments around an Index of Household Payments – our analysis for the high profile Household Below Average Income statistics in particular focuses on analysis of household incomes. For time series analysis at the moment we are using adapted variants of CPI/CPIH to an approach agreed with IFS and ONS, but something specifically tailored to household costs might be more appropriate to our needs and we’re interested to see the outcome of any exploratory analysis in this area.

Our immediate views on your paper and the broader issues here are summarised below.

On practical factors which might influence our adoption of any new index here:

- For our analysis, whilst different indices for different client groups would be interesting, we would need a single index across the population
- Whilst we understand the concerns outlined in the Johnson Review around potential index-shopping, we would need any potential index here to be available on a monthly basis for use in our analysis.
- Any significant lag/delay in production of a future IHP following the reference period might mean we hold to our current methodology, rather than delaying publication of our statistics to accommodate use of this new series
- There are some practical consideration over specifics included in the measure which might influence our adoption (or where we might be keen to request variants) e.g. versions of a potential IHP estimated before and after housing costs; we’d prefer to exclude council tax etc. etc.
- Finally, as part of any assessment here, it would be useful to understand how much of difference this honestly makes – CPI-based indices are transparent and well-established so if IHP follows CPI closely we might prefer to hold with our current methodology.

More generally:

- We would agree that a democratic rather than plutocratic index is better suited to income deflation
- We would agree with excluding the institutional population
- Lots of the methodological issues in the paper are described as difficult or meriting further investigation. Obviously a complete, consistent, methodologically understood index here is the preference so it’d be good to just keep an eye on the number of assumptions that are being made and/or things that can’t be done, and how far what it ultimately published meets requirements.

Thanks and very happy to discuss separately on any narrow specific requirements we might prefer from any potential future IHP to tailor to our work.

John

Pension groups and trade unions

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Helen Sands,
Prices Division,
Office for National Statistics,
Cardiff Road, Newport, NP10 8XG

26 September 2016

Dear Helen Sands

Age UK's Response to the ONS consultation: Developing an Index of Household Payments

Age UK is the country's largest charity dedicated to helping everyone make the most of later life. The Age UK network includes over 150 local Age UKs, reaching most of England. Each year we provide information and advice to around 5.9 million people through web based and written materials, and individual enquires by telephone, letter, email and local face-to-face sessions. We work closely with Age Cymru, Age NI and Age Scotland.

The need for a new index

Age UK welcomes the proposals to develop a new household payments index and the opportunity to respond to this consultation. One of the main reasons why we support the proposal is to ensure that we have a measure of inflation that captures the experience of individual households in a better way than the CPI. This is important for a range of uses including informing annual increases to pensions and benefits, and wage negotiations.

The move from RPI to CPI as the headline measure of inflation for uprating many pensions and state benefits has had a major impact on the incomes of many older

people and others reliant on these forms of income. As we understand it, the CPI was designed as a measure to look at the overall economy and to provide a comparable measure with other EU countries, rather than looking at prices as faced by individual households.

When the CPI was introduced as the index for inflation to be considered for Bank of England interest targets, there was no suggestion that this would also be used for pension and benefit uprating. For example, the BBC at the time reported 'People receiving pensions and benefits will not have to worry though. Their payments will be uprated in line with RPI inflation'.¹

While we acknowledge that there are criticisms that can be made of the RPI, given the CPI is generally lower than the RPI, it is difficult not to conclude that an important motive behind the Government changing the index for uprating was to reduce expenditure. We note in contrast the RPI has been maintained in other scenarios such as setting rail fares. The move to introduce homeowners' costs into the CPI through the CPIH may produce an improved measure but we still feel there is a need for an index developed from the starting point of reflecting rises in costs as experienced by households.

Of course, the Government would continue to choose which index to use for purposes such as uprating, but having a household index would provide better evidence to inform those decisions.

We also see value in producing measures of household income alongside costs, as referred to in the consultation paper. This would provide a helpful picture of living standards which would be very useful in a range of policy debates and decisions.

While we envisage there would be an overall household measure, it would be very useful to be able to compare different types of households and the costs they face, for example, for different age groups and different income levels.

Frequency

Age UK believes that in order to provide a measure of household inflation to sit alongside the CPI and other indexes, the household index should be updated monthly.

However in terms of producing a general measure of living standards including income measures, this could be published as an annual report in the same way as other ONS publications such as the 'Effects of tax and benefits on household income'.

¹ <http://news.bbc.co.uk/1/hi/business/3188470.stm>

Population coverage

We think that all UK households should be included.

Timing

The index should reflect when payments are actually made as far as possible in order to reflect the outgoings that people have, although we acknowledge that for some items there may be methodological or other reasons why this is not possible.

Treatment of particular items

Overall, we believe that the aim should be to include all the outgoings that people have. We acknowledge that the treatment of housing costs for homeowners is a particularly difficult issue and that there are different approaches to this. However, our preference would be to use an approach based on the payments that people actually make.

Different types of taxes are generally regarded by individuals in different ways and we agree with the suggestion that they should be included when these are part of outgoings such as council tax, and excluded when they are deductions from income such as income tax.

The name

Lastly, we question whether an 'Index of Household Payments' is the best name to reflect an index that provides information about changes in prices. Other suggestions have been made and we believe it would be clearer to describe it as an index of 'household costs' or 'household prices' instead.

Yours sincerely,

Sally West
Policy Manager

Email: sally.west@ageuk.org.uk



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26th September 2016

The National Union of Teachers (NUT) is the largest teachers' union in the UK and represents over 270,000 serving teachers. The NUT is pleased to take the opportunity to respond to this discussion paper. Although not a formal consultation, the NUT also endorses the response of the RPI-CPI User Group and that of the Public Service Pensioners' Council (PSPC).

The NUT's response to the questions outlined in Appendix A is as follows:

1. Do you believe that there is a need for this type of index? If so, why?

The NUT believes that there is a need for an Index of Household Payments to specifically recognise the change in costs typically experienced by households. An index of this type which had the confidence of negotiators could be used as a benchmark for wage negotiations.

The RPI is the closest the UK has to such an index at present. However, this has had its designation as a National Statistic removed and we now have an opportunity to create an updated index that meets this basic requirement.

The NUT attended a public meeting at the Royal Statistical Society on 12 September. At the meeting it was made clear by the ONS representatives that they did not regard the proposed Index of Household Payments to be an inflation index. This is a pity because most users would recognise this type of measure as an inflation index. By contrast we do not recognise CPI as a suitable index for domestic uprating purposes.

The CPI is the UK version of the HICP which is produced in accordance with EU Regulations. It was designed to compare inflation rates across Europe. It remains suitable for the purpose for macroeconomic comparison, but the UK now uses it for purposes for which it was not designed. Very few European countries use the HICP as their 'uprating index'.

2. What is your need for this index and why do you believe it would be suitable for your need?

The NUT has two principal uses for this information. As wage negotiators for teachers it is important to have a measure of inflation which recognises the price changes experienced by average households to act as a benchmark in wage negotiations.

There is also a need for this information for pension uprating. Current legislation for Public Sector Pensions requires the measurement of increases “in the general level of prices”. The NUT believes that any index used for the uprating of state and public service pensions actually attempt to measure the cost of living increases experienced by households.

3. How frequently would the index need to be published to meet this need?

The index should be published monthly to be comparable to other price indices, which are published monthly, and to enable it to be used by other bodies that may wish to select a particular month within the calendar for comparison purposes.

To suggest that the index be produced yearly, as ONS representatives did at the meeting on 12 September, would downgrade the importance of the IHP from the start and make it purely a measure of academic interest rather than practical use. Sadly, we suspect this was the intention of the proposal to publish the information annually. Any measure which is intended to be of use to wage bargainers must be published monthly.

To best meet the needs stated above;

4. What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

The measure should be household expenditure, weighted to reflect household experience of changing prices.

5. What is your preferred population (for example, all UK or private UK) coverage?

Ideally the index should reflect national expenditure which would include UK residents' spending abroad but exclude foreign spending in the UK. It should cover all households, including institutional households.

6. What is your preferred expenditure (for example, national or domestic) coverage?

National (expenditure by residents of the UK).

7. What is your preferred approach to timing?

Expenditure should be recognised at the point of payments. This is when it will impact the households' budget.

8. What is your preferred treatment for the following items?

interest payments – The cost or interest levied on household loans should be recognised in an Index of Household Prices.

student loans – include on a payments basis in order that the actual money expended on them is included and interest charged on the loans. But exclude parts of the loan that are never paid off.

insurance premiums – include on a gross basis. Insurance policies represent purchasing protection or fulfilling a legal requirement. Such services should be fully recognised by an Index of Household Prices. If a householder makes a claim, they are merely back in an equal position to before they made the claim.

life insurance premiums - Life insurance premiums, which are only payable on death, should be included.

Taxation - As a general rule of thumb income taxes and national insurance should be excluded, but other taxes should be included. e.g., council tax, stamp duty, car tax, TV license fee should all be included. VAT is of course generally included.

owner occupier housing costs excluding capital costs – these should all be included. These are particularly relevant to retired home owners as they are less able to maintain their homes cheaply and may need to pay to adapt their home as they become less mobile.

capital housing costs – should be included. Arguably one of the big failures of our current range of inflation measures is their failure to recognise the increases in housing costs. All these costs of course impact on the ability of people to save for retirement. Although specific housing cost measures do exist. It is important that these are also included in an Index of Household Prices.

10 Do you have any additional comments?

We agree with the RPI CPI User Group's view that as the new index is intended to measure the change in prices experienced by households, it is more appropriate to call the new index the Index of Household Prices.

Yours sincerely



KEVIN COURTNEY
General Secretary

Public Service Pensioners' Council

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The Public Service Pensioners' Council (PSPC) represents the interests of retired public servants. Thank you for the opportunity to give our views on the discussion paper "Introducing an Index of Household payments".

PSPC brings together the various organisations for retired public servants and the retired members' sections of public sector unions. We campaign alongside other organisations, including the National Pensioners' Convention and the TUC, to protect the interests of pensioners and protect public service pensions.

PSPC members are not just concerned about protecting existing pensioners. From the vantage point of retirement, we recognise the importance of pensions for current and future public sector workers alike.

1. Do you believe that there is a need for this type of index? If so, why?

The PSPC has previously campaigned to retain the RPI as a measure to increase Public Sector Pensions as it is the closest the UK has to an index which recognises the prices experienced by households. However, this measure has had its designation as a National Statistic removed. CPI is a measure designed to look at the economy overall, but it is now widely used to uprate pensions. We see this exercise as an opportunity to ensure any updated index measures fairly recognise the price changes experienced by all households.

2. What is your need for this index and why do you believe it would be suitable for your need?

Current legislation for Public Sector Pensions requires the measurement of increases "in the general level of prices". PSPC is concerned that the indexation being considered (which may in future be used to measure public sector and state pension increases) should be a fair reflection of the cost of living increases experienced by households. Ideally it should be possible to compare the experiences

General Secretary: Lisa Ray

of different types of household e.g.; working families, retired pensioners, younger couples or single occupants.

