

# Statistics Commission

REPORT OF A SCOPING STUDY  
ON PRICE INDICES AND  
DEFLATORS PRODUCED AT  
THE OFFICE FOR NATIONAL  
STATISTICS (REVISED)

Statistics Commission Report No 9  
August 2002

# Statistics Commission

## Statistics Commission Report No 14

### Report of a Scoping Study on Price Indices and Deflators Produced at the Office for National Statistics (Revised)

A report to the Statistics Commission  
by Malcolm Jones

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## **Introduction**

1. This report to the Statistics Commission details the findings of a scoping study into price indices and deflators produced at the ONS. The study's main aim was to ascertain whether issues identified in the scoping study indicated that a more substantive study should be instigated. The specification of the scoping study is given in Appendix A. The work was undertaken in the secretariat by Malcolm Jones though the assistance of all those who contributed to the study (secretariat staff, ONS staff and interviewees) is gratefully acknowledged.

## **Background**

2. There were several reasons for including the study in the Commission's research programme. Firstly, it was a topic with a high profile and, whilst price indices are important in their own right as leading economic indicators, they are also vital for the deflation of other important economic measures such as GDP. Secondly, the Commission was aware of a number of concerns including those raised at a Treasury Committee meeting relating to both methods for quality adjustment [1], and also the role of the Chancellor of the Exchequer in determining the scope and definition of the Retail Prices Index (RPI) [2]. The Commission had indicated to the Treasury Committee that such matters would form part of the Commission's research programme.

## **Method of working**

3. There were three elements in the research approach adopted:
  - obtain information from ONS on the price indices and deflators that they produce. A summary of the information supplied is given in Appendix B;
  - interview a small sample of users of price indices and deflators in order to ascertain their views/experience on methodological and any other issues including the role of the Chancellor. Appendix D contains a collation of these views;
  - supplement the information supplied by undertaking desk research. Section 5 refers to some of the publications consulted, and other major ones consulted were the RPI Technical Manual [3], and the Boskin Report [4].
4. Organisations from whom user views were sought were chosen to include known high profile users of the indices – Bank of England, HM Treasury, other major organisations such as the CBI, TUC, other major government/private organisations, users with City experience with a possibly broader perspective being sought through interviews with two journalists. The Royal Statistical Society was also approached though its input is restricted to the role of the Chancellor. Information was received from 15 organisations/individuals and these are listed in Appendix C. Interviewees were normally working in a capacity involving macroeconomic forecasting and/or briefing, or had previous experience of such work. Interviews were conducted face-to-face, by telephone or written responses were accepted as circumstances dictated. Interviews were open-ended in the sense that they focused on discussions about the particular interviewee's interests rather than there being a formal questionnaire though one specific issue – the role of the Chancellor – was brought up by the interviewer at the end of the interview if it did not arise during the course of the interview.

## Findings

5. Appendix D contains a summary of user views. This section highlights the main findings based on these views, and also refers to appropriate ONS research work. Appendix D identifies 16 separate sets of issues, a not surprising number given the wealth of indices produced by ONS. Issues raised varied from wide-ranging ones, such as quality adjustment where the potential impact could be appreciable, to other issues such as some of the RPI issues which potentially would have a modest impact on the overall index. Despite the number of issues raised, it was often acknowledged by users that ONS were doing good work both as regards production and research work. The point was made by one user that the high profile nature of many of these indices means that they are well scrutinised and that problems are likely to be identified relatively quickly.
6. Looking at the major methodological issues raised:
  - the adjustment for quality raised the most concern particularly for ICT. This is an area that ONS are devoting research effort on for both the RPI and Producer Price Indexes (PPIs) including participating with EU colleagues in a 'European hedonics centre' [5]. ONS are currently producing hedonic models for desktop and laptop computers, and depending upon their success may use them in the January 2003 PPI. ONS do adjust for quality albeit not yet using hedonic modelling. Some interesting work has been done by ONS on quality adjustment for PPIs for ICT [6] leading to a new index that is claimed to be 'more consistent with other evidence'. Several users, as did the Treasury Committee, raised the issue of the effect of quality adjustment on deflators, whose use could lead to higher growth estimates for UK GDP. In the *STORI report* [7], it was estimated that utilising USA deflators for ICT could, at the extreme, lead to an increase in growth of the Index of Production of 6 per cent; such a figure equates to a difference in the growth rate of GDP of 0.3 per cent pa but subsequent work by the ONS [8] have reduced the estimate of this figure to 0.1 per cent;
  - the provision of service sector deflators produced concerns both as regards sectors covered and quality of deflators. This is an area that is covered by an experimental series Corporate Services Price Index (CSPI) so there are likely to be future improvements both in quality and coverage;
  - the deflation of government spending was raised by four users, albeit recognised as being a difficult issue. The Final Expenditure Price Index (FEPI) was providing information on this but was discontinued with the December 2001 issue due to the difficulty of calculating reliable indices for government output prices;
  - the need for regional deflators. A recent paper by ONS [9] based on work done for Eurostat/OECD in calculating purchasing power parities indicated real differences in prices between regions which would no doubt translate into differences between regions as regards GDP deflators. ONS are now considering whether to instigate some research work to build on some recent work done by DTI/DTLR to calculate a simplified regional deflator.

