INSTITUTO NACIONAL DE ESTADISTICA

Subdirectorate General for Statistics
Interims and Prices

New methodology for the processing of seasonal items in the Harmonised Index of Consumer Prices (HICP)

The objective of the Harmonised Index of Consumer Prices (HICP) is to provide a common measurement of inflation that enables making international comparisons and calculating the Consumer Price Index of the EU (EUCPI) and the Consumer Price Index of the EMU (EMUCPI).

This is an indicator whose importance lies in the high degree of comparability of the measurement of inflation, for which the harmonisation of the methodologies is fundamental. In fact, since the year 1995, when the EU Council Regulation entered into force for the implementation of the HICP, this indicator has increased its capacity for comparability as the methodological treatments comprising its computation have been harmonised.

In this process, the next methodological element whose treatment is to be harmonised affects seasonal items. **In January 2011, the measures proposed by the new EU Regulation will be implemented[1] for the common treatment of these products in the computation of the HICP.**

The Regulation considers fish, fresh fruit, fresh vegetables, clothing and footwear to be seasonal items. These are products whose particularity is that they are not available in the market every month of the year, which makes it difficult to monitor their prices for the computation of this indicator. The proposed methodology implies a substantial change with regard to the treatments used currently in the HICP in Spain, and therefore, its implementation will have important effects on the computation of this indicator.

This document details the new methodology what will be applied in this type of product, and the consequences of its implementation in the HICP of Spain. Likewise, given the differences that will occur between the HICP and the CPI after the implementation of this methodology, the last section of the document informs on the publication of the flash estimate of the CPI, as of January 2011.

[1] Commission Regulation (EC) no. 330/2009, of 22 April 2009, establishing the detailed norms for the implementation of Council Regulation (EC) no. 2494/95 regarding the minimum norms for the treatment of seasonal products in the HICP.

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1. The new treatment of seasonal items

In the area of the HICP, seasonal items are considered to be those goods or services that cease to be available for sale during certain periods throughout the year, and this situation is repeated cyclically.

The fact that the item is not available on the market makes it impossible to follow the price thereof that had been collected during the months when it was available. This makes it necessary to apply methods enabling continuity of the price series and calculating the indices in the time period in which the product is unavailable.

Thus, for example, a summer dress will be available in establishments during the period between the months of March and August; the autumn/winter season begins in the month of September, and the summer dress will have disappeared from the stores. As a result of this, the price of the summer dress, which was recorded month-by-month, will not be available starting in September, preventing the calculation of the price index for this product.

The methodology that the EU Regulation proposes is based on the estimate of the price in the months in which the seasonal product is not found on the market. This estimate is carried out using the evolution of the prices of those products, in the same category, that are found on the market.

Continuing with the example, in the period during which the summer dress is out of season (from the month of September to the month of February), its price should be estimated with the information obtained from the remaining garments that do have prices during said period (most of them correspond to winter season garments).

In this way, the price of the summer dress will evolve as will the winter garments during said season. We thus arrive at an estimate of the price when it does not exist.

The case of fresh fruit and fresh vegetables is similar to that of the dress, although with different seasonal schemes, according to the product in question. Thus, each month, some fruit or vegetable ceases to be sold, due to being out of season, while others begin to be sold.

2. Consequences of the new methodology

The new methodology implies a substantial change with regard to that which is currently used in the HICP. The consequences of its application may be one of two types:

– **Change in the evolution of the HICP.** The evolution of the prices of the affected divisions will have a profile with **rises and drops that are much more intense**, since the prices that are not collected will be estimated, something that is not done in the current treatments of the HICP.

– **Break in the series.** The indices for the year 2011, in which the Regulation will be implemented, will not be In keeping with those published in previous years.

2.1. Change in the evolution of the HICP

The incidence is different according to the group of articles concerned.

