

Consumer Price Inflation: 2016 Weights

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Overview

The 'shopping baskets' of items and their associated weights used in compiling the various measures of consumer price inflation are reviewed and updated each year to ensure the indices are representative of consumer spending patterns. This is one of two articles providing commentary to accompany this year's annual update. This article focuses on changes to the weights applied within the baskets. The other article, entitled "Consumer Price Inflation: The 2016 Basket of Goods and Services", focuses on changes to items within the baskets, including new items added and old ones removed.

Published weights for the consumer price inflation statistics reflect the best available understanding of what households spend their money on in the UK at the time they were produced. However, the revisions policy for consumer price statistics means the indices are not usually revised historically¹. The changes in weights between years may reflect changes in data sources, methods, and definitions, as well as changes in spending patterns. Therefore, these weights should not be used to analyse trends in consumer spending in the UK over time.

This article is set out as follows. The first section explains the concept of inflation, what is meant by weighting, and lists the four measures of consumer price inflation in the UK. The second section defines the population coverage of the indices and the data sources used to compile the weights. The third section details the aggregation structure used for each of the indices. The fourth and final section provides some analysis to explain the largest weight changes between 2015 and 2016.

Annex A describes the non-generic methods used and notable exclusions from the weighting framework. Information on RPI pensioner weights is covered in annex B. The different treatment of owner occupiers' housing costs (OOH) for each index is described in annex C. The complete sets of weights up to 2016 for all the indices are provided in the tables in annex D.

¹ Revisions to the Owner Occupiers' Housing cost (OOH) component in the experimental CPIH statistic were included in the Consumer Price Inflation release on 24 March 2015. This presented ONS with an opportunity to also revise the OOH weight in CPIH so that it is aligned with historical National Accounts estimates. Further details can be found in ONS article Revising the weight of Owner Occupiers' Housing in CPIH published on 17 February 2015.

Background

What is inflation?

Consumer price inflation is the speed 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 basket² containing all the goods and services bought by households. The price index estimates changes to the total cost of this basket within years, by calculating an average of the price changes of the items in it. At the beginning of each year the items within the basket, and the relative weight they hold, are updated using the latest available information on household spending.

What is meant by weighting?

Some items are more important than others in terms of their share of household expenditure. We would therefore expect price increases for certain items to have a larger impact on the overall change in the cost of the basket than others. Representative weights are applied to each item in the basket based on the proportion of household expenditure spent on them.

By way of an example, let's say that on average, households spend about five times as much on fruit as they do on postal services. A five per cent increase in the price of fruit would have five times as much effect on the total cost of the basket when compared to a five per cent increase in postal charges.

Annual updates to the weights are necessary to ensure that the consumer price inflation indices remain representative of current household expenditure patterns. In addition, weights also need to be updated to reflect the introduction of new items and the removal of old ones.

What are the measures of consumer price inflation?

- Consumer Prices Index (CPI) a measure produced to international standards and in line with European regulations.
- CPIH a measure of consumer price inflation that includes owner occupiers' housing costs
 (OOH). CPIH has recently been assessed against the Code of Practice for Official Statistics and
 the <u>Assessment Report</u> was published on 3 March 2016. The report includes a number of
 requirements that need to be implemented for CPIH to regain its status as a National Statistic.
 ONS will report to the UK Statistics Authority by September 2016 on the actions that it has
 taken to address these requirements.
- Retail Prices Index (RPI) a long-standing measure of UK inflation that has been used for a
 wide range of purposes. In accordance with the Statistics and Registration Service Act 2007,
 the Retail Prices Index and its derivatives were assessed against the Code of Practice for
 Official Statistics in 2013 and were found to not meet the required standard for designation as
 National Statistics. The <u>Full Assessment</u> report can be found on the UK Statistics Authority
 website.
- RPIJ a variant of the Retail Prices Index calculated using formulae that meet international standards. The same weights are used to produce the RPI and RPIJ.

² In reality there are three inflation baskets: for the CPI, CPIH and a basket used by both RPI and RPIJ.

Population coverage and data sources

Expenditure weights are designed to reflect the expenditure patterns of the target population of households covered by the index. The CPI/CPIH and RPI/RPIJ have different target populations and therefore have different expenditure weights. In addition; the CPI/CPIH and RPI/RPIJ weights are based on different sources of expenditure data.

CPI and CPIH

The CPI and CPIH cover all expenditure within the UK by:

- Private households
- · Residents of institutional households such as university halls of residence or nursing homes
- Visitors to the UK from abroad

Information on spending patterns, which underlie the CPI and CPIH weights, largely come from the Household Final Consumption Expenditure (HHFCE) component of the UK National Accounts (Blue Book). These data are used because the expenditure information is comprehensive, and balanced against data collected in other sectors of the economy³ to create the most accurate picture of aggregate consumer spending. As a result, data are often revised at a later date when more accurate information becomes available. However, this is preferable to using a single data source, often with fewer revisions, as is the case in the RPI and RPIJ, because it leads to more accurate information and fewer sampling variability issues.

For the 2016 weights, the information about spending patterns was obtained from the latest available data consistent with <u>Blue Book 2015</u> relating to the calendar year 2014. As this information lags two years behind, spending on each product group is uprated to reflect price movements using information from the CPI. The uprating factor is calculated by dividing the latest December CPI month index by the annual average index of the weights reference period. For example, for the calculation of the 2016 weights in January 2016, the December 2015 index is divided by the average index of 2014.

RPI and **RPIJ**

The expenditure data underlying the RPI weights⁴ is based on the spending of private UK based households only and excludes:

- The top 4% of households by income
- Pensioner households (where the head of the household is retired and economically inactive and where at least three-quarters of the household income is derived from state benefits).

Information on spending patterns underlying the RPI weights is predominately sourced direct from the Living Costs and Food Survey (LCF). The LCF is a continuous household survey which monitors the spending patterns of over 5,000 households (from an issued sample of approximately 11,000) across the country each year. From this survey, the changing pattern of household spending can be monitored at regular intervals. The LCF is also one of the major inputs into the HHFCE component of the UK National Accounts. While the LCF is the primary source of weights a

³ For example household and business surveys are balanced against each other to form a GDP estimate.

⁴ References to RPI weights also apply to RPIJ weights which are identical.

number of other sources are also used, these include a variety of market research data, National Accounts data, and other government sources.

For the 2016 weights, the information about spending patterns for most sections was obtained from the latest available data from the LCF which covers the period July 2014 to June 2015. These are then uprated to January 2016 using movements in the RPI.

Aggregation Structure

The CPI and CPIH are classified according to COICOP (Classification Of Individual COnsumption by Purpose). This is the international classification of household expenditure and it is used by both the National Accounts and the LCF.

The RPI and RPIJ use a bespoke classification system which has evolved over time following the recommendations of various RPI Advisory Committees.

Item weights

There are approximately 700 items included in the basket of goods and services, each of which is given its own individual weight. These item level weights represent the proportion of household expenditure spent on that item in comparison to the other items in the basket. An example of an item would be "Large Loaf, white, unsliced". For some items, price movements may differ markedly by region or type of outlet. In these cases stratification by region and/or shop type is used to improve estimates of price change.

Central shop weights reflect the market share of certain large chain stores (such as supermarkets). These chain stores are designated as "regional" or "central" shops. If a chain is designated as "regional", price quotes are collected from one store per region, while for "central" shops; price quotes from a single store or the internet represent the whole country. As only one price quote will be collected for the region or the whole country this means that such shops would be underrepresented relative to the market share they hold. This is adjusted for by using shop replication factors. These essentially create copies of the prices collected from the regional and central shops to counteract their under representation in the sample.

Class/Section Weights

Each item belongs to a CPI/CPIH 'class' or a RPI/RPIJ 'section'. Classes and sections comprise of a group of similar or related goods or services items. They represent the lowest level of aggregation for which LCF and National Accounts expenditure weights can be reliably and consistently estimated, and therefore published as part of the National Statistics dataset⁵. For example, expenditures on alcoholic beverages, such as lager, bitter, stout, and craft beer form the 'beer' class of CPI/CPIH and the 'beer off sales' section of RPI/RPIJ. In total, weights are produced for 85 classes in the CPI (86 in CPIH due to the inclusion of OOH) and 85 sections in RPI/RPIJ. Both class and section weights are calculated as parts per thousand (ppt).

⁵ Item weights are released as part of a microdata set containing item price indices and individual price quotes.

Division/Group Weights

Each 'class' then belongs to a CPI/CPIH 'division' and each 'section' belongs to an RPI/RPIJ 'group'. There are 12 'divisions' that make up the CPI/CPIH and 14 'groups' that make up the RPI/RPIJ.

Figure 1 below shows the aggregation structure in detail.