7. Five of the issues raised – adjusting prices of consumer goods for changes in quality, use of geometric mean, coverage, pricing and inclusion of Internet sites – are related to the quality of the RPI. Many of the issues raised are covered in principle in the RPI research programme [10] though the document understandably gives a broad picture of the research programme so that it cannot be readily ascertained whether every point raised by users is covered. A report covering the research programme is due to be published later this year.
8. There are some other issues which, whilst not major issues of methodology, are particularly worthy of note:
  - some concern over suitable infrastructure and resources being in place to meet demands of changes;
  - the feeling that more emphasis should be given to the Harmonised Index of Consumer Prices (HICP) as compared to the RPI. Were this to be desirable it is not a matter that is totally within the control of ONS, though there may be increased interest in future years as it forms part of the convergence criteria for membership of the EMU.

Other points were raised and are detailed in Appendix D.

9. The major non-methodological issue related to the role of the Chancellor:
  - most users (in some cases after prompting) expressed an opinion. A clear majority of these felt that the Chancellor should relinquish his role. Some felt this strongly, others less so;
  - four felt strongly that the roles should be relinquished because of the importance of the RPI though for two users this view was linked to the impression that the RPI was not a National Statistic;
  - one of those who felt strongly, argued that it was not consistent to grant independence to the Bank of England in the setting of the base rate but retain some control over the calculation of inflation;
  - two felt that the status quo should be maintained because of the direct financial influence of the RPI on pensions, gilts, etc;
  - several others also felt that the Chancellor should relinquish control but this was after prompting. Whilst the prompting was related to the subject and not to any particular view, it is possible that the very act of informing interviewees of the Chancellor's role may have helped them towards the point of view of wishing to see it changed;
  - several others had no view/felt it appropriate not to comment.
10. A second non-methodological issue was what steps, if any, should be taken were there to be methodological changes that led to an appreciable change in the RPI. One suggestion was that this situation would lead to the need to calculate the old RPI's in tandem for many years.

## Conclusions

11. As regards methodology, the numbers and type of issues that surfaced were not sufficient to warrant a more substantive study given that, of the major issues identified, these are mostly the subject of research/development by ONS – adjustment for changes in quality, provision of service sector information, RPI issues. The ONS report on RPI research should be reviewed when it has been published, and consideration given to the ramifications of any appreciable changes. ONS should be encouraged to continue work on deflating government spending/output despite dropping the FEPI, and, if possible, make some progress on research to calculate regional GDP deflators. In addition, given the multitude of indices produced, and the changing environment, it is important that ONS ensure that flexible systems are in place.
12. Although most users did not have strong views about the role of the Chancellor in relation to the RPI, most users had some opinion with the clear majority of those expressing an opinion believing that it would be better if the Chancellor did not have this special role. There was a degree of confusion about whether the RPI was in fact part of National Statistics with those feeling very strongly that the Chancellor's role should be relinquished sharing especially in the confusion. Views expressed were based upon general principles with perhaps the most telling argument being that the setting of the base rate was fully independent of the Chancellor but the target of the MPC – RPIX was not in the same state. No-one offered hard evidence, either that the Chancellor's special role had led to inappropriate intervention or conversely that it had been needed to provide an additional safeguard in relation to pensions, contracts and gilts.
13. The report does not therefore make a clear-cut recommendation for or against change in the Chancellor's role on the basis of the evidence gathered in the study. It is however clear that the current position is not well understood and that a clearer public statement of the position is needed.
14. The lack of a clear-cut evidence based recommendation is not of itself an argument for the *status quo* and the Commission may also wish to consider this in the context of wider issues relating to the Code of Practice.

