

# Harmonised Indices of Consumer Prices

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## Summary

Harmonised indices of consumer prices (HICPs) are constructed in each Member State of the European Union for the purpose of international comparisons of consumer price inflation. They will also be used as part of the assessment of progress against the convergence criteria when eligibility of Member States to join the European Economic and Monetary Union is decided.

HICPs have been under development by Eurostat, the European Commission's statistical arm, in conjunction with Member States, for over four years. HICP figures for each Member State have been published monthly by Eurostat since March 1997. The ONS publishes the UK figures separately, in advance of this, in their own First Release. This article comprises four parts which explain the development and uses of HICP in the EU and the United Kingdom:

- a) background to the construction of HICPs and their uses
- b) development of HICPs
- c) details of the harmonisation measures
- d) differences between the UK HICP and the retail prices index (RPI)

The last part summarises the methodological differences between the two measures and their respective inflation rates. It also explains why, in the UK context, the RPI remains the best indicator of consumer price inflation.

## Background

### Maastricht Treaty and convergence criteria

The Maastricht Treaty<sup>1</sup> sets out the arrangements and the timetable for achieving Economic and Monetary Union (EMU). Participating countries are required to have a high degree of economic convergence as measured by the four criteria set out in Article 109j of the Treaty: price stability, sustainability of the government financial position (government debt and deficit), exchange rate fluctuations and levels of interest rates.

The price stability criterion states that a country must have a sustainable price performance and an average rate of inflation over a period of one year that does not exceed by more than one and a half percentage points that of, at most, the three best performing Member States. The Article also states that price stability should be measured by means of consumer price indices produced on a comparable basis, taking into account differences in national definitions. HICPs have been developed for this purpose.

Existing consumer price indices (CPIs), such as the RPI in the United Kingdom, cannot be used for EMU purposes because of differences in their coverage and the ways in which they are constructed. For instance, the treatment of health and education varies greatly between countries; there is also no consistency of practice in the formula used to aggregate prices at the most basic level. It has long been considered that such differences may lead to different results in the measured rate of inflation.

### **Uses of the HICP**

The HICPs are being developed expressly for international comparisons of inflation within the European Union. In the short term, they will be used in deciding whether Member States meet the convergence criterion for EMU on price stability. The European Monetary Institute (EMI) and the European Commission will report to the Council of Ministers on progress against this criterion, as well as the other three criteria, on March 25 1998. The decision on who is eligible to take part in EMU, which is due to commence on 1 January 1999, will be made in May 1998.

The HICPs are also being used to produce an inflation index for the whole of the European Union and, in due course, will be used to construct an inflation index covering EMU members. These indices will be of use to central banks in Member States, providing cross-country comparisons of inflation on a comparable basis.

### **Revisions to HICP figures**

HICPs are revisable. However, during 1998, when first stage membership of the Monetary Union will be decided, and in the run-up to the start of EMU in January 1999, revisions to HICPs will be limited to the correction of mistakes and the correction of breaches of the rules underpinning the construction of the HICPs. Other revisions, for instance as a result of methodological changes or newer data, will not be allowed.

### **Relationship between the HICPs and national CPIs**

As previously mentioned, HICPs are designed expressly for international comparisons of inflation within Europe. The primary focus in their development has been on harmonising the

methodology used to construct different national HICPs so that annual inflation rates are measured on a comparable basis. HICPs are not intended to replace national CPIs. Most Member States are likely to continue producing their existing CPIs for domestic purposes for the foreseeable future. This is certainly the case in the United Kingdom where the RPI remains the best measure of the impact of price changes on consumers and continues to be used for monitoring economic policy, indexation of contracts and social security benefits, and wage bargaining.

Although they serve different purposes, there are close links between national CPIs and HICPs. In particular, the actual price collections for HICPs often depend heavily on that of national CPIs, for reasons of economy and practicability. Furthermore, there are a number of research projects and studies under way in the context of the HICPs which may be of relevance to domestic CPIs. These include investigations into quality adjustment methods in a number of areas, sampling methods, and the possible use of scanner data. In the United Kingdom, developments in these and any other relevant areas will continue to be monitored for their potential benefit to the RPI.

## **The development of the HICPs**

### **Council Regulation**

Eurostat has been collaborating closely with National Statistical Institutes (NSIs) for over four years to produce HICPs. The first important and tangible outcome of this work was the Council Regulation<sup>2</sup> which gives the framework of rules by which HICPs are to be constructed. It also lays down a strict timetable, derived from the timetable in the Maastricht Treaty, for their introduction by Member States.

The Regulation states that harmonisation is to be achieved in two phases:

- (a) Stage I: the production of interim indices based on national CPIs by March 1996
- (b) Stage II: production of the first set of HICPs in March 1997

### **Interim indices of consumer prices**

The interim indices of consumer prices were published by Eurostat from February 1996 to January 1997. Monthly index levels were published for 1994 to 1996, together with 12-month inflation rates for 1995 and 1996. These indices were used by the European Commission and the EMI in their first report to the Council of Ministers in 1996 on progress made against the convergence criteria.

The interim indices were constructed using the same methods as national CPIs but with the coverage of goods and services adjusted to be as similar as possible across Member States. The interim indices were therefore more comparable than the national measures excluding housing, which had previously been used for international comparisons. However, they omitted a wide range of products and still involved quite different methodologies. The main categories of expenditure excluded from the interim indices were owner-occupiers' housing costs, insurance, and health and educational goods and services. For each of these, the methods used to construct price indices varied considerably between countries and their inclusion would have seriously undermined comparability. Some categories of expenditure which were excluded from some national CPIs - in particular, alcoholic drinks and tobacco - were included for all Member States.

