

Users and uses of consumer price inflation statistics: October 2016

This article contains information about the users and uses of consumer price inflation statistics and user experiences of these statistics. In addition, it provides information on the characteristics of the different measures of consumer price inflation in relation to potential use, which may vary depending on the population of interest to the users and the way the indices are compiled. The last section covers the history of the indices. Users can use this information to help inform their own decision making in regards to which index is most suitable for their particular purpose.

Contact: Jonathan Lewis jonathan.lewis@ons.gsi.gov.uk +44 (0)1633 451872 Release date: 28 October 2016

Next release: To be announced

Table of contents

- 1. Summary
- 2. Introduction
- 3. Users and uses of consumer price inflation statistics
- 4. Characteristics of the different measures of consumer price inflation
- 5. Annex A: Background information on the history of measures of consumer price inflation

1. Summary

Consumer price inflation is the rate at which the prices of goods and services bought by households rise or fall. Consumer price inflation is estimated by using price indices. One way to understand a price index is to think of a very large shopping basket containing all the goods and services bought by households. Movements in price indices represent the changing cost of this basket. Our suite of consumer price indices is published monthly.

Consumer price inflation statistics are important indicators of how the UK economy is performing. They are used in many ways by individuals, government, businesses and academics. Inflation statistics impact on everyone in some way as they affect interest rates, tax allowances, benefits, pensions, savings rates, maintenance contracts and many other payments. We produce 4 measures of inflation: the Consumer Prices Index (CPI), which is the main measure and used by the Bank of England as an inflation target; the CPIH, which is the CPI including owner occupiers' housing; the Retail Prices Index (RPI); and the RPIJ, an alternative to the RPI that uses a different formula.

This article provides information about the users and uses of consumer price inflation statistics and user experiences of these statistics. The different measures are used for different purposes based on the population of interest and the way the indices are compiled (Table 2). In addition, this article provides information on the characteristics of the different measures of consumer price inflation in relation to potential use, which may vary depending on the population of interest to the users and the way the indices are compiled (Table 3). The last section covers the history of the indices. Users can use this information to help inform their own decision-making in regards to which index is most suitable for their particular purpose.

This article is intended to reflect the current uses and users of consumer price inflation statistics as known to us and feedback is welcome. If there are aspects that have changed and you feel the document should be updated, please contact cpih@ons.gsi.gov.uk.

2. Introduction

The Consumer Prices Index (CPI) is currently the main measure of inflation in the UK. The CPIH, which compensated for the lack of a measure of owner occupiers' housing (OOH) in the CPI, was introduced in 2013. OOH costs are a major part of household budgets and, as such, are an important aspect of consumer price inflation. As the more complete measure, then, it is intended that the CPIH should in due course become the headline measure of consumer price inflation in the UK. The Retail Prices Index (RPI) is a legacy measure that due to legislation is still used in some index-linked bonds. The RPIJ is an alternative RPI that uses a different formula.

The CPIH was de-designated as a National Statistic in 2014 after required improvements to the methodology were identified. The improvements from the resulting development work were introduced in February 2015, with the historical series revised back to 2005. CPIH has recently been assessed against the Code of Practice for Official Statistics and the assessment report was published on 3 March 2016. On 9 March 2016, in the National Statistician's letter to the chair of the UK Statistics Authority on the future of consumer price statistics, he considered that the CPIH should become the preferred measure of inflation once it is re-designated as a National Statistic. This view is supported by UK Consumer Price Statistics: A review (Paul Johnson, 2016; commonly referred to as the Johnson Review). We have undertaken work to improve CPIH and to reassure users of its quality, and submitted evidence of this to the UK Statistics Authority on 26 September 2016. The evidence contains a suite of new and updated publications, which will be used over a period of time to monitor the behavior of the index, and increase awareness and confidence in CPIH.

We currently produce 2 other measures of consumer price inflation. The RPI is the longest-standing measure of inflation in the UK. The current RPI figure is still included in the CPI statistical bulletin, but it is no longer a National Statistic due to its methodology not meeting international standards. Due to long-standing contracts, the RPI is still used in some index-linked gilts. We also produce the RPIJ, a variant of the RPI which is calculated using formulae that meet international standards. In his letter to the chair of the Authority on 9 March, the National Statistician strongly discouraged the use of the RPI as a measure for inflation.