3. How frequently would the index need to be published to meet this need?

The index should be published monthly to be comparable to other price indices, this will make comparison easier across different indexation measures.

To best meet the needs stated above;

4. What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

The measure should be household expenditure, weighted to reflect household experience of changing prices.

5. What is your preferred population (for example, all UK or private UK) coverage?

Ideally the index should reflect national expenditure

6. What is your preferred expenditure (for example, national or domestic) coverage?

National (expenditure by residents of the UK).

7. What is your preferred approach to timing?

Expenditure should be recognised at the point of payments, i.e.; when it will impact the households' budget.

8. What is your preferred treatment for the following items?

Interest payments – The cost or interest levied on household loans should be recognised in an Index of Household Prices.

Student loans – include on a payments basis in order that the actual money expended on them is included and interest charged on the loans. But exclude parts of the loan that are never paid off.

Insurance premiums – Insurance policies represent purchasing protection or fulfilling a legal requirement. Such services should be fully recognised by an Index of Household Prices.

Life insurance premiums - Life insurance premiums, payable on death, should be included.

Taxation - As a general rule of thumb income taxes and national insurance should be excluded, but other taxes should be included. e.g., council tax, stamp duty, car tax, TV license fee should all be included. VAT is generally included.

Owner occupier housing costs excluding capital costs – these should all be included. These are particularly relevant to retired home owners as they are less able to maintain their homes cheaply and may need to pay to adapt their home as they become less mobile.

Capital housing costs – should be included. Arguably one of the big failures of our current range of inflation measures is their failure to recognise the increases in housing costs. Households experience these costs differently depending on their mortgage status. Although specific housing cost measures do exist. It is important that these are also included in an Index of Household Prices.

Are there any other areas you believe we need to consider with regards to this index?

Not at present

Do you have any additional comments?

The name for the index- we would prefer the Household Prices (or Costs) Index

Utility companies

SP Energy Networks 27

SP Energy Networks response to ‘Developing an Index of Household Payments’

SP Energy Networks comprises SP Transmission, SP Distribution and SP Manweb which are, respectively, the licensed electricity Transmission Owner for the South of Scotland, the electricity distributors for the South of Scotland, and Merseyside and North Wales.

1. Do you believe that there is a need for this type of index? If so, why?

There is a need for a measure of price changes which better reflects the experience of households than one designed as a macroeconomic indicator. In particular, the headline CPI, as currently implemented, may not adequately take into account changes in the cost of items of expenditure of households.

However, different households will experience price changes to varying degrees depending on household composition and patterns of expenditure. Without further analysis, it is not clear how representative an “average” measure would be. It seems likely that there will be a need for a number of indices for sub-groups, reflecting different types of households.

2. What is your need for this index and why do you believe it would be suitable for your need?

Utility bills form a significant part of household expenditure and there is considerable interest from stakeholders in assessing their impact on the cost of living and wider measures of living standards and well-being. There is particular interest in the measurement and extent of “fuel poverty”.

A household payments type index would potentially provide a useful comparator for assessing movements in utility bills, including the fuel costs and related components, such as network charges, relative to overall changes in income or expenditure.

3. How frequently would the index need to be published to meet this need?

Ideally, a monthly index would be required to provide comparison with other inflation measures. A monthly index would also allow estimation of any seasonal patterns and facilitate short term forecasting.

4. What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

A household index should be household weighted.

Household weighted indices would be more representative of the middle of the expenditure distribution, and should therefore be more representative of a typical household. An expenditure weighted index is unlikely to reflect the expenditure levels and consumption patterns of a typical household.

5. What is your preferred population (for example, all UK or private UK) coverage?

The index should cover all households, including nursing and retirement homes.

6. What is your preferred expenditure (for example, national or domestic) coverage?

The index should include UK residents' spending abroad but exclude foreign spending in the UK.

7. What is your preferred approach to timing?

The index should be based on the payments approach, which reflects the time at which expenditure is incurred.

8. What is your preferred treatment for the following items?

a) interest payments

The index should include interest payments.

b) student loans

Interest on and repayment of student loans should be included in the index as they form a significant part of the expenditure of the households which pay them.

c) insurance premiums

Gross insurance premiums should be included rather than net of claims.

d) life insurance premiums

As life insurance is often regarded as a form of savings it would not be included in an inflation index.

e) taxation

Taxes which are generally regarded as part of households' outgoing payments should be included but not taxes on income. For example, the index would therefore include Council Tax and stamp duty land tax.

f) owner occupier housing costs excluding capital costs

Owner-occupied housing forms a great part of the expenditure of many households and should not be ignored.

g) capital housing costs

Although house prices may be regarded as asset prices and houses not a consumption good, for owner-occupier households with a mortgage, the payment of the mortgage is a major item of household expenditure. It seems unlikely that most households distinguish between the interest and capital repayment components of mortgages and so both components should be included in the index.

9. Are there any other areas you believe we need to consider with regards to this index?

Careful consideration must be given to the formulae used in its construction and the way in which components are aggregated, especially if this measure is to be compared meaningfully with changes in households' incomes. Simply adopting an approach used for a different index will not be optimal.

10. Do you have any additional comments?

The ONS must clearly set out:

- the expenditure items included;
- the basis on which the published index is calculated; and
- the data sources used.

Users need to be informed fully of the differences between the scope, construction and coverage of different indices so that they can make a fully informed decision as to which index is the most appropriate for a particular use. This will become increasingly necessary as the range of published inflation measures and expenditure deflators expands.

It would be very helpful to produce a back-history of this index for as far as is possible from available data. This would facilitate comparisons with other measures of price changes.

Other organisations

Royal Statistical Society	31
RPI CPI User Group	38

Developing an Index of Household Payments Response to ONS discussion paper of 15 August 2016

Introduction

1. On 15 August 2016 the ONS published a [discussion paper](#)¹ in response to proposals first set out in Astin, J. & Leyland, J. (2015) '[Towards a Household Inflation Index](#)'². The Royal Statistical Society (RSS) issued its [initial public response](#)³ on 22 August 2016.⁴
2. This more detailed response adds to our initial response, and has been prepared and agreed by the RSS' National Statistics Advisory Group. We have concentrated on basic principles and major issues of substance.
3. We also address three specific issues raised at the recent User Group meeting held at the RSS on 12 September. At the meeting, ONS said that the new index was not a measure of inflation and that only one main measure of inflation was needed. We disagree with both of these statements. We also think the proposed new title for the index is both misleading and incorrect, and suggest an alternative title.

Summary of RSS views

4. The RSS has consistently argued that the UK needs an index which reflects how price changes affect households. Our views on this matter are informed by our National Statistics Advisory Group, with particular reference to Astin and Leyland's paper, 'Towards a Household Inflation Index', which was commissioned by the RSS.
5. The RSS strongly supports the development of a monthly household payments price index to provide an alternative and complementary index to the CPI/CPIH. The proposed new index would have many features in common with the Retail Prices Index (RPI), but would correct some of the deficiencies in that index as well as updating its approach and coverage to reflect the realities of the 21st century. We believe that in the long term it would become the preferred price index for many purposes and a potential replacement for the RPI.

¹ ONS 'Methodology: Developing an index of household payments' (webpage), last revised 15 August 2016 <https://www.ons.gov.uk/economy/inflationandpriceindices/methodologies/developinganindexofhouseholdpayments>

² PDF available from <http://www.rss.org.uk/Images/PDF/publications/Astin-Leyland-HII-paper-Apr-2015.pdf>

³ RSS (2016) *Better measurement of inflation for households: Statement in response to ONS' proposed Index of Household Payments* (PDF), available from: <http://www.rss.org.uk/Images/PDF/influencing-change/2016/RSS-statement-better-measurement-inflation-households-Aug-2016.pdf>

⁴ This also follows our response to an earlier consultation: *Royal Statistical Society response to UK Statistics Authority Consultation on Measuring Consumer Prices: the options for change* (PDF), September 2015, available from: <http://www.rss.org.uk/Images/PDF/influencing-change/2015/rss-response-to-consumer-prices-index-consultation-Sept-2015.pdf>

6. To be useful to users, the new price index must be produced monthly. As such it would become an important tool in wage negotiations and indexation; and would correspond more closely to what the general public perceive of and experience as 'inflation'. The CPI/CPIH would continue to be of greater use for monetary and macro-economic policy and as an overall measure of inflation in the economy as a whole. Both should be published side by side in the monthly consumer price release.
7. As reflected in the ONS paper, the key differences of the new index from the macro-economic based CPI/CPIH would be:
 - Based on the regular payments made by households rather than just household consumption as defined in the national accounts. Thus allowing congruence with common public perceptions of regular and unavoidable household costs including interest payments and all owner occupier costs.
 - Weighted by household (so-called "democratic" weights) rather than by expenditure ("plutocratic" weights) so it better reflects the experience of the average household.
 - Gross expenditure based weights, rather than net of income. Thus for example full weight would be given to insurance premiums actually paid out by households, rather than reducing the weight to account for claims.
8. Comparisons with income measures and versions of the index by income or socio-economic groups would be a useful supplementary analysis to be produced annually, as envisaged by ONS.
9. We think the proposed title of the new index "Index of Household Payments" is both misleading and incorrect. This would be a price index, not an index of volumes, so the chosen title should reflect this; for example it could be called "Index of Household Prices".

Issues from the 12 September 2016 User Group meeting

10. We would describe 'Inflation' as the rate at which the general level of prices for goods and services is rising and, consequently, the purchasing power of currency is falling. However, the ONS CPI manual (section 1.4.1) says "*There is no single definition of the word inflation*" and we agree. The only practical definition of inflation is in fact the rates derived from the various indices used to measure price changes. Inflation has widespread impacts on different aspects of the economy, and on different household groups and no single operational method of measurement can meet all needs.
11. Different price indices are needed for different purposes. The CPI and the RPI were both published side by side for many years, until the downgrading of the status of the RPI.
12. The UK's CPI was designed specifically as an internationally comparable consumer prices index (HICP) to enable proper decisions to be made on the eligibility of EU member states to join the euro area. Although it shares most of its methods with other CPIs, it is designed as a macroeconomic index, and not as a compensation index.



13. In contrast, the RPI was designed as a compensation index, with the specific goal of enabling the uprating (or negotiation) of wages and salaries in line with rising prices. It has features which clearly differentiate it from the CPI.
14. With the RPI's methodological framework now effectively frozen, a gap remains in the UK's inflation measures which the new IHP could fill. The emphasis with this new index is on price changes or inflation as experienced by households. Thus, the new price index would be consistent with the primary aim of a consumer price index as given in the international CPI Manual.
15. A good example of the difference between the proposed IHP and the CPIH is the treatment of housing costs. The IHP would measure the actual outgoings of households (mortgage interest and part of the capital costs of housing) while the CPIH uses imputed rents as a proxy for housing costs, so as to be in line with national accounts concepts. We wish to see mortgage interest reflected in the new index, because it is a very important part of many households' outgoings. It is perceived of as expenditure by households paying it, even if it is not so classified in national accounts.
16. CPI, CPIH, RPI and the new index and are all different measures of price changes and hence "inflation". But they differ according to purpose and users need to be aware of the different rationale for each. There is nothing new in this multi-index approach. The UK has two main unemployment indices and several indices of wages, salaries and income. Each index has a useful purpose, despite the differences between them.
17. Finally, we need to address the title of the new index. The new index would measure changes in prices experienced by households. The current proposed title suggests that this is a volume index not a price index and has already led to misunderstanding at the recent user group meeting. Misleading and incorrect aspects of the ONS' proposed title need to be addressed. We suggest instead "Index of Household Prices", which conveniently has the same initials – IHP - as the ONS proposal.