Malcolm Jones  
Secretariat  
Statistics Commission  
August 2002

## References

- [1] Treasury Committee, *Second Report 2000-01, National Statistics (HC 137)*, Minutes of Evidence, para. 178.
- [2] *ibid.* recommendation (h).
- [3] *The Retail Prices Index Technical Manual* (1998), ed. Michael Baxter. London, The Stationery Office.
- [4] M J Boskin *et al* (1996) 'Towards a more accurate measure of the cost of living', *Final Report to the Senate Finance Committee from the Advisory Commission to Study the Consumer Price Index*. Available at: [www.ssa.gov/history/reports/boskinrpt.html](http://www.ssa.gov/history/reports/boskinrpt.html)
- [5] ONS, 'Review of Short-Term Output Indicators', *National Statistics Quality Review Series*, No. 1, 2000, Implementation Plan, recommendation 4.4.
- [6] M Brand, 'Historical Revisions to Computer Producer Prices', ONS article, June 11, 2001. Available at: [www.statistics.gov.uk/themes/economy/articles/pricesandinflation/downloads/revisions\\_to\\_computer\\_ppi.pdf](http://www.statistics.gov.uk/themes/economy/articles/pricesandinflation/downloads/revisions_to_computer_ppi.pdf)
- [7] ONS *op cit.* section 4.3.7.
- [8] P Vaze, 'ICT Deflation and Growth: A Sensitivity Analysis', *Economic Trends*, (572) July 2001.
- [9] D Baran and J O'Donoghue 2002, Price levels in 2000 for London and the regions compared with the national average, *Economic Trends*, (578) January 2002.
- [10] ONS (1999), *Three Year Research Programme on RPI Methodology*.

## **STATISTICS COMMISSION**

### **SPECIFICATION FOR SCOPING STUDY ON THE USE OF PRICE INDICES AND DEFLATORS AT THE OFFICE FOR NATIONAL STATISTICS**

#### **BACKGROUND**

1. The Statistics Commission has been set up to advise on the quality, quality assurance and priority setting for National Statistics, and on the procedures designed to deliver statistical integrity, to help ensure National Statistics are trustworthy and responsive to public needs. It is independent of both Ministers and producers of National Statistics. As part of its quality assurance role it will be seeking to commission pieces of methodological audit and other work from academic and other experts to inform its judgments.
2. It is still testing out different ways of working but intends that its choice of areas for substantial pieces of work should be informed by initial 'scoping studies' which will assess the case for further work and provide clear terms of reference for the main studies. Some of these will be undertaken by its own small secretariat and some by external experts. It is envisaged that all the scoping studies will be published, perhaps as a series of occasional papers, in line with the Commission's commitment to work openly and transparently.
3. It is envisaged that this scoping study can best be carried out by the secretariat with some external advice/consultation. A fuller follow-up study is likely to require the commissioning of external expertise.
4. Price indices and deflators are important constituents of National Statistics, and are widely used in the construction of many important economic indicators. The Commission is aware of a number of concerns about price indices and deflators. Such concerns range from very technical issues relating to the adjustment of prices for quality changes in areas such as information and communications technology<sup>1</sup>, to the role of the Chancellor of the Exchequer in determining the scope and definition of the Retail Price Index (RPI)<sup>2</sup>.

#### **PURPOSE OF STUDY**

5. The scoping study shall assess whether, prima facie, a useful purpose would be served by a substantive study of methodological and other issues relating to price indices and deflators produced by ONS.
6. The study shall also take account of recent and planned internal quality assurance work in this area.
7. A full study would need to take into account the international perspective but in this limited study, the international dimension must necessarily be restricted to any feedback from users, and relevant information thrown up by the desk research.