We are responsible for the production and dissemination of a wide range of official statistics to enable informed decision-making by individuals, government, businesses and academics. We have a role to play in explaining the implications of using statistics for particular purposes, including their known users and uses. However, it is for users and decision makers outside of the organisation to determine which statistics they use for their required purpose.

A summary table of the indices (Table 3) describes the main characteristics and considerations in regard to potential use. Table 1 is an abridged version of Table 3. For more detailed descriptions please refer to Annex B.

Table 1: Abridged characteristics of the different measures of consumer price inflation

.tg th, .tg td{padding:10px 5px;border:1px solid black;text-align:left;} .tg tbody {vertical-align:top}

Characteristic	c CPI	RPI	RPI RPIJ			
Population base	Includes expenditure by pri institutional households in t Includes expenditure by for to the UK.	he UK.	Includes expenditure by private households			
Expenditure data (or weights)	Derived in the main from the household consumption ex component of the UK Nation	penditure		Derived in the main from our Living Cost and Food survey (LCF).		
Commodity coverage	Covers a number of items excluded from the RPI	Same as the CPI with the inclusion of OOH costs.	Covers a number of items excluded from the CPI.			
Historical time series	Launched in 1996. Historical time series from 1988	Launched in March 2013. Historical time series from 2005.	Launched in 1947 with the first official estimated being produced in January 1956	Launched in March 2013. Historical time series from 1999		
National Statistic status	National Statistic	Experimental Statistic (subject to change)	Official Statistic	National Statistic		
Governing legislation	Governed by a series of legally binding regulations drafted by the European Commission (Eurostat) in conjunction with EU Member States.	No governing legislation at present	Governed by the Statistics and Registration Services Act 2007	No governing legislation at present		
Elementary aggregate	Jevons – roughly two- third	s of the index	Carli – roughly one-third	Jevons – roughly one-third		
formulae	Dutot – around 5%		Dutot – roughly one- third Dutot – roughly one-third			
	Otheror weighted formula - third	- roughly one-	Other or weighted formula –roughly one-third	Other or weighted formula – roughly one-third		
Price collection	Intended to reflect prices of working week at or near the reference month.		Intended to reflect prices on a particular day of each month (Index Day). In practice the collection is the same as the CPI or CPIH except for petrol and oil which are also collected on Index Day in the RPI and RPIJ.			
Revisions	CPI indices are revisable			The revisions policy for RPIJ is the same as that used for CPI.		
Rounding	Calculated using unrounde	d indices	Based on estimates to	1 decimal place		
Product coding	Product coding Classification of Individual Consumption Classification system unique to the User Description (COICOP)					

Insurance Expenditure is distributed amongst other Expenditure considered to belong to categories according to nature of claim. relevant insurance heading (for Only the service charge is allocated to example, housing or motor insurance insurance headings. premiums) OOH is excluded from the Owner Measured Measured using the payments approach. occupiers' CPI using the housing costs rental (OOH) equivalence approach

3. Users and uses of consumer price inflation statistics

The users and uses of the CPI, RPI and RPIJ are established and well understood. The relative newness of the CPIH measure and its de-designation as a National Statistic in August 2014 means that users are still evaluating it and its use is still being established. The production of CPIH reflects an improvement to users in terms of choice of consumer inflation measures, and will be useful for those users whose need is based on the same population and expenditure patterns as the CPI but require a measure of owner occupiers' housing cost.

Sources of information

Information on the users and uses of consumer price inflation statistics, and user experiences of these statistics, has been gathered from a variety of sources including feedback obtained in response to the 2015 consultation on consumer prices. The consultation followed a review led by Mr Paul Johnson (commonly referred to as the Johnson Review), which took a comprehensive look at how inflation is measured in the UK and made a series of recommendations about the future development of these statistics. Respondents to the consultation included representatives from pension groups, financial Institutions, government departments, unions, businesses and individuals.