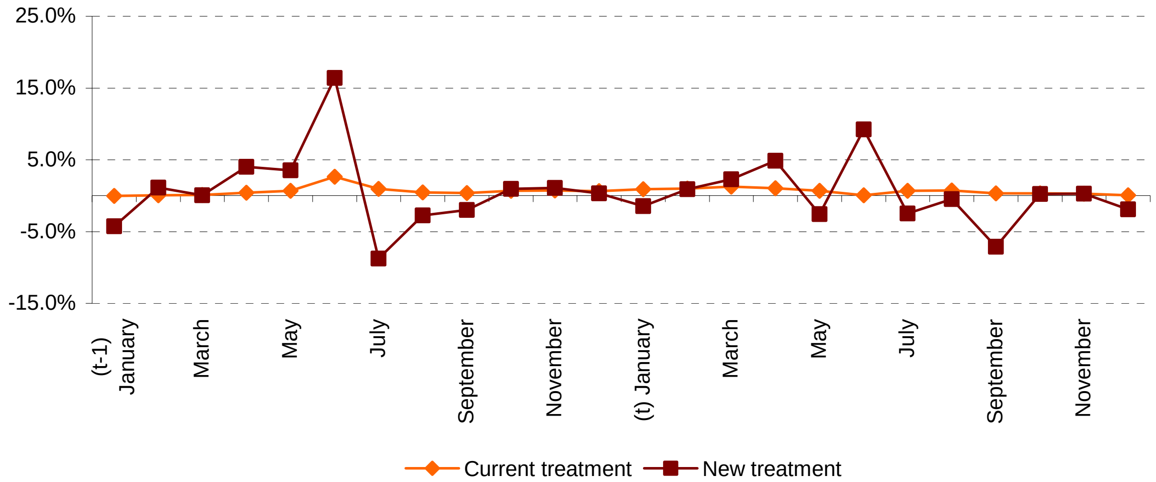
Fruit and vegetables

The methodology currently applied for this set of articles in the HCPI gives priority to estimating the annual price tend as compared with the measuring of monthly fluctuations inherent in this group of articles.

In turn, as has been said, the new methodology estimates the prices of missing products, which implies a greater fluctuation in the evolution of prices month-by-month.

The following graph simulated the difference between the results of both methods.

Monthly changes. ***Fresh fruit and vegetables***



It can be seen in the graph how the new method provides a profile with greater monthly fluctuations, in contrast with the smooth evolution with the method used thus far.

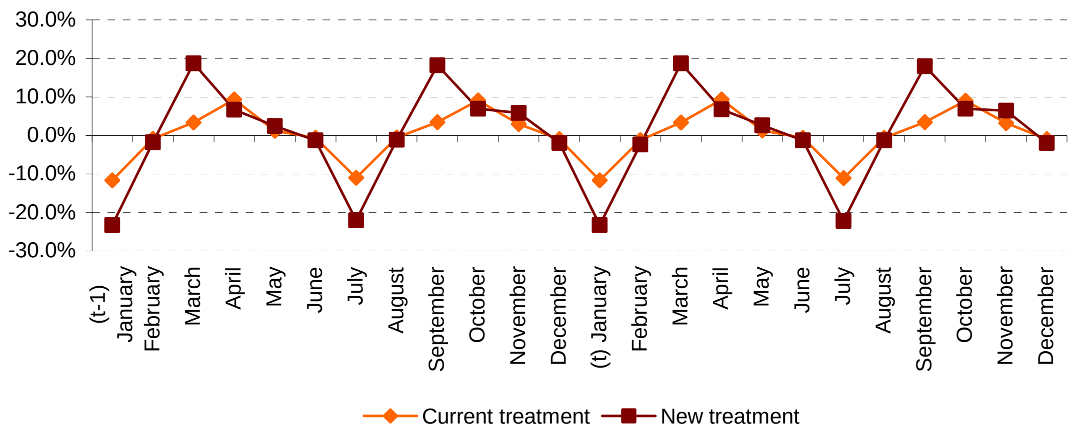
CLOTHING AND FOOTWEAR

Unlike fresh fruit and vegetables, all clothing and footwear articles belonging to the same season have the same commercialisation classification on the market (summer garments are available and disappear from the market at the same time, and the same happens with winter garments).

Current handling of the HICP consists of considering the price change to be zero in the months in which products are not for sale; when the season starts again, product prices are once again collected.

In the new way of handling prices, however, it proposes estimating them out of season. Therefore, classification of the evolution of prices differs considerably from the current one, as cam be observed in the following simulation:

Monthly changes. *Clothing and footwear*



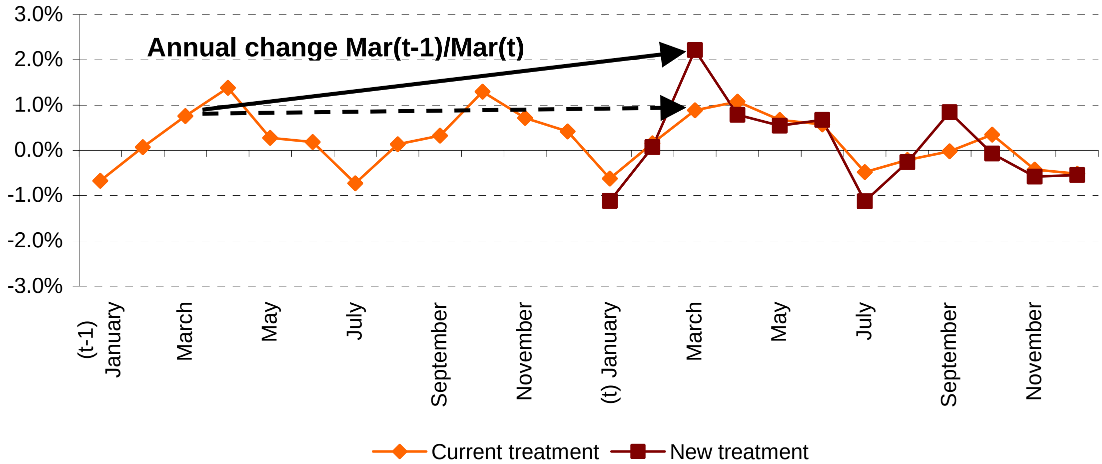
It can be seen how both price increases at the start of seasons, and decreases in sales periods are approximately double measures with the new treatment.