Figure 1: Weighting structure CPI/CPIH and RPI/RPIJ

RPI/RPIJ		<u>CPI/CPIH</u>
	Raw Data	
Central Shop Weights		Central Shop Weights
Stratum Weights		Stratum Weights
RPI/RPIJ Item Weights		CPI/CPIH Item Weights
Published Section Weights		Published Class Weights (Classified by COICOP)
Published RPI/RPIJ Group Weights		Published Division Weights (Classified by COICOP)
RPI/RPIJ All Items		CPI/CPIH All Items

Weight changes between 2015 and 2016

This section considers the largest weight changes between 2015 and 2016 and explains the reasons for these changes. Firstly there is a summary of the changes across all three baskets. Changes in the weights used in the CPI are covered second, followed by CPIH third and the RPI (which are also RPIJ weights) fourth. For all inflation measures changes greater than +/-3 ppt are explained.

The tables in Annex D present CPI weights (down to class level) from 2006 onwards (table W1) and CPIH weights from 2006 onwards (table W3). RPI weights are also presented in Annex D (table W2) from 2001 onwards down to the section level.

These published weights reflect the best available understanding of what households spent their money on at the time they were produced. Differences in the weights between years can reflect changes in data sources, methods and definitions, as well as changes in spending patterns. Therefore, these weights should not be used to analyse trends in consumer spending in the UK over time. For users wishing to compare consumer spending over time, the source data used in the calculation of the weights is available in the National Accounts Blue Book for CPI and CPIH and the Living Costs and Food Survey for the RPI and RPIJ.

This section also considers differences in weights between the CPI and RPI. Due to the conceptual differences between the CPI and RPI, it is not always straightforward to reconcile differences in weights between the two indices at a point in time, or to reconcile changes from one year and the next. These differences include population and commodity coverage, the different classification systems employed, and the differences in source data underlying both sets of weights.

Summary of weight changes

- The most significant weight change occurred in CPIH for the imputed rental class. In Blue Book 2016 improvements to the measurement of this class will be introduced and in 2015 these changes were anticipated using estimated expenditure data. Since then the Blue Book 2016 improvements have been finalised and as a result, expenditure on imputed rentals is lower than initial estimates.
- Across all three baskets there were decreases in the weights of food and energy, reflecting the falling prices seen over the past year
- Both CPI and CPIH saw weight increases in transport and miscellaneous goods and services,
 CPIH also saw an increase in recreation and culture
- With the exception of food and fuel RPI weights remained relatively stable

CPI division level weights

CPI division level weights for 2015 and 2016, and the difference between the two years, are presented in Figure 2 below.

Figure 2: CPI division level weights – 2015 to 2016

CPI Division	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
01. Food and non-alcoholic beverages	110	103	-7	-6.4
02. Alcoholic beverages and tobacco	43	42	-1	-2.3
03. Clothing and footwear	70	71	1	1.4
04. Housing, water, electricity, gas and other fuels	128	120	-8	-6.3
05. Furniture, household equipment and maintenance	59	59	0	-
06. Health	25	28	3	12.0
07. Transport	149	153	4	2.7
08. Communication	31	32	1	3.2
09. Recreation & culture	147	148	1	0.7
10. Education	26	25	-1	-3.8
11. Restaurants & hotels	121	123	2	1.7
12. Miscellaneous goods and services	91	96	5	5.5
Total	1000	1000		

Between 2015 and 2016 there were four divisions in the CPI which changed by more than +/-3 ppt. The divisions, and the reasons for the changes, are described below.

The **Housing, Water, Electricity, Gas and Fuels** division decreased in weight between the two years by 8ppt, from 128ppt to 120ppt. This means spending on housing, water, electricity, gas and fuels represents 12% of all spend in the CPI in 2016, as opposed to 12.8% in 2015. The division is comprised of nine classes. The changes within each class are detailed in Figure 3 below.

Figure 3: Housing, Water, Electricity, Gas and Fuels division weights - 2015 to 2016

CPI Class	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
Actual rentals	72	72	0	-
Materials for the maintenance and repair of the dwelling	1	1	0	-
Services for the maintenance and repair of the dwelling	1	1	0	-
Water supply	6	6	0	-
Sewerage collection	6	5	-1	-16.7
Electricity	20	17	-3	-15.0
Gas	20	16	-4	-20.0
Liquid fuels	1	1	0	-
Solid fuels	1	1	0	-
Total	128	120	-8	-6.3

The weight change in the division has been driven by the "Gas" and "Electricity" classes which have decreased by 4ppt and 3ppt respectively. Expenditure on these classes as measured by HHFCE is detailed in Figures 4 and 5 below.

Figure 4: Electricity expenditure 2015-16

	2015 Weights	2016 Weights
Blue Book (£bn)	16.2	15.3
Uprating factor	105.3	99.6
Expenditure used in weights (£bn)	17.0	15.2

In the **Electricity** class the 3ppt decrease in the weight is caused by both a fall in recorded household expenditure and a fall in the uprating factor, as a result of price falls in this class during 2015. When comparing the fall in weight to the RPI we see that there was also a decrease, albeit only a fall of 1ppt.

Figure 5: Gas expenditure 2015-16

	2015 Weights	2016 Weights
Blue Book (£bn)	16.4	14.8
Uprating factor	104.6	93.4
Expenditure used in weights (£bn)	17.1	13.8

In the **Gas** class the 4ppt decrease in the weight is caused by both a fall in recorded household expenditure and a fall in the uprating factor, as a result of price falls in this class during 2015. When comparing the fall in weight to the RPI we see that there was a similar fall of 3ppt.

The weight for the **Food and Non Alcoholic Beverages** division decreased by 7ppt from 110ppt to 103ppt. In total there are eleven classes within the division. The changes within each class are detailed in Figure 6 below.

Figure 6: Food and Non Alcoholic Beverages division weights - 2015 to 2016

CPI Class	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
Bread and cereals	16	15	-1	-6.3
Meat	22	21	-1	-4.5
Fish	4	4	0	-
Milk, cheese and eggs	14	12	-2	-14.3
Oils and fats	2	2	0	-
Fruit	10	9	-1	-10.0
Vegetables	14	13	-1	-7.1
Sugar, confectionery and ice cream	12	12	0	-
Food products (nec)	3	3	0	-
Coffee, tea and cocoa	3	3	0	-
Fruit and vegetable juices and other soft drinks	10	9	-1	-10.0
Total	110	103	-7	-6.4

No one class is driving the decrease in weight; however there was a fall in price across the majority of the food classes in 2015. As such the majority of the decrease can be attributed to the food classes within the division as opposed to the non alcoholic beverage classes. The "Food" group in the RPI also saw a fall of 7ppt.

The weight for **Miscellaneous Goods and Services** division has increased by 5ppt from 91ppt to 96ppt. In total there are ten classes within the division. The changes within each class are detailed in Figure 7 below.

Figure 7: Miscellaneous Goods and Services division weights - 2015 to 2016

CPI Class	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
Hairdressing	7	8	1	14.3
Personal care products	23	23	0	-
Jewellery, clocks and watches	9	9	0	-
Other personal effects	5	7	2	40.0
Social protection	13	16	3	23.1
Insurance connected with the dwelling	2	2	0	-
Insurance connected with health	3	3	0	-
Insurance connected with transport	5	4	-1	-20.0
Other financial services	12	12	0	-
Other services NEC	12	12	0	-
Total	91	96	5	5.5

There are three classes driving the increase in weight; "Hairdressing", "Other personal effects" and "Social protection" which have increased by 1ppt, 2ppt and 3ppt respectively.

There are two factors behind the increase in the weight for the **Social Protection** class. The first reason is increased consumer expenditure as detailed in Figure 8 below.

Figure 8: Social Protection expenditure 2015-16

	2015 Weights	2016 Weights
Blue Book (£bn)	10.7	13.2
Uprating factor	104.6	105.1
Expenditure used in weights (£bn)	11.2	13.9

As well as increased consumer expenditure, revisions taken on in Blue Book 2015 revised the expenditure levels up for the class historically. However, as revisions to previous years expenditure data are not taken for weights calculations the change has resulted in an increase in expenditure shares between 2015 and 2016 for the class. If the revisions were taken on historically, there would have been a 15.5% increase in expenditure on social protection as opposed to the 24.1% increase. There is no similar class within the RPI so direct comparisons cannot be made.

The **Transport** division has increased in weight by 4ppt from 149ppt to 153ppt. In total there are eleven classes within the division. The changes within each class are detailed in Figure 9 below.

Figure 9: Transport division weights – 2015 to 2016

CPI Class	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
New cars	24	25	1	4.2
Second hand cars	14	16	2	14.3
Motor cycles	2	2	0	-
Motor vehicle spares	6	5	-1	-16.7
Fuel & lubricants	34	32	-2	-5.9
Motor vehicle repairs	23	22	-1	-4.3
Other services in respect of transport equipment	14	14	0	-
Rail fares	12	13	1	8.3
Passenger transport by road	12	12	0	-
Air travel	6	8	2	33.3
Sea travel	2	4	2	100.0
Total	149	153	4	2.7

No one class is driving the increase in weight. When considering the RPI a direct comparison is not possible. Transport is covered in the "Motoring expenditure" and "Fares and other travel good" groups which both also increased by 2ppt and 1ppt respectively.