The UK Regulators Network (UKRN), a network of the UK's economic regulators, published a paper in response to the consultation, which considered whether the RPI should still be used for regulation. Their next step is to publish a discussion paper which will consider the benefits, risks, costs and options associated with economic regulators utilising a common indexation measure, and whether they should move to the UK Statistics Authority's chosen main inflation measure. The majority continue to use either the RPI or the RPI-X, which is a model of RPI that excludes mortgage payments, while Ofcom and the Civil Aviation Authority (CAA) have begun to move towards using the CPI. ATOS IT services have stated that they intend to continue to use the RPIJ for the indexation of staff pensions.

The list of known users and uses of the consumer price statistics is presented in Table 2. In the last 15 to 20 years there has been a shift towards using the CPI in preference to using the RPI for a number of uses. This includes the monetary policy target which changed to the CPI in 2003, as a deflator in the national accounts. This changed in 2010 and for the uprating of government pensions and some benefits which changed in 2011. The RPI is still used for many purposes, such as the uprating of index-linked gilts, which are tied to long-term contracts that mandate its use.

Information collected as part of the CPIH assessment showed that few users make use of the CPIH directly. However, there was a great deal of interest in its developments. A number of concerns raised about the statistic are captured in the CPIH assessment report. The CPIH is being closely monitored by the Bank of England and HM Treasury in the context of understanding consumer price inflation.

Table 2: Users and uses of consumer price statistics

Use	Use Detail	User	Index used	Additional detail
Monetary policy	Inflation targeting	Bank of England	CPI	Since 1992, the UK government has based its economic policies around targeting a specific range of inflation. From December 2003, the target has been the CPI at 2%. Prior to this it was the RPIX (RPI excluding mortgage interest payments) at 2.5%. If, when the Bank of England's Quarterly Inflation Report is published, inflation is more than 1 percentage point higher or lower than the target, the Governor of the Bank of England is required to publish an accompanying open letter, explaining why inflation deviated from the target and what action the Monetary Policy Committee intends to take to get it back to target.
Macroeconomic measure of inflation	Monitoring inflationary pressures in the economy	Economists and analysts in government, business and academia	CPI, CPIH and RPI	The suite of consumer price inflation statistics is used by economists and analysts as a macroeconomic indicator. The statistics can be used to inform decisions on economic and government policy. A number of government departments use consumer price statistics to monitor how prices for specific goods or services compare with general levels of inflation.
Deflation	To remove price effects from statistics, such as in the UK National Accounts	ONS, government departments and other users who want to remove the effects of price change from their statistics	CPI and RPI	For many purposes, comparisons over time are more useful when the effect of price change is eliminated. For instance, in the estimates made of gross domestic product (GDP) and its main components, revalued at constant prices. In 2010, we switched from using the RPI to using the CPI for deflation purposes. Both the CPI and the RPI are used by government departments, business and academia to remove the effect of price inflation from time series.
Academic research and analysis	Research and analysis by academia	Universities and research institutes	CPI, CPIH and RPI	Academics and research institutes use consumer price statistics for research and analysis purposes.

Inflation reporting	Publication of articles and reports on inflation	The media	CPI, CPIH and RPI	The monthly publication of consumer price inflation statistics receives much interest from the media. Media coverage of the release is always extensive, including the primary online news providers as well as national (and often regional) newspapers. Media reports frequently compare the consumer price inflation statistics to other important statistics, for example, average weekly earnings, to help their readers understand how living standards are changing over time.
Informing the public	Understanding the impact of inflation on personal and household budgets	General public	CPI, CPIH and RPI	The general public uses consumer price statistics to understand the impact of inflation on their personal and household budgets, and to understand how incomings and outgoings linked to inflation (such as taxes, benefits, pensions, wages, rail fares and other costs) are likely to change.
Index-linked government bonds and National Savings	Index-linking government bonds (gilts)	Debt Management Office	RPI	Issued for the first time on 27 March 1981. The semi-annual coupon payments and principal payments associated with these bonds are adjusted in line with movements in the RPI. The redemption values of certain giltedged securities and National Savings certificates are automatically uprated by an account dependent on the RPI.
	National Savings and Investments Index-linked Savings Certificates	National Savings and Investments	RPI	The value of savings tied up in these certificates is guaranteed to grow at least in line with the RPI.
Business tax	Corporation Tax on chargeable gains	HM Revenue and Customs		The RPI is used to calculate the indexation allowance for the effects of inflation when calculating the chargeable gains of companies or organisations.
	Business rates	UK government for England, Scottish Parliament for Scotland, and the National Assembly for Wales	RPI	Rates are levied on business properties on the basis of their rateable value and the national multiplier. Each year in April, the government may raise the multiplier by a maximum of the RPI from the previous September.
Indirect tax	Vehicle Excise Duty	HM Revenue and Customs		Vehicle Excise Duty rates increase in line with the RPI.