Response to ONS Questionnaire

Q1 Do you believe that there is a need for this type of index? If so, why?

The CPI was designed for macro-economic purposes and more specifically to facilitate comparisons across the EU (as the Eurostat HICP). The widely used RPI, which had been developed originally for wage negotiations and inflation indexation, no longer has National Statistics status and has a number of known deficiencies. The CPI also has known deficiencies for some uses. A new household based price index is needed which better reflects the experiences of the average household.

Q2 What is your need for this index and why do you believe it would be suitable for your need?

One of the key charitable purposes of the RSS is to help ensure that statistics can be used effectively in the public interest⁵. As indicated above we see the IHP as having many potential uses as an ultimate replacement for RPI. In addition, we think this development would put the ONS in the lead internationally in the field of Consumer Price indices.

Q3 How frequently would the index need to be published to meet this need?

Monthly - see our summary above. This could usefully be supplemented by annual data for subgroups of the household population and comparisons with income based indices.

Q4 What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

We strongly prefer the 'democratic' weights (household weighted) as this emphasises the differences from the CPI/CPIH and would more closely meet the needs of users for an index close to what the public perceive and experience as inflation.

We note the discussion in the consultation paper about means of approximating the weights to this basis. We agree with the ONS conclusion that total implied household expenditure from both sets of weights should be consistent.

Q5 What is your preferred population (for example, all UK or private UK) coverage?

We would be content for it to be private UK households similar to the RPI. However ONS should use the expenditure of all private households when calculating weights, without the exclusions (highest earners and pensioners) used in the RPI.

Q6 What is your preferred expenditure (for example, national or domestic) coverage?

National is our preferred target. In particular expenditure in the UK by non-residents should be excluded from the weights. We note some of the difficulties set out in the paper on measurement of UK household expenditure abroad, and would be content for an approximation to this to be used so long as overseas holidays are included (as in the RPI).

Q7 What is your preferred approach to timing?

In principle it should be payments, but in practice only specified items would need to differ from the CPI acquisition basis (as in the ONS paper).

We disagree with the ONS view expressed on page 10 that release practices for the CPI might be compromised by using some prices in a monthly IHP ahead of their appearance in the CPI. There

⁵ See RSS' *Strategic plan 2014-18* (PDF) http://www.rss.org.uk/Images/PDF/about/strategy-summary_flr.pdf

is no way that a few individual prices could be seen as pre-release of CPI components. Holding back the IHP for a month or more for this reason would in fact be a more serious breach of the code of practice.

Q8 What is your preferred treatment for the following items?

Interest payments

The most important thing is for mortgage interest to be included as part of owner occupied housing costs.

More research is needed on whether it is feasible to cover consumer debt (including credit cards). The effective rates from banks collected by the Bank of England would not be an adequate source on their own, as they exclude high interest consumer lending by other financial institutions. The stock of average household debt would lead to an expenditure based weight, so there is a need to use the debt of the average household to achieve a democratic weight.

The paper suggests a separate COICOP class for interest payments. This seems sensible, but mortgage interest payments should remain under owner occupied housing costs.

We do not agree that including the cost of credit would have “perverse effects” (footnote 2 to section 3) for those households not in debt – it would simply have no effect. We strongly oppose inclusion of interest income (or any income) in the new index because it does not form any part of household outgoings.

Student loans⁶

Both the fees and the loan repayments should be included. Some individuals incur the former and others the latter – there is no double counting. In most cases different households are involved, but some with a graduate and a student in them could be paying both. We do not see loan repayments as a tax, but even if it were so classified in national accounts, we would still wish to see it in this payments based index.

Insurance premiums

The weight and payments must be gross for a payments based index. Income (from claims) should be seen as part of wider income measures.

Life insurance premiums

The Astin and Leyland paper makes a distinction between “life insurance” (payable on death only) and “life assurance” (payable after a fixed term or on death whichever is earlier). They only want the first of these included. Term life insurance (where someone makes payments for a fixed period, say to the age of 60, and gets no benefit if he or she lives beyond 60) should be regarded as similar to motor insurance. It is very different from Life Assurance where the insured (or his/her estate) is guaranteed a payment, and where the premiums are a type of saving or investment.

The ONS paper fails to make this distinction.

⁶ If the population coverage is private households, then we presume that students in communal/institutional establishments would be excluded.

Taxation

We agree with the ONS paper that regular payments classed as a tax, but seen by the public as expenditure (such as Council tax and Stamp Duty), should be included.

Owner occupier housing costs excluding capital costs

The issue is that we need to include how much households are paying each month towards buying their house. Many house purchases and most for younger people are funded mainly by a mortgage but there are exceptions, for example where someone is trading down and selling a house the own outright to buy a retirement flat.

These costs should be included based on a payments basis including major repairs and modifications. This would differ from the RPI which includes housing depreciation as a proxy for major repair costs.

Capital housing costs

We agree in principle with Astin and Leyland that these should be included gross for first time buyers and net (where positive) for other buyers. Net housing purchase expenditure would need to be calculated (or proxied) at the level of the individual household rather than at the level of the UK economy as a whole. This might be the one exception to the general principle of gross weights.

We appreciate however that including capital housing costs is a radical departure from traditional consumer price index practice, and we would be willing to accept that it might be left to a later stage of development.

Q9 Are there any other areas you believe we need to consider with regards to this index?

In the construction of any price index, important decisions have to be made about the formula used for aggregating price quotations, especially at the elementary level. This was a question which ONS did not address and which the Astin and Leyland paper deliberately set aside for a second stage of development, until more progress has been made on the formula issue.

ONS have said that the use of the Carli aggregation formulae is no longer in line with best practice. However, the APCP-Technical, set up by the ONS, makes a more nuanced judgement on this point, as expressed in the minutes of its January 2016 meeting:

“Panel members agreed that the relative merits of the mathematical properties of elementary aggregate formulae were finely balanced when considered from a theoretical standpoint. However, the performance of each formula in practice is an important consideration for use.”

There will be different opinions about the importance to be assigned to different practical considerations, but the way should be left open for an assessment of which aggregation formula should be used for which items by which index, depending on its purpose.

As the RSS have said many times in the past, the ONS need to reduce the difference between use of the Carli and Jevons for aggregation of price quotations, particularly for clothing, by methodological improvements. The very large difference undermines the credibility of both the

CPI/CPIH and the RPI, and would have the same effect on the proposed new index. Progress in this area, could, for example, allow greater use of the simpler arithmetic average (Dutot), as in the RPIJ, and would make it easier to use the same formulae in all consumer price indices, which, other things being equal, would be desirable.

Q10 Do you have any additional comments?

The ONS paper makes much of the value of linking the new household payments price index with income indices. While not the prime purpose of the new index, we agree this would be a useful supplementary analysis. Such welfare measures are an area where the merit of the new index relative to the CPI stands out most clearly. It could, for example, be used to replace the RPI in the previous personal inflation calculator. It would also lend itself more easily than the CPI to the construction of consistent sub-indices for different household types; and, as the ONS says, it could usefully be set against an index of earnings or income that was constructed in a comparable manner.

We dispute the first sentence in section 2 of the ONS paper. The current CPI was never designed to measure “inflation as perceived and experienced by households”. It is the same as the Eurostat HICP which was designed to measure personal sector consumption inflation in the economy as a whole and for maximum comparability between EU member states. Eurostat never intended the HICP to be the preferred index for domestic use and nearly all EU countries still produce their own indices, better suited to their own needs than the HICP.

Response submitted by RSS’s Policy and Research Manager, 22 September 2016



**Submission by RPI CPI User Group in Response to
ONS Discussion Paper of 15 August 2016
'Developing an Index of Household Payments'
25 September 2016**

The RPI CPI User Group operates under the auspices of the Royal Statistical Society, but is independent of that organisation. It comprises approximately 170 members and hosts both public face to face meetings and discussions on line via the Statistics User Net web-site (SUN).

The User Group response to this discussion paper is based on views expressed on SUN and at various meetings, but especially the public meeting hosted on 12 September by the User Group to discuss the ONS paper.

Not all members of the User Group will endorse everything our response says and in addition to the above process we have encouraged User Group members to make their own individual responses.

This User Group response follows the format of the ONS discussion paper and the questions it contained.

1. Do you believe that there is a need for this type of index? If so, why?

An index that is designed with the purpose of recognising the price changes experienced by households is needed. The RPI is the closest the UK has to such an index at present. However, this has had its designation as a National Statistic removed and we now have an opportunity to create an updated index that meets this basic requirement.

At the public meeting on 12 September the ONS representatives indicated that they did not regard the proposed Index of Household Payments to be an inflation index. This is not the understanding of most User Group members who see the development of this index as fitting within a family of price indices. It is partly to clarify this point that the term Index of Household Prices is preferred (see below). The ONS view also seemed to stem from the idea that there was only one definition of inflation and the IHP did not match it. But as the ONS's own consumer prices manual says (para 1.4.1) "there is no single definition of the word 'inflation'. The Johnson review also made this point.

2. What is your need for this index and why do you believe it would be suitable for your need?

An Index of Household Prices or IHP (see comments under Q.10 for a discussion of the name to be given to this index) has the potential for many uses. Fundamentally it will provide an index which better reflects

the experience of changing prices for households on average. At its most basic this will provide information on how households are benefiting, or not, from other changes in the economy, for example when compared to changing pay rates.

3. How frequently would the index need to be published to meet this need?

The index should be published monthly to be comparable to other price indices, which are published monthly, and to enable it to be used by other bodies that may wish to select a particular month within the calendar for comparison purposes.

To best meet the need stated above:

4. What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

This is intended to be an index that reflects the household experience of changing prices. It therefore follows that it should be household expenditure weighted. Indeed, this is one of the characteristics that make it different from the design of macro-economic indices such as the CPI family.

5. What is your preferred population (for example, all UK or private UK) coverage?

Ideally the index should reflect national expenditure which would include UK residents' spending abroad but exclude foreign spending in the UK. It should cover all households, including institutional households.

6. What is your preferred expenditure (for example, national or domestic) coverage?

National is preferred as ideally expenditure by visitors to the UK should be excluded.

7. What is your preferred approach to timing?

Assuming this question refers to a preference for when expenditure should be recognised then the preference is for recognising expenditure at the point of payments, since this is when it impact the households' budget.

This is unlikely to make a significant difference for most items, but in some cases it is likely to be important eg. In the case of student loans.