CPI class level weights

Between 2015 and 2016, there was only one class in the CPI that changed by more than +/-3 ppt. The investigation criteria were therefore widened to look at classes that changed by +/- 3ppt as well. The classes are presented in Figure 10 below.

Figure 10: CPI class level weights - 2015 to 2016

CPI Class	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
Electricity	20	17	-3	-15.0
Gas	20	16	-4	-20.0
Package holidays	33	36	3	9.1
Social protection	13	16	3	23.1

Three of the above classes have already been investigated as part of the changes at division level. The only class that warrants investigation within its own right is "Package holidays".

The weight for **Package Holidays** has increased by 3ppt from 33ppt to 36ppt. It is important to note that the data source used to calculate the weight for this class is the LCF as opposed to HHFCE. The increase is driven mainly by higher weekly consumer expenditure and, to a lesser extent an increase in the uprating factor. See Figure 11 below for details.

Figure 11: Package Holidays expenditure 2015-16

	0045 Webster	0040 W-1-1-4
	2015 Weights	2016 Weights
Living Costs and Foods Survey (£bn)	28.4	32.0
Uprating factor	101.0	101.6
Expenditure used in weights (£bn)	28.7	32.5

There is no direct comparison with the RPI. The closest sections are "*UK holidays*" which remained unchanged and "*Foreign holidays*" which decreased by 1ppt.

CPIH Division level weights

As CPIH weights are based on the same data source as the CPI weights, with one additional class: 40200 – Imputed Rentals, the movements are broadly in line with the CPI weight changes. Figure 12 below summarises the weight changes in CPIH at the division level between 2015 and 2016.

Figure 12: CPIH division level weights – 2015 to 2016

CPIH Division	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
01. Food and non-alcoholic beverages	90	86	-4	-4.4
02. Alcoholic beverages and tobacco	35	35	0	-
03. Clothing and footwear	58	60	2	3.4
04. Housing, water, electricity, gas and other fuels	284	266	-18	-6.3
05. Furniture, household equipment and maintenance	49	50	1	2.0
06. Health	20	23	3	15.0
07. Transport	124	128	4	3.2
08. Communication	25	26	1	4.0
09. Recreation & culture	118	123	5	4.2
10. Education	22	21	-1	-4.5
11. Restaurants & hotels	99	102	3	3.0
12. Miscellaneous goods and services	76	80	4	5.3
Total	1000	1000		

Between 2015 and 2016 there were five divisions in the CPIH which changed by more than +/-3ppt. Three of the divisions "Food and non-alcoholic beverages", "Transport" and "Miscellaneous goods and services" have changed for the same reasons as detailed in the CPI division level weights section. The remaining two divisions, and the reasons for the changes, are described below.

The **Housing, Water, Electricity, Gas and Fuels** division weight decreased in weight between the two years by 18ppt, from 284ppt to 266ppt. The division is comprised of ten classes. The changes within each class are detailed in Figure 13 below.

Figure 13: Housing, Water, Electricity, Gas and Fuels division weights - 2015 to 2016

CPIH Class	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
Actual rentals	60	60	0	-
Imputed rentals	178	165	-13	-7.3
Materials for the maintenance and repair of the dwelling	1	1	0	-
Services for the maintenance and repair of the dwelling	1	1	0	-
Water supply	5	5	0	-
Sewerage collection	5	5	0	-
Electricity	16	14	-2	-12.5
Gas	16	13	-3	-18.8
Liquid fuels	1	1	0	-
Solid fuels	1	1	0	-
Total	284	266	-18	-6.3

The decrease in weight is being driven by three classes. The largest decrease, the **Imputed Rentals** class is unique to CPIH. The class has fallen by 13ppt from 178ppt to 165ppt.

Planned improvements to the data sources and methodology used to calculate imputed rentals will be included in Blue Book 2016. The decision was made to anticipate these improvements by, as far as possible, using Blue Book 2016 consistent methods when calculating the 2015 weight for imputed rentals. In 2015 ONS had an opportunity to revise the weight for imputed rentals. Further details of why this was the case can be found in ONS article entitled "Revising the weight of Owner Occupiers' Housing in CPIH" published on the 17 February 2015. Revising ensured that the weight aligned with historical estimates and mitigated a future step change in the weight for 2017 when the planned improvements would be taken on from Blue Book 2016. Since estimating the 2015 weight, the Blue Book 2016 improvements have been finalised and as a result, expenditure on imputed rentals is lower than initial estimates. Figure 14 below shows the effect of the changes.

Figure 14: Imputed Rentals expenditure – 2015 to 2016

	2015 (estimated)	2015 (final)	2016
Expenditure (£bn)	179.7	158.0	170.7
Uprating factor	103.8	103.8	102.8
Expenditure used in weights (£bn)	186.5	164.4	175.8

If the revisions were taken on, there would have been a 6.9% increase in expenditure on imputed rentals as opposed to the 5.7% decrease. There is no similar class within the RPI so direct comparisons cannot be made. The falls in "Gas" and "Electricity" were covered within the CPI division weights section.

The weight for the **Recreation and Culture** division has increased by 5ppt from 118ppt to 123ppt. This division comprises of 16 classes. The main class within the division driving the change is **Package Holidays** which has increased by 3ppt from 27ppt to 30ppt. The reasons for this change mirror those in the CPI and were discussed in detail in the CPI class weights section.

CPIH Class level weights

As with CPIH Division level weights, many of the CPIH class level weights have moved in the same direction as the CPI class level weights. Between 2015 and 2016, there was only one class in the CPIH that changed by more than +/-3ppt and two that changed by +/-3ppt. The classes are presented in Figure 15 below.

Figure 15: CPIH class level weights – 2015 to 2016

CPIH Class	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
Imputed rentals	178	165	-13	-7.3
Gas	16	13	-3	-18.8
Package holidays	27	30	3	11.1

The explanations for all of these movements have been covered either in the CPI division, CPI class or CPIH division weights sections.

RPI & RPIJ Group level weights

RPI group level weights for 2015 and 2016, and the difference between the two years are presented in Figure 16 below.

Figure 16: RPI group weights – 2015 to 2016

RPI/RPIJ Group	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
Food	109	102	-7	-6.4
Catering	47	47	0	-
Alcoholic Drink	56	57	1	1.8
Tobacco	27	25	-2	-7.4
Housing	263	266	3	1.1
Fuel and Light	45	41	-4	-8.9
Household Goods	59	62	3	5.1
Household Services	65	67	2	3.1
Clothing and Footwear	42	41	-1	-2.4
Personal Goods and Services	41	42	1	2.4
Motoring Expenditure	115	117	2	1.7
Fares and Other Travel Costs	25	26	1	4.0
Leisure Goods	28	29	1	3.6
Leisure Services	78	78	0	-
Total	1000	1000		

Between 2015 and 2016 there were two groups in the RPI which changed by more than +/-3 ppt. The groups, and the reasons for the changes, are described below.

The **Food** group saw a decrease in weight by 7ppt from 109ppt to 102ppt. The group is comprised of thirty sections with no one section being the driving factor. Eight food sections decreased by 1ppt. Only the "Coffee and other hot drinks" section saw an increase in weight which was by 1ppt.

The **Fuel and Light** group saw a decrease in weight of 4ppt from 45ppt to 41ppt. Within the group, the section "Gas" decreased by 3ppt. Figure 17 below details the information used to calculate the weight.

Figure 17: Gas expenditure 2015-16

	0045 Webst	0040 W-1-1-4
	2015 Weights	2016 Weights
LCF average weekly expenditure (£)	12.2	11.1
Uprating factor	99.0	94.0
Expenditure used in weights (£)	12.1	10.4

The decrease in the weight for gas is due to a combination of a fall in the average weekly expenditure as measured in the LCF and a fall in prices. The only other decrease came in the *"Electricity"* section which decreased by 1ppt.

RPI/RPIJ Section level weights

There was only one section that changed by more than +/-3 ppt between 2015 and 2016, therefore as with the CPI and CPIH, class level weights the investigation criteria was widened to include the three sections that had changed by +/- 3ppt. The sections are detailed in Figure 18 below.