	FuelDuty	HM Revenue and Customs	RPI	Fuel duty is often increased in line with the RPI. However, in the 2016 Budget, the Chancellor announced that fuel duty would remain frozen, as it had been in recent years.
	Alcohol duty rates	HM Revenue and Customs	RPI	Alcohol Duty Rates often increase by reference to the RPI. In the 2016 Budget, the Chancellor announced that duty on beer, cider and spirits will remain frozen, while duty rates on most wine and higher-strength sparkling cider would increase at the same rate as the RPI.
	Tobacco duty rates	HM Revenue and Customs	RPI	Tobacco duty rates increase by reference to the RPI. In the 2016 Budget, the Chancellor announced that duty on most tobacco products would increase by 2% above RPI, while duty on hand-rolling tobacco would increase by 5% above RPI.
	Gaming Duty	HM Revenue and Customs	RPI	Gross gaming yield bands increase in line with the RPI.
	Air Passenger Duty	HM Revenue and Customs	RPI	Air Passenger Duty rates increase in line with the RPI.
	Climate Change Levy	HM Revenue and Customs	RPI	Climate Change Levy rates increase in line with the RPI.
Personal tax	Income Tax allowances and thresholds	HM Revenue and Customs	(CPI in future	Income Tax allowanced and thresholds are often revised annually in line with changes in inflation. For progressive taxes, inflation means that the Chancellor of 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, known as "fiscal drag". To offset this, the Chancellor frequently raises the tax threshold to take account of inflation. Legislation was introduced in the Finance Bill 2016 to set the personal allowance to £11,500 and the higher rate threshold to £45,000. Once the personal allowance has reached £11,500, it will then increase in line with the CPI in future years. Historically the RPI has also been used to uprate this threshold.
	Car and van fuel benefit charge	HM Revenue and Customs	RPI	The rate of fuel benefit charge for company cars, fuel benefit charge for company vans, and the benefit charge for company vans all increase in line with the RPI.

Regulated charges	Regulated rail fares	HM Revenue and Customs, Department for Transport, train operating companies and National Rail	RPI	The maximum allowable increases in regulated fares by train operators in Great Britain are set using the RPI. Regulated fares account for around 40% of total national rail fares and include season tickets on most commuter journeys and offpeak tickets on most intercity journeys. Since 2004, the average annual increase in regulated rail fares is capped at the RPI plus up to 1% from the previous July.
	Regulation of water and sewerage charges in England and Wales	Regulation Authority (Ofwat) and water and sewerage companies	RPI	The Water Services Regulation Authority sets the maximum allowable annual increase in the overall charge by water companies. The annual increase of regulated water and sewerage charges, which occurs in April, is capped at the RPI from the previous November plus a constant (called the "K-factor") plus any unused K-factor the company has from previous years. The K-factor is reviewed every 5 years.
	Indexation of charges for some of the wholesale services offered by British Telecom	British Telecom (BT)	RPI	Indexation of BT's wholesale charges for Local Loop Unbundling and Wholesale Line Rental services. OFCOM sets a maximum annual increase in these charges. OFCOM expects a real terms decrease in these charges, seeing them fall by between RPI-1.2% and RPI-14.6% (depending on the service). OFCOM's propositions currently being appealed by BT at the competition commission.
	Stamps	OFCOM and Royal Mail	CPI	In 2012 OFCOM put a cap on second- class stamps for letters of 55 pence, indexed in line with the CPI for 7 years.
Indexation of pensions and benefits	State Pension	Department for Work and Pensions	CPI	The State Pension is a regular payment from the government that UK citizens receive when they reach a set State Pension age. To receive this payment UK citizens must have paid or been credited with National Insurance contributions. The basic State Pension increases every year by whichever is the highest: - earning – the average percentage growth in wages (in Great Britain) - prices – the percentage growth in prices in the UK as measured by the CPI - 2.5% In 2011 the UK government switched from using the RPI to using the CPI to uprate state benefits.
	Civil Service pensions	UK government	CPI	Similar to the State Pension.Since 2011 payments have increased in line with the CPI. Previously the RPI was used.

