User oriented quality report

Consumer Price Index

Generally

The Consumer Price Index (CPI) in Greece is being compiled since 1959, by the Hellenic Statistical Authority (ELSTAT). Up to the year 2000, the CPI referred to the urban areas of the country, while from 2001 onwards it refers to the whole country.

Purpose of the index

The purpose of the Consumer Price Index is to measure the general level of prices of goods and services, purchased by the average Greek household.

Legal basis

Law 3832/10

Reference period

Month

Base

December of the previous year

Reference year

2009=100.0

Chain linking Index

Until 2013, the weights underlying the CPI were revised periodically (usually every five years) on the basis of the results of the latest, Household Budget Survey (HBS) which was conducted every 5 years. Until December 2013, the CPI was a fixed basis index with the reference year being 2009=100.0. From January 2014 onwards, the revised CPI index follows the chain linking method where new weights are introduced annually with every year having as a base the December of the previous year. The weights are estimated according to the most recent available data of Household Budget Survey, which is now conducted on an annual base extrapolated in the prices of December.

The CPI adjusted on an annual basis to the latest consumption expenditure pattern of the private households of the country, ensures the representativity of goods and services, which compose the "basket" of purchases of the average household.

Geographical and population coverage of the CPI

The CPI refers to the whole of the country covering the urban, semi-urban and rural areas.

As regards the population coverage of the Index, in terms of the weights, it covers the resident households of the territory excluding collective households (hospital homes for the elderly, boarding homes, prisons, etc.) and non-resident households (tourists, and expatriates visiting home) in the country.

Classification of items

The classification of items (goods and services) that are included in the index is based on the international classification COICOP (Classification of Individual consumption by Purpose) and, in particular, as this has been adapted to the needs of the HICPs of the EU Member States, thus creating the COICOP5/HICP classification.

Weights of items

From December 2013, the weights of items are updated every year, on the basis of the most recent available data from the Household Budget Survey. The weights are calculated the share (‰) of the expenditures for each group, subgroup and item (good or service) to the total household expenditure of the average household.

Price collection Cities

The price collection of the items of CPI takes place in 27 cities, aiming at a representative coverage of the 13 Regions of the country. The selection criteria of the price collection cities are the size and the particularities of their markets, the possibility of continuous price collection and the comparability of the index and the required cost of price collection.

Population weights

The calculation of the population weights by regions is based on the population data of the General Population Census for the year 2011 and the expenditure data of the HBS by regions for the years 2012 and 2013.

Selection of items

The composition of the "household basket" i.e. the selection of goods and services which are included in the calculation of CPI will be updated annually from December 2014 using the results of the latest available Household Budget Survey and other market research etc. The chain linking methodology allows the change of items of household basket on an annual basis, in order to ensure the representativeness of items, which take part in the calculation of groups and subgroups of CPI.

Price collection-Outlets

Prices for CPI's items are collected from retail sales outlets, enterprises providing services, street markets etc. (price collection outlets) which are considered representative of the branches of shops, where the households make their purchases in the 27 selected price collection cities. The new methodology allows the renewal of price collection sources in order to maintain their representativeness in the calculation of CPI.

Prices are collected by experienced and well-trained staff of ELSTAT. They visit the selected outlets within a certain time period of a month (monthly prices) or on a certain day of the week (weekly prices) and register the prices into special price collection forms (questionnaires). The collected prices correspond to the prices actually faced by the consumer.

Specification-Substitution of items

All the items, for which prices are collected, are defined by the specification, that is the particular characteristics which determine the quality, the trade show and the identity, in general, of goods (such as brand, weight, package etc), in order to avoid any price variations attributable to differences in the specification.

When a specified item (good or service) is no longer available in the market or has ceased to be important, as regards consumption, then it is replaced by a newly specified item, which has taken its place in the market.

Calculation of the Consumer Price Index

The Consumer Price Index is a Laspeyres-type index and it is calculated based on December of the previous year.

Implementation of formula in five-digit level of COICOP5

Specifically, if the five-digit item h includes q price collected items, then its index in month t of year T, $R_h^{t,T}$, is given by the formula below:

$$R_{h}^{t,T} = R_{h}^{12,T-1} \left[\frac{\sum_{i=1}^{q} w_{i}^{T} R_{i}^{t,T} / R_{i}^{12,T-1}}{\sum_{i=1}^{q} w_{i}^{T}} \right],$$

where:

 $R_{\,\rm h}^{\,12,T-1}\!$ = the index of the five-digit item h, in December of year T-1,

 \mathbf{W}_{i}^{T} = the weight of the price collected item i, in year T,

 $R_i^{t,T}$ =the index of the price collected item i, in month t of year T,

 $R_i^{12,T-1}$ = the index of the price collected item i, in December of year T-1.

A similar methodology is followed for the calculation of indices in the upper levels (two-digit, three-digit and four-digit) of COICOP5 and the calculation of the overall CPI as well.

Publication of data

The available time series of the Consumer Price Index with the same reference year (2009=100.0) starts back from January 1959 onwards.

The CPI data are released each month in the anticipated press release to a pre-defined timetable, which is normally based on the previous years publication dates. These data is posted on the ELSTAT website (www.statistics.gr), under the link "timeseries".

References

Further information concerning the Consumer Price Index can be found in the Methodological Publication CPI (2009=100.0), and also in the information note for CPI of January 2015 which are posted on the homepage of ELSTAT (www.statistics.gr).