Figure 18: RPI/RPIJ Section level weights – 2015 to 2016

RPI/RPIJ Section	2015 Weight (parts per thousand)	2016 Weight (parts per thousand)	Difference (parts per thousand)	Per cent change
House depreciation	73	80	7	9.6
Gas	21	18	-3	-14.3
Purchase of motor vehicles	42	45	3	7.1
Furniture	22	25	3	13.6

House Depreciation saw an increase of 7ppt from 73ppt to 80ppt. The reason for the large increase is due to revisions made to National Accounts data⁶ in recent years. The revisions are explained in detail in the ONS articles Methodological changes to the estimation of capital stocks and consumption of fixed capital and Impact of the methodological changes to the estimation of capital stocks and consumption of fixed capital. In summary, the changes are a result of source data revisions and the introduction of new methodology. The result of the changes was the raising of the depreciation rate. This new rate was then applied to the previous year's average house

⁶ Housing Depreciation is one of the few cases where RPI weights are calculated using National Accounts data.

price, excluding land, to arrive at a final cost for depreciation for use in the 2016 weights calculations. This was £46.49 per week (increasing from £41.10 per week in 2015).

House depreciation is not included in the CPI and CPIH. The differences in the treatment of owner occupiers' housing costs are explained in annex C.

The section **Purchase of Motor Vehicles** increased 3ppt between 2015 and 2016 from 42ppt to 45ppt and is almost entirely due to an increase in estimated average weekly household expenditure as reported by the LCF. Figure 19 below details the expenditure used to create the 2015 and 2016 section weights.

Figure 19: Purchase of Motor Vehicles expenditure 2015-16

	2015 Weights	2016 Weights
LCF average weekly expenditure (£)	23.9	26.5
Uprating factor	99.1	98.2
Expenditure used in weights (£)	23.6	26.0

The CPI weight change between 2015 and 2016 for the purchase of motor vehicles is +3ppt. The CPI has separate weights for new and second hand cars. To allow for a comparison to RPI/RPIJ, the two have been combined to give a weight of 38ppt in 2015 and 41ppt in 2016, an overall change of +3ppt, mirroring the RPI/RPIJ weight change.

The **Furniture** section has increased by 3ppt from 22ppt in 2015 to 25ppt in 2016. The increase is due to an increase in average weekly household expenditure, as reported by the LCF. Figure 20 below details the expenditure used to create the 2015 and 2016 section weights.

Figure 20: Furniture expenditure 2015-16

	2015 Weights	2016 Weights
LCF average weekly expenditure (£)	11.9	14.0
Uprating factor	103.4	103.7
Expenditure used in weights (£)	12.3	14.5

When comparing this increase to the CPI we see that the expenditure used to calculate the weight in the CPI also increased, albeit to a lesser extent of 1ppt. The reason for this is due to the different data sources used to calculate the CPI/CPIH weights and the RPI/RPIJ weights.

Further information about the construction of the weights can be obtained from:

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March 2016

Annex A: Non-generic methods and notable exclusions

Consumer Price Index and CPIH

For insurance, a 'net' concept is used in the construction of the weights. The expenditure used to calculate the weight for insurance relates only to the 'service charge' element of insurance premiums paid. The remainder of the premiums paid represent 'claims paid out'; this expenditure is redistributed to the appropriate COICOP classes. For example, expenditure on car repairs following an accident which is reimbursed by the insurance company is allocated to the 'maintenance and repairs of personal transport equipment' class. To avoid the possibility of 'negative' weights in years where claims expenditure exceeds premiums paid, a three year average of National Accounts data are used. The 'net' concept also applies to the treatment of second hand cars.

Retail Price Index and RPIJ

Sections covering expenditure on furniture and repairs & maintenance charges use a three year average of LCF data. This is because of the large sampling errors that can arise from a single year's data for these expenditure categories.

Some sections are known to under-record the actual expenditure in the LCF and are required to be adjusted. Appropriate adjustments are made to soft drinks, confectionery, alcoholic drinks, and tobacco products using the Household Final Consumption Expenditure (HHFCE) component of the National Accounts, which is derived from a variety of sources. In common with National Accounts, the weights used for alcohol and tobacco products include estimates of household expenditure on smuggled alcohol and tobacco.

Weights for the costs of owner-occupation, comprising mortgage interest payments and depreciation, are not based on LCF expenditure data. The weight for depreciation is calculated using National Accounts data to estimate a rate of depreciation for household sector dwellings, which is applied to the average house price, excluding land, to give a notional annual cost of depreciation. The weight for mortgage interest payments is based on a modelled mortgage incorporating both repayment and endowment components over an average 23 year term. Each of these is updated annually and expressed in terms of average weekly expenditure.

Annex B: RPI Pensioner Weights

Pensioners are largely dependent on benefits and so tend to have different spending patterns when compared to the remainder of the population. Specific indices have been compiled for these households since 1968 (separately for one and two person pensioner households using RPI sources and concepts). These specific indices differ from the 'general' CPI and RPI in that they are published on a quarterly rather than monthly basis. They exclude housing costs because of measurement problems since the price indicators used in the RPI would not be appropriate, as well as certain other items such as canteen meals which have negligible expenditure levels.

Due to the smaller LCF sample size, all pensioner weights are based on the last three years of available expenditure data (mid-2012 to mid-2015 for the 2016 weights), with all expenditures uprated to January 2015 prices. The very small sample sizes at 'section' level often gives rise to volatility of these weights between one year and the next. The pensioner indices in previous years have been published with this article, however due to earlier publication this year pensioner indices will follow as a separate release on the 12 April 2016⁷. RPIJ based pensioner indices are not produced.

⁷ The pensioner weights were added to this article on the 12 April 2016 and can be found in tables W4 and W5

Annex C: Treatment of owner occupiers' housing costs (OOH) in the different indices

CPI does not include OOH costs. This is due to the fact that they are currently excluded from the EU regulations that define the CPI, because of the difficulties in measuring them.

CPIH treats OOH costs using the rental equivalence method. This method states that a house is capital good that is not itself consumed; instead, it provides a service that the owner occupier consumes. The rental equivalence approach argues that people who own their home can either live in it or rent it out. Therefore, the rent the owner occupier could have received is a measure of how much these services are worth. Internationally, rental equivalence is the most widely used method for estimating owner occupiers' housing costs. Council tax is not currently included in CPIH

The RPI treats OOH costs largely using the payments approach. This is defined as looking at what households pay out as owner occupiers. This includes:

- Mortgage interest payments (MIPS)
- Running costs (such as repairs and maintenance and insurance)
- Transaction costs such as estate agency fees and conveyancing

The RPI also includes council tax and a measure for estimating depreciation. This is achieved by estimating the amount of money households should put aside for necessary major repairs and updating in order to maintain the value of the property.