### **First publication of the HICPs**

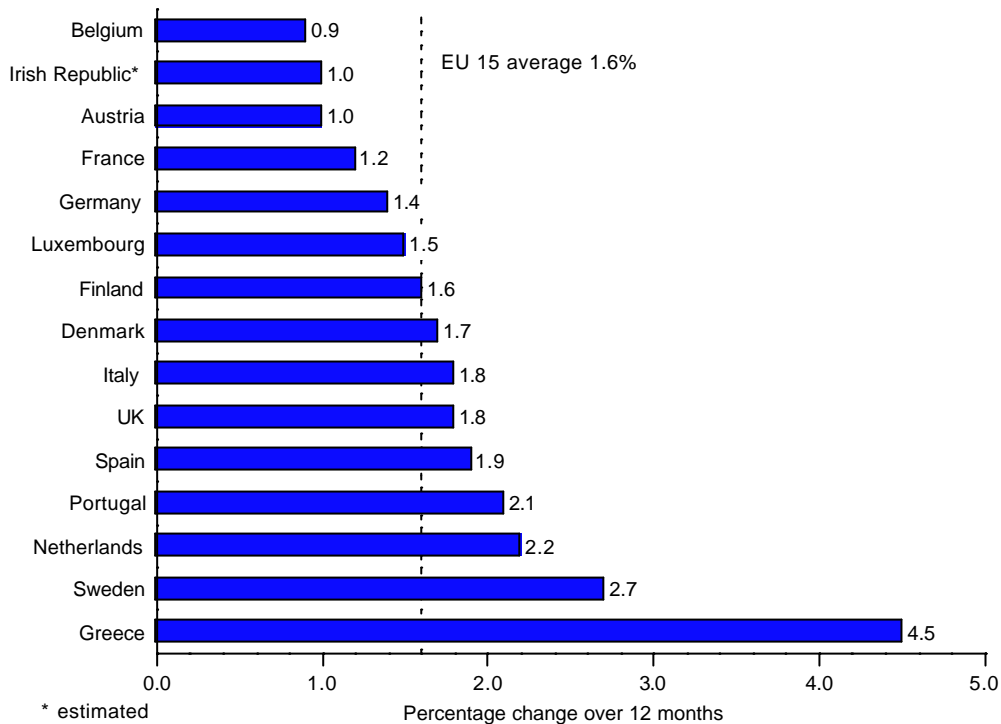
The interim indices were replaced by the monthly publication of HICPs by Eurostat, starting in March 1997. In contrast to the interim indices, the HICPs are harmonised in several methodological areas, in particular the formulae used to combine prices at the most basic level. Coverage of goods and services is also more comprehensive although there are still several areas where further harmonisation is necessary, such as insurance and in the health and education fields. Figures for the United Kingdom are published in a separate ONS First Release, in advance of the Eurostat publication.

The monthly figures published by Eurostat are for each of the 15 Member States, together with those for Norway and Iceland. Indices for the European Union and the European Economic Area (EU plus Norway and Iceland, but not Switzerland) are also calculated. The data published include: the monthly index level (starting in January 1995); the annual rate of change (starting in January 1996); and figures for the sub-indices.

Chart 1 shows the 12-month inflation rates for each country at December 1997 while Tables 1 and 2 show the monthly HICP indices and the 12-month inflation rates since the start of 1995. Although the Regulations do not require the production of HICP indices prior to 1996, most countries have produced estimates for 1995 so that 12-month inflation rates during 1996 could be derived. The United Kingdom could not readily produce such estimates, so Eurostat produced their own estimates based on the 1995 interim indices, adjusted for the effect of using a different formula in the HICP for aggregating the basic price data. It should be noted that the Eurostat estimates can only be used to give a broad indication of trends; they are not consistent with the figures for later periods.

## Chart 1

### HICP International comparisons EU countries: December 1997



## Details of the harmonisation measures

### HICP Regulations

The Council Regulation set out a framework of rules for the construction of HICPs. The procedures to be followed in implementing the rules are detailed in a series of Commission Regulations. As with the Council Regulation, the Commission Regulations are legally binding on Member States. They are developed by Eurostat in conjunction with National Statistics Institutes and are generally approved by qualified majority voting in the Statistical Program Committee, which comprises heads of National Statistical Institutes (such as the ONS), before adoption by the Commission. There are two general principles underlying the Regulations. Firstly, they specify the outputs which are required, rather than they how they are to be achieved. Secondly, they eliminate practices which may result in the HICPs not being comparable. The second of these principles has had the effect of achieving convergence on good practice and of raising the general quality of data.

To date, two Commission Regulations have been adopted<sup>3,4</sup>. The Regulations have introduced a common expenditure classification, a common HICP coverage, and a series of minimum standards such as:

- the incorporation of newly significant goods and services (eg personal computers);
- quality adjustment;

- the use of comparable formulae for aggregating prices at the most basic level;
- representativity of the sample.

The issues addressed in the Regulations cover, by default, the main issues raised in the Boskin report<sup>5,6,7</sup> which looked at potential causes of bias in the US CPI. These were: quality adjustment, the basic formula and keeping up with market developments (new goods and expenditure weights).

In addition to the two Commission Regulations which have already been adopted, a Regulation on minimum standards for the quality of HICP weights has been passed and is awaiting adoption; and further Regulations are being developed to extend the coverage of goods and services, and harmonise the geographic and population coverage of the HICP.

The main requirements of the existing Regulations, and their effects, particularly on the United Kingdom, are described below.

### **Classification**

The assessment of price stability under the convergence criterion primarily concerns the “all items” HICPs. However, the analysis of sources of inflationary pressure requires a sub-division of the HICP into component parts relating to different product groups. International comparability of these sub-indices thus requires a common classification. The HICPs are compiled using the international classification of consumers’ expenditure known as COICOP (Classification of Individual Consumption by Purpose). COICOP groups together consumption according to the purpose of its use. Thus the heading “clothing”, for example, groups together garments, clothing materials, laundry and repair which are all items associated with keeping oneself clothed.

A version of this classification has been specially adapted for the HICPs, known as COICOP/HICP. The weights assigned to each sub-index vary from country to country depending on the relative share of consumers’ expenditure on each sub-category in each country.

The weights for the United Kingdom are shown in Table 3. It should be noted that the HICP classification differs substantially from that used in the RPI. For instance, the COICOP category 02.1, “alcoholic beverages”, comprises off-sales only; sales of alcohol in bars and restaurants are included under 11.1, “catering”. By contrast, in the RPI all expenditures on alcohol are included under the one heading. This means that it is often not straightforward to compare the weights and inflation rates for sub-indices of the UK HICP and the RPI. Another example where the two measures differ is insurance. In the RPI, the weight for insurance comprises total

expenditure on the purchase of insurance policies. Under COICOP, the weight for insurance comprises the service charge element only: ie it excludes that part of expenditure on insurance policies which is paid out in claims. The claims element is, instead, redistributed to the COICOP headings under which the expenditure is made. For instance, claims for motor insurance are split between second hand cars, motor spares and repairs (COICOP headings 07.1.1B, 07.2.1 and 07.2.3).

### **Product Coverage**

The interim indices produced during 1996 had a relatively limited coverage of goods and services. This coverage was extended for the HICPs when they were first published in March 1997 to include expenditures on, for example, insurance for cars and house contents, package holidays, banking services, and some goods and services in the fields of health and education.

There are still some categories of expenditure which are excluded from the coverage of the HICPs. These are the technically difficult areas where differences in national markets make the production of comparable indices difficult. For example, in the fields of health and education, many goods and services are heavily subsidised by the state; the extent of the subsidy varies substantially across Member States; and it is not always clear how or which prices should be measured. Work is underway to develop a harmonised methodology in these areas. Work is also progressing on the methodology to be used for insurance with the aim of extending coverage to include buildings, travel, health and other types of insurance. Further work remains to be done on certain financial services, and social protection services, such as nurseries and retirement homes.