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<sup>1</sup> For example, ONS, Review of short-term output indicators (NSQR report No.1), 2000: recommendation R 4.4.

<sup>2</sup> For example, Treasury Committee, Second Report 2000-01, National Statistics (HC 137): recommendation (h)



8. If the report does conclude that there is a case for further investigation, it should give an estimate of the time that would be required to do this thoroughly and guidance as to the issues, which would need to be addressed. The Commission would then put the main study out to tender.

## **METHOD OF WORKING AND TIMING**

9. The study will have three phases as regards information gathering:
- obtain from ONS information on the prices indices and deflators being produced, and where they are being used in the production of National Statistic and official statistics. In addition, details of relevant current and future development work needs to be made available.
  - interview a sample of users in order to ascertain their views on the price indices and deflators which they use. Such users should be drawn from HMT, and The Bank of England, and other users within and outside government. Issues raised should not be restricted to methodological ones.
  - conduct desk research of publications and web sites, which will supplement the interviews, in order to help establish the main issues in the construction of price indices/deflators. This stage to be determined following study of information from ONS. It may require some consultation with price index expert(s) including but not necessarily exclusively ONS.
10. The study will be initiated on 4 June with a meeting between representative(s) of the Commission and key players from the ONS when required information will be provided [or arrangements agreed for its provision]. It is expected that the study will take no more than 20 days of secretariat time. The report will be produced by 30 November 2001. Apart from any small costs due to travelling/publication purchase, there is a possibility of utilising a consultant albeit, at this stage, for a relatively limited consultation.

## **OUTPUTS**

11. The report will:
1. List the price indices and deflators covered by the study.
  2. Summarise user views.
  3. Make recommendations on the need for further study of methodological and/or other issues.

Secretariat  
Statistics Commission  
September 2001

## SUMMARY OF PRICE INDICES AND DEFLATORS PRODUCED BY ONS

The following sections give summary information on the price indices and deflators produced by ONS. Except where indicated, information is published on a monthly basis.

### 1. Mainstream economic series

#### Consumer price indices

RPI:	<p>Retail Prices Index: The main domestic measure of inflation in the UK measuring the average changes from month to month in the prices of goods and services purchased for personal consumption by most private households in the UK. The spending pattern on which the index is based is revised each year mainly using information from the expenditure and food survey (formerly Family Expenditure Survey). The change over 12 months in the RPI is often referred to as the headline rate of inflation. Over one hundred RPI component series are published on the ONS website as part of the electronic publication <i>Focus on Consumer Prices</i>.</p>
RPIX:	<p>RPI excluding mortgage interest payments. It is the measure used for the Government's inflation target, and the change over 12 months is often referred to as the underlying rate of inflation.</p>
RPIY:	<p>RPI excluding mortgage interest payments and indirect taxes.</p>
TPI:	<p>Tax and Price Index: It measures how much the average person's gross income needs to change to purchase the RPI basket of goods and services, allowing for the average amount of income tax and national insurance paid on earnings.</p>
Pensioner price indices:	<p>RPI for pensioner households who derive at least 75 per cent of their income from state pension and benefits. Calculated on a quarterly basis.</p>
The Rossi Index:	<p>This index is used to uprate state-income related benefits based on the change in the index over the 12 months to September of each year. It is defined as the RPI less mortgage interest payments, depreciation, rent and council tax.</p>
HICP:	<p>Harmonised Index of Consumer Prices: The European inflation measure. It covers expenditure in the UK by private households, institutional households and foreign visitors to the UK. The spending pattern on which the index is based is revised each year mainly using information from the National Accounts. The goods and services covered by the index closely correspond to household final monetary consumption expenditure in the National Accounts.</p>

### Producer price indices (PPIs)

Also called 'factory gate prices', Producer Prices are a set of indices which measure the price changes of goods bought and sold by UK manufacturers. Results are published every month in an ONS First Release, made available simultaneously on the National Statistics website.

There are two main groups of PPIs: output and input indices. Input indices measure changes in the prices of purchases of materials and fuels by manufacturers, whereas output indices measure the change in price of goods sold manufacturers. A broad selection of the data is published in monthly business monitors MM19 and MM22 and the full dataset is available on Timezone on the National Statistics website.