											parts pe	er 1000
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CPI (overall index)	CHZQ	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
01 Food and non-alcoholic beverages	CHZR	102	103	109	118	108	118	112	106	112	110	103
02 Alcoholic beverages and tobacco	CHZS	44	43	42	44	40	42	42	44	45	43	42
03 Clothing and footwear	CHZT	65	62	63	57	56	62	65	68	72	70	7
04 Housing, water, electricity, gas and other fuels	CHZU	108	115	115	126	129	129	144	137	129	128	12
05 Furniture, household equipment and maintenance	CHZV	73	68	67	66	64	61	61	59	60	59	5
06 Health	CHZW	24	24	22	22	22	24	24	25	24	25	2
07 Transport	CHZX	155	152	152	151	164	159	162	148	152	149	15
08 Communication	CHZY	25	24	23	23	25	26	27	31	32	31	3
09 Recreation and culture	CHZZ	147 17	153 18	152 19	145 21	150 19	147 18	134 19	141 21	144 22	147 26	14 2
10 Education 11 Restaurants and hotels	CJUV	134	138	137	128	126	120	114	∠ı 117	120	26 121	12
12 Miscellaneous goods and services	CJUW	106	100	99	99	97	94	96	103	88	91	9
All goods All services	ICVH ICVI	554 446	547 453	547 453	554 446	549 451	561 439	555 445	534 466	540 460	532 468	51° 48°
01.1 Food	CJUX	90	90	95	104	96	103	98	93	99	97	9
01.1.1 Bread and cereals	CJWB	15	15	16	17	16	17	17	16	17	16	1
01.1.2 Meat	CJWC	21	21	21	23	22	22	22	21	22	22	2
01.1.3 Fish	CJWD	4	4	5	5	4	4	4	4	4	4	
01.1.4 Milk, cheese and eggs	CJWE	13	12	14	15	14	15	14	13	14	14	1
01.1.5 Oils and fats	CJWF	2	2	2	2	2	2	2	2	2	2	
01.1.6 Fruit	CJWG	8	9	9	10	9	12	9	9	10	10	1
01.1.7 Vegetables including potatoes and tubers	CJWH	14	14	15	16	15	16	15	14	15	14	1
01.1.8 Sugar, jam, syrups, chocolate and confectionery 01.1.9 Food products (nec)	CJWJ CJWI	11 2	11 2	11 2	13 3	11 3	12 3	12 3	11 3	12 3	12 3	1:
01.2 Non-alcoholic beverages	CJUY	12	13	14	14	12	15	14	13	13	13	1:
01.2.1 Coffee, tea and cocoa	CJWK	3	3	3	4	3	4	4	3	3	3	
01.2.2 Mineral waters, soft drinks and juices	CJWL	9	10	11	10	9	11	10	10	10	10	ç
02.1 Alcoholic beverages	CJUZ	18	18	18	21	18	19	18	20	20	19	19
02.1.1 Spirits	CJWM	5	5	5	6	5	5	5	6	6	5	
02.1.2 Wine 02.1.3 Beer	CJWN CJWO	9 4	9 4	9 4	10 5	9 4	9 5	9 4	9 5	9 5	9 5	
		•										
02.2 Tobacco	CJWP	26	25	24	23	22	23	24	24	25	24	23
03.1 Clothing	CJVA	56	54	55 51	48	47	54	56	59	62 55	60	61
03.1.2 Garments	CJWR	52	50	51	44	43	49	52	54		54	54
03.1.3 Other clothing and clothing accessories 03.1.4 Cleaning, repair and hire of clothing	CJWS CJWT	3 1	3 1	3 1	3 1	3 1	4 1	3 1	4 1	6 1	5 1	1
03.2 Footwear including repairs	CJVB	9	8	8	9	9	8	9	9	10	10	10
04.1 Actual rentals for housing	CJVC	47	49	51	51	54	57	64	62	70	72	72
04.3 Regular maintenance and repair of the dwelling	CJVD	19	17	18	18	17	18	14	16	2	2	2
04.3.1 Materials for maintenance and repair	CJWU	11	10	10	10	10	11	8	9	1	1	
04.3.2 Services for maintenance and repair	CJWV	8	7	8	8	7	7	6	7	1	1	•
04.4 Water supply and misc. services for the dwelling	CJVE	10	10	11	11	11	10	10	11	12	12	1
04.4.1 Water supply 04.4.3 Sewerage collection	CJWY CJWW	5 5	5 5	5 6	5 6	5 6	5 5	5 5	6 5	6 6	6 6	
· ·												
04.5 Electricity, gas and other fuels 04.5.1 Electricity	CJVF	32 15	39 19	35 17	46 20	47 19	44 19	56 20	48 19	45 21	42 20	3: 1:
04.5.1 Electricity 04.5.2 Gas	CJXA CJXB	15	18	17	23	25	22	32	26	21	20	10
04.5.3 Liquid fuels	CJXC	2	10	2	23	23	2	32	20	2	1	
04.5.4 Solid fuels	CJXD	1	1	1	1	1	1	1	1	1	1	
05.1 Furniture, furnishings and carpets	CJVG	32	28	28	28	25	23	20	20	21	21	20
05.1.1 Furniture and furnishings	CJXF	25	22	22	21	19	18	16	16	16	15	10
05.1.2 Carpets and other floor coverings	CJXG	7	6	6	7	6	5	4	4	5	6	2
05.2 Household textiles	СЈУН	8	8	8	7	8	8	7	8	7	6	7
05.3 Household appliances, fitting and repairs	CJVI	9	8	9	9	9	9	9	9	9	8	8
05.3.1/2 Major appliances and small electric goods 05.3.3 Repair of household appliances	CJXI CJXJ	8 1	7 1	8 1	7 1	,						
05.4 Glassware, tableware and household utensils	CJVJ	7	7	7	5	6	5	5	5	6	6	6
05.5 Tools and equipment for house and garden	CJVK	6	6	5	6	7	6	5	4	4	5	Ę
05.6 Goods and services for routine maintenance	CJVL	11	11	10	11	9	10	15	13	13	13	1:
05.6.1 Non-durable household goods	CJXK	5	5	5	6	5	6	6	5	5	5	
05.6.2 Domestic services and household services	CJXL	6	6	5	5	4	4	9	8	8	8	8
06.1 Medical products, appliances and equipment	JKWO	11	10	10	10	10	11	10	10	10	12	13
06.1.1 Pharmaceutical products	CJYA	5	5	5	6	6	6	6	6	6	7	8
00.1.1 1 Harridocutical products				5	4	4	5	4	4	4	5	

Key: - not available (nec) not elsewhere classified

¹ Prior to 10 December 2003, the consumer prices index (CPI) was published in the UK as the harmonised index of consumer prices (HICP).

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d parts per 1000

continued										þ	arts pe	r 1000
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
06 2 Out potiont convices (Dec 1000–100)	T.037.T	4	5	4	4	4	4	5	6	6	5	7
06.2 Out-patient services (Dec 1999=100) 06.2.1/3 Medical services & paramedical services (Dec 1999=100)	ICVJ ICVK	2	3	2	2	2	2	3	3	3	3	4
06.2.2 Dental services (Dec 1999=100)	ICVL	2	2	2	2	2	2	2	3	3	2	3
06.3 Hospital services (Dec 2000=100)	ICVM	9	9	8	8	8	9	9	9	8	8	8
07.1 Purchase of vehicles	CJVM	52	49	48	47	49	44	43	38	44	40	43
07.1.1A New cars	CJXN	31	27	26	26	23	25	24	21	23	24	25
07.1.1B Second-hand cars	CJXO	18	19	19	18	23	16	16	14	18	14	16
07.1.2/3 Motorcycles and bicycles	CJXP	3	3	3	3	3	3	3	3	3	2	2
07.2 Operation of personal transport equipment	CJVN	71	72	72	69	79	81	89	81	76	77	73
07.2.1 Spare parts and accessories	CJXQ	6	6	5	5	5	6	5	5	5	6	5
07.2.2 Fuels and lubricants	CJXR	35	36	38	34	41	43	46	40	35	34	32
07.2.3 Maintenance and repairs 07.2.4 Other services	CJXS CJXT	24 6	24 6	23 6	23 7	25 8	24 8	22 16	22 14	23 13	23 14	22 14
07.2.4 Other services	COXI	U	U	U	,	U	U	10	17	10	14	14
07.3 Transport services	CJVO	32	31	32	35	36	34	30	29	32	32	37
07.3.1 Passenger transport by railway	CJXU	8	8	8	9	9	9	9	9	11	12	13
07.3.2 Passenger transport by oir	CJXV	15	14 7	14 8	14 9	14	13 9	12 8	13 6	11	12 6	12
07.3.3 Passenger transport by air 07.3.4 Passenger transport by sea and inland waterway	CJXW CJXX	7 2	2	2	3	10 3	3	1	1	6 4	2	8 4
or.o. Traccongor transport by coa and mand waterway	COM	_	_	_	Ü	Ů	Ů					•
08.1 Postal services	CJVP	1	1	1	1	1	2	1	2	2	2	2
08.2/3 Telephone and telefax equipment and services	СЈҮВ	24	23	22	22	24	24	26	29	30	29	30
09.1 Audio-visual equipment and related products	CJVQ	27	29	27	23	23	27	23	23	22	23	18
09.1.1 Reception and reproduction of sound and pictures	CJYC	6	6	6	6	7	6	6	6	5	5	5
09.1.2 Photographic, cinematographic and optical equipment	CJYD	5	4	4	4	3	5	4	3	3	3	2
09.1.3 Data processing equipment	CJYE	5	7	5	5	6	7	6	7	8	9	7
09.1.4 Recording media 09.1.5 Repair of audio-visual equipment & related products	CJYF CJYG	10 1	11 1	11 1	7 1	6 1	8 1	6 1	6 1	5 1	5 1	3 1
										•		
09.2 Other major durables for recreation & culture (Dec 1999=100) 09.2.1/2 Major durables for in/outdoor recreation (Dec 1999=100)	CJVR ICVN	9	9 9	9 9	9 9	9 9	10 10	10 10	9 9	9	10 10	12 12
09.3 Other recreational items, gardens and pets	CJVS	39	37	38	37	40	38	35	32	36	36	35
09.3.1 Games, toys and hobbies	ICVP	23	21	22	20	24	22	20	19	21	21	20
09.3.2 Equipment for sport and open-air recreation	ICVQ	4	4	4	4	4	3	3	3	3	4	3
09.3.3 Gardens, plants and flowers 09.3.4/5 Pets, related products and services	CJYJ	5 7	5 7	5 7	5 8	5 7	5 8	4 8	4 6	4 8	4 7	4 8
09.4 Recreational and cultural services	G TYPE	28	32	32	32	31	30	29	29	31	31	33
09.4.1 Recreational and sporting services	CJVT ICVR	8	10	11	11	10	8	29 8	9	9	8	10
09.4.2 Cultural services	ICVS	20	22	21	21	21	22	21	20	22	23	23
00 E Backs, newspapers and stationery	T.03700	17	17	17	17	17	15	13	14	14	14	14
09.5 Books, newspapers and stationery 09.5.1 Books	ICVT ICVU	5	5	5	17 5	17 4	15 4	3	4	4	4	4
09.5.2 Newspapers and periodicals	ICVV	7	7	7	6	6	5	5	5	5	5	5
09.5.3/4 Misc. printed matter, stationery, drawing materials	ICVW	5	5	5	6	7	6	5	5	5	5	5
09.6 Package holidays	ICVX	27	29	29	27	30	27	24	34	32	33	36
10.0 Education	CJUU	17	18	19	21	19	18	19	21	22	26	25
	CUUU											
11.1 Catering services	CJVU	116	119	118	111	109	103	97	98	100	100	101
11.1.1 Restaurants & cafes 11.1.2 Canteens	CJYL	103	106 13	106 12	100	98	93 10	86 11	88 10	91 9	91 9	93 8
TI.I.2 Canteens	CJYM	13	13	12	11	11	10	- 11	10	9	9	0
11.2 Accommodation services	CJVV	18	19	19	17	17	17	17	19	20	21	22
12.1 Personal care	CJVW	32	31	30	31	29	28	28	28	29	30	31
12.1.1 Hairdressing and personal grooming establishments	CJYN	8	8	8	8	7	7	8	7	7		8
12.1.2/3 Appliances and products for personal care	CJYO	24	23	22	23	22	21	20	21	22	23	23
12.3 Personal effects (nec)	CJVX	11	10	10	11	10	10	13	13	13	14	16
12.3.1 Jewellery, clocks and watches	ICVZ	7	7	7	8	7	7	8	8	8	9	9
12.3.2 Other personal effects	ICWA	4	3	3	3	3	3	5	5	5	5	7
12.4 Social protection (Dec 1999=100)	CJVY	12	12	12	11	11	11	13	14	12	13	16
. ,												
12.5 Insurance	CJVZ	9	8	8	7	8	8	8	8	7		9
12.5.2 House contents insurance 12.5.3 Health insurance (Dec 1999=100)	CJYP JKWP	2	2	2	2	2	2	3 2	2	2 2		
12.5.4 Transport insurance	CJYQ	5	4	4	3	4	4	3	4	3	5	4
·	-		•			-	-					
12.6 Financial services (nec)	CJWA	29	28	28	28	28	26	23	30	17	12	
12.6.2 Other financial services (nec)	CJYK	29	28	28	28	28	26	23	30	17	12	12
12.7 Other services (nec)	ICVY	13	11	11	11	11	11	11	10	10	12	12