Due to large differences between Member States, no agreement has been reached on the appropriate treatment of owner-occupiers' housing costs in the HICP. The use of imputed rents (as used in the National Accounts) or mortgage interest payments (as used in the RPI and by some other Member States) are considered by some as inappropriate. It has been argued that imputed rents are not actual prices while mortgage interest payments are considered to be a charge on credit rather than a price for the housing service received, which is the approach adopted in the RPI. The main options seem to be either the total exclusion of owner-occupiers' housing costs or the inclusion of an index for the acquisition of new houses. The treatment of owner-occupiers' housing costs in the RPI was last considered by the 1992-94 RPI Advisory Committee<sup>8</sup>.

In the United Kingdom, product coverage for the HICP is, on the whole, very similar to that of the RPI, and prices are obtained from the same sources. However, there are a few notable exceptions. A number of RPI series are excluded from the HICP; in particular, mortgage interest payments, house depreciation and council tax which, together, account for around 10 per cent

of expenditure covered by the RPI. Also excluded are direct expenditure by households on education and health care and the proxy indicator for new car prices. The latter is based on movements in used car prices; the HICP uses movements in list prices of new cars in its place (ideally, the prices used should take account of the discounts obtained by most purchasers, but these are not readily available).

The HICP includes an index for personal computers and air fares neither of which are currently included in the RPI. These items are included in the HICP because their expenditure exceeds one part per thousand of total consumers' expenditure, the threshold set by Eurostat above which items have to be included (see next section).

### **New Products**

CPIs are often criticised for being slow to include new products, such as mobile phones and personal computers. If some Member States add important new products but others fail to do so, it could lead to significant differences in the relative rates of measured inflation. To overcome this, a new product must be included in a Member State's HICP if it achieves a sales volume of over one part per thousand of total consumers' expenditure in that country.

Member States have to be able to identify when new goods and services emerge on the market and gain the required volume of sales. To aid this process, Eurostat acts as an information exchange, informing each Member State of the products identified as newly significant by other Member States. In the United Kingdom, this information is taken into account during the annual review of the "basket of goods and services" for which prices will be collected for the HICP and RPI.

### **Quality change**

Like most CPIs, the HICPs aim to measure the change in prices of specified goods and services through time. However, product developments, seasonal variability in the availability of some goods, and changes in consumer preferences, often make this difficult. If for example, a motor car priced in January is replaced by a new model in August, the price difference may be a result of a quality change as well as a price change. Differences in the procedures used to adjust for quality change are probably the biggest source of non-comparability between Member States' HICPs. To help counter this, minimum standards for quality adjustment have been specified and a number of research projects and study groups have been set up. Specific aspects which are being looked at include quality changes for personal computers, new cars and clothing.

Quality adjustments can be explicit or implicit. An explicit adjustment would be one where differences between the characteristics of the original and its replacement are compared and



valued. In practice, explicit adjustments are time-consuming and expensive and most quality adjustments applied by Member States are implicit. For instance in the United Kingdom, replacements are generally judged to be either of comparable quality or not. For comparable items, the full price difference between the original and its replacement is taken into the index. Otherwise, the price change is generally assumed to be in line with other items belonging to the same group; the remaining difference in price between the original and its replacement being the implicit valuation of the quality change.

One particular type of implicit quality adjustment has been ruled out if applied automatically without justification. This is the practice of “linking” where no price change is taken into the index when an item is replaced. This is equivalent to assuming that the difference in price between an item and its replacement is wholly attributable to a difference in quality.

In the UK HICP, the only items for which explicit quality adjustments are made are new cars and personal computers. With these, the option cost approach is used. This involves assigning a value to different parts of the specification of the replacement (eg sun-roof or CD-ROM), based on the cost of buying these differences as options. The price of the old model is then adjusted using 50 per cent of these option costs, to allow a like for like comparison. The figure of 50 per cent was arrived after discussions with international experts on CPIs, and with economists, and implies that each option which is included as standard on the new model would have been bought as an extra by half the purchasers of the old model. For these purchasers, the true price change is the difference between the price of the new model and the old price plus the option now included as standard. For the people who would not have bought the option, the true price change is the difference between the price of the two models. To date, these explicit quality adjustments have not been used in the RPI.

### **Formulae used to construct the HICPs**

The HICPs are constructed using a Laspeyres-type index. This means they are calculated as a weighted arithmetic average of the component price indices, using weights which reflect the expenditure patterns of the index population in the weight reference period.

An “elementary aggregates” are the most basic level at which prices are collected. Below this level, expenditure weights are not available. An example of an elementary aggregate might be the price of “a double wardrobe” or “1 kg of carrots” in a particular region and / or shop type. The price index for an elementary aggregate is obtained by combining prices together using an appropriate formula. In the HICP, the two main formulae used are the ratio of arithmetic means (RA) and the geometric mean (see Appendix). Alternative formulae can also be used provided they do not result in annual inflation rates which differ systematically from an index compiled by either of the given formulae by more than 0.1 per cent on average over a year.

The average of price relatives formula (AR) can only be used in the HICP if it can be shown to produce results comparable with other formulae. In general, this will not be the case and eight countries had to change the formula from that used in their national CPI to comply with this requirement. The eight countries are: Denmark, Greece, France, Italy, Luxembourg, Austria, Finland and the United Kingdom. In almost all cases, the geometric mean was introduced for all elementary aggregates. The exceptions were Italy which changed to RA; France which introduced the geometric mean for products where the items surveyed vary substantially in price (heterogeneous products), but retained RA for homogenous products; and Austria which switched to the geometric mean for all except certain items such as fruit and vegetables for which RA is used. All countries, except for Austria and the United Kingdom, introduced the change in formula into their national CPIs.

It should be noted that the decision effectively to rule out AR in the HICP was not taken on the grounds that it is wrong but rather that it does not give results which are “comparable” to those given by other formulae. In other words, differences in Member States’ inflation rates will not be due to the formulae used to create price indices for elementary aggregates.

In the United Kingdom, the RPI continues to use a combination of the two arithmetic mean formulae. RA is used for more homogeneous items, where the products surveyed do not vary greatly in price. AR is used where the prices are less homogeneous, so that the index is not unduly influenced by movements in the highest priced items, as can happen with RA. The use of AR smooths out some of the price variation which can be caused by the sampling of items with a wide range of prices.

### **Weights and population coverage**

The geographical and population coverage for expenditures used to calculate weights in the HICP are not fully harmonised. They are harmonised to the extent that the weights must cover all households, regardless of income, resident in any part of the economic territory. To comply with this, the United Kingdom, Greece and Portugal had to adjust their weights to cover households excluded from their national CPIs.

There are two main areas where the coverage of the weights is not harmonised: expenditure by residents of institutions (such as retirement homes), and expenditure by foreign visitors. The majority of Member States do not include the expenditure of institutional households; France, Italy and Denmark are exceptions. Expenditure by foreign visitors is included in the weights of those Member States which use National Accounts as their primary data source (about half) but is excluded by those who base their weights on household budget surveys. Consideration is being given to further harmonisation of geographical and population coverage.