There are around 1,400 output indices and over 750 of these are published. The lowest level of aggregation (called 6 digit indices) provides information on very detailed products such as 'atlases and other books of maps and charts' and 'machinery and apparatus for filtering or purifying gases not elsewhere specified'. These are then aggregated into around 240 Standard Industrial Classifications (SIC) 4 digit indices and then up into higher level aggregations such as all manufacturing and all manufacturing excluding food, beverages, tobacco and petroleum products.

There is much less detail available on the input side because the index structure is determined by input/output groups which are much broader categories than the specific product classifications used for the output indices. The input price indices require data on purchases of products to provide weighting information and this is only available for input/output groups. (The output price indices uses weighting information derived from a detailed survey of sales by product – 'ProdCom'.) There are around 75 detailed input indices, covering industries such as 'structural metal products' and 'manufacture of alcoholic beverages'. These are aggregated into all manufacturing and all manufacturing excluding food, beverages, petroleum and tobacco industries.

### Trade prices

Import price indices measure price movements in goods imported into the UK. Not all categories of imports are covered; the bulk of the indices relate to agricultural and raw material products, although some expansion into intermediate and capital goods has taken place. The export indices measure the price change of manufactured goods exported from the UK. These are both available monthly.

Around 160 detailed import indices and 130 export indices are published. Imports include products such as 'Asian hardwoods' and 'Aluminium waste and scrap' and these are aggregated up to broad groups and then to a total imported products index.

Exports cover detailed product groups such as 'nitrogen function compounds' and 'machine tools and their parts' and again these are aggregated to broad groups and to a total export index.

### GDP deflator

The GDP deflator is a broad measure of inflation across the whole economy which is produced from the UK National Accounts. Whilst represented by one figure encapsulating annual changes, it reflects movements in hundreds of separate deflators for the individual expenditure items of GDP. These separate deflators include both those described in this section plus others calculated specially for the purpose of deflating GDP. Unlike the price indices described above, which are Laspeyres (base-weighted) in form, the GDP deflator is a Paasche index (current-weighted).

## 2. Experimental series

ONS also publishes two experimental series of price indices. They are experimental in the sense that they are in the testing phase and not fully developed.

### Corporate Services Price Index (CSPI)

The CSPI measures the change in prices for services provided by UK businesses to other UK businesses (hence 'corporate services'). The activities covered include business and professional services (eg accountancy, telecommunications, freight transport, industrial cleaning, security and waste disposal services provided directly to an individual for final consumption are excluded). Broadly, the CSPI is the service sector equivalent of the manufacturing Producer Price Index (PPI).

Data are collected and results produced every quarter. Since February 2001, indices have been available for 28 industries. Most correspond to 4 digits in terms of the UK SIC, although a few relate to 5 digits. Industry-level indices are weighted together on a net sector basis to produce a top-level CSPI. The top-level index currently represents about half the corporate services sector. A development programme is in place to increase the number of industries covered to at least 35 by 2003.

Once initially developed, each CSPIs is subject to a detailed quality assurance process during which its publication status is reviewed and its fitness for use as a deflator in national accounts calculations is assessed, using a set of criteria agreed with the ONS's National Accounts Group.

### Final Expenditure Price Index (FEPI)

This gives a broader measure of inflation than that provided by the consumer price indices. It is a measure of the change in the prices paid by UK households, businesses, government and non-profit institutions for final purchases of goods and services.

The FEPI is made up of four components:

Index of Consumer Prices (ICP): measures inflation affecting all consumers in the UK.

Index of Investment Prices (IIP): measures changes in prices paid for capital goods by businesses and government.

Index of Government Prices (IGP): measures inflation affecting government.

Index of Non-Profit Institutions Prices (INP): measures inflation amongst mainly higher education institutions and charities.

It was intended that the series be relaunched as a mainstream economic indicator in March 2002. Methodological problems have led to the series being discontinued with the release of the December 2001 data.