Key - not available (nec) not elsewhere classified

Source: Office for National Statistics

¹ Prior to 10 December 2003, the consumer prices index (CPI) was published in the UK as the harmonised index of comsumer prices (HICP)

W2 RPI¹ Weights 2001 to 2016

parts per 1000

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Food and catering	CBVV	169	166	160	160	159	155	152	158	168	159	165	161	163	161	156	149
Alcohol and tobacco	CBVW	97	99	98	97	96	96	95	86	90	91	88	85	91	87	83	82
Housing and household expenditure	CBVX	362	363	365	367	387	392	408	417	416	403	408	412	419	424	432	436
Personal expenditure Travel and leisure	CBVY CBVZ	96 276	94 278	92 285	93 283	89 269	90 267	83 262	83 256	80 246	81 266	82 257	84 258	83 244	85 243	83 246	83 250
Consumer durables ¹	CBWA	125	126	126	121	122	117	109	104	106	105	106	100	96	98	94	98
Seasonal food	CZHA	18	20	17	19	19	17	19	20	21	19	20	19	20	19	18	18
Food excluding seasonal	CZHA	98	94	92	92	91	88	86	91	97	93	98	95	96	95	91	84
All items excluding seasonal food	CZGW	982	980	983	981	981	983	981	980	979	981	980	981	980	981	982	982
All items excluding food	CZGV	884	886	891	889	890	895	895	889	882	888	882	886	884	886	891	898
All goods	DOHD	526	529	522	518	510	503	478	474	472	486	480	462	455	453	436	431
All services	DOHH	354	361	361	358	352	364	377	372	397	386	394	412	415	417	422	421
Other indices																	
All items excluding:	~- ~	054	004	004	004	050	050	0.45	0.40	050	000	000	074	074	070	074	070
mortgage interest payments (RPIX)	CZGY	954 795	964 801	961 797	961 791	950 776	950 778	945 762	940 746	959 764	966 763	968 762	971 763	971 746	970 747	971 737	972 734
housing mortgage interest payments	CZGX	795	801	191	791	776	110	762	740	764	763	762	763	746	747	131	734
and council tax	DOGY	920	930	925	923	911	911	905	901	919	927	928	930	928	928	931	932
mortgage interest payments	DOGI	320	550	320	320	311	311	300	301	313	321	320	330	320	320	301	302
and depreciation	DOGZ	914	924	919	914	901	906	895	885	909	911	914	915	913	912	898	892
Food	CZGZ	116	114	109	111	110	105	105	111	118	112	118	114	116	114	109	102
Bread	CZVO	5	5	4	4	4	4	4	5	5	5	5	4	5	5	4	4
Cereals	CZVP	4	4	3	3	3	3	3	4	4	4	4	4	4	4	4	4
Biscuits and cakes	CZVQ	7	7	6	7	6	6	6	6	7	6	7	7	7	7	7	6
Beef	CZVR	4	3	4	4	4	4	4	4	5 2	4	4	4	4	4	4	4
Lamb of which home-killed lamb	HKIC CZVS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2 1
imported lamb	CZVI	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pork	CZVU	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Bacon	CZVV	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
Poultry	CZVW	5	5	3	4	3	4	3	4	4	4	4	4	4	4	4	4
Other meat	CZVX	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	6
Fish	HKHK	4	3	3	3	4	4	4	4	3	4	4	4	4	4	4	4
of which fresh fish	CZVY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
processed fish	CZVZ	2	1	1	1	2	2	2	2	1	2	2	2	2	2	2	2
Butter Oils and fats	CZWA CZWB	1	1	1	1	1	1	1	1	2	2	2	1 2	1	2	1	1 1
Cheese	CZWB	3	3	3	3	3	3	3	3	4	3	4	4	3	4	4	3
Eggs	CZWD	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Milk, fresh	CZWE	5	5	5	5	5	5	5	5	5	5	5	4	4	4	3	3
Milk products	CZWF	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Tea	CZWG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Coffee and other hot drinks	CZWH	2	2	1	1	1	1	1	1	1	1	1	2	1	2	1	2
Soft drinks	CZWI	11	10	11	10	12	10	11	12	12	11	13	11	12	11	10	9
Sugar and preserves	CZWJ	1	1	1	1	1	1	1	1	1	1 11	1	1	1	1	1	1
Sweets and chocolates Potatoes	CZWK HKIE	11 6	11 6	10 5	10 5	11 5	10 4	10 5	10 5	12 5	5	12 5	11 5	13 5	11 5	11 5	11 3
of which unprocessed potatoes	CZWL	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	1
potato products	CZWM	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	2
Vegetables other than potatoes	HKIF	8	10	7	9	9	8	9	9	10	9	9	9	9	9	8	8
of which fresh vegetables	CZWN	6	8	5	7	7	6	7	7	8	7	7	7	7	7	6	6
processed vegetables	CZWO	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Fruit	HKIG	7	7	7	7	7	7	7	8	8	7	8	8	8	7	8	8
of which fresh fruit	CZWP	6	6	6	6	6	6	6	7	7	6	7	6	7	6	6	7
processed fruit Other foods	CZWQ CZWR	1 13	1 12	1 15	1 15	1 12	1 11	1 10	1 10	1 11	1 11	1 11	2 11	1 11	1 11	2 11	1 10
Catering Bestsurent mode	CZHC	53	52	51	49	49	50	47	47	50	47	47	47	47	47	47	47
Restaurant meals Canteen meals	CZWS CZWT	26 6	26 5	26 5	26 4	25 5	27 4	25 4	26 4	27 4	26 4	26 4	27 3	27 4	28 3	28 3	28 3
Take-aways and snacks	CZWU	21	21	20	19	19	19	18	17	19	17	17	17	16	16	16	16
Alcoholic drink	CZHD	68	68	68	68	67	67	66	59	63	64	60	56	61	58	56	57
Beer	CZWV	37	36	36	35	37	36	34	31	32	31	29	26	26	25	24	24
on sales	CZWW	31	30	30	30	31	31	29	26	26	26	23	21	21	20	19	19
off sales	CZWX	6	6	6	5	6	5	5	5	6	5	6	5	5	5	5	5
Wines and spirits	CZWY	31	32	32	33	30	31	32	28	31	33	31	30	35	33	32	33
on sales	CZWZ	15	19	19	19	16	17	18	15	17	18	17	16	20	18	18	19
off sales	CZXA	16	13	13	14	14	14	14	13	14	15	14	14	15	15	14	14

Key: .. not available

1 Consumer durables: Furniture, furnishings, electrical appliances and other household equipment, men's, women's and children's outerwear, footwear, audio-visual equipment, CDs and tapes, toys, photographic and sports goods

