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Methodological Innovations in the CPI

The CPI extends energy sector coverage with the incorporation of the free market for gas and electricity.

The main source for the weighting structure now becomes the National Accounts

In 2023, prices collection using electronic devices will be implemented

The Consumer Price Index (CPI), published today by the INE, incorporates methodological innovations to improve indicator quality and bring it into line with European Union regulations.

These represent significant changes in the measurement of the CPI, and specific developments have been necessary following the implementation of the base change, last year.

The first concerns the extension of the coverage of the gas and electricity markets, with the incorporation of the free market part of both sectors. For this extension, it has been necessary to carry out a process of adaptation of the information on free market prices of both sectors to make it compatible with the methodological requirements of the CPI.

The second methodological change affects one of the CPI's structural elements: the weighting structure. As of 2023, the main source used for calculation will be the National Accounts (NA), replacing the Family Budget Survey (FBS). The CPI is thus adapted to the criteria established by European regulations, which set the year 2023 for its entry into force.

Added to these two methodological changes is another that has to do with the procedure used to carry out the survey. This refers to the collection of prices by means of electronic devices. This change will take effect throughout 2023. This simplifies the process of obtaining information and speeds up its processing.

This development in the collection process is in line with the line of action aimed at adapting the CPI to changes in the market in order to more accurately capture price movements and reduce the burden on respondents. To this end, as announced last year, the INE will continue to work to extend the use of automated information collection methods in more sectors, through the use of company databases (*scanner data*) and automated internet collection (*web scraping*).

As usual, the incorporation of these changes will also occur in the Harmonized CPI (HCPI). The INE thus complies with the plan set forth in its Base Change Project, and places both indicators among the most advanced in neighbouring countries.

Inclusion of the free market for electricity and gas

Two of the main elements that make up the energy sector in the CPI are electricity and gas. In both cases, the rates considered for the calculation of the indicator referred exclusively to the regulated market. However, due to changes that have taken place in the sector in recent years, it was considered necessary to incorporate the free market to adequately represent the evolution of sector prices.

This extension of coverage could not be undertaken in the year 2022 due to the fact that the information was not available with a sufficient level of detail, nor with the necessary technical criteria that would allow the application of a methodology consistent with the requirements demanded in the CPI calculation.

Therefore, throughout the year 2022 it was necessary for the main distribution companies to adapt their information processing systems to meet the methodological requirements of the CPI. As a result of this work, the necessary information became available, which now makes it possible to incorporate the free electricity and gas markets into the CPI calculation with full guarantees. The INE is grateful for the cooperation of the companies, whose work has been essential in order to develop the ideal method for incorporating the free market in both sectors.

We should note that this incorporation of the free markets for electricity and gas in CPI calculation is supported by Eurostat, the statistical office of the European Union.

Change in the main source for obtaining weightings

One of the most important elements in keeping the CPI in line with changes in consumer behaviour is the annual revision of its weighting structure. Every year the weight or importance of its components is updated to keep it current. In addition, the complete structure is updated every five years for all levels of disaggregation.

To carry out these revisions, the CPI has traditionally used the HBS as a source of information. This was completed using data from the National Accounts, the CPI itself and other sources provided by the different sectors.

However, Regulation 2020/1148 of the European Commission establishes that from January 2023 onwards, the National Accounts must be used as the main source, replacing the HBS.

Therefore, the overall CPI weighting structure in force starting in January 2023 is obtained from the Household Final Consumption Expenditure from the National Accounts. This structure is complemented by HBS data, which continues to be used to drill down to more detailed functional and geographical levels, and by information from the supply side of some sectors.

The following table shows the weightings of the twelve large CPI groups for 2023 and their comparison with those of 2022.

Group weightings (percent)

Group	2022	2023
01. Food and non-alcoholic beverages	22.6	19.6
02. Alcoholic beverages and tobacco	3.1	4.0
03. Clothing and footwear	6.0	3.9
04. Housing	14.2	12.7
05. Furnishings, household equipment and routine		
maintenance of the house	5.8	5.8
06. Medicine	4.4	6.0
07. Transport	13.0	13.8
08. Communications	3.6	3.2
09. Leisure and culture	6.4	7.9
10. Teaching	1.6	2.0
11. Hotels, cafes and restaurants	13.0	13.2
12. Other goods and services	6.3	7.8
TOTAL	100	100

The detailed information regarding the new weightings is available on the INE website (www.ine.es).

Implementation of computerized collection

Within the project to modernise the instruments and procedures for obtaining information for the CPI, the use of electronic devices for the collection of prices in establishments is of paramount importance.

It should be pointed out that the process of surveying establishments not only involves noting down the prices of the products in the sample; it is accompanied by recording of additional information that is of vital importance to correct follow-up, such as any alteration that has occurred in the product since the previous visit, or proposals for a change of product or establishment if these have ceased to be representative or have disappeared from the market.

Up to now, all this information had been noted on paper questionnaires, which were subsequently recorded at INE's offices for processing and the start of the validation, control and index calculation process. The implementation of computerised collection facilitates and automates this entire process, which results in faster availability of the recorded information, a reduction in potential recording errors and greater efficiency in the processing of the additional information collected