8. What is your preferred treatment for the following items?

interest payments – these should be included. In a modern economy most households take out loans of one sort or another and the cost (interest levied on these loans) should be recognised in an Index of Household Prices.

student loans – these should be included, but on a payments basis in order that the actual money expended on them is included. This will automatically include the interest charged on the loans, but exclude parts of the loan that are never paid off by some households.

insurance premiums – these should be included on a gross basis. When a household takes out an insurance policy it is buying peace of mind or fulfilling a regulatory or legal requirement. Such services should be fully recognised by an Index of Household Prices. In the event of a claim the householder is simply put back to the position they were in before the event that justified the claim. Double counting is avoided by not including the price of the ‘repairs’ in the HII, except to the extent these were not included in the insurance claim.

life insurance premiums - Life insurance premiums, which are only payable on death, should be included. Life assurance, which is payable after a fixed term or on death whichever is earlier, should not. The latter is more akin to a savings product, which are not included in an Index of Household Prices whereas the former is an insurance product and these should be included.

Taxation - As a general rule of thumb income taxes and national insurance should be excluded, but other taxes should be included. Eg, council tax, stamp duty, car tax, tv license fee should all be included. VAT is of course generally included for those items in the basket and subject to it.

owner occupier housing costs excluding capital costs - these should all be included

capital housing costs - should be included. Arguably one of the big failures of our current range of inflation measures is their failure to recognise the increases in housing costs. Although specific housing cost measures do exist. It is important that these are also included in an Index of Household Prices.

9. Are there any other areas you believe we need to consider with regards to this index?

The ONS should be seeking ways to obtain accurate weighting information and thereby reduce its reliance on aggregation formula. However, while there remains a need to use such formulae greater consideration should be given to which formula is the most appropriate. Currently the approach within the CPI family of indices is to strongly favour the Jevons formula. The Dutot formula is used in a very small number of cases. The work started some years ago by the ONS to address the question of the ‘formula effect’ needs to be continued as a

matter of urgency in any event to benefit both the RPI and the CPI families but also so that its findings can contribute to the design of the HII.

10. Do you have any additional comments? The ONS has coined the term, Index of Household Payments in their discussion paper. However, the new index is intended to measure the change in prices experienced by households not the change in their actual expenditures. The name provided by the ONS did result in some confusion at the recent User Group meeting. In previous discussions the User Group has used the term Household Inflation Index, which was that used by Leyland and Astin in their earlier paper. While the User Group was in general content with that terminology (though the ONS did question the term inflation in that title) it is on balance preferable to include the term price in the name of the new index.

It would therefore appear more appropriate to title the new index an Index of Household Prices and consequently that is the terminology adopted above.

Tony Cox, chair RPI CPI User Group

(rpcpiusergroup@gmail.com)

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Andrew Baldwin response to ‘Developing an Index of Household Payments’

1. Do you believe that there is a need for this type of index? If so, why?

Yes, I do. The RPI was the index used as a cost-of-living measure and an index for upratings for the UK. There was no reason it could not have gone on fulfilling that function but the handling of the formula effect problem was bungled by the UKSA, so now we must look to the Household Inflation Index (I don't agree with the term Index of Household Payments) to take its place.

2. What is your need for this index and why do you believe it would be suitable for your need?

I am a Canadian and would not use the index myself. I would very much like to see such an index published by the UKSA however. It is close in its methodology to the MO2 analytical series at the CPI level that I created in 1985. It has not been updated since August 2000, but if a UK series were published, it might shame Statistics Canada into updating that series, as well as the other analytical series.

3. How frequently would the index need to be published to meet this need?

The index should be published monthly, along with the CPI and related series. It is ridiculous to speak of publishing it only annually. One of the chief uses of a consumer price series is as a deflator of nominal wages to obtain real wages. For that you need a monthly series. The CPI and the CPIH are ill-suited for such a purpose, and the CPI was never created with such a purpose in mind. Section 3 of the paper seems to embrace Paul Johnson's view of the CPIH as the one index to rule them all. For some reason he seems to believe that the UK should have only one all-purpose monthly consumer price series that would be used for both uprating purposes and as an inflation measure by the Bank of England. Otherwise the British public would be confused. Surely this way of thinking is quite insulting to the British public when elsewhere in Europe people are accustomed to having a national CPI as an upratings measure and an HICP as a macroprudential inflation measure.

To best meet the need stated above:

4. What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

For this and the following questions, I would support an HII being calculated as recommended by John and Jill; I have only provided comments where my preferences differ; it would be nice if several options could be calculated with the choice between them.

I would prefer expenditure-weighted estimates; if household weighted estimates were used, I would prefer households be given weights according to the size of household (e.g. the weight given to the household would be the square root of the number of members; there are many equivalence scales to choose from).

5. What is your preferred population (for example, all UK or private UK) coverage?

I would prefer private households rather than private households plus institutional households, but I don't have strong feelings about it. The institutional households consisting of students living in residence should be distinguished from residents of nursing homes. I believe in the Canadian CPI these are treated as private rather than

institutional households and are part of the CPI target population. Most students in residence would be part of the target population anyway, since they would live in the summer term with their parents and be considered part of their parents' private household.

6. What is your preferred expenditure (for example, national or domestic) coverage? National. In practice, almost every official consumer price series that is national in its weighting has been domestic in its pricing. That has certainly been the case with the Canadian CPI. It would be nice if the HPPI could make a real effort to incorporate foreign pricing where it is important, since it is part of the weights. But any such initiatives should not be started until the initial index has been calculated and published.

7. What is your preferred approach to timing?

8. What is your preferred treatment for the following items?

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interest payments

The average mortgage rate used for mortgage interest should ideally treat the shift from, say, higher fixed term mortgage rates to lower variable term mortgage rates as a price reduction.

For mortgage interest there is the problem of loans that are refinanced to buy a sailboat or send a child to university. It is contentious whether this part of mortgage interest should be included in the expenditure weight of the index. It should be discussed.

student loans

insurance premiums

gross approach, as favoured by John and Jill

life insurance premiums

Not sure that even term insurance should be included in the index. It might be better to hold off on including it until the HII is up and running.

Taxation

Stamp duty must be included, as suggested by Jill and John

owner occupier housing costs excluding capital costs

capital housing costs

9. Are there any other areas you believe we need to consider with regards to this index? Both motor vehicle leasing and motor vehicle purchases should be given the payments approach.

10. Do you have any additional comments?

Terminological debates are the most boring of all debates, but in the UK terminology has become particularly pernicious. There is a cost-of-living index in every way similar to what in other countries would be called a CPI, which is called an RPI, and an HICP that since December 2003 has not been called by that name, even though it is a macroprudential inflation measure, not an index appropriate for upratings. Some might think this needn't be a source of confusion, but it seems to have confused even HMT, which has started using it for upratings, something for which it is not at all suited. So maybe it would make sense to go through a rebranding: go back to calling the CPI the HICP and call the new household inflation index the CPI. Whatever happens, don't use the index of household payments. It suggests that the ideal is to take a payments

approach everywhere. So any departure from it, even where the use of a payments approach would make almost no difference for a component index, can be marked down as a failure of the IHP monopoly. It's like the UKSA is trying to set its own index up for failure. Maybe it is.

Departure from a cost-of-living index

The accounting approach now used in the RPI assumes a fixed stock of owner-occupied dwellings and a fixed stock of mortgage debt. Without any adjustment to the weights the OOH component for an HII would violate both these assumptions. Whether it is sensible or possible to try to make such adjustments should at least be discussed.

Andrew Baldwin

27 August 2016

ADDITIONAL CONSIDERATIONS

“To ensure accuracy, aspects of the index such as formulae, aggregation, and classification are expected to follow the same procedures and methods that have already been established for CPI and CPIH, unless differences are necessary in meeting the specific requirements of the index.” I would take it from this that the elementary aggregate formulas used in the new index will match those of the CPI for the most part, i.e. be Jevons and Dutot indices, with no use of Carli indices. This is appropriate and it would be quite inappropriate to reopen the consideration of elementary aggregate formulas while an initial IHP series is being developed. In my paper “Common Sense Favours the Use of the Jevons Formula” I complained that the Dutot formula is probably overused in the UK CPI, being used where the Jevons formula would be more appropriate. I also said that the criteria for using the Carli formula in Eurostat regulations need to be revised, and posited the case where there was pps sampling based on revenues as an instance where the use of the Carli formula would be acceptable. Nevertheless, the gains to be made from such reforms are minor and should not interfere with the work of developing an initial pilot series. Also, over time, with increased use of scanner data, it is likely that the weighting of all elementary aggregate formulas in UK consumer price series will be considerably reduced. This is really not a problem that should be given any kind of priority at this time.

For the same reason, I don't believe there should be any attempt to expand pricing to charity shops or to include gambling or illegal activities (e.g. narcotics and prostitution) at this time. In the long term, I think it would be desirable to include charity shops in the priced sample, I believe that expenditures in these charity shops are already part of the RPI and CPI expenditure weights. If they aren't, they certainly could be part of the weighting of the new index, since such expenditures are recorded in the diaries of the Living Costs and Food (LCF) Survey. Illegal transactions like those related to narcotics and prostitution have no place in the new index either now or in the future. An upratings index should not be dependent on the price of cocaine, which would not be easily established in any case. The inclusion of gambling in the index requires more thought, but should certainly be avoided in putting the initial index together.

One issue that does not seem to have been dealt with in the paper at all, perhaps because an annual index is proposed, is the index formula. As it is the CPI is linked twice, once in December for the COICOP class indices, and again in January for the CPI item indices. (This January linking is carried over from the practice in the RPI and the indices that are linked to it.) For the initial calculation the ONS will probably have to stick with this arrangement, but it is really not satisfactory, and the ONS should be looking towards having its consumer price series linked only at December, given the problems that David Fenwick has identified with January links.

In the long term, the household inflation index should be calculated as an annually chained index, linked at the year rather than the month, with an index number formula that passes the time reversal test. (The Swedish CPI is an example of such an index. It uses the Walsh formula, although in my view the Edgeworth formula would be superior. Statistics Sweden had initially planned to use the Edgeworth formula.) _ (I mean both chained once a year and chained at the year rather than at December or any other calendar month). This would of course require a revision period for the index and a much longer revision period than is customary for indices used for upratings. However, the Swedish experience shows that it is feasible.

Andrew Baldwin

(September 5, 2016)

Response to “Developing an Index of Household Payments” – Arthur Barnett

I am responding as an individual.

APPENDIX A: Questionnaire for responses to this paper

1. Do you believe that there is a need for this type of index? If so, why?

Yes there is a need for a price/inflation index of the type proposed by Astin and Leyland. It is not clear what type of index the ONS Index of Household Payments (IHP) is intended to be so the answer to the question is not straightforward for the ONS version of the proposed index.

There are a number of reasons for an Astin/Leyland index. The CPI is, and CPIH is for the most part, a macroeconomic index and they are not designed to reflect adequately the experiences of households and individuals and there has been no convincing argument from ONS or elsewhere that they do so.