## LIST OF INTERVIEWEES

<u>Interviewee/Contributor</u>	<u>Organisation and Role</u>
<b>Face-to-face interviews</b>	
Sir Alan Budd	Provost of the Queen's College, Oxford
The Lord Burns	Former Chief Economic Adviser to the Treasury Chairman of Abbey National plc, Former Permanent Secretary and Chief Economic Adviser to the Treasury
Neil Blake	Research Director, Business Strategies
Sudhir Junankar	Associate Director, CBI
Peter Kellner	Freelance journalist
Three officials*	Bank of England
Two officials*	HM Treasury
<b>Telephone interviews</b>	
Simon Briscoe	Statistics Editor, Financial Times
Hugh McAloon	Statistician, Scottish Executive
Iain Murray	Policy Officer, TUC
Peter Thompson	Chairman, National Association of Pension Funds
Three officials*	DTI
<b>Written evidence</b>	
Robert Baker	Chief Economist, Society of Motor Manufacturers and Traders
Mark Capleton on behalf of Sir Peter Middleton	Director, Barclays Capital  Chairman, Barclays Bank plc, former Permanent Secretary to the Treasury
Royal Statistical Society	Evidence contained in <i>Treasury Committee, Second Report 2000-2001, Appendix 3.1</i>

\* Some interviewees chose not to be listed individually.

## **PRICE INDICES AND DEFLATORS: SUMMARY OF ISSUES RAISED BY USERS**

This section collates the various views expressed by users. Some issues were raised by a number of users whilst others were raised by only one user, possibly reflecting the special interest of that particular user. The issues raised have been grouped into methodological and other issues, and within these groups are listed in order of number of times the issue was raised. Further information on the composition of the price indices and deflators referred to is contained within Appendix B.

### **Methodological issues**

#### Adjustment to take account of quality changes

Comparison of prices over time can be distorted when the typical quality or nature of the product also changes at the same time. This means that like is not being compared with like. This presents particular problems in areas such as information and communications technology (ICT) where, for example, changes in technology lead to rapid increases in computing power without corresponding price increases. Over half the users raised the issue as to whether or not ONS were adequately adjusting for quality changes. The main concern was on the measurement of manufacturing output (PPI measures) rather than on the consumer side (RPI measures); most users raising this issue referred to ICT in particular. Several users stated that they believed that ONS were making progress in researching the use of hedonic methods [1] though the USA was mentioned in this context as being a leader in this field. Some users pointed out that whilst the adoption of these methods in the USA has led to reductions in inflation, such a reduction will also lead to changes in the figures for other leading indicators such as GDP. One user did urge caution, and was concerned that there should be a universal approach to quality changes, and noted that changes in quality may not always be upwards. Examples of organic food and rail usage being cited.

#### Use of geometric mean [2] rather than arithmetic mean in calculation of RPI

Six users felt that the method of calculating price changes should be based on using the geometric mean [2] rather than the arithmetic mean. From a theoretical point of view, using it can cater better for product substitution in the sense that if the price of similar products (eg fruit) change relatively there will be altering patterns of consumption. From a conceptual viewpoint, its use or not should be tailored to those items in the RPI whereby reasonable substitution could be expected.

The Harmonised Index of Consumer Prices (HICP) utilises the geometric mean approach and this was referred to by four of the respondents. Its advocacy by Eurostat was designed to aid comparability across countries in its handling of outliers rather than based on a consideration of the conceptual approach. Of late, the HICP has been about one point lower than the underlying rate of inflation-RPIX. About half of this difference is due to the use of the geometric mean.

### Service sector deflators

With the growth in the service sector economy, four users were concerned over the provision of deflators for particular sectors and the quality of some of the information being provided. Sectors that received special mention were software, business services, sanitary services, financial services and transport. The experimental series Corporate Services Price Index (CSPI) was welcomed but one user thought some grading of the series in quality terms would be helpful.

### Deflation of government spending/output

The question of adequately measuring government output/productivity was felt to be a big problem by four contributors with it being important to calculate the correct deflator, though it was acknowledged to be a difficult area of measurement. One user said that there were too frequent revisions to the data as compared to consumer data. The experimental series Final Expenditure Price Index (FEPI), which included information on government prices, was mentioned by several users as being useful. Allied to this, one user felt that the greatest need was for a whole economy price index.

### Calculation of regional price deflators for regional GDP

The measurement of regional economic activity in terms of GDP was important to three users. Comparisons of GDP figures are made for various reasons eg to see if Public Service Agreement( PSA) growth targets have been met. Whilst, for example, regional growth may be deflated by the national GDP deflator, it is known that different regions will have different rates of deflation. It would therefore be better if more appropriate deflators rather than the national one could be made available.