	Private sector pensions	Private sector companies	CPI and RPI	For private sector pension funds under the rules of The Pensions Trust, the annual rate of increase in the private sector occupational pensions in payment must be greater than a statutory amount which is set by the government. Since 6 April 2011, this statutory amount has been related to the CPI. Prior to this date the statutory amount was related to the RPI. If the rules of a pension scheme specifically refer to the RPI, however, then that scheme continues to increase private sector occupational pensions in payment by the stipulated figure unless the scheme changes its rules.
	Benefits	Department for Work and Pensions	CPI	As set out in the 2012 Autumn statement, most benefits for working-age people are uprated by 1% for 3 years beginning in April 2013. Before this most benefits were increased in line with the CPI.Benefits aimed at disabled people and pensioners (not including the basic State Pension) are increased in line with the CPI. Working Tax Credit and Child Benefit were frozen in 2016.
Pay setting and wage negotiations	Wage bargaining and pay setting deals	Public and private sector employers, employees and trade unions	CPI and RPI	Consumer price inflation is an important factor in wage bargaining and pay setting deals. Some pay agreements explicitly link their pay rises to either the CPI or the RPI. It is likely that future negotiations will also include consideration of the rate of growth shown by the CPIH.
Student loans	Interest payments on student loans	Student Loans Company	RPI	For students in England and Wales who enrolled on courses starting on or after 1 September 2012, the interest rate paid on their student loans is RPI plus between 0.9 and 3.9% depending on the students' circumstances.
Business contracts	Private sector business contracts	Private sector companies	CPI and RPI	Consumer price indices are used in some private sector business contracts to inflate and/or deflate monetary values and to set payment amounts.
	Privately issued	Private sector	RPI	Some companies issue index-linked bonds which return to the investor a rate of interest which exceeds the RPI.

4. Characteristics of the different measures of consumer price inflation

Each of the 4 measures of consumer prices inflation (CPI, CPIH, RPI and RPIJ) has specific characteristics or differences which can be considered as relative strengths or limitations, in relation to potential use.

Table 3 describes the main characteristics and key considerations in regard to potential use.

Table 3: Characteristics of the different measures of consumer price inflation

Characteristic	Description	Key considerations in relation to use	СРІ	СРІН	RPI	RPIJ
Population base	Population covered by the indices	CPI and CPIH, compared to RPI and RPIJ, have a different population base. This difference may be considered more or less desirable depending on use. Some users have informed us that they prefer a measure of price inflation that excludes the highest earners and pensioner households mainly on state benefit to use for wage negotiations. Conversely, other users prefer the wider coverage provided by the CPI and CPIH.	Includes expend private and instit households in that also includes ex foreign visitors to	itutional ne UK and openditure by	Includes exper private househ excludes house income lies wit of the income of pensioner hous least three-quaincome coming pensions and be	olds but eholds whose hin the top 4% distribution an seholds with a rters of their I from state
Expenditure data (or weights)	Source of the expenditure data used to calculate the weights	The CPI and the CPIH, compared to the RPI and the RPIJ, have a different source of expenditure data. This difference may be considered more or less desirable depending on the	Expenditure datused to represe population are of main from the ficonsumption excomponent of the Accounts. The value of the domestic temprivate household visitors to the U residents of instals nursing homes and universe.	ant the derived in the nal household spenditure ne UK National weights are nditure within rritory by all olds, foreign K and situtions (such es, retirement	Expenditure da used to represe population are main from our l Food survey (L weights relate to by private hous excluding the h households and households may on state benefit	ent the derived in the Living Cost ar CF). The RPI to expenditure seholds only, lighest-incomd pensioner ainly depende

homes and university halls of

residence).

the

circumstances.