Source: Office for National Statistics

DOEE

Source: Office for National Statistics

Source: National Statistics

ontinued parts per 1000

ontinued											parts pe	er 1000
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
06.2 Out-patient services 06.2.1/3 Medical services 7 paramedical services 06.2.2 Dental services	L5EW L5EX L5EY	4 2 2	4 2 2	4 2 2	4 2 2	3 1 2	4 2 2	4 2 2	5 3 2	4 2 2	4 2 2	5 3 2
06.3 Hospital services	LSEZ	7	7	7	7	7	7	7	7	6	6	7
07.1 Purchase of vehicles	L5F2	42	40	38	37	39	35	34	30	35	34	36
07.1.1A New cars	L5F2	25	22	21	21	19	20	19	17	19	20	21
07.1.1B Second hand cars	L5F4	15	16	15	14	18	13	13	11	14	12	13
07.1.2/3 Motorcycles and bicycles	L5F5	2	2	2	2	2	2	2	2	2	2	2
07.2 Operation of personal transport equipment	L5F6	57	58	58	57	64	66	73	67	63	63	61
07.2.1 Spare parts and accessories 07.2.2 Fuels and lubricants	L5F7 L5F8	5 28	5 29	4 30	4 28	4 34	5 35	4 38	4 33	4 29	5 28	26 26
07.2.3 Maintenance and repairs	L5F9	19	19	19	19	20	20	18	18	19	19	19
07.2.4 Other services	L5FA	5	5	5	6	6	6	13	12	11	11	12
07.3 Transport services	L5FB	25	24	28	28	28	27	24	23	26	27	31
07.3.1 Passenger transport by railway	L5FC	6	6	7	7	7	7	7	7	9	10	11
07.3.2 Passenger transport by road	L5FD	12	11	12	11	11	11	10	10	9	10	10
07.3.3 Passenger transport by air	L5FE	6	6	7	8	8	7	6	5	5	5	7
07.3.4 Passenger transport by sea and inland waterway	L5FF	1	1	2	2	2	2	1	1	3	2	3
08.1 Postal services	L5FG	1	1	1	1	1	1	1	1	1	1	1
08.2/3 Telephone and telefax equipment and services	L5FH	19	19	17	18	19	20	21	24	24	24	25
09.1 Audio-visual equipment and related products	L5FI	22	23	22	18	19	22	19	19	18	18	16
09.1.1 Reception and reproduction of sound and pictures	L5FJ	5	5	5	5	5	5	5	5	4	4	4
09.1.2 Photographic, cinematographic and optical equipment		4	3	3	3	3	4	3	2	2	2	2
09.1.3 Data processing equipment	L5FL	4	5	4	4	5	6	5	6	7	7	6
09.1.4 Recording media 09.1.5 Repair of audio-visual equipment & related products	L5FM L5FN	8 1	9	9 1	5 1	5 1	6 1	5 1	5 1	4 1	4 1	3 1
como riopan el adale riodal equipment a related producte		•		•		•	•		•	•	•	•
09.2 Other major durables for recreation & culture 09.2.1/2 Major durables for in/outdoor recreation	L5FO L5FP	7 7	7 7	7 7	7 7	8 8	8 8	8 8	7 7	8 8	8 8	10 10
09.3 Other recreational items, gardens and pets	L5FQ	30	30	31	29	32	31	29	27	30	29	28
09.3.1 Games, toys and hobbies	L5FR	18	17	18	16	19	18	16	16	17	17	16
09.3.2 Equipment for sport and open-air recreation	L5FS	3	3	3	3	3	3	3	3	3	3	2
09.3.3 Gardens, plants and flowers 09.3.4/5 Pets, related products and services	L5FT L5FU	4 5	4 6	4 6	4 6	4 6	4 6	4 6	3 5	3 7	3 6	4 6
09.4 Recreational and cultural services	L5FV	23	25	26	26	25	25	24	24	25	25	28
09.4.1 Recreational and sporting services	L5FW	7	8	9	9	8	7	7	8	7	7	8
09.4.2 Cultural services	L5FX	16	17	17	17	17	18	17	16	18	18	20
09.5 Books, newspapers and stationery	L5FY	14	14	13	14	14	12	11	11	11	11	11
09.5.1 Books	L5FZ	4	4	4	4	3	3	3	3	3	3	3
09.5.2 Newspapers and periodicals	L5G2	6 4	6 4	5 4	5 5	5 6	4	4 4	4 4	4	4 4	4
09.5.3/4 Misc. printed matter, stationery, drawing materials	L5G3	•	•				5	•	•	-	-	•
09.6 Package holidays	L5G4	22	23	23	22	24	22	20	28	27	27	30
10.0 Education	L5DA	14	14	16	17	15	15	15	17	18	22	21
11.1 Catering services	L5G5	93	95	95	91	89	84	80	80	83	82	84
11.1.1 Restaurants & cafes	L5G6	83	85	85	82	80	76	71	72	75	75	77
11.1.2 Canteens	L5G7	10	10	10	9	9	8	9	8	8	7	7
11.2 Accommodation services	L5G8	15	15	16	14	14	14	14	16	16	17	18
12.1 Personal care	L5G9	25	24	24	26	24	23	22	23	24	25	26
12.1.1 Hairdressing and personal grooming establishments 12.1.2/3 Appliances and products for personal care	L5GA L5GB	6 19	6 18	6 18	7 19	6 18	6 17	6 16	6 17	6 18	6 19	6 20
100 Barrier ()			•	•	•	•	•	40			40	
12.3 Personal effects (nec) 12.3.1 Jewellery, clocks and watches	L5GC L5GD	9	9	8 5	9 6	9 6	8 6	10 6	11 7	11 7	12 8	14 8
12.3.1 Jeweilery, clocks and watches 12.3.2 Other personal effects	L5GE	3	3	3	3	3	2	4	4	4	4	6
12.4 Social protection	L5GF	10	10	9	9	9	9	11	11	9	11	13
12.5 Insurance	L5GG	8	6	6	7	7	7	7	7	7	8	7
12.5.2 House contents insurance	L5GH	2	2	2	2	2	2	2	2	2	2	2
12.5.3 Health insurance	L5GI	2	1	1	2	2	2	2	2	2	2	2
12.5.4 Transport insurance	L5GJ	4	3	3	3	3	3	3	3	3	4	3
12.6 Financial services (nec)	L5GK	23	22	22	23	23	21	19	25	14	10	10
12.6.2 Other financial services (nec)	L5GL	23	22	22	23	23	21	19	25	14	10	10
12.7 Other services (nec)	L5GM	11	9	9	9	9	9	9	8	8	10	10

Key: - zero or negligible .. not available (nec) not elsewhere covered

Source: National Statistics

¹ The owner occupiers' housing costs weight in CPIH has been revised so that it's aligned with historical National Accounts estimates and reflects planned changes to the National Accounts methodology. This leads to revisions to the full CPIH time series.

RPI pensioner indices: 1 person pensioner household weights 2001 to 2016

Food CBXR Bread CZYU Cereals CZYV Biscuits and cakes CZYX Home-killed lamb CZYY 2 Imported lamb CZYZ Pork CZZA Bacon CZZB Poultry CZZC Other meat Fresh fish CZZE Processed fish CZZF Butter CZZG Oils and fats CZZH 7 Cheese CZZI Eggs CZZJ Milk, fresh CZZK Milk products CZZL Tea CZZM Coffee and other hot drinks 7 CZZN 7 Soft drinks CZZO Sugar and preserves CZZP Sweets and chocolates CZZQ Unprocessed potatoes CZZR Processed potatoes CZZS 3 5 5 3 3 Fresh vegetables CZZT Processed vegetables CZZU Fresh fruit CZZV Processed fruit CZZW Total Seasonal food Catering CBXU Restaurant meals CZZY Canteen meals Take-aways and snacks Alcoholic drink CBXV Beer "on" sales Beer "off" sales CBVO 2 CBVP Wines & spirits "on" sales CBVR Wines & spirits "off" sales CBVS Tobacco CBXW Cigarettes CBVT Other tobacco CBVU Fuel and light СВХҮ Coal and solid fuels Electricity CBWD CBWE Oil and other fuels CBWF