The RPI which was designed for that purpose is an old design with its original purpose changed through of the influence evolving government macroeconomic policies on ONS and its predecessors. The restrictions upon changes to the RPI mean that it is probably not practical to update it sufficiently. It does, however, have well-established and respected uses and so is likely to continue broadly in its present form. A replacement is needed to meet the original concept underlying the RPI.

The main practical reason a new index is needed in my view is the changing uses that price indices are put to and the changing economic and demographic environment. These changes mean that price indices need to be effective over longer time frames than in the past. The Johnson Review expressed scepticism that price indices are suitable for long term contracts such as pensions which may “reflect the limits of what a consumer price index can do”. Johnson did not quantify what he meant by long term and evidence is limited. One source of evidence is the time that elapsed before the change from the RPI to the triple lock for the basic state pension would suggest that for the RPI long term may mean less than 30 years. A simple extension to CPI (and probably CPIH) would suggest in that case long term means less than 20 years. A theoretical analysis based around the Turner Report concept of pension adequacy gave similar time frames for the indices to be effective. These limited examples would suggest that the Johnson Review concerns about the length of time across which price indices are effective may have traction for the current indices and in particular for CPI and CPIH. There is a need to develop new price indices that reflect better the realities of the changing economics and demographics of households.

One implication of the Johnson Review point about the limits of price indices is that ONS should provide an assessment, as far as that is possible, of the likely length of the time frame over which a household index, and other indices, is likely to be effective at representing price changes as experienced by households.

Note: It is not the statistician's role to decide which indices should be used for which purposes – these are commercial or political decisions. However it is ONS' role to

provide the information that can inform those decisions – Principle 1 of the Code of Practice.

2. What is your need for this index and why do you believe it would be suitable for your need?

Price indices affect almost everyone's life either directly or indirectly and it is essential that ONS provide a balanced range of price indices that meet needs other than those of the macroeconomists inside and outside of government.

CPI can be considered as an example of a class of what could be termed a Macroeconomist Inflation Indices (MII) which the non-specialist public cannot reasonably be expected to understand. A Household Inflation Index (HII) which is the subject of this paper would be designed to become over time more accessible and understandable by the non-specialist public. Conceptually both RPI and CPIH could be considered to be neither fish nor fowl in terms of being an MII or a HII and as such probably need even more specialist knowledge than the CPI to understand them properly. However in practice, the current RPI remains close to a HII; and CPIH to its origins in the HICP/CPI and hence a MII. A new purpose designed HII is needed to complement the HICP/CPI.

3. How frequently would the index need to be published to meet this need?

The index should be published monthly.

A series published less frequently will make it more difficult for users to interpret and hence it is unlikely to be used to support their decision making. From a technical point of view a series that is available less than monthly will have fewer data points, or the data points will be available less frequently, which will make it more difficult to assess its quality and where improvements are needed. It will make it more difficult to assess the effectiveness of improvements. Publishing a monthly series annually will only partly address such technical problems. For users and for technical reasons a monthly series is essential.

The answers to the detailed technical **questions 4 to 8** will depend on practicalities and the detail of the index models that are developed. It is difficult to provide a precise answer to the questions at this stage but in the interim I would support the positions set out in the RPI/CPI User Group submission.

Question 9 – Other areas you believe we need to consider with regards to this index

The list of questions does not include two important topics that are covered in the Astin and Leyland paper but for which no recommendations are made because of the need for further research. These are the formula effect and quality adjustment. These issues are related. Both are likely to be of considerable importance in exploring how to develop price indices that are effective over long time frames.

The importance of the formula effect can be inferred from the relative performance of the RPI over long time frames compared to the CPI. This does not mean, for example, that Carli

is the appropriate formula to use but the supposed price bounce bias associated with that formula appears more likely to be a function of the choice of chain linking algorithm than the elementary aggregate formula.

Quality adjustment was an issue raised by the Johnson Review in relation to the difficulties associated with the use of price indices for long term contracts. The Review's analysis in this area was criticised and arguably understated the negative effects of current methods of quality adjustment. It did, though, identify that there are problems related to non-comparable replacements and chain linking – sections 12.7 and 12.8.

Additional comments.

The name – “Index of Household Payments”

The IHP name confuses a payments index (it was referred to as an expenditure index at the meeting on the 12th) with a price or inflation index which is what Astin and Leyland are proposing. To oversimplify a payments index would arguably measure change in value – ie price and quantity simultaneously – whereas a price index would keep quantities constant and just measure change in price. The proposed index does the latter.

The difference between the CPI and the proposed index is essentially the users whose needs it is supposed to represent – broadly for CPI it would be macroeconomists and for the proposed index households. This reflects the MII and HII classification in the answer to question 3.

Naming price indices is difficult. The name of the proposed index should reflect that it is an index of prices or inflation for a particular set of user needs. It would also be useful if the names of the proposed index and of the UK HICP/CPI reflected the difference between the two.

Typical, sub-groups

The principle objective of the proposed index should be a single measure of inflation for a typical household. Statistically typical would be taken to mean a central measure over some distribution related to households. Quite what that central measure and the distribution are will depend on the agreed aim of the index and the practicality of collecting the relevant data.

Sub-groups would be a welcome addition but are not the principle objective. By their nature sub-groups involve smaller populations; sample sizes and lower quality estimates. Hence they are more difficult to use and interpret. Nevertheless if they can reliably be calculated they will be useful.

Two issues with the balance of the Introduction to the paper

Keeping the introduction of the IHP paper to a reasonable length is important but this should not have come at the expense of a balanced narrative. The issues with the balance of the Introduction to the paper mean that it could potentially be misleading. ONS need to take this into account, or at least acknowledge the issue, in the analysis of the responses to the consultation.

The problem from the perspective of a statistician is that the Introduction is likely to bias the responses to the consultation. Price indices are a very difficult area to understand and most people are not well versed in the arguments. This is particularly the case with macroeconomic indices that are closely related to national accounts principles rather than the experience of households.

Also the notes immediately preceding the introduction refer to ONS experts up to and including Jonathan Athow (Deputy National Statistician and Director General for Economic Statistics) which is likely to reinforce the impression for the non-expert that the introduction is authoritative and balanced.

First: The opening sentence of the introduction is arguably misleading and risks biasing the responses to the consultation –

“UK Consumer Price Indices (CPI and CPIH) are designed according to international guidelines to measure “inflation as perceived and experienced by households in their role as consumers” (ILO, 2004).”

There is no need to go into the detail of the issues here. John Astin and Andrew Baldwin posted detailed rebuttals on SUN.

Second: The final paragraph of the Introduction to Johnson Review conclusions

The first sentence of the final Introduction paragraph includes –

“... Paul Johnson’s UK Consumer Price Statistics: A Review (2015), which concluded that there did not appear to be a case for a single “household” measure...”

The conclusions of Chapter 5 (The case for a ‘household’ measure of inflation) of the Johnson Review open with the clear statement that –

“There are coherent arguments in favour of a “household” measure of inflation.”

The next paragraph then goes on to suggest that there does not seem to be a case for publication of a single household measure alongside CPIH. The opening paragraph refers specifically to three reasons underlying this view –

- Practical and conceptual difficulties
- The household measure being considered synonymous with uprating
- Risks associated with more than one headline measure of inflation.

These reasons are unconvincing at best.

There are practical and conceptual difficulties with any price index. Events have moved on since the publication of the Review report. The Review which was published in January

2015 predates the difficulties associated with the re-designation of CPIH – the index that the Review championed. The difficulties argument is weak without evidence that these difficulties are insurmountable.

The household index is not synonymous with uprating. The term is used as a short hand in part to indicate that the household index is not a novel concept but an updating of the original RPI concept. Uprating is a commercial or political decision but statisticians should provide the information necessary to support such decisions. Advice from a Review does not absolve ONS from its responsibility to provide information that meets “the requirements of informed decision-making” – Principle 1 of the Code of Practice.

The third point about the risk of publishing more than one headline index monthly is contentious as the discussion at the meeting on the 12th showed. The Johnson Review, for example, cited an inflation rate shopping argument but that would appear to be contrary to Principle 1 of the Code of Practice. It would be helpful if ONS brought together their rationale for a single headline index in a short note.

The decision on a single headline index may ultimately rest with ONS but it is incumbent on the National Statistician to provide a convincing rationale for any such decision.

Brian Rhodes response to 'Developing an Index of Household Payments'

Having attended Paul Johnson's presentation on 26th Feb. 2015 and Jill Leyland and John Astin's presentations on July 13th 2015 and the recent ONS presentation on 12th Sept. 2016, I can claim to have heard many of the arguments for and against introducing another consumer type index. Because I am going on holiday for 2 weeks tomorrow (20th Sept.) I do not have time to obtain responses from my committee, so these are my personal comments.

Referring to the questionnaire included under Appendix A;

1. Clearly, an ongoing problem with CPIH suggests there might be a better way of covering the costs of owning or renting a house.

2. In my opinion, IHP could confer widespread benefits to wage earners and pensioners throughout the UK.

3 Recommend publishing Quarterly.

4 Economy-wide.

5. All UK but see comments in 9 and 10 below.

6 National.

7. Point of acquisition seems more practical.

8 Interest payments.....include

Student loans.....include.

Insurance premiums.....gross amount.

Life insurance premiums.....gross amount.

Taxationinclude Council tax and Stamp Duty.

Owner occupier housing costs excluding capital costs....essential, affects 62% of households

Capital housing costs... not sure, but help for first time buyers must be considered.

9. Suggest sub-groups of population; workers; those in receipt of occupational pensions; workers needing benefit support; pensioners solely reliant on State pension.

10. CPI conforms with European membership. Does Brexit allow more freedom of choice? RPI excluded the very rich and the very poor. How feasible/desirable would that be for IPH?

Hope these comments are constructive.

Brian Rhodes, Chairman, Independent Television Commission Retirement Association (ITCRA)

Developing an Index of Household Payments

Response by Gareth Jones to ONS paper

1st Sept. 2016.

1, 2 & 3 - Need for such an index.

The Johnson Review specifically rejected a Payments based approach to inflation measurement, especially on a whole population basis and especially with monthly frequency (where it would be in competition with other monthly measures). It did accept the possibility of less frequent publication of such measures so long as they are confined to specific population groups and alongside measures of net income after allowing for taxes and benefits for the same population groups.

Payments do not track inflation at all well for certain things such as the capital costs of OOH. There are other areas too where payments are not much related to inflation but depend more on people's choice of how to finance a purchase liability that they have incurred. The most obvious examples are purchase of vehicles and student loans, but could also be extended to purchase of household items by credit.

The need for inflation measures for population subgroups has not been established. At present we have only the 2 pensioner indices (which I believe are published quarterly) and the Rossi index, but these attract little interest and the government does not use either of the pensioner indices for indexing state pensions. What people really want is a believable monthly measure of inflation as experienced by consumers as a whole.

Personally, I would regard it as a waste of public resources to produce payments based measures at all when there are much more important matters to address.

It is much more important to make CPIH a generally accepted measure of inflation, which is capable of modification according to users' desires and without legal constraint of any kind.

This can be done either by improving the the RE methodology or by replacing it with a similar but directly measured version of opportunity cost.