Commodity coverage	The goods and services included in the indices	The RPI, the CPIH and the RPIJ all include a component for owner occupiers' housing (OOH) costs. As well as housing components, the RPI and RPIJ include Council Tax. Both components may be considered more or less desirable depending on the use.	Covers a number of items excluded from the RPI, including: - university accommodation fees - foreign students' tuition fees		Covers a number of items excluded from the CPI, including: - Council Tax - mortgage interest payment - house depreciation - buildings insurance - ground rent - other house purchasing consuct as estate agents' and conveyancing fees	
Historical time series	Available time series	The RPI has a longer series of data than the other 3 inflation measures. The length of the available back series may be an important consideration in regard to use.	Launched in 1996. A historical time series is available from 1988.	Launched in March 2013. A historical time series is available from 2005. There is an alternative back series available which is dated to 1987.	Launched in 1947 with the first official estimated being produced in January 1956.	Launched in March 2013 historical tim series is available fro 1997.

National Statistic status

Status of the statistic in accordance with the Code of Practice for Official **Statistics**

The National Statistics status Statistic of the statistics, which indicates whether or not a statistic is compiled in accordance with the Code of Practice for Official Statistics, should be a important consideration for users.

National The CPI was reassessed against the Code of Practice for Official Statistics in 2013 and the **UK Statistics Authority** confirmed its designation as a National Statistic subject to us implementing a that it would number of enhancements. designated

Experimental Statistic (subject to change) The CPIH was assessed against the Code of Practice for Official Statistics in 2015, and the UK Statistics Authority determined not be as a National Statistic until the requirements set out in the assessment report had been satisfactorily met.

Official Statistic National The RPI was assessed against the Code of Practice for Official Statistics in 2013 and the **UK Statistics** Authority cancelled its designation as a National Statistic because of the a National findings that i) The methods subject to us used to produce the RPI are not consistent with In March internationally recognised best practices and ii) The decision to freeze the methods used to produce the RPI, and only to contemplate *routine changes"

Statistic The RPIJ w assessed against the Code of Practice for Official Statistics in 2013 and th **UK Statistic** Authority determined that it can b designated Statistic implementing a number of enhanceme 2016, the **National** Statistician published a letter to the Chair of the **UK Statistic** Authority, in which he stated that t **RPIJ** would discontinue Governing legislation

Legislation regulating the the indices

Legislation may Governed by a be an important series of consideration production of for some users. regulations

legally binding drafted by the European Commission (Eurostat) in conjunction with EU Member States. The UK can only make certain changes to the CPI within the bounds of the European

regulation.

No governing Governed by legislation at present as in common with many Official **Statistics**

No governin legislation a present as i common wit many Officia **Statistics**

the Statistics and Registration Services Act 2007. Any methodological changes to the RPI require the approval of the UK **Statistics** Authority Board before being referred to the Bank of England. If the Bank of England considers the change fundamental and materially detrimental to the interests of the holders of certain indexlinked gilts, then the consent of the Chancellor of the Exchequer is also required.

Elementary aggregate formulae

Formulae used to combine prices at the first stage of aggregation called the "elementary aggregate". In the UK there are 3 formulae used; 2 of these use arithmetic averages (means) known as ration of average prices) and the Carli (or average price relatives). The third formula is a geometric average called the

In constructing consumer price indices most statistical institutes choose between 2 formulae, the Dutot or Jevons. The RPI also uses the Carli formula. The Carli formula used to produce the RPI does not meet the Duton (or international standards and in early 2012 the RPI status as a National

Statistic was

because of this.

