How ONS consumer price statistics are used

Introduction

The Office for National Statistics (ONS) produces two main measures of consumer price inflation – the Consumer Prices Index (CPI) and the Retail Prices Index (RPI). Consumer price indices are important indicators of how the UK economy is performing. They are used in many ways by the government, businesses and society in general. They can affect interest rates, tax allowances, wages, state benefits, pensions, maintenance contracts and many other payments. They also show the impact of inflation on family budgets.

During 2010, an assessment team from the UK Statistics Authority conducted a review of the Office for National Statistics’ consumer price indices. Their remit was to assess the CPI and the RPI against the Code of Practice for Official Statistics1. In December 2010 the team published their conclusions as Assessment Report 792.

The Statistics Authority judged that the statistics are readily accessible, produced according to sound methods and managed impartially and objectively in the public interest. They confirmed that the statistics are designated as National Statistics subject to the Office for National Statistics (ONS) implementing five enhancements or requirements. The first of these required the ONS to:

Take steps to develop a greater understanding of the use made of the statistics; publish the relevant information and assumptions and use them to better support the use of the statistics

This article has been written in response to this requirement. The information presented below has been gathered in the following ways:

1. A seminar held at the Royal Statistics Society in January 2011
2. ONS consultation on its work programme3
3. Regular monitoring of the use of consumer price statistics by Government policy departments

---

4. Continual monitoring of contact with a wide range of stakeholders and other users, including through email and other channels

5. Occasional meetings with City analyst users of consumer price statistics

6. Frequent regular and ad hoc meetings with users of consumer price statistics in Government

7. Occasional meetings with non Government users of consumer price statistics

**Background**

**Our strategy for user engagement**

Our strategy for user engagement on consumer price statistics is based on the overall ONS engagement strategy[^1], which in turn builds on the Code of Practice for Official Statistics, Principle 1: Meeting user needs and Protocol 1: User engagement. In particular, our aim is to:

- Be inclusive, identifying a range of users
- Provide clear information that is open and accessible to all
- Engage with users, using a variety of methods appropriate to them
- Investigate and document the needs of users, the use made of our statistics and the decisions they inform
- Publish statistical reports that take account of user needs
- Be open and honest, publishing information about user experience, data quality and the timeliness of reports
- Consult users before making changes that affect ONS statistics
- Feedback and demonstrate the impact and influence of comments received

Our approach to engagement with users varies depending on the purpose of the engagement and the users consulted. Our engagement and communication regularly reaches the range of user groups for ONS consumer price statistics, including:

- Major policy customers, including the Bank of England and Her Majesty’s Treasury
- Other government departments including, for example, the Department for Work and Pensions
- Devolved administrations including the Welsh Government and the Scottish Executive

How ONS consumer price statistics are used

• Academics and researchers
• Members of the public
• The private sector
• Journalists and the media

In line with ONS’ strategy on user engagement, we will carefully monitor and update our engagement channels, with the aim of understanding when / how user needs evolve and to enable us to ensure that we take account of the views of users in setting our forward work programme. We aim to do this through the channels described above, as well as to explore the potential to further strengthen our engagement through a wide variety of channels. To begin this process, and in order to improve our understanding of the full range of uses of consumer price statistics, we intend to set up a User Group for consumer price statistics. We anticipate that the User Group will be established before the end of 2011 / 12.

When the User Group is up and running, we will invite them to consider this article and to provide their views on how it might be developed further, so that we can further improve our understanding of the uses made of consumer price statistics. This information will then be used to help shape the forward work programme for consumer prices.