In the United Kingdom, weights for the HICP are constructed in a very similar way to the RPI. There are two main differences. First, the HICP uses the COICOP classification whereas the RPI has its own distinct system. Secondly, the HICP covers all private households whereas the RPI excludes the expenditure of the top four per cent of households by income, and of pensioner households who derive at least 75 per cent of their income from state benefits. The RPI coverage is designed to prevent it being unduly influenced by the spending patterns of these households which are likely to differ significantly from the average.

As for RPI section weights, data for HICP weights (down to the 3-digit COICOP published figures) are primarily obtained via the Family Expenditure Survey (FES). However, certain categories of expenditure which are known to be under-recorded in the FES, such as alcohol, tobacco, soft drinks and confectionery, are constructed using National Accounts data. All weights below 3-digit COICOP (such as those for items within product groupings and shop type) are derived in the same manner, and from the same sources, as those used in the RPI.

### **Updating of weights**

No specific measures relating to the updating of weights were required of Member States for the launch of the HICP. The majority of Member States update weights every five years but there are a few which revise their weights annually, namely: the United Kingdom, France, Sweden and, from the start of 1998, the Netherlands.

The Council Regulation does not require household budget surveys (such as the FES in the United Kingdom) to be conducted more frequently than every five years for the purpose of obtaining information on spending patterns for use in weights. A draft Commission Regulation, which has been passed by Member State and is awaiting adoption, builds on this. It stipulates that the weights used can, in general, relate to a weight reference period up to seven years prior to the current year. However, adjustments need to be made for significant changes in expenditure patterns in the intervening periods. This will typically be to take account of products which are significantly losing or gaining in importance, such as personal computers, where five year old weights might not correctly reflect their relative importance.

In all countries, HICP weights down to 3-digit COICOP level are updated annually from their weight reference period to December of the latest year using movements in the relevant price index. This annual updating also needs to take account of any newly significant goods and services which have been identified. In the case of the United Kingdom, the weight reference period is December of the previous year; for instance, 3-digit COICOP weights for the 1998 HICP will be based on expenditure patterns at December 1996 updated to December 1997.

In the United Kingdom, the weight of items below 3-digit COICOP and the items in the “basket of goods and services” are reviewed annually. Since the HICP is based on the RPI price collections, the updated weights and sample of items are introduced at the same time as they are in the RPI, in January of each year. This means that the annual chain-linking used in the UK HICP is a two-stage process, with a link at December to take account of the updated weights at 3-digit COICOP level and above, and a link at January to take account of the updated sample of items.

### **Sample Design and Maintenance**

All CPIs are based on the regular measurement of a sample of prices of specified goods and services. To ensure the long term representativeness and comparability of the HICPs, the samples need to be kept up-to-date. There are several aspects to this including the incorporation of newly significant products (discussed earlier); regular reviews of products and retail outlets; sampling methods for products and outlets, which is the subject of a research project; and the replacement of products and retail outlets when they disappear from the market.

To ensure the sample of products is kept up-to-date, rules have been developed for how long a target item can be kept in the sample if its price is missing. These state that for items surveyed monthly, estimated prices may be used for up to two consecutive months if a price is not available for a specific target item. However, a replacement item has to be introduced if the price is unavailable for a third month. For prices collected less frequently than monthly, an estimated price may be used on the first occasion a price is not available but a replacement item has to be introduced on the second occasion.

### **Further harmonisation work**

Although considerable progress has been made towards harmonisation through the HICPs, more work remains to be done. Further technical Regulations are under development to harmonise the geographical and population coverage of the HICP and to extend the coverage of goods and services. Guidelines are also being developed to ensure that discounts (e.g. three for the price of two; temporary sales; end of line sales; loyalty cards) and tariffs (e.g. gas and electricity prices, the price of a stamp) are treated in a comparable fashion.

Study groups and special Task Forces, comprising representatives of National Statistical Institutes and other international experts, have also been set up to look at specific issues. The subjects being tackled include: how to incorporate of insurance, health and education into HICPs; the harmonisation of methods, including quality adjustment procedures, in the areas of new cars, clothing, and personal computers; and sampling methods.

## **The UK HICP compared with the RPI**

### **Summary of methodological differences**

The UK HICP uses the same basic price collections as the RPI. However, as noted in the preceding sections, there are a number of areas where the methodologies differ. These are summarised below:

- a. the coverage of the HICP is based on the international classification system, COICOP, whereas the RPI uses its own distinct system;
- b. a number of RPI components are excluded from the HICP, most notably, owner-occupiers' housing costs, house depreciation and council tax which together make up 10 per cent of the weight of the RPI. Other components excluded are: the cost of the annual road fund licence; health insurance; private education; medical fees;
- c. the HICP includes an index for air fares and personal computers, which are not currently included in the RPI. In addition, the HICP includes an index for actual list prices of new cars rather than a proxy index based on used car prices;
- d. the HICP series for personal computers and new cars are explicitly adjusted for changes in quality;
- e. the HICP uses the geometric mean to aggregate the prices at the lowest level while the RPI uses arithmetic means (a combination of the ratio of averages and the average of relatives - see Appendix);
- f. the average household expenditure pattern on which the HICP is based is that of the whole UK household population. In the RPI, the expenditure of highest income households, and of pensioner households mainly dependent on state benefits, are excluded;
- g. the HICP is a revisable index while the RPI is never revised.

### **Comparison of inflation rates**

The UK HICP consistently records a lower rate of inflation than the RPI and other indices such as the RPI excluding Mortgage Interest Payments (RPIX) which are derived from it. Chart 2 shows how the annual inflation rate for the HICP compares with the RPIX. On average during 1997, the annual rate of inflation for the HICP was 0.9 percentage points lower. The average monthly differences during 1997 between the two measures can be broken down as follows:

- a) the effect of using the geometric mean in the HICP, as opposed to arithmetic means in the RPIX contributes -0.5 percentage points to the difference between the RPIX and the HICP. This effect is much greater than the 0.1 reduction reported by most other

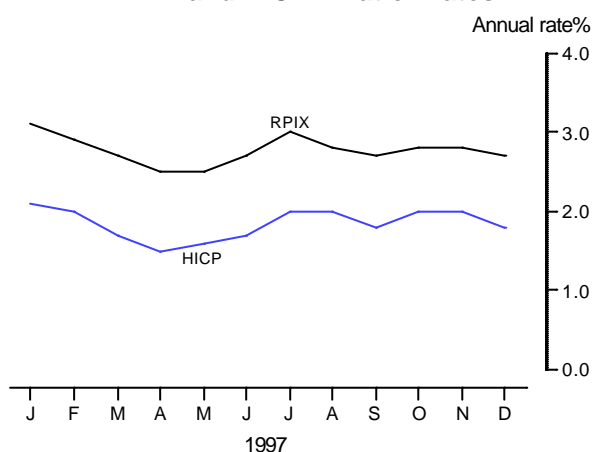
countries which have adopted the geometric mean. The ONS is researching the reasons for the difference;

- b) the exclusion of Council Tax and house depreciation from the HICP contributes -0.2 percentage points to the difference between the RPIX and the HICP;
- c) the inclusion and subsequent quality adjustment of an index for personal computers in the HICP contributes -0.1 percentage points to the difference between the RPIX and the HICP;
- d) the exclusion of some health and education expenditures from the HICP and the broader coverage of household expenditure in the HICP contribute a further -0.1 percentage points to the difference between the RPIX and the HICP.