I have suggested to ONS two methods for improving the RE methodology. These are
a) restriction to comparison of new lets, and excluding renewals (this is to ensure like for like quality comparison).
b) a much more detailed stratification (esp. geographical) for weighting, such as might be obtained using data from the relatively new Deposit Protection Scheme, which covers all private sector lets.

I have also suggested a different way of measuring opportunity cost which does not involve proxy imputation by rents but which can be directly measured in a fairly simple way. Details of this have already been postd on the RPI/CPI User Group website along with people's comments.

Another most unfortunate effect of this distraction of a “payments approach” is the way that resources are being drawn from the much more important “formula effect”, which accounts for most of the difference between the RPI and CPI. I think that is what people really want sorted out.

I have always thought that this emphasis of “payments approach” was really a back door way of debating the treatment of OOH costs. Effects in other areas are likely to be minimal.

4 Weighting

I prefer the population wide approach, but with the exclusion of luxury and fashion goods. I am not in favour of trimming according to either income or expenditure. Trimming is too arbitrary and gives results which are equally arbitrary. Note that this still excludes the Government and Business sectors of the economy.

5 Population coverage

This should clearly include institutions.

6 Domestic vs National coverage

It seems that the numerical difference will be negligible, so the simpler of the two should be chosen.

7 Timing

See response to 1, 2 and 3 above.

8 Treatment of specific items

interest payments – interest liabilities incurred should be included but not payments.

student loans - no opinion at present

insurance premiums - no opinion at present

life insurance premiums - no opinion at present

taxation - if related to expenditure, should be included, but not if related to income or capital gain.

OOH costs (exc. Capital costs) – should be as in RPI and CPI

Capital Housing costs - should be covered in respect of depreciation and opportunity cost.

9 and 10. - I would be concerned about heavy reliance on LCF data since it excludes institutions and has only a 50% response rate.

ONS Questionnaire on the “Index of Household Payments”

Response from Jill Leyland, independent economics consultant.

1. Do you believe that there is a need for this type of index? If so, why?

*In answering this I am assuming that ONS’s intention is indeed to produce a **price** index, as per earlier discussions and the paper written by John Astin and myself, and not an expenditure index as the title implies and as was suggested by some at the meeting on 12th September at the RSS.*

Yes. The original purpose of consumer price indices was to measure inflation as experienced by the consumer. This was not the purpose of the CPI or, by extension, CPIH¹. It was the purpose of the RPI but, as we know, the RPI is no longer a satisfactory guide and its problems cannot be fixed. There is therefore a gap which needs to be filled.

2. What is your need for this index and why do you believe it would be suitable for your need?

My current personal need is for analysis and research – an index to show households’ experience of inflation in practical terms and also to monitor the extent to which existing measures of inflation do or do not track this.

In my previous job I required such an index to meet requests from my company’s HR department, when salaries were reviewed, for advice on inflation levels experienced by and forecast for households.

Through my current consultancy work, I am also aware of the need for many pension funds to have an index that can replace RPI for uprating purposes but which trustees can accept as being a sufficiently accurate measure of households’ inflation experience.

And, generally, I believe there needs to be an index, for policy, analytical, informative and, ultimately once it has proved itself and bedded in, contractual purposes where there is a need to link something to households’ experience of inflation.

3. How frequently would the index need to be published to meet this need?

Monthly for all uses in 2. Annual is not sufficient for ongoing analysis (although it may be acceptable for more detailed information) even if monthly data are then produced since there would be an unacceptably long lag in new information at times.

While salary rounds only normally happen once a year, different companies have different review times. Annual publication means that some companies could be working on very out

¹ The first sentence of the first paragraph under “Introduction” (P2) of the ONS paper is incorrect in attributing this purpose to CPI etc.

of date information. Further my work required forecasting inflation – forecasting requires data to be as up to date as possible.

As regards pension funds and other contractual needs, again different funds could have different review dates and some would therefore be working on very out of date information.

To best meet the need stated above:

4. What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

Household weighted (“democratic weights”) or as close an approximation as practically possible.

5. What is your preferred population (for example, all UK or private UK) coverage?

All UK households but all UK private households could be acceptable

6. What is your preferred expenditure (for example, national or domestic) coverage?

National, accepting that some UK households’ expenditure abroad may be difficult to cover accurately.

7. What is your preferred approach to timing?

Payments in principle. This said, there are only a few categories of expenditure where the timing difference is sufficiently important to matter.

8. What is your preferred treatment for the following items?

interest payments – these should be included to the extent practical. Mortgage interest is particularly essential given its importance to many households’ budgets. They should be included gross; interest receipts should be included in any income measure.

student loans – included to the extent possible for households repaying such loans (both interest and principal).

insurance premiums – these should be included on a gross basis. Note that while insurance claims paid out are counted as income in the national accounts, this is a rather specialised interpretation. Households would not consider claims paid as income but as compensation for loss.

life insurance premiums - Life insurance premiums, ie for policies payable on death or in respect of serious injury during a fixed term, should be included (at least in principle). Life assurance should not.

taxation – Direct taxes on income – income tax and national insurance – should be excluded. Other taxes, including council tax, stamp duty, VAT, vehicle excise duty etc, should be included.

owner occupier housing costs excluding capital costs – All included

capital housing costs – Included – ideally both up front payments and the capital element of mortgage payments. For second and subsequent purchases up front payments should be weighted as per the net cost to the householder.

9. Are there any other areas you believe we need to consider with regards to this index?

Pending further research on formula effect issues, I would suggest that the best starting point would be to use elementary aggregate formulae as in RPIJ. While I see the attraction of aligning aggregation formulae with the CPI, this over uses Jevons in my view. What is really needed is a general review of formulae used and the continuation of the research work done in 2011/12 particularly in respect of clothing.

10. Do you have any additional comments?

The meeting on September 12th confirmed that the title “Index of Household Payments” is very confusing as a number of people thought that it referred to an index of amounts paid (ie expenditure) rather than prices. Index of Household Prices or Index of Household Costs would be better.

An issue that has frequently arisen in discussion is that of offsetting income. My belief is that the principle should be to offset (eg adjust weights) where the income would accrue to the same household but not when it would accrue to the household sector as a whole. For example, when buying a car, whether new or second hand, many households would trade in their existing car. In those cases it is the difference between the amount paid and the amount received that the index should seek to track. For interest payments the issue is different since it is unusual for households to be both a substantial payer and a substantial recipient of interest.

Page 11, paragraph 2 (timeliness and punctuality) refers to protocol 2, paragraph 8 of the code of practice implying that publishing an index based on payments, which might give earlier information than an index based on acquisition, could be in breach of this paragraph. This is a misunderstanding of the purpose of that paragraph which is designed to ensure that no one who is not cleared for pre-release access is given access to a report before it is published. Indeed holding up publication of any report is in clear breach of paragraph 1 of the same protocol.

Jill Leyland

Response to ONS Questionnaire on IHP: John Astin (private consultant and member of the Technical Advisory Panel on Consumer Prices).

Q1 Do you believe that there is a need for this type of index? If so, why?

It is difficult to know what is meant by “this type of index”. The IHP as described in the ONS paper is not, on the face of it, an “inflation index” – this was confirmed at the recent User Group meeting by ONS. Reading the letter to Sir Andrew Dilnot from John Pullinger of 9 March 2016, the National Statistician says “The ONS will publish proposals and a timetable on the development of an HII in July 2016”. The HII is the index proposed by myself and Jill Leyland in our paper “Towards a Household Inflation Index” of July 2015. This index was very clearly an “inflation index” – meaning that the index could be used to assess the current rate of inflation in the UK, as perceived and experienced by households.

Thus, the IHP as proposed by ONS seems not to be the same “type” as the Household Inflation Index, and therefore does not accord with the proposal of the National Statistician. That is, unless there have been misunderstandings over the meaning of “inflation index”. My own understanding is that it is a price index which is used to measure the rate of inflation between any two periods of time. If that describes the proposed IHP, then I do indeed believe there is a need for it. I would quibble only over the word “payments”, which is not the same as “prices”. (I pay £50 to fill up my tank; the price is £1.00 per litre).

In fact, the technical aspects of the IHP accord quite closely with those proposed in the Astin/Leyland 2015 HII paper. The ONS proposal for an annual index, supplemented by coherent income data, presents no problem for me in itself. The feature which I feel is lacking – and it is a vital feature – is the monthly publication of an index similar to the IHP – clearly labelled as a price index, not a payments index. The RPI/CPI User Group has proposed such an index, which it has suggested could be called the Index of Household Prices, and I would support this.

In the rest of this submission, I assume that the proposed IHP is in fact a consumer prices index.

Q2 What is your need for this index and why do you believe it would be suitable for your need?

I have no special professional needs. But, as a member of the public, I see a need for a monthly price index which will answer, in a way which is meaningful for householders in general, the question “What is the rate of inflation?” The CPI, which is currently the main UK headline inflation index, was designed (under my direction) specifically as a macroeconomic price index for use by the European Central Bank and EU Member States as required by the convergence criteria laid down in the Maastricht Treaty. It was not designed for use as a compensation (or “uprating”) index. In the UK, the RPI fulfilled this role more or less successfully for half a century, but it is no longer classified as a National Statistic. This absence leaves an important gap in the array of consumer price indices published by ONS having the status of National Statistics. The IHP described in the ONS paper, provided it were to be published monthly, would go a long way towards filling this gap.

Q3 How frequently would the index need to be published to meet this need?

An index designed to fill the gap left by the RPI, such as the proposed Household Inflation Index, would clearly need to be published monthly, alongside a measure such as CPI or CPIH, which are important technical indices for specialised economic users. This could be supplemented with an annual analytic publication of the IHP as suggested in the ONS paper.

Q4 What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

A household-based inflation index should be compiled using “democratic” or household weights, rather than “plutocratic” or expenditure weights which are appropriate for a macroeconomic measure of inflation. If such weighting turns out to be impossible to measure accurately, a suitable proxy could be used. I am unclear as to what is meant by “economy-wide expenditure weighted”.

Q5 What is your preferred population (for example, all UK or private UK coverage)?

Preferably all UK-resident households.

Q6 What is your preferred expenditure (for example, national or domestic coverage)?

I would prefer a household-based index to use national coverage, since the index should be based on UK residents’ household expenditure, excluding expenditure by foreign visitors and including expenditure abroad by UK residents.

Q7 What is your preferred approach to timing?

I assume this question concerns the allocation of expenditures to the appropriate month. In principle I would prefer the payments approach, although in practice there is usually little difference between the payments approach and the acquisitions approach.

The difference becomes important in the case of payments in advance, e.g. for season tickets and for forthcoming events. My view is that a household-oriented price index should record the time of payment as being the appropriate month for recording the expenditure. This is the moment when the expenditure hits the household budget. This would also be the relevant date for recording the expenditure in the LCF survey, and would thus place both weights and prices on the same footing. (This practice would also be consistent with the acquisitions approach since the ownership of a ticket gives the right to enjoy it at a future date.)

A second important difference between the acquisition and payments approaches is the timing of mortgage interest payments. Again, such payments impact on the household budget usually each month, and should enter into the index for that month.