**Uses of the CPI and RPI**

The CPI and RPI are used in many ways by Government, businesses, individuals and internationally. The uses can be categorised in a number of ways:

- As a macro economic measure of inflation and to inform policy-making decisions
- For deflation – price indices are used to remove the effect of price changes from time series
- For indexation of wages, benefits and pensions
- For indexing gilts – the redemption values of certain gilt-edged securities are linked to price indices
- For indexing rates in private contracts

**Use of ONS consumer price statistics to inform Government decisions**

**As a macroeconomic indicator of inflation**

UK Governments have, for many years, based their economic policies around targeting a specific range of inflation, so that a comparison of the outcome for inflation with the target can provide a means of measuring the success of the relevant economic policies. The main characteristics of the current inflation target are:

- an inflation target for the CPI of 2 per cent
• if inflation is more than one percentage point higher or lower than the target, the Governor of the Bank of England is required to publish an open letter explaining why inflation has deviated from the target and what action the Monetary Policy Committee intends to take to get it back to target; and

• provision for the target to be reviewed in each Budget.

In addition to this formal role in monetary policy, both the CPI and RPI are used as a macroeconomic indicator of inflation to inform decisions on economic policy, as well as to monitor Government policy. A number of government departments use consumer prices to monitor how prices for specific goods or services compare with general levels of inflation. In some cases, the CPI and/or the RPI is used directly to inform or monitor government policy, while on other occasions consumer prices are used only indirectly.

For deflation purposes

For many purposes, comparisons over time are more useful when the effect of price changes is eliminated. For instance, estimates are made of gross domestic product (GDP) and its main components in each period, revalued at the average prices in a selected year. Until now, the RPI and its components have been used to adjust current levels of household final consumption expenditure and other economic series in the national accounts to produce constant price series. This is typically done by deflating (dividing) estimates of expenditure at current prices by appropriate price indices, derived from the RPI or CPI. ONS has recently announced, see Drew (2011), its intention to switch to the use of the CPI and its components for deflation purposes. For more information on the use of consumer prices for deflation purposes, and the rationale behind the switch from RPI to CPI, please see the paper by Drew.

Both the CPI and RPI are used to remove the effect of price changes by a wide range of other Government departments, both to inform economic policies and to monitor the implementation of those policies. Other users, for example in business, academia and the general public are also interested in removing the effect of price change in economic time series.

For indexation of tax allowances

Some tax allowances and thresholds are revised annually in line with changes in the RPI. For progressive taxes, inflation means that the Exchequer takes a growing share of a person’s income if wages increase over time resulting in a greater proportion of income moving into a higher bracket. This tendency is known as ‘fiscal drag’. In order to help offset this, the Chancellor frequently raises the tax threshold to take account of changes to the RPI. Conversely, for specific taxes (ie taxes levied per unit of a commodity irrespective of price) such as excise duty, inflation will reduce the real tax burden. As a result, excise duties are often increased in line with inflation.

Indexation of incomes

5 http://www.statistics.gov.uk/cc/cci/article.asp?ID=2722&Pos=1&ColRank=1&Rank=1
The change in the RPI and / or the CPI is an important factor in wage bargaining; some pay agreements explicitly link pay rises to these indices.

**Index linked gilts and national savings**

The redemption values of certain gilt-edged securities and national savings certificates are automatically uprated by an amount dependent on the RPI.

The Government expects to undertake a formal consultation on the issuance of CPI-linked gilts in 2011-2012. The Government will also review the use of the CPI for indirect taxes once its fiscal consolidation plans have been implemented and the duty increases it inherited from the previous Government have come to an end.

**Indexation of pensions and benefits**

Most state benefits and pensions are revised annually in line with changes in consumer prices. Until recently, uprating was based on the RPI and its components. However, the Budget 2011 announced that from April 2012 the default indexation assumption for direct taxes will switch from the RPI to the CPI. To ensure employers and older people do not lose out, the annual increases in the employer National Insurance Contributions threshold, and the age-related allowance and other thresholds for older people will continue to increase by the equivalent of the RPI. The personal allowance will increase from 2013-14 by at least the equivalent of the RPI.

**Price adjustment**

**Regulation of utilities**: certain regulated privatised utilities have their prices constrained to rise by no more than a rate dependent on the RPI.

**Other price regulation**: Many pieces of legislation refer to the RPI as a way of adjusting prices, and there are a number of statutory instruments which refer to the RPI or its variants.