This topic was one that emerged in last year's study of regional GDP by the Commission. The Commission recommended a list of topics to be included in the ONS review of regional accounts, and the list included the need to review the case for regional deflators. An initial response from ONS was that resource was not available to include the subject in the review, and the latest position is that ONS is considering whether to undertake some research building upon work done by DTI/DTLR.

### Greater emphasis to be placed on the HICP

The HICP is the measure of inflation used to compare consumer prices inflation across the European Union; apart from the difference in formula it differs from the RPI in terms of weighting and coverage. Two users felt that it should be given greater prominence in its use though this was speaking from a perspective whereby they were making international comparisons. A third user felt that the RPI should be more in line through utilisation of the geometric mean and inclusion of new car data.

Nevertheless, it can be argued that whilst it is useful for international comparability measures, it has an emphasis on comparability that tends to reduce its applicability as a national measure eg does not take full account of owner occupier housing costs.

### Pricing of items in the RPI

Two users felt that housing costs were not necessarily properly accounted for with one user believing that properly accounting for house price inflation was a problem. Another user was especially concerned with pricing issues: was the RPI reflecting the effect on prices of consumer incentive schemes? eg loyalty cards, buy-one-get-one-free, offers such as 'spend £40 on groceries get 5p off petrol'. Yet another user was concerned that the price series for new cars was not appropriate, being a proxy based on second hand car data.

A more conceptual concern expressed related to a quote by Alan Greenspan regarding the difficulties posed as the result of 'the progressive substitution of intangible services for physical output'. An example cited was that of email, one of whose effects was a reduction in letters sent and hence postage costs.

### Coverage of the RPI

- Two users were concerned that coverage of the RPI was incomplete. Particular omissions of concern were:
- new products are not included quickly enough. eg mobile phones;
- illegal products such as drugs or services mainly provided in the informal economy such as child minding;
- free services that become chargeable eg motorway tolls.

### Production of additional RPI indices

Apart from the RPI, the ONS produces a number of consumer price indices including indices for one/two person pensioner households. One user felt that this should be extended to other special interest groups eg owner-occupiers. Such information would be useful in the formulation/analysis of policy. In fact, the Institute for Fiscal Studies (IFS) have recently published some research (3) along these lines. This point overlaps with the section on 'ramifications of future changes in the RPI' where the possibility of additional indices is considered but with a different purpose in mind.

### RPI- price collection from internet sites

One user was concerned that sufficient account was being taken of the growth in the use of the Internet for purchases particularly for those categories of goods/services with high Internet usage eg holidays.

### PPI-use of list prices

One user believed that, whilst ONS normally asked for actual transaction prices to be supplied, that list prices were quite often given.

### Improved vehicle price data

One user was concerned that the car price data produced for the HICP was overly lagged, and that no price information was available for commercial vehicles.



## Other issues

### Role of the Chancellor in relation to the RPI [4]

This issue was not raised spontaneously by many users but, at the end of the interviews the interviewer asked those who did not raise it whether they had views.

Just over half the users felt (some very strongly, others less so) that it was inappropriate for the Chancellor to retain control. Main points made were that:

- the very importance of the RPI meant that it should be free of political interference. Independence in setting the base rate had been granted to the Bank of England yet the Chancellor still retained some potential control over the calculation of the MPC's target;
- tidier for Chancellor to retain control though not important as extremely unlikely that Chancellor would not convene/listen to Retail Prices Index Advisory Committee (RPIAC) if necessary;
- it is very unlikely when new framework was set-up that Chancellor would have introduced control if existing mechanism had not already been in place CF. release practices which are difficult to change because Ministers have become used to early release;
- the exclusion of the RPI weakens the image and standing of National Statistics as a service which informs the Parliaments and Assemblies and the citizen about the state of the nation;
- unhappy that the most important statistic is not within the scope of National Statistics. This gave the message that it was too important to be left to the statisticians;
- there was also the issue as to the extent to which the Chancellor exercised any influence over any proposed changes whatsoever eg weights;
- it seemed sensible for the Chancellor to relinquish control so that the RPI was constructed independently of government;
- it would be easier to get acceptance for appreciable changes in the RPI were the Chancellor not to have a controlling role.