2.2 Break in the series

The methodological change, as shown, has a considerable impact on the results of the HICP. Therefore, its implementation in January 2011 will entail a break with the HICP series published until December 2010, since the indices calculated using the new methodology are not in keeping with the one that was valid until 2010.

The main consequence of this fact is that annual changes during 2011, calculated from the indices generated using different methodologies, provide incoherent results.

Break in the series. Overall index



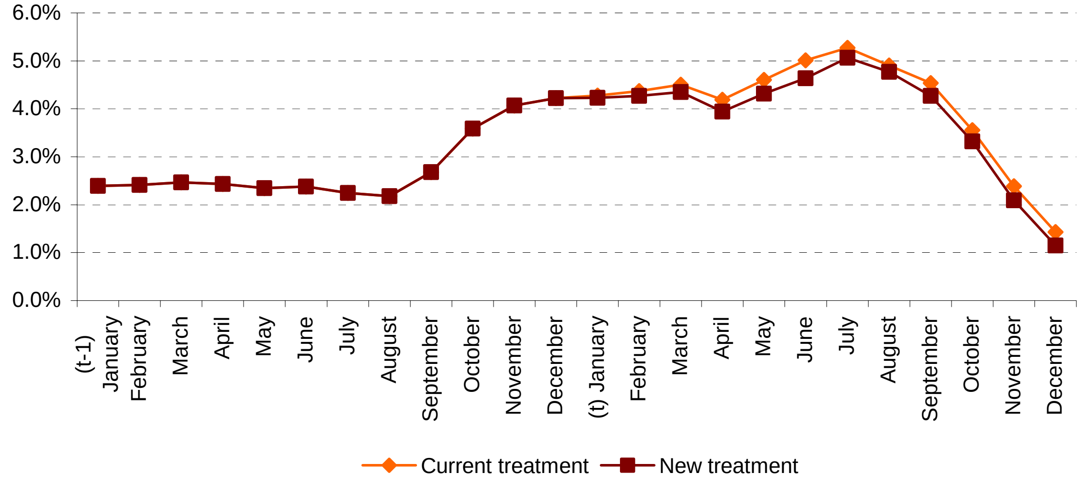
The graph simulates the evolution of the monthly changes of the overall index. It can be seen, for example, how in March in t-1 the monthly change is close to 1 per cent, similar to that of March in t, results in the annual comparison being stable (broken arrow). However, if the comparison is made with the monthly change measured with the new method, the latter exceeds 2 per cent, resulting in an increase in the annual comparison due to the fact that the calculation methods are different in both years (solid arrow).

However, in the scope of the CPI harmonisation process, it is considered that when methodological changes occur which imply non-comparability, HICP data published during the preceding twelve months may be reviewed, in order to provide consistent annual changes in the year of implementation..

Thus, **the HICP data published during 2010 will be reviewed, applying the new methodology, in order to be able to calculate the annual changes from January until December 2011 in a coherent manner.**

It should be noted that the review only affects the year 2010, in order to overcome the moment of breakage and be able to calculate consistent annual changes in 2011.

Annual changes. (revised series) Overall index



3. Publication of the CPI flash estimate

Currently, the methodological difference between the CPI and the HICP are taken solely from a number of conceptual questions, which minimally affect their respective weighting structures. On the one hand, the HICP estimates the expenditure taking domestic consumption (that made within Spain by resident and non-resident households), whereas the CPI does so taking into account the concept of national consumption (expenditure by resident households within and outside Spain).

Similarly, in articles such as insurance, for weighting the HICP uses expenditure by households on their insurance premium, with payouts removed; In the case of the CPI, this expenditure is measured solely taking into account expenditure relating to the premium, without removing payouts. In turn, purchases of used cars also is also treated differently in order to calculate weighting: The HICP only considers transactions made between the business and private sectors, whereas the CPI includes all transactions, including those made between individuals.

With these minimal methodological differences, evolution of both indicators is similar, their annual change on occasions differing by one tenth. For this reason, the HICP Flash Estimate published by the INE on the penultimate day of each month is likened by many users to that of the CPI.

However, since January 2011, although both indicators will continue to bear many similarities, the large degree of difference stemming from handing of seasonal products will lead to the results differing more.

For this reason, **the INE considers it appropriate to begin publishing the CPI Flash Estimate**, which will supplement the HICP one, which has been published the year 2004. In this way, users will be provided with complete information on national inflation rates and which will serve as a comparative reference with EU countries.

Regarding the possible application of the new treatment of seasonal articles in the CPI, given that it involves a substantial change in the methodology of the indicator, its pertinence in the process of base change which is forecast to be implemented in January 2012.