**Price monitoring**

Many government departments use the RPI and / or CPI to understand price movements for specific goods or services, or to compare price changes for specific goods / services with general level of price change.

**Use of consumer price statistics to inform the public**

The ONS Consumer Prices team has frequent contact with users via email and by telephone. During each month of 2010, we received on average seventy five emails and around one hundred phone calls, with increased calls / emails in some months. The majority of these phone calls and emails are from members of the public. The majority of requests are relatively straightforward, most often asking for data. Virtually all other requests cover three broad topics: the differences between the RPI and CPI, assistance with interpretation of the figures and, occasionally, inquiries about the methodology used to compile consumer price indices.

The general public uses consumer prices directly in number of ways:
How ONS consumer price statistics are used

- to aid in understanding the economy generally, and to monitor the performance of government policies
- to understand the impact of inflation on their household budget. This sometimes includes using the Personal Inflation Calculator, available on the ONS and BBC websites, to compare how their personal experience of inflation with the overall average inflation rates
- to understand how their taxes, benefits and / or pensions are likely to be updated to take account of price changes
- to understand / put into context price changes for certain goods or services compared to the general level of price change

Use of consumer price statistics by industry

To inform business decisions

Many business use consumer prices in a similar way to government, including to:

- to understand the performance of the economy, and to understand inflationary conditions
- for deflation to remove the effect of price change

Private contracts

Many contracts link payments due to the change in the RPI or CPI

Indexation of incomes

The change in the RPI and / or the CPI is an important factor in wage bargaining; some pay agreements explicitly link pay rises to these indices.

Special interest groups

A number of ‘special interest’ or ‘lobby’ groups also take a keen interest in the official measures of consumer prices. For example, the trades unions often use consumer price indices for wage bargaining, as well as for more general lobbying on their members’ behalf. A wide range of other lobby groups use the CPI and / or the RPI directly in acting on their members’ behalf. For example, a number of organisations acting on behalf of pensioners have recently taken a keen interest in the differences between the CPI and the RPI, and are active in using that information to petition on behalf of their members.

Retailers

To provide a context to compare their price changes with the overall average levels of price change.
Use by academic and research institutes

For research and analysis purposes

For deflation purposes, to remove the impact of price change from time series

As part of teaching about the economy

To evaluate the affordability of specific goods or services compared to other goods / services

For econometric modelling

Indexation of incomes

The change in the RPI and / or the CPI is an important factor in wage bargaining; some pay agreements explicitly link pay rises to these indices. This particular use is wide spread among the different groups of users.

Media coverage of consumer price indices

The monthly publication of consumer prices is, arguably, one of the highest profile statistical outputs. Media coverage is always extensive, including the BBC news website and other online news agencies, as well as national (and often regional) newspapers. Many of these news agencies publish articles on inflation in the lead up to publication. There are always numerous reports of the latest figures on or shortly after the monthly publication date. ONS statisticians often provide a number of television and radio interviews to help to explain the latest figures.

In addition, the Personal Inflation Calculator that was developed by ONS to enable individuals to assess how their own personal inflation experience compares with the headline figures is hosted on the BBC website as well as on the ONS website.

Next steps

We welcome feedback on the information presented here. We would be particularly interested to hear from users whose use of consumer prices is not covered in this document, so that we can further improve our understanding of the full range of uses.

We will take steps to ensure that we keep our understanding of users and uses up-to-date, through maintaining active engagement with the full range of different stakeholder groups. We hope that the User Group that is being established will provide a valuable new way of engaging with users, although we will also use a range of other new and existing channels for seeking user views.

We will use this information on uses to inform the forward work programme for consumer prices. The Office for National Statistics has an active development agenda for consumer prices and we will ensure that the full range of different uses is taken into account in setting priorities for development work.
Further Information

For further information please contact:
Pam Davies
01633 45 6900

Alternatively Email cpi@ons.gov.uk

© Crown Copyright 2011