Other differences in the construction of the two measures, such as the inclusion of air fares in the HICP; the inclusion of new cars, rather than relying on used cars as a proxy; and the use of COICOP have negligible effect on the overall difference between the two measures.

## Chart 2

RPIX and HICP inflation rates



## Conclusion

The HICP and the RPI differ in their purpose and construction. The RPI is the best indicator of consumer price inflation in the United Kingdom. The HICP is used for international comparisons of inflation in Europe. There has been considerable progress made towards harmonising the methods used to construct HICPs, in particular the elimination of some of the main practices which may have led to HICPs not being comparable. Nonetheless, harmonisation is not complete and work is proceeding in a number of areas to improve further the comparability of the indices.

## Appendix : Construction of elementary aggregates

### Formulae

An elementary aggregate is the lowest level for which information on expenditure shares is available; below this level, data are not available to weight the individual price quotes together. In the HICP, elementary aggregates can be constructed using either the **ratio of averages (RA)** or the **geometric mean (G)**. Use of the **average of relatives (AR)** is effectively banned as it does not produce results comparable with the other two formulae. If prices  $p_{1,0}$  to  $p_{n,0}$  are obtained in the base period and matching prices  $p_{1,t}$  to  $p_{n,t}$  are obtained for the same commodities in a subsequent month  $t$ , then:

$$\text{AR: } I_t = \frac{1}{n} \sum_{i=1}^n \frac{P_{it}}{P_{i0}}$$

$$\text{RA: } I_t = \frac{\sum_{i=1}^n P_{it}^{1/n}}{\sum_{i=1}^n P_{i0}^{1/n}}$$

$$\text{G: } I_t = \left( \prod_i \frac{P_{it}}{P_{i0}} \right)^{1/n} = \frac{\left( \prod_i P_{it} \right)^{1/n}}{\left( \prod_i P_{i0} \right)^{1/n}}$$

### Properties of the formulae

Both AR and RA have the effect of giving implicit fixed weights to each price quote. This can be seen by considering the following expression:

$$I_t = \sum_{i=1}^n W_i \frac{P_{it}}{P_{i0}}$$

If all the  $w_i$  are equal, this formula becomes AR while if the weights are proportional to the base price  $p_{i,0}$  it becomes RA. By contrast, G is equivalent to assuming that expenditure shares remain constant, so that if one price doubles while the others stay the same, the quantity purchased of the former will halve. Thus the implicit weights will vary through time.

G is always lower than AR (unless the price relatives,  $p_{it}/p_{i,0}$ , are all equal, in which case  $G = \text{AR}$ ). If most price relatives are roughly equal but there are a few outliers, G is not raised as much as AR by large price relatives, but is lowered more by small ones. For example, suppose

$n = 10$  and nine of the price relatives equal 1. If the other price relative is 2, AR is 1.1 and G is 1.072. However, if the other price relative is 0.1, AR is 0.91 and G is 0.794.

G may be higher or lower than RA. If the coefficient of variation of the prices (standard deviation divided by mean) is higher in month  $t$  than in the base month 0, then  $RA > G$  and vice versa.

## References

1. *Treaty on European Union*; Office for Official Publications of the European Communities, 1992; ISBN 92-824-0959-7
2. *Council Regulation (EC) No 2494/95 of 23 October 1995 concerning harmonized indices of consumer prices*; Official Journal of the European Communities; No L 257/1; 27.10.95.
3. *Commission Regulation (EC) No 1749/96 of 9 September 1996 on initial implementing measures for Council Regulation (EC) No 2494/95*; Official Journal of the European Communities; No L 229/3; 10.9.96.
4. *Commission Regulation (EC) No 2214/96 : treatment of newly significant goods and services*; Official Journal of the European Communities; No L 296/8; 21.11.96.
5. Boskin et al (1996): "Toward a More Accurate Measure of the Cost of Living", Final Report to the Senate Finance Committee from the Advisory Committee to Study the Consumer Price Index.
6. Baxter, M (1997): *Implications of the US Boskin report for the UK Retail Prices Index*; Economic Trends No. 527 October 1997.
7. Fenwick, D (1997): *The Boskin Report from a United Kingdom Perspective; Bias in the CPI: Experiences from five OECD countries*; Statistics Canada, 1997; No. 62 F0014MPB.
8. Central Statistical Office: *Retail Prices Index Advisory Committee: Treatment of owner occupiers' housing costs in the retail prices index*; (Cmnd 2717; Dec 1994).