Q8 What is your preferred treatment for the following items?

Interest payments

Mortgage interest has been included in the RPI for many years – and in my view this is one of the reasons why the RPI has remained so popular in the public eye. But it should be included in any household-oriented index, since it is one of the most important items in many household budgets. It is also often difficult to substitute for. If, as I believe it should, mortgage interest is included, there seems no theoretical argument against including other forms of interest, and my preference would be to include as many types of interest as is feasible.

Student loans

Both the fees and the loan repayments, including interest, should be covered in the index.

Insurance premiums

Both the weights and the premiums should be measured on a gross basis in a household-based index. Households are buying “peace of mind” when they buy insurance, even when it is compulsory. Claim payments are not regarded by policyholders as “income”. Having gross premiums used for both prices and weights would provide the desired consistency in a normal price index.

Life insurance premiums

The term “life insurance” describes a policy which is payable only on the death of the policyholder. It should be covered in the index.

On the other hand, “life assurance” is widely regarded by the price index community as a form of saving and is generally excluded from price indices. This should also be the case for the IHP.

Taxation

Direct taxes, which would include income tax, capital gains tax, national insurance contributions and inheritance tax, should be excluded from the index. Indirect taxes, particularly those associated with various forms of expenditure, such as VAT, Council Tax, and Stamp Duty Land Tax, should be included.

Capital housing costs

There is a particularly strong case for including capital payments made by first-time buyers (and there exists already a relevant price index). Such purchasers have to face the full brunt of house price increases, often delaying their purchase while savings for a deposit fail to reach the necessary percentage of price. There is also a case for including partially the capital payments made for second and subsequent purchases of dwellings, after taking account of receipts from the previous dwelling – much as is done when trading in a secondhand car to a dealer.

Q9 Are there any other areas you believe we need to consider with regards to this index?

Elementary aggregate index formulae

The 2015 Astin/Leyland paper did not make any specific proposals for the elementary aggregate index formula(e) which should be used in the proposed HII. The ONS paper also does not go into detail on this. However, if the IHP is indeed a price index, then the formula question needs to be addressed.

There are a number of outstanding discussions going on at the present time, and it would be preferable to reach some conclusions on these before the new index is launched. But I would suggest that if the new index is launched before any general consensus has emerged on the formula issue, it would be prudent to follow the method currently used in RPIJ.

Q10 Do you have any additional comments?

(a) I have already argued that an Index of Household Prices should be published monthly, as well as annually. The Astin/Leyland 2015 paper says (p6) “The intention behind the HII . . is an index . . which would become the normal index used for uprating purposes and for assessing real incomes in the UK. It would be a headline index, enjoying equal publicity with the CPI or whichever index is used for interest rate setting by the Bank of England.”

To fill the gap left by the “loss” of RPI it is necessary to have a monthly index which the IHP could become, to provide an alternative, more relevant to the public, estimate of inflation than the specialist macroeconomic measures provided by CPI or CPIH.

(b) The ONS paper regards the IHP as being “unlike traditional approaches to measuring inflation”. An Index of Household Prices (not “payments”), based on the HII proposal, would stand very much in the tradition of UK consumer price indices, taking most of its technical aspects from either CPI or RPI. It is not a “fundamentally new” index, as has been said.

J Astin

26 September 2016

Response to Consultation on proposed Index of Household Payments: John Wood

1. *Do you believe that there is a need for this kind of index? If so, why?*

The financial crisis of 2008 arose, in the main, because the economic and political authorities did not pay sufficient attention to booming house prices and increasing household debt. This lack of attention, in turn, arose partly because the inflation targets monitored ignored these problems. To avoid a replication of this disaster, it is necessary to have a macroeconomic measure of inflation that includes the effects of all price movements affecting households.

2. *What is your need for this index and why do you believe it would be suitable for your need?*

See answer to question 1.

3. *How frequently would the index need to be published to meet this need?*

Monthly.

4. *What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?*

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.

The main rationale for using household weighting is to produce an aggregate index that is closer to that of a “typical” household than the “average” household represented by an expenditure weighted index. This is related to the use of the new index to inform price updating of pensions and welfare benefits but in such cases it would be more sensible to use expenditure weighting relating to the specific households affected by the updating. In addition, the concerns expressed in Flower & Wales (2014) about “the CPI is broadly representative of the price experience of households around two-thirds of the way up the expenditure distribution” and “An alternative, ‘democratic’ price index ... is around 0.3 percentage points higher on average than the plutocratic measure over this period.” are based on a flawed analysis. These statements are based on expenditure data from the Living Costs and Food Survey, obtained from a detailed expenditure diary over a two week period for each of the randomly selected households. These expenditure data are not typical of any household, not even the selected household itself. As Flower & Wales note, in some cases a household's recorded expenditure may be exceptionally high or dominated by a specific COICOP category because of the purchase of an expensive, infrequently purchased item. Correspondingly, although less easy to detect, other recorded expenditures may be exceptionally low or dominated by frequently purchased items.

The first statement quoted above is based on an analysis categorising households according to their total expenditure. As this expenditure is, in part, random, according to which particular fortnight the household was selected for the sample, this is neither a useful nor sensible categorisation. In the corresponding analysis categorised by income, whose definition is designed to represent the typical weekly income for the household, there is very little deviation of inflation rates from the aggregate values, except for the anomalous lowest tenth of households by income.

The alternative, ‘democratic’ price index mentioned in the second statement quoted above assigns equal weight to each equalised household expenditure data. As almost all households have occasional large expenditures for relatively expensive items such as furniture, cars and holidays, this weighting process effectively understates the true weights of these expensive items within groups of similar households. As these expensive, occasional items appear to undergo lower inflation than cheaper, every day items (perhaps because of technological improvements, as with electronic devices), this would overstate inflation for this so-called ‘democratic’ price index.

In practice, concern that an expenditure weighted index is not truly representative of the typical household is misplaced. There is no reliable evidence that inflation rates vary between households so much that the additional complications of applying household weighting are justified. A more appropriate approach is to

produce expenditure weighted indices for the desired categories of households. If desired, an approximation to a household weighted index may be obtained by producing indices for households in income groups determined by income deciles or quintiles than applying equal weights to the indices for these groups.

5. *What is your preferred population (for example, all UK or private UK) coverage?*

All UK households.

6. *What is your preferred expenditure (for example, national or domestic) coverage?*

Domestic. For the intended macroeconomic measure, only domestic expenditure is relevant because UK authorities have no direct influence over or responsibility for price movements in foreign countries. Expenditure by UK residents in foreign countries should therefore be excluded but expenditure in the UK for the purchase of foreign holidays, including payments for package holidays, for travel to and from abroad (unless these travel costs are incurred abroad) and for accommodation abroad (booked in the UK prior to travel) should be included.

7. *What is your preferred approach to timing?*

The approach to timing of price movements for both CPI and RPI is to use acquisition costs and I prefer to retain this for the new index. Astin & Leyland (2015) purport to prefer a payments approach, only using acquisition cost when the timing is similar to the payment timing. 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 shown in response 8a 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 (see response 8b).

The nonsensical complications required for a genuine payments approach are ably described in Turvey (1981). Here is a short extract of his description of this approach with regard to interest payments: "...requires knowledge not only of credit prices ... over the past n years, but also, in the case of mortgages with variable interest rates, of interest rate changes for mortgages. All this would be a fearsome task if taken literally."

8. *What is your preferred treatment for the following items?*

a. *Interest payments*

The proposed inclusion of interest payments on all loans with no adjustment for interest received as income is correct but the discussion on how to obtain price changes for interest payments indicates a lack of understanding of this matter by the authors of the consultation document. This question has already been addressed in ONS with regard to the Services Producer Prices Index (SPPI) for Banking. The Retail Prices team should consult with the SPPI team to obtain a full understanding of this matter. In essence, the "price" is the cost of obtaining the use of a fixed sum of money for a fixed period (usually a month or a year but the equivalent monthly rate is the most appropriate rate to use in the context of a monthly index, as this represents the acquisition cost for the index reference month). As the interest rate charged depends on the size and term of the loan and on a variety of other factors, it is necessary to obtain separate prices for loans of different types and they should be weighted together proportionally to their average amounts outstanding during the base period. Because of the wide variety of different loan types and paucity of data, some averaging may be necessary. The price for each loan type is then the fixed amount of loan for that type multiplied by the relevant interest rate for that type in the reference month for the index. The weight for each loan type would be proportional to the amount of interest paid in the base period for that type. There is no need to adjust for the changing value of money or for households' changing debt levels because the proposed index is a fixed basket index, the basket items in this case being the fixed loan amounts for the different loan types. As loan interest relates specifically to the use of borrowed money, regardless of the nature of the product bought by this borrowed money, it should be treated as a separate class and not "classified as additional expenditure for the item for which the loan is given".

b. *Student loans*

Under the acquisition cost basis, the prices for student fees are those extant in the index reference month and, usually, these prices will only change at the beginning of the academic year. The prices of interest payments on loans for fees or maintenance costs are determined according to interest rates in the index reference month, as described in response 8a above, even if the interest is not paid until (often many years) later. Loan repayments are a return of capital and are therefore transfer payments, not payments for the receipt of goods or services, and are not relevant to a prices index. This reflects the actual legal situation, in that the universities have received all their fees, even if some students have financed their fee payments by borrowing and have therefore incurred a liability to their lenders. Students' tuition fees are all paid for in the academic year in which the tuition is received. With regard to interest payments, the deferral of interest is treated as the payment of the incurred interest by an additional loan from the lender. In this way, the acquisition cost basis recognises payment of the interest due when it is due, the lack of actual payment being accounted for by an increase in the amount of loan outstanding. When the capital amounts and deferred interest are eventually paid off, they are transfer payments representing the return of the lenders' own money, are not a purchase of anything and are not relevant to a prices index.

Under the payments basis, these legally binding administrative arrangements, established under contract, are ignored. Instead, the pretence is made that deferred payments of capital (treated as payments of university fees) and interest represent purchases of services that were actually received (sometimes many years) previously. The prices relating to these payments are manifold, spread over all the preceding years when the services were received. As the payments have no direct relationship to these services, it is necessary to make arbitrary assumptions about which services are covered by individual payments in order to establish the appropriate prices to use, also ensuring that the total payments allocated to each price match the fee or interest payment that price relates to. This is horrendously complicated, as ably described in Turvey(1981), of which the relevant quotation under question 7 above is only a small part. Furthermore, because the prices enter the index only after a lag of possibly several years, this introduces an unnecessary and unhelpful delay in the identification of price movements for these services, contrary to the aim of a timely indicator of price changes.

The only sensible approach is to apply an acquisition costs basis.

c. *Insurance premiums*

I agree with the proposal that general insurance premiums should be included in the index with no adjustments made for insurance payouts.

d. *Life insurance premiums*

I agree with the proposal that life insurance premiums should be included in the index with no adjustments made for insurance payouts but the insurance element of life assurance premiums should also be included. This includes the entirety of whole life assurance premiums. Although a whole life assurance policy has the appearance of a savings contract, because a payment is certain on eventual death, it is not a savings contract. This is because an early death leads to a payment that is much greater than the accumulation of premiums paid and associated investment earnings. A very late death leads to a payment that is much less than could have been achieved by investing the premium payments directly: affected policyholders have sacrificed the possibility of a larger amount for the certainty of a fixed sum on death, whenever it occurs.