Key: - zero .. not available Source: Office for National Statistics

RPI pensioner indices: 1 person pensioner household weights 2001 to 2016

2005 2006 2007 2009 2010 2011 2012 2013 2014 2015 2016 Household goods CBXZ Furniture CBWG Furnishings CBWH Electrical appliances CBWI Other household equipment CBWJ Household consumables CBWK Pet care CBWL Household services CBYA Postage Telephones, telemessages, etc CBWN Domestic services CBWO Fees and subscriptions CBWP Clothing and footwear СВУВ Men's outerwear CBWQ Women's outerwear CBWR Children's outerwear CBWS 7 7 7 Other clothing CBWT Footwear CBWU Personal goods and services CBYC Personal articles CBWV Chemists goods CBWW Personal services CBWX Motoring expenditure CBYD Purchase of motor vehicles CBWY Maintenance of motor vehicles CBWZ Petrol and oil Vehicle tax and insurance Fares and other travel costs CBYE Rail fares CBXC Bus and coach fares CBXD Other travel costs CBXE Leisure goods CBYF Audio-visual equipment CBXF Records, tapes and CDs CBXG Toys, photographic and sports goods CBXH Books and newspapers CBXI Gardening products CBXJ Leisure services CBYG Television licences and rentals CBXK Entertainment and other recreation CBXL Foreign holidays (Jan 1993 = 100) CBWB UK holidays (Jan 1994 = 100) DOEF

Source: Office for National Statistics

RPI pensioner indices: 2 person pensioner household weights 2001 to 2016

Food CDITO Bread CBYH Cereals CBYI Biscuits and cakes СВУК Home-killed lamb CBYL Imported lamb CRYM Pork CBYN Bacon СВУО Poultry СВУР Other meat Fresh fish CBYR Processed fish CBYS Butter CBYT Oils and fats 7 7 7 7 CBYU Cheese CBYV Eggs 7 7 Milk, fresh Milk products CBYY Tea CBYZ Coffee and other hot drinks 7 CBZA Soft drinks CBZB Sugar and preserves CBZC Sweets and chocolates CBZD Unprocessed potatoes CBZE Processed potatoes CBZF 5 4 5 5 5 3 Fresh vegetables CRZG Processed vegetables CBZH Fresh fruit CBZI Processed fruit CBZJ Total seasonal foods Catering CDJT Restaurant meals CBZL Canteen meals Take-aways and snacks Alcoholic drink CDIII Beer "on" sales Beer "off" sales 5 CBZP CBZO Wines & spirits "on" sales CBZS Wines & spirits "off" sales CBZT Tobacco CDITV Cigarettes CBZU Other tobacco CBZV

Key: - zero .. not available Source: Office for National Statistics

 CDJX

CCZE

CCZF

CCZG

CCZH

Fuel and light

Electricity

Coal and solid fuels

Oil and other fuels

RPI pensioner indices: 2 person pensioner household weights 2001 to 2016

2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 Household goods CDJY Furniture CCZI Furnishings Electrical appliances CCZK Other household equipment CCZL 11 17 Household consumables CCZM 10 12 Pet care CCZN Household services CDJZ Postage CCZO Telephones, telemessages, etc CCZP Domestic services CCZQ Fees and subscriptions CCZR Clothing and footwear CDKA Men's outerwear CCZS Women's outerwear CCZT 12 Children's outerwear CCZU Other clothing CCZV Footwear CCZW Personal goods and services CDKB Personal articles CCZX Chemists goods Personal services CCZZ Motoring expenditure CDKC Purchase of motor vehicles CDIX Maintenance of motor vehicles CDIY Petrol and oil Vehicle tax and insurance Fares and other travel costs CDKD Rail fares CDJB Bus and coach fares CDJC Other travel costs CDJD Leisure goods CDKE Audio-visual equipment CDJE Records, tapes and CDs CDJF 7 7 Toys, photographic and sports goods CDJG Books and newspapers CDJH Gardening products CDJI Leisure services CDKF Television licences and rentals CDJJ Entertainment and other recreation CDJK Foreign holidays (Jan 1993 = 100) CBXP UK holidays (Jan 1994 = 100) DOEG

Source: Office for National Statistics

W6^{Average} weekly expenditure of households underlying 2016 RPI weights at January 2016 prices

						pounds	
	General	1 person	2 person		General	1 person	2 person
	index	pensioner	pensioner		index	pensioner	pensioner
	house-	house-	house-		house-	house-	house-
	holds	holds	holds		holds	holds	holds
Food	58.65	26.00	52.32	Fuel and light	23.38	18.06	23.86
Bread	2.07	1.15	2.26	Coal and solid fuels	0.25	0.03	0.58
Cereals	2.04	0.77	1.59	Electricity	11.67	8.57	11.63
Biscuits and cakes	3.67	2.10	4.60	Gas	10.43	8.37	10.22
Beef	2.13	0.84	2.37	Oil and other fuels	1.03	1.09	1.43
Home-killed lamb	0.31	0.23	0.38	on and outer rusts			
Imported lamb	0.30	0.23	0.37	Household goods	36.13	10.21	27.17
Pork	0.63	0.39	0.83	Furniture	14.52	2.03	7.69
Bacon	0.87	0.58	1.32	Furnishings	4.46	1.89	2.71
Poultry	2.12	0.86	1.67	Electrical appliances	4.10	0.91	3.27
Other meat	3.54	1.99	3.95	Other household equipment	2.37	0.80	2.38
Fresh fish	1.09	0.50	1.19	Household consumables	6.42	2.93	6.56
Processed fish	0.97	0.50	1.02	Pet care	4.26	1.64	4.56
	0.97		0.64	ret care	4.20	1.04	4.56
Butter		0.32	0.64	Haveahald sandasa	20.20	15.49	40.40
Oils and fats	0.74	0.45		Household services	39.32		16.42
Cheese	1.75	0.80	1.64	Postage	0.58	0.38	0.50
Eggs	0.64	0.36	0.71	Telephones, telemessages, etc	14.65	6.53	8.72
Milk, fresh	1.84	1.24	2.31	Domestic services	8.44	5.96	2.89
Milk products	2.28	1.02	1.95	Fees and subscriptions	15.66	2.63	4.30
Tea	0.47	0.34	0.60				
Coffee and other hot drinks	0.94	0.44	1.00	Clothing and footwear	23.84	5.62	12.82
Soft drinks	5.24	0.88	1.98	Men's outerwear	5.12	0.37	2.31
Sugar and preserves	0.66	0.36	0.74	Women's outerwear	8.64	2.89	5.42
Sweets and chocolates	6.50	1.19	2.31	Children's outerwear	2.52	0.26	0.37
Unprocessed potatoes	0.81	0.53	1.28	Other clothing	2.98	0.85	2.03
Potato products	1.45	0.54	1.22	Footwear	4.58	1.26	2.68
Other fresh vegetables	3.62	1.54	3.47				
Processed vegetables	0.89	0.39	0.83	Personal goods and services	24.08	7.47	16.24
Fresh fruit	3.82	1.97	3.64	Personal articles	6.87	1.00	4.13
Processed fruit	0.85	0.44	0.91	Chemists goods	8.62	2.53	6.02
Other foods	5.98	3.02	4.57	Personal services	8.59	3.94	6.10
Catering	27.05	6.28	15.19	Motoring expenditure	68.13	13.18	43.94
Restaurant meals	16.11	5.26	12.42	Purchase of motor vehicles	25.99	2.90	12.51
Canteen meals	1.68			Maintenance of motor vehicles	9.49	3.22	8.15
Take-aways and snacks	9.26	1.01	2.77	Petrol and oil	19.27	3.25	12.31
				Vehicle tax and insurance	13.38	3.81	10.97
Alcoholic drink	32.41	3.43	10.78				
Beer "on" sales	10.98	1.07	2.76	Fares and other travel costs	15.39	1.74	3.07
Beer "off" sales	2.72	0.25	1.47	Rail fares	3.96	0.42	0.37
Wines & spirits "on" sales	10.78	0.48	1.76	Bus and coach fares	2.01	0.17	0.10
Wines & spirits "off" sales	7.92	1.62	4.79	Other Travel costs	9.42	1.15	2.60
Tobacco	14.49	1.78	3.13	Leisure goods	16.99	5.29	12.45
Cigarettes	12.06	1.51	2.21	Audio-visual equipment	3.79	0.42	1.80
Other Tobacco	2.43	0.27	0.91	CDs and tapes	1.04	0.25	0.31
				Toys, photographic and sports goods	5.51	0.33	1.56
Housing ¹	154.17			Books and newspapers	3.44	2.92	5.55
Rent	48.19			Gardening products	3.21	1.38	3.23
Mortgage interest payments	16.14			3 .			
Depreciation	46.49			Leisure services	45.27	9.25	27.57
Council tax and rates	22.93			Television licences and rentals	6.87	2.56	5.16
Water and other charges	7.41			Entertainment & other recreation	9.31	1.23	3.61
Repairs and maintenance charges	5.24			Foreign holidays	23.08	3.55	12.31
Do-it yourself materials	4.28			UK holidays	6.00	1.91	6.49
Dwelling insurance and ground rent	3.49			2.1.10.000,0		1.01	
	3.70			ALL ITEMS	579.30	123.81	264.94
				·	2.0.00	0.0 1	_0-1.0-1

Note: Expenditure is rounded to two decimal places. For this reason, the section data may not add up to the group and all items totals.

Source: Office for National Statistics

¹ Housing costs are excluded from the pensioner indices because of measurement problems.