**Table 1: HICP index levels, 1996=100**

	United Kingdom	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Irish Republic	Italy	Luxembourg	Netherlands	Portugal	Spain	Sweden	EU 15 average
	CHVJ	CLMV	CLMW	CLMX	CLMY	CLMZ	CLNA	CLNB	CLNC	CLND	CLNE	CLNF	CLNG	CLNH	CLNI	CLNJ
1995	97.6 <sup>1</sup>	98.3	98.3	98.1	98.9	98.0	98.8	92.7	97.9 <sup>*</sup>	96.2	98.8	98.6	97.2	96.6	99.2	97.7 <sup>*</sup>
1996	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1997	101.9	101.2	101.5	102.0	101.2	101.3	101.5	105.4	101.2	101.9	101.4	101.9	101.9	101.9	101.9	101.7
1995	Jan 95.8 <sup>1</sup>	97.8	97.8	97.2	98.8	97.0	97.9	89.3	96.3 <sup>2</sup>	93.3	98.4	97.6	95.9	94.9	97.9	96.2 <sup>*</sup>
	Feb 96.3 <sup>1</sup>	98.0	97.9	97.6	99.1	97.3	98.5	88.9	97.0	94.0	98.6	98.2	96.4	95.3	98.3	96.7 <sup>*</sup>
	Mar 96.9 <sup>1</sup>	98.1	97.9	97.9	99.0	97.5	98.4	91.1	97.4 <sup>2</sup>	94.8	98.6	98.9	96.8	95.9	98.8	97.0 <sup>*</sup>
	Apr 97.5 <sup>1</sup>	98.1	98.0	98.2	99.0	97.7	98.6	92.1	97.6 <sup>2</sup>	95.3	98.6	99.1	97.3	96.4	99.4	97.4 <sup>*</sup>
	May 97.9 <sup>1</sup>	98.2	98.1	98.5	99.1	97.8	98.7	93.0	97.8	95.9	98.7	98.9	97.2	96.4	99.5	97.6 <sup>*</sup>
	Jun 97.9 <sup>1</sup>	98.4	98.1	98.3	99.2	97.8	99.0	93.5	98.0 <sup>2</sup>	96.5	98.8	98.7	96.9	96.5	99.3	97.8 <sup>*</sup>
	Jul 97.4 <sup>1</sup>	98.4	98.4	97.7	99.2	97.6	99.2	91.8	97.8 <sup>2</sup>	96.7	98.8	98.0	96.9	96.5	99.0	97.7 <sup>*</sup>
	Aug 97.9 <sup>1</sup>	98.4	98.7	97.9	98.9	98.1	99.1	91.9	98.3	96.9	98.8	98.1	97.3	96.8	99.0	97.9 <sup>*</sup>
	Sep 98.4 <sup>1</sup>	98.5	98.6	98.5	98.9	98.5	99.0	94.1	98.5 <sup>2</sup>	97.2	99.0	99.0	97.5	97.2	99.9	98.2 <sup>*</sup>
	Oct 98.1 <sup>1</sup>	98.4	98.4	98.5	98.9	98.6	98.9	94.8	98.5 <sup>2</sup>	97.5	99.1	99.0	97.8	97.3	100.0	98.3 <sup>*</sup>
	Nov 98.0 <sup>1</sup>	98.4	98.5	98.7	98.6	98.7	98.8	95.2	98.7	98.1	99.3	99.0	97.9	97.6	100.0	98.4 <sup>*</sup>
	Dec 98.7 <sup>1</sup>	98.4	98.7	98.6	98.5	98.8	99.1	96.7	98.8 <sup>2</sup>	98.2	99.3	98.5	97.9	97.9	99.7	98.6 <sup>*</sup>
1996	Jan 98.5	99.4	99.1	98.4	99.2	98.9	99.2	96.3	98.5 <sup>2</sup>	98.6	99.4	98.7	98.3	98.5	99.1	98.8 <sup>*</sup>
	Feb 98.9	99.7	99.2	99.0	99.6	99.3	99.7	96.1	99.2	99.0	99.5	99.2	98.8	98.7	99.3	99.2
	Mar 99.4	100.0	99.5	99.6	99.8	100.0	99.8	98.9	99.7 <sup>2</sup>	99.3	99.6	100.4	99.0	99.1	100.0	99.6 <sup>*</sup>
	Apr 99.9	99.9	100.0	99.9	100.0	100.1	99.8	99.9	99.5 <sup>2</sup>	99.7	99.8	100.7	99.8	99.7	100.4	99.9 <sup>*</sup>
	May 100.2	99.8	100.1	100.1	100.3	100.0	100.7	99.7	99.7	100.1	99.9	100.3	100.2	100.1	100.5	100.1
	Jun 100.3	100.1	100.0	100.1	100.3	100.2	100.1	100.9	99.9 <sup>2</sup>	100.3	99.9	99.8	100.2	100.0	100.1	100.2 <sup>*</sup>
	Jul 99.6	100.2	99.9	99.9	100.3	100.0	100.4	99.1	99.7 <sup>2</sup>	100.2	100.0	99.5	100.4	100.1	99.9	100.1 <sup>*</sup>
	Aug 100.2	99.9	99.9	100.1	99.9	99.8	100.3	99.0	100.3	100.3	100.1	99.3	100.7	100.4	99.6	100.1
	Sep 100.7	99.9	100.1	100.6	100.1	100.1	100.1	101.3	100.8 <sup>2</sup>	100.4	100.1	100.4	100.7	100.7	100.4	100.4 <sup>*</sup>
	Oct 100.6	100.1	100.6	100.8	100.2	100.4	100.2	102.1	100.7 <sup>2</sup>	100.5	100.3	100.7	100.5	100.8	100.4	100.5 <sup>*</sup>
	Nov 100.7	100.4	100.6	100.8	100.0	100.3	100.1	102.2	100.8	100.9	100.6	100.5	100.7	100.8	100.2	100.5 <sup>*</sup>
	Dec 101.0	100.7	100.8	100.7	100.2	100.5	100.3	103.4	101.2 <sup>2</sup>	101.0	100.6	100.4	100.7	101.1	100.2	100.7 <sup>*</sup>
1997	Jan 100.6	100.6	101.3	100.9	100.1	100.7	100.9	102.7	100.3	101.2	100.7	100.4	101.1	101.3	100.4	100.9
	Feb 100.9	101.1	101.2	101.2	100.2	101.0	101.2	102.3	100.9	101.3	101.0	100.6	101.2	101.2	100.4	101.1
	Mar 101.1	101.2	100.8	101.5	100.5	101.1	101.1	104.7	101.0	101.5	100.9	101.6	101.3	101.3	101.0	101.3
	Apr 101.4	101.1	101.1	101.8	100.9	101.1	101.0	105.6	101.1	101.6	100.9	101.7	101.4	101.3	101.7	101.4
	May 101.8	101.1	101.6	102.4	101.2	101.2	101.4	106.1	101.1	101.9	101.0	101.9	102.1	101.4	101.8	101.6
	Jun 102.0	101.1	101.6	102.6	101.4	101.2	101.6	106.5	101.4	101.9	101.1	101.3	101.8	101.4	101.8	101.7
	Jul 101.6	101.1	101.8	102.0	101.4	101.1	101.9	104.3	101.2	101.9	101.3	101.4	101.8	101.6	101.6	101.7
	Aug 102.2	101.2	101.6	102.1	101.6	101.4	102.0	104.5	100.9	101.9	101.5	101.8	102.3	102.1	101.7	101.9
	Sep 102.5	101.1	101.7	102.5	101.7	101.6	101.7	106.3	101.4	102.0	101.8	102.9	102.2	102.6	103.0	102.1
	Oct 102.6	101.2	101.8	102.4	101.9	101.5	101.6	106.8	101.5	102.4	102.0	103.0	102.1	102.6	103.1	102.2
	Nov 102.7	101.5	101.9	102.5	101.8	101.7	101.5	107.3	101.9	102.7	102.1	103.0	102.6	102.7	102.9	102.3
	Dec 102.8	101.7	101.7	102.4	101.8	101.7	101.7	108.1	102.2	102.8	102.1	102.6	102.8	103.0	102.9	102.4

(1) Eurostat estimates based on the Interim Index of Consumer Prices, adjusted for the effect of the different formula used in the HICP to aggregate prices at the most basic level. These estimates have been produced to give a broad estimate of trend. They are not on the same basis as later figures.  
(2) Eurostat estimates. Monthly figures are only available from the start of 1997.  
(\*) Eurostat estimates.