Endowment assurance policies comprise a savings component, to provide the sum assured at the end of the policy term, and an insurance component, to provide the sum assured on death. Only the insurance component should be included. Disentangling the insurance component correctly from the total premium is fraught with difficulty but a reasonable proxy is to use the premium for a term insurance policy with the same policy term and outstanding duration. The only additional requirement is then to increase the weight for term insurance, which may be done by grossing up term insurance premiums paid in the base year by a factor reflecting the additional sums assured from endowment assurance policies relative to the corresponding term assurance policies, separately by policy term and outstanding duration.

e. *Taxation*

I agree with the proposal in the consultation document.

f. *Owner occupier housing costs excluding capital costs*

I prefer an acquisition cost approach, with mortgage interest treated as described in my responses 8a and 8b. In practice, this is not likely to be very different from the proposed payments approach when mortgage interest is paid monthly.

g. *Capital housing costs*

All capital housing costs, including full, gross acquisition costs for all buyers (not just first-time buyers), major renovations and extensions should be included at the date of acquisition. Mortgage capital repayments are not relevant because they are return of capital transfer payments to lenders. Including mortgage capital repayments on a payments basis creates the same problems as applying such treatment to student loan repayments, as described in my response 8b, and should be avoided. The fact that housing is an asset rather than an item of consumption is not relevant to my intended purpose of the index, which is as a macroeconomic indicator of inflationary pressures on households. Including the full capital cost of housing is also relevant if the index is intended as a guide to wage negotiations or the updating of benefits and pensions, at least in so far as they relate to home owners.

9. *Are there any other areas you believe we need to consider with regards to this index?*

The appropriate elementary aggregate index to use for this index is the Carli formula, which is the appropriate elementary aggregate formula for a base-weighted index under sampling by probability proportional to size, which is the basis of the sampling design for RPI and CPI, the main source of data for this index.

10. *Do you have any additional comments?*

The proposed name "Index of Household Payments" is a misnomer. First, it does not make clear that the index is intended as an index of price movements. Second, the vast majority of items (all of them, under my proposals) will be included as acquisition costs, so it is not even an index of price movements on a payments basis. Even the introduction of monthly interest costs is, as I noted above in response 8a, on an acquisition cost basis. Attempting to impose a payments basis for university tuition fees and associated interest costs is intractable, as discussed in response 8b. The main purpose of the proposed index is to correct for deficiencies in the coverage of RPI and CPI, mainly relating to housing costs and interest payments. If the name "Household Inflation Index" is not acceptable, I suggest the name "Household Expenditure Prices Index", which avoids potential confusion with the payments approach to index construction and succinctly describes the index's intended purpose.

References

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Developing an Index of Household Payments – comments

Paul A. Smith

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This documents my response to the ONS paper *Developing an Index of Household Payments*; it is informed by discussions at the Advisory Panel on Consumer Prices – Technical (APCP-T) in September 2016, but the views within it are my own and should not be taken as part of that committee’s deliberations.

The discussion document touches many issues, and a lot of thought has clearly gone into its construction. It is nevertheless inevitable that issues remain, and I’m pleased to have this opportunity to comment, and this means that I will dwell most on things where changes are, in my opinion, needed.

General Comments

The discussion paper launches straight into an assessment of the quality of data sources for constructing the proposed index, and uses these in part to help decide what it should include. This seems backwards to me. The right process should be to set out the concept(s) that the index should measure, and then to assess the quality of the data sources to measure those concepts.

The key concepts (which make sense to me) from the outline of a statistic to measure the influence of price changes (in the loosest sense) on the outgoings of households are:

- the index should be constructed democratically, so that it measures the inflation experience averaged over households (where each household has an equal weight)
- the index should include items in a basket according to an objective definition of ‘outgoings’
- in order to be a useful statistic for wage bargaining or for assessing wellbeing, it should be paired with an index that measures ‘incomings’ in a wide sense. Where there is no option about the linkage between incomings and outgoings (eg income tax, national insurance), neither should be included.

Constructing an index

The first stage is to define the item coverage of the index and though much of the discussion in the paper is devoted to particular items, there is no stated principle behind what is suggested for inclusion and what is not. The Living Costs and Food Survey provides a reasonably objective measure of household outgoings, and would therefore seem to be a natural source. Suitably classified versions of interest payments, mortgage payments etc are needed. To be consistent with the democratic index concept, the basket should also be assessed democratically, so starting with the item that forms the highest average proportion of household expenditure, $\frac{1}{N} \sum_{i=1}^N p_{ik}$ in the population case, where p_{ik} is the proportion of household i ’s expenditure formed by product k . Then the next highest, etc, until a *de minimis* threshold is reached.

The weighting of the price data to form the index should also be democratic, so with weights formed as the average proportion of each household’s expenditure formed by the item in question. It is important to distinguish (and the discussion paper does not do this) between the experience of an average household (which is *not* what is being proposed here) and the average experience of households (which is). Box 1, point a, gives an example. At face value I would be content with a reconciliation of LCF with CPI expenditure totals, but you need to show how it relates to the concept to be measured. In particular year-to-year consistency of this process is important to avoid spurious movements arising from the reconciliation process, and needs to be demonstrated.

Responses to (some of the) specific consultation questions

1. Do you believe that there is a need for this type of index? If so, why?

This is a complex question about user needs, which is hard to answer directly. There are sufficient proxy versions of price indices already published by the ONS that it should be possible to make an approximation to this kind of index for most of the purposes for which it would be used (wage bargaining, uprating, etc). However, the level of skill and interpretation required to say how well these indices work for that job is quite high, and not widely available to the general population. A democratic index would provide a much more easily interpretable version, and my sense is that it would align much more closely with the default (assumed) concept of 'inflation' held by a non-technical user. It would also help to describe the impact of price change, adding new insights. Therefore the index would be *useful*, but may not be *required*.

I have said before, and am still of the opinion, that a guidance document describing the principle uses of the existing family of indices would be valuable, particularly for lay users. This would become more important with the introduction of IHP.

2. What is your need for this index and why do you believe it would be suitable for your need?

One of the purposes I see for this index is to reflect changes in outgoings for the purposes of uprating – which includes both government uprating (eg pensions, universal credit) and marketplace uprating (principally wage bargaining). A complementary index of incomings is needed in order to pass an ethical impact assessment – of not disadvantaging one sector of society (people paying wages/benefits/pensions) by giving partial information only to another part (wage bargainers etc).

3. How frequently would the index need to be published to meet this need?

If uprating and wage bargaining are key uses (see 2.), they have different periodicity requirements. Uprating is already done annually (eg CPI in September for State Pensions). Therefore an annual analysis can provide these figures with little change. However, wage bargaining is not automatic, and does not take place annually. An annual publication for this information will then lead to it not meeting the user need – users will need more timely information, and arguments over how to extrapolate the IHP using (say) CPI will dominate over evidence-based decisions. Therefore I consider that information is needed more frequently. This could be monthly, but could also be quarterly. A forthcoming paper (Nason *et al.* (in press)) presents a method for assessing whether the additional cost of a monthly index would be valuable.

To best meet the need stated above:

4. What is your preferred treatment for weighting (for example, household expenditure weighted or economy-wide expenditure weighted)?

In line with my stated principle of a democratically constructed index, household expenditure weights. If you consider that economy-wide expenditure weights provide a satisfactory approximation, it is up to you to demonstrate that they do. Or you can set out different concepts to measure. But otherwise the conceptual framework for the index will be inconsistently defined.

5. What is your preferred population (for example, all UK or private UK) coverage?

6. What is your preferred expenditure (for example, national or domestic) coverage?

My preferred concept is expenditure by UK residents. How to implement this is up for discussion – because of the difficulty of obtaining spending patterns and prices for visits abroad, approximations may be needed. It may even be that foreign visitors' spending in the UK is the most easily available

proxy for UK visitors' spending overseas, which would implicitly change the definition to 'domestic', but still only as a proxy for the required concept. As before, need to define the concept that the index would ideally measure, and then work out the best measurement process from the available data sources.

7. What is your preferred approach to timing?

If the index is supposed to keep pace with outgoings (and that would be my statement of the concept required, on which the following rests), then it seems sensible to use a payment approach to timing. Again set the principle, then consider the details. Here, the details could involve lagging prices for delayed payments. For items to be received in the future (eg holidays, other travel tickets), prices would need to include how far in advance they are bought as an attribute.

8. What is your preferred treatment for the following items?

- *interest payments*

Under my concept of a timing of payments approach, a loan would be included as it is repaid (including both capital and interest) – that is the time when I spend *my* money to pay for the good, even if the transfer of ownership was a long time ago. The price may therefore need lagging, possibly by many years.

Proxying the changing value of money by inflation (bottom of p13) looks circular. What measure of inflation are you proposing?

- *student loans*

Under my concept of a timing of payments approach, a student loan would be included as it is repaid, just like any other loan. If you want to treat it as a tax (not consistent with my concept, but one credible concept), then you have to be consistent and include the whole cost of the loan at the time it is used (that is, while a student is at university, to pay for tuition and living costs).

- *insurance premiums*

Include (as long as they are sufficiently high in the basket of outgoings). On the double counting of increases in car prices and increases in insurance premiums, include both, but account for the double counting by including increased income from insurance claims in the complementary incomings index. Then analyses using both parts will be sound.

- *life insurance premiums*

You have not suggested how to treat financial assets conceptually, but need to do so. I have no strong opinions on this matter.

- *taxation*

- *owner occupier housing costs excluding capital costs*

Buildings insurance should be treated the same as other insurance (see above).

- *capital housing costs*

The same as other purchases with loans. The idea to produce versions with and without capital costs (p18) looks analytically useful and interesting, at the risk of further diversifying the family of price indices.

9. Are there any other areas you believe we need to consider with regards to this index?

You include a lot on *coherence* in your assessments, but the discussion seems to point to using existing methods wherever possible. I would again prefer the concepts to be defined, and then work out how best to measure them. If this results in differences of approach from, eg, the CPI, then that is OK. The key point of coherence is that any differences should be *explainable*.

10. Do you have any additional comments?

The argument on p13 ("Timeliness and punctuality") about not releasing data which may help users forecast what happens next is specious. ONS already releases data such as this (for example saying

what the impact of a growth in the Index of Production means for quarterly GDP, or providing a monthly output series in advance of an annual one).

Footnote 11: But no other NSI produces an IHP equivalent either?

Reference

NASON, G.P., POWELL, B., ELLIOTT, D. & SMITH, P.A. (in press) Should we sample a time series more frequently? Decision support via multirate spectrum estimation (with discussion). *Journal of the Royal Statistical Society, Series A*. Available from <http://www.rss.org.uk/Images/PDF/publications/Nason-Sept.-6.pdf>

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