There was some confusion about the position of the RPI in National Statistics. In particular, the responses from two of those who felt most strongly indicated that they felt that it was outside the scope. In fact, it is formally a designated National Statistic albeit with the additional caveat of the Chancellor's role.

Only two users put forward arguments that it was appropriate for the Chancellor to retain this control because:

- the RPI has a long history of public credibility, and is probably the most important economic statistic because of its direct effect on such things as pensions, contracts and gilts. It is important to preserve its credibility, and the Chancellor's

role can be seen as that of a safeguard. In providing this safeguard, the Chancellor had access to the advice of the RPIAC, although that was not a standing committee and would only be convened if the Chancellor wished to seek its advice. Previous Chancellors had never exercised a veto on its findings;

- it was reasonable for the Chancellor to have the final say because of its direct financial effect.

#### Ramifications of appreciable changes in the RPI

Several users stated the belief that the RPI overstated the true rate of inflation for consumer prices because of issues such as substitution bias, quality bias, outlet bias though two users stated that consistency over time is an important consideration. This belief in a systematic bias is implicit in other users suggesting greater use of the geometric mean given that its introduction would lead to a reduction in the inflation rate. The Boskin Report (*op. cit.*) is well known in this context.

Two users expressed the concern that, given the review of RPI methodology, there could be changes implemented that led to appreciable changes in the RPI. Were this to be the case, this then raises the question as to whether something special should be done to cater for the change. There would be an impact on many financial areas eg pensions, gilts, contracts, student loans, MPC target.

One suggestion was that the state pension indexation could be changed eg inflation + 0.5% (say). A broader suggestion from another user was that a new index could be produced but the old ones would also be calculated for use in indexation; this user felt that the Chancellor was in the best position to judge how to handle the situation (but should not be in the position of influencing the robustness of any potential improvements).

#### Use of indices in the private sector

One user expressed the view that it was vital for financial markets that depended on inflation-linked instruments that the best possible measure of inflation is used. Conversely another user believed that many businesses made limited use of price deflators with the deflation of data being carried out much more in the public sector than the private sector.

#### ONS resource issues

A majority of users were spontaneously appreciative of the work being carried out by the ONS. The regular series were described positively as being timely and of good quality with there being no criticism of the production aspects of the series. Several users observed that the ONS was carrying out good quality research and were aware of the main issues with one user feeling that the ONS could be better at communicating its achievements. Conversely, one user felt that too much research was being conducted on the RPI as some of the research would lead to very little improvement in the accuracy of the RPI. There were two issues relating to the actual resources being employed by ONS.

- one user felt that the computer systems for the production of the RPI/PPI were not modern enough. They were currently produced on different systems and it was felt that a new system catering for both would lead to greater flexibility;
- another user expressed concern whether sufficient resource would be available when annual chain-linking of GDP is introduced in 2003.

Notes:

- [1] Hedonic methods are based on the view that many goods and services can be viewed as bundles of characteristics or features. Statistical models are developed in order to estimate the price in terms of its characteristics, and these models are used to adjust prices for variation in characteristics. These methods have been especially pioneered in the USA.
- [2] The geometric mean is calculated, for a set of  $n$  values, by taking the  $n$ th root of the result of multiplying the  $n$  values together. In the context of the price information, the use of the geometric mean will produce a lower value than the use of the arithmetic mean ie the more usually encountered average. From a conceptual viewpoint the relevance of the geometric mean approach needs to be considered for each section of the RPI shopping basket. The economic theory on which its use is based depends upon the substitution taking place between items within the same section.
- [3] I. Crawford and Z. Smith, *Distributional Aspects of Inflation*, London, IFS, 2002. ISBN 1-903274-26-5. URL: [www.ifs.org.uk/consume/comm90.pdf](http://www.ifs.org.uk/consume/comm90.pdf)
- [4] The RPI differs from other National Statistics in that to quote from the *Framework for National Statistics* 'the National Statistician will take the lead in advising on methodological questions concerning the RPI but the scope and definition of the index will continue to be matters for the Chancellor of the Exchequer'.