This should be

an important

consideration

these statistics.

for users of

cancelled

Jevons – roughly two-thirds of Carli – roughly the index Dutot - around 5% of the index Other or weighted formula roughly one-third of the index.

one-third of the index Dutot roughly onethird of the index Other or weighted formula roughly onethird of the index

Jevons roughly one third of the index Dutot roughly one third of the index Other or weighted formula roughly one third of the index

Price collection The timing of The approach the price collection

Jevons.

to the collection of prices may be a consideration for the indices' users

Intended to reflect prices over at least 1 working week at or near the middle of the reference month. In practice the collection is the same as the RPI and RPIJ collection except for petrol and oil. Prices for petrol and oil can exhibit particularly volatile price movements and for the CPI and CPIH are averaged over the month, based on the prices prevailing on each Monday during the month.

Intended to reflect prices on particular day of each month (Index Day). In practice the collection is the same as the CPI and CPIH except for pet and oil, which are also collected on Index Day in the RPI and RPIJ.

Revisions

The process of revising inflation figures once published.

The CPI, CPIH and RPIJ can, in theory, be revised over time. However, this almost never happens in practice. The RPI is not revised once published. The revision policy for the CPIH and the RPIJ is beina developed. The 2006 indices, revisions approach may make the indices more or less desirable.

CPI indices are The revisions Once the RPI revisable although the only time the CPI all items index has been CPI. In 2015 revised was when the index component in was rereferenced; first in 2005, which took place with the publication of the January and again in 2015, which took place with the publication of the January

2016 indices.

policy for the CPIH is the same as that used for the the OOH **CPIH** was revised to align with historical national accounts estimates. and to reflect planned changes to the measurement of imputed rents in the Blue Book 2016. We will review the revisions policy for **CPIH** in light of the UK **Statistics** Authority reivews of the range

The revision policy for the RPIJ is the published they same as tha used for the CPI. RPIJ indices are therefore revisable although no revisions ha been made since its launch in ea 2013.

indices are

are never

revised.

Rounding

How and where rounding is used in the indices

The approach to rounding may be a consideration for the indices' users.

Monthly and 12-month rates of change are calculated using unrounded indices.

and

governance of price statistics.

> Monthly and 12-month rates change are calculated using published estimates, and so are based on estimates to 1 decimal place.

Product coding Classification The number of system used for the aggregation and results

categories published or how products are grouped publication of together may be considered as part of the indices' use.

Based on an internationally recognised system classifying household expenditures, known as the Classification of Individual Consumption by Purpose (COICOP).

Based on a long- standing classification system unique the UK, specified and developed by the RPI Advisor Committee.

Insurance

The treatment of insurance

The approach to how insurance is calculated may be a consideration for the indices' users.

The amount of expenditure on All expenditure on insurance insurance premiums is distributed amongst other expenditure categories according to the nature of the claim. Only the service charge is allocated to the relevant insurance heading.

considered to belong to the relevant insurance heading (such as housing or motor insurance premiums).

Owner occupiers' housing costs (OOH)

The treatment of costs of housing services associated with owning, maintaining and living in one's own home. OOH does not include costs such as utility bills, minor repairs and maintenance which are already included in the consumer price inflation statistics.

The CPIH and the RPI/RPIJ use a different method to measure OOH costs.
The approach used to measure OOH may be important for some users.

OOH is excluded from the CPI

Measured using the rental equivalence approach, which uses the rent paid for an equivalent house as a proxy for the costs faced by an owner occupier. Increases in house prices will not necessarily be captured in this method. The data used to compile the series are available from 2005 onwards for England. For Wales and Scotland, data is available from 2009 and September 2010 onwards respectively. Before this, the CPI/RPI unfurnished private rent series for Wales and Scotland have been used to calculate OOH. The CPI/RPI unfurnished private rent series for Northern Ireland is used in all

years.

Measured using the payment approach which includes mortgage interest payments (MIPs), house depreciation, buildings insurance and other house purchasing costs, such as estate agents 'and conveyancing fees. Both the weight and price changes for MIPs are modelled to estimate the interest payment on a standard dwelling for an average household.