Source: ONS / Eurostat

**Table 2: HICP percentage change over 12 months**

	United Kingdom	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Irish Republic	Italy	Luxembourg	Netherlands	Portugal	Spain	Sweden	EU 15 average
	CJYR	C LNL	C LNM	C LNN	C LNO	C LNP	C LNQ	C LNR	C LNT	C LNU	C LNV	C LNW	C LNY	C LNZ	C LOA	C LNX
1996	2.5 <sup>1</sup>	1.8	1.8	1.9	1.1	2.1	1.2	7.9	2.2 <sup>2</sup>	4.0	1.2	1.4	2.9	3.6	0.8	2.5 <sup>2</sup>
1997	1.9	1.2	1.5	2.0	1.2	1.3	1.5	5.4	1.2 <sup>2</sup>	1.9	1.4	1.9	1.9	1.9	1.9	1.7 <sup>2</sup>
1996	Jan 2.8 <sup>1</sup>	1.6	1.3	1.2	0.4	2.0	1.3	7.8	2.3 <sup>2</sup>	5.7	1.0	1.1	2.5	3.8	1.2	2.7 <sup>2</sup>
	Feb 2.7 <sup>1</sup>	1.7	1.3	1.4	0.5	2.1	1.2	8.1	2.3	5.3	0.9	1.0	2.5	3.6	1.0	2.6 <sup>2</sup>
	Mar 2.6 <sup>1</sup>	1.9	1.6	1.7	0.8	2.6	1.4	8.6	2.4 <sup>2</sup>	4.7	1.0	1.5	2.3	3.3	1.2	2.6 <sup>2</sup>
	Apr 2.5 <sup>1</sup>	1.8	2.0	1.7	1.0	2.5	1.2	8.5	1.9 <sup>2</sup>	4.6	1.2	1.6	2.6	3.4	1.0	2.6 <sup>2</sup>
	May 2.3 <sup>1</sup>	1.6	2.0	1.6	1.2	2.6	1.3	8.3	1.9	4.4	1.2	1.4	3.1	3.8	1.0	2.6 <sup>2</sup>
	Jun 2.5 <sup>1</sup>	1.7	1.9	1.8	1.1	2.5	1.1	7.9	1.9 <sup>2</sup>	3.9	1.1	1.1	3.4	3.6	0.8	2.4 <sup>2</sup>
	Jul 2.3 <sup>1</sup>	1.8	1.5	2.3	1.1	2.5	1.2	8.0	1.9 <sup>2</sup>	3.6	1.2	1.5	3.6	3.7	0.9	2.4 <sup>2</sup>
	Aug 2.3 <sup>1</sup>	1.5	1.2	2.2	1.0	1.7	1.2	7.7	2.0	3.5	1.3	1.2	3.5	3.7	0.6	2.2 <sup>2</sup>
	Sep 2.3 <sup>1</sup>	1.4	1.5	2.1	1.2	1.6	1.1	7.7	2.3 <sup>2</sup>	3.3	1.1	1.4	3.3	3.6	0.5	2.2 <sup>2</sup>
	Oct 2.5 <sup>1</sup>	1.7	2.2	2.3	1.3	1.8	1.3	7.7	2.2 <sup>2</sup>	3.1	1.2	1.7	2.8	3.6	0.4	2.3 <sup>2</sup>
	Nov 2.8 <sup>1</sup>	2.0	2.1	2.1	1.4	1.6	1.3	7.4	2.1	2.9	1.3	1.5	2.9	3.3	0.2	2.2 <sup>2</sup>
	Dec 2.3 <sup>1</sup>	2.3	2.1	2.1	1.7	1.7	1.2	6.9	2.4 <sup>2</sup>	2.9	1.3	1.9	2.9	3.3	0.5	2.1 <sup>2</sup>
1997	Jan 2.1	1.2	2.2	2.5	0.9	1.8	1.7	6.6	1.8 <sup>2</sup>	2.6	1.3	1.7	2.8	2.8	1.3	2.2 <sup>2</sup>
	Feb 2.0	1.4	2.0	2.2	0.6	1.7	1.5	6.5	1.7	2.3	1.5	1.4	2.4	2.5	1.1	2.0
	Mar 1.7	1.2	1.3	1.9	0.7	1.1	1.3	5.9	1.3 <sup>2</sup>	2.2	1.3	1.2	2.3	2.2	1.0	1.7 <sup>2</sup>
	Apr 1.5	1.2	1.1	1.9	0.9	1.0	1.2	5.7	1.6 <sup>2</sup>	1.9	1.1	1.0	1.6	1.6	1.3	1.5 <sup>2</sup>
	May 1.6	1.3	1.5	2.3	0.9	0.9	1.4	5.4	1.4	1.8	1.1	1.6	1.9	1.3	1.3	1.5
	Jun 1.7	1.0	1.6	2.5	1.1	1.0	1.5	5.6	1.5 <sup>2</sup>	1.6	1.2	1.5	1.6	1.4	1.7	1.6 <sup>2</sup>
	Jul 2.0	0.9	1.9	2.1	1.1	1.1	1.5	5.2	1.5 <sup>2</sup>	1.7	1.3	1.9	1.4	1.5	1.7	1.6 <sup>2</sup>
	Aug 2.0	1.3	1.7	2.0	1.7	1.6	1.7	5.6	0.6	1.6	1.4	2.5	1.6	1.7	2.1	1.8
	Sep 1.8	1.2	1.6	1.9	1.6	1.5	1.6	4.9	0.6 <sup>2</sup>	1.6	1.7	2.5	1.5	1.9	2.6	1.8 <sup>2</sup>
	Oct 2.0	1.1	1.2	1.6	1.7	1.1	1.4	4.6	0.8 <sup>2</sup>							

