

FEATURE

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Keeping the RPI and CPI basket of goods and services up to date

SUMMARY

As part of a process of continual improvement, and to help ensure that the Consumer Prices Index (CPI) and Retail Prices Index (RPI) are representative of consumer spending patterns, the items that are priced in compiling the indices are reviewed each year. This article describes the review process and explains how and why the various items in the CPI and RPI baskets are chosen.

The shopping basket

The most useful way to think about both the CPI and RPI indices is to imagine a 'shopping basket' covering the full range of goods and services on which people typically spend their money. As the prices of the various items in the basket change over time, so does the total cost of the basket. Movements in the CPI and RPI indices represent the changing cost of this representative shopping basket.

It would be both impractical and unnecessary for this shopping basket to contain every item bought by every household in compiling the CPI and RPI. The prices of similar items can reasonably be assumed to move in line with one another in response to market forces. It is therefore sufficient to compile the index using prices of a large and varied sample of products in selected locations. The goods and services for which prices are recorded are called 'representative items'. These items are held constant for one year at a time, and are reviewed annually to ensure that they remain representative of consumers' expenditure patterns, and take account of the development of new goods and services. For example, purchases of vinyl records were common during the 1960s and 1970s. However, with the advent of compact discs, records now form a niche market and have not been included as an item since the early 1990s.

The review process also helps to ensure that the indices reflect longer-term trends in consumer spending patterns. For example, the proportion of household expenditure

devoted to leisure services has risen steadily. This is reflected both in an increasing weight for this component in the CPI and RPI, and the addition of new items to the basket in recent years to improve measurement of price changes in this area; examples include entrance fees to a wide range of sporting venues and subscriptions to recreational and sporting facilities, including leisure centres and health clubs/gyms.

Representative items

There are some individual goods and services where typical household expenditure is sufficiently large that they merit inclusion in the basket in their own right; examples include car purchase and repair, petrol, and utility charges such as those for telephone, electricity and gas supply.

However, more commonly, it is necessary to select a sample of specific goods and services that can give a reliable measure of price movements for a broader range of similar items. For example, price changes for a power drill might be considered representative of price changes for other power tools. The selection of these representative items is judgmental. For each product grouping, a number of items are selected for pricing whose price movements, taken together, provide a good estimate of the overall change in prices for the group as a whole. For example, there are around 20 representative items in the CPI furniture and furnishings class, from bedroom wardrobes to kitchen units, which are used each month to give an overall estimate of price changes for all furniture products.

Selecting the representative items

A number of factors need to be taken into account when choosing representative items. The number of items chosen to represent each product group within the CPI and RPI depends both on the weight, that is, expenditure of the group, and also the variability of price changes between the various items that could be selected to represent the group (reflecting, for example, the diversity of products available). Intuitively, it makes sense to choose more items in product groups where spending is high. However, if price movements of all possible items in the group are very similar as in the case of cigarettes, it is sufficient to collect prices for only a few. In contrast, if price movements of all the possible items are very different, prices will be needed for many representative items to get a reliable overall estimate of price change for the group.

For example, in the case of the fuels and lubricants class in the CPI, it is sufficient to monitor just three representative items: ultra low sulphur (unleaded) petrol, ultra-low sulphur diesel and motor oil. Total household spending in this area is high but these three items provide a reliable estimate of price changes for all fuel and lubricant products because, taken together, these three items cover 99 per cent of spending in this category. In contrast, there are around 15 items representing fruit products in the CPI and RPI baskets, despite the fact that spending on fruit is much lower. This reflects the greater diversity in type and variety of fruit available for purchase. As a consequence, there is considerable variation in price changes for these different fruits, as well as between fruits sold in different shops.

Analysis of the variability of prices in relation to the weight of a product category may indicate that more or fewer items are required, but it cannot tell us which items should be priced. Choosing a particular set of items to represent each category therefore remains a matter of judgement. CPI and RPI commodity groupings are regularly reviewed with the aim that all significant items or distinct markets where consumers' expenditure exceeds around £400 million annually are explicitly represented in the basket, except where those items are judged to be adequately represented by other items in the basket. Conversely, where spending on items falls below £100 million, there should be good reason for their continuing inclusion in the basket. For example, while

spending on acoustic guitars and power drills is relatively low, both are included in the basket to represent wider markets (musical instruments and power tools respectively) that would otherwise not be covered explicitly. Trends in expenditure, as well as the latest available figures, help to inform the decisions in all cases.

This focus on relative expenditures in determining the contents of the basket partly reflects the wealth of data that is available describing household spending patterns. One major source of information comes from the diaries filled in by people taking part in the ONS Expenditure and Food Survey, a continuous survey of over 6,000 households each year. This is supplemented by detailed analyses of trends presented by market research companies, trade journals and press reports. Changes in the retail environment are also provided by Research International, a market research company which collects many of the prices on behalf of ONS. Together, these various sources of information help to ensure the goods and services that the average household spends its money on are appropriately represented in the CPI and RPI baskets.

Finally, from a practical viewpoint, the items must be easily obtainable by price collectors, to ensure that estimates of price change are based on an adequate number of price quotes collected throughout the UK.

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