5. Annex A: Background information on the history of measures of consumer price inflation

Consumer Prices Index (CPI)

The CPI was first published in 1997 as the Harmonized Index of Consumer Prices (HICP) – a consistent measure of inflation across Europe. The HICP was developed across the European Union (EU) for the purpose of assessing whether prospective members of the European Monetary Union would pass the inflation convergence criteria, and of acting as a measure of inflation used by the European Central Bank in assessing price stability in the EU member countries. In December 2003, the National Statistician decided that the name of the UK version of the HICP would change to CPI in all National Statistics publications. This decision was concurrent with the Chancellor of the Exchequer's Pre-Budget Report 2003 announcement that the UK inflation target would be based on the HICP, replacing the RPI excluding mortgage interest payments (RPIX). A full history of the CPI and the RPI is included in an article by Philip Gooding.

Consumer Prices Index including owner occupiers' housing costs (CPIH)

CPIH was introduced in March 2013 as a measure of UK consumer price inflation that includes owner occupiers' housing costs (OOH). These are the costs of housing services associated with owning, maintaining and living in one's own home. OOH does not include costs such as utility bills and minor repairs and maintenance which are already included in the index. CPIH uses an approach called rental equivalence to measure OOH. Rental equivalence uses the rent paid for an equivalent house as a proxy for the costs faced by an owner occupier. In other words this answers the question "how much would I have to pay in rent to live in a home like mine?" OOH does not seek to capture increases in house prices. Although this may be inconsistent with some users' expectations of measures of OOH, the inclusion of an asset price and therefore capital gains makes the measure less suitable for a measure of consumption. OOH currently accounts for 16.5% of the expenditure weight of CPIH. CPIH was developed in response to user demand for a measure of OOH.

It is intended that CPIH should in due course become the headline measure of consumer price inflation in the UK. This view is supported by <u>UK Consumer Price Statistics: A Review</u> (Paul Johnson, 2015; commonly referred to as the Johnson Review) and, following an open consultation, in the <u>National Statistician's letter to the chair of the UK Statistics Authority</u> on 9 March 2016, in which he indicated that this should happen once CPIH has been reawarded its designation as a National Statistic.

The CPIH was de-designated in 2014 after required improvements to the methodology were identified. These issues have now been resolved and protocols put in place to ensure the continued and correct supply of data. We have submitted our evidence to the UK Statistics Authority. The evidence contains a suite of new and updated publications, which will be used over a period of time to monitor the behaviour of the index and increase awareness and confidence in the CPIH. We hope that the CPIH will be awarded National Statistic status in the first half of 2017.

Retail Prices Index (RPI)

The RPI was initially developed as a compensation index, derived from an index designed as an aid to protect ordinary workers from price increases associated with the First World War. The RPI provides estimates of inflation from 1947 onwards with the first official release of consumer price inflation being produced in January 1956. Until the introduction of the UK CPI (also known at the time Harmonised Index of Consumer Prices, HICP) in 1996, the RPI and its derivatives were the only measures of UK consumer price inflation available to users. The use of the RPI is required by legislation for certain measures, such as index-linked gilts. The 2014 Johnson Review and the National Statistician, in a letter to the Chair of the UK Statistical Authority on the future of consumer price indices on 9 March 2016, recommended strongly that the RPI be discontinued.

Retail Prices Index calculated using the Jevons Formula (RPIJ)

Following a consultation on options for improving the Retail Prices Index (RPI), it was concluded that one of the formulae used to produce the RPI does not meet international standards and it was recommended that a new index be published. Therefore, an improved variant of the RPI was published from March 2013 which is calculated using formulae that meet international standards. The rationale for creating the RPIJ was to give users a better alternative to the RPI if their needs were for a measure of inflation based on the same population, classifications, weights and so on as the RPI.

Currently, RPIJ also acts as an analytical series, in that it allows users to see the impact of using the Jevons (which meets international standards) in place of the Carli formula (which does not meet international standards) in the RPI. The use of the different formulae at the elementary aggregate level is currently the only difference between the 2 indices.