**Table 3: Weights used for the HICP in 1996 and 1997**

		1996	1997			1996	1997
<b>HICP (Overall index)</b>	<b>CHZQ</b>	1000	1000	<b>05.4 Glassware, tableware and household utensils</b>	<b>CJVJ</b>	7	7
01 Food and Non-Alcoholic Beverages	<b>CHZR</b>	156	152	<b>05.5 Tools and equipment for house and garden</b>	<b>CJVK</b>	9	9
02 Alcoholic Beverages and Tobacco	<b>CHZS</b>	70	71	<b>05.6 Goods and services for routine maintenance</b>	<b>CJVL</b>	17	17
03 Clothing and Footwear	<b>CHZT</b>	67	68	05.6.1 Non-durable household goods	<b>CJXK</b>	9	9
04 Housing, Water, Electricity, Gas and Other Fuels	<b>CHZU</b>	134	133	05.6.2 Domestic services and home care services	<b>CJXL</b>	8	8
05 Household Furnishings, Equipment, and Maintenance	<b>CHZV</b>	90	91	<b>07.1 Purchase of vehicles</b>	<b>CJVM</b>	58	56
06.A Health - paid by the consumer and not reimbursed	<b>CHZW</b>	7	7	07.1.1A New motor cars	<b>CJXN</b>	13	12
07 Transport	<b>CHZX</b>	154	155	07.1.1B Second-hand motor cars	<b>CJXO</b>	43	42
08 Communications	<b>CHZY</b>	21	21	07.1.2/3 Motor cycles and bicycles	<b>CJXP</b>	2	2
09 Recreation and Culture	<b>CHZZ</b>	131	130	<b>07.2 Operation of personal transport equipment</b>	<b>CJVN</b>	76	79
10.A Education - commonly paid by consumers	<b>CJUU</b>	11	11	07.2.1 Spares, parts and accessories	<b>CJXQ</b>	8	8
11 Hotels, Cafes and Restaurants	<b>CJUV</b>	111	112	07.2.2 Fuels and lubricants	<b>CJXR</b>	40	43
12 Miscellaneous Goods and Services	<b>CJUW</b>	48	49	07.2.3 Maintenance and repairs	<b>CJXS</b>	21	21
<b>01.1 Food</b>	<b>CJUX</b>	141	137	07.2.4A Other services	<b>CJXT</b>	7	7
01.1.1 Bread and cereals	<b>CJWB</b>	25	25	<b>07.3 Transport services</b>	<b>CJVO</b>	20	20
01.1.2 Meat	<b>CJWC</b>	34	34	07.3.1A Passenger transport by railway	<b>CJXU</b>	6	6
01.1.3 Fish	<b>CJWD</b>	6	5	07.3.2A Passenger transport by road	<b>CJXV</b>	11	11
01.1.4 Milk, cheese and eggs	<b>CJWE</b>	21	21	07.3.3A Passenger transport by air	<b>CJXW</b>	2	2
01.1.5 Oils and fats	<b>CJWF</b>	4	4	07.3.4A Passenger transport by sea and inland waterway	<b>CJXX</b>	1	1
01.1.6 Fruit	<b>CJWG</b>	9	9	<b>08.1 Communications</b>	<b>CJVP</b>	21	21
01.1.7 Vegetables including potatoes and tubers	<b>CJWH</b>	20	17	08.1.1 Postal services	<b>CJYA</b>	2	2
01.1.8 Sugar, jam, syrups, chocolate, confectionery	<b>CJWI</b>	15	15	08.1.2/3 Telephone and telefax equipment and services	<b>CJYB</b>	19	19
01.1.9 Food products nec <sup>1</sup>	<b>CJWJ</b>	7	7	<b>09.1 Equipment and accessories, including repairs</b>	<b>CJVQ</b>	46	45
<b>01.2 Non-alcoholic beverages</b>	<b>CJUY</b>	15	15	09.1.1 Reception and reproduction of sound and pictures	<b>CJYC</b>	8	8
01.2.1 Coffee, tea and cocoa	<b>CJWK</b>	5	5	09.1.2 Photographic, cinematographic and optical equipment	<b>CJYD</b>	5	4
01.2.2 Mineral waters, soft drinks and juices	<b>CJWL</b>	10	10	09.1.3 Data processing equipment	<b>CJYE</b>	5	5
<b>02.1 Alcoholic beverages</b>	<b>CJUZ</b>	35	35	09.1.5 Games, toys, hobbies, sports and camping	<b>CJYG</b>	8	8
02.1.1 Spirits	<b>CJWM</b>	10	10	09.1.6 Recording media for pictures and sound	<b>CJYH</b>	4	4
02.1.2 Wine	<b>CJWN</b>	15	15	09.1.7 Gardening	<b>CJYI</b>	6	6
02.1.3 Beer	<b>CJWO</b>	10	10	09.1.8 Pets	<b>CJYJ</b>	9	9
<b>02.2 Tobacco</b>	<b>CJWP</b>	35	36	09.1.9 Repair of equipment for leisure and culture	<b>CJYK</b>	1	1
<b>03.1 Clothing</b>	<b>CJVA</b>	55	56	<b>09.2A Recreational and cultural services</b>	<b>CJVR</b>	34	34
03.1.2 Garments	<b>CJWR</b>	50	51	<b>09.3 Newspaper, books and stationery</b>	<b>CJVS</b>	20	20
03.1.3 Other clothing and clothing accessories	<b>CJWS</b>	4	4	<b>09.4 Package holidays</b>	<b>CJVT</b>	31	31
03.1.4 Dry-cleaning, repair and hire of clothing	<b>CJWT</b>	1	1	<b>11.1 Catering</b>	<b>CJVV</b>	4	4
<b>03.2 Footwear, including repairs</b>	<b>CJVB</b>	12	12	11.1.1 Restaurants and cafes	<b>CJYU</b>	107	108
<b>04.1 Actual rentals for housing</b>	<b>CJVC</b>	55	55	11.1.2 Canteens	<b>CJYL</b>	100	101
<b>04.3 Regular maintenance and repair of the dwelling</b>	<b>CJVD</b>	19	19	<b>11.2 Accommodation services</b>	<b>CJYM</b>	7	7
04.3.1 Products for maintenance and repair	<b>CJWU</b>	8	8	<b>12.1 Personal care</b>	<b>CJYV</b>	26	27
04.3.2 Services for maintenance and repair	<b>CJWV</b>	11	11	12.1.1 Hairdressing and personal grooming establishments	<b>CJYN</b>	7	7
<b>04.4A Other services relating to the dwelling</b>	<b>CJVE</b>	15	15	12.1.2 Appliances, articles and products for personal care	<b>CJYO</b>	19	20
<b>04.5 Electricity, gas and other fuels</b>	<b>CJVF</b>	45	44	<b>12.2 Personal effects nec<sup>1</sup></b>	<b>CJVX</b>	9	9
04.5.1 Electricity	<b>CJXA</b>	22	22	<b>12.4A Insurance</b>	<b>CJYV</b>	6	6
04.5.2 Gas	<b>CJXB</b>	20	19	12.4.2A Contents insurance	<b>CJYP</b>	2	2
04.5.3 Liquid fuels	<b>CJXC</b>	1	1	12.4.4A Car insurance	<b>CJYQ</b>	4	4
04.5.4 Solid fuels	<b>CJXD</b>	2	2	<b>12.5A Banking services nec<sup>1</sup></b>	<b>CJVZ</b>	2	2
<b>05.1 Furniture, furnishing, decorations, carpets</b>	<b>CJVG</b>	38	39	<b>12.6A Other services nec<sup>1</sup></b>	<b>CJWA</b>	5	5
05.1.1 Furniture and furnishings	<b>CJXF</b>	28	29				
05.1.2 Carpets and other floor coverings	<b>CJXG</b>	10	10				
<b>05.2 Household textiles</b>	<b>CJVH</b>	6	6				
<b>05.3 Household appliances, fitting and repair</b>	<b>CJVI</b>	13	13				
05.3.1/2 Major appliances and small electric goods	<b>CJXI</b>	11	11				
05.3.3 Repair of household appliances	<b>CJXJ</b>	2	2				

Note new weights are introduced with the index for January each year  
(1) nec - not elsewhere covered

Source: ONS