

Hungary

A: Identification

Title of the CPI: National Consumer Price Index

Organisation responsible: Hungarian Central Statistical Office (HCSO)

Periodicity: Monthly

Index reference period: December of the previous year = 100

Weights reference period: The weights refer to the household expenditure structure of the t-2 year.

Main uses of CPI: Main inflation indicator used for monetary policy.

B: CPI Coverage

Geographical Coverage

Weights: Nation-wide

Price collection: Nation-wide

Population coverage: Resident households of nationals

Population groups excluded: Institutional households

Consumption expenditure includes:

- Gambling expenditures

Consumption expenditure excludes:

- Foods produced for own final consumption;
- Other goods produced for own final consumption;
- Income in-kind receipts of goods;
- Second hand goods purchased (except cars)
- Direct taxes,
- Charitable donations,

C: Concepts, definitions, classifications and weights

Definition of the CPI and its objectives: CPI is the average measure of change in prices of goods and services bought for the purpose of consumption by the households in Hungary.

Classification: The classification of expenditures on consumption products is defined by the Hungarian Central Statistical Office. Besides the Classification of Individual Consumption by Purpose (COICOP) is used.

Weights include value of consumption from own production: No

Sources of weights: Household expenditure surveys and national accounts.

Frequency of weight updates: Annual

Price updating of weight reference period to the index reference period: Not needed

D: Sample design

Sampling methods:

Localities: Sampling with probability proportional to size (PPS)

Outlets: Sampling with probability proportional to size (PPS)

Products: Purposive sampling

Frequency of sample updates:

Outlets: Annual

Products: Annual

Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples:

Item selection: Approximately 1000 items representing the most important elements of the household consumption were selected by the Central Statistical Office, by concentrated selection. The selected items should represent the price movement of the basic class and should be available for a reasonable length of time.

Outlet selection: The prices are collected in each county's capital. In addition, they are collected in a number of other randomly selected towns. Within each selected locality shops, service places and markets with the biggest turnover and largest assortment of goods are selected. Small shops are also included in the sample. The price observation does not extend to such special forms of commerce as automatic vending, shopping by mail and tax-free shops.

Criteria used for selecting an item variety in the outlet in case of loose specifications provided by the central office: In general, specifications provide detailed descriptions of the characteristics (such as brand, size, fabric/material, and so on) of the surveyed product.

E: Data Collection

Approximate number of localities, outlets and price observations: Localities: 103, Outlets: 9,000, Price observations: 75,000

Frequency with which prices are collected: Monthly.

Reference period for data collection: Prices for all representative items are observed between the 1st and 20th day of every month.

Methods of Price Collection

- Personal data collection
- Telephone interview
- Internet

Treatment of:

Discounts and sales prices: Discounts and rebates that may apply to the specific products purchased are included; the consumer credit charges are excluded.

Second hand purchases: Only second hand cars are included in the CPI.

Missing or faulty prices: When a price observation is temporarily unavailable in a given month, its price is imputed based upon the price movement of similar products in the same item category in the same geographical area. The estimated (imputed) price shall be used for two months.

Period for allowing imputed missing prices: 2 months

Disappearance of a given type or quality from the market: When a product disappears from the market, a replacement is sought. Price collectors select products with significant market share and where possible the same quality; quality defined in terms of characteristics listed in product description.

Quality differences: The representative items are revised in every year and quality adjustment methods are applied by HCSO.

Appearance of new items: The list of items is reviewed each December, and when new products have gained sufficient market share they are added to the pricing sample.

Treatment of seasonal items and seasonality

Items that have a seasonal character and their treatment: Fruits and vegetables have a seasonal character. HCSO uses fixed annual weights for these items. At individual product level constant annual weights replace the variable seasonal weights according to the implementation of the new Commission Regulation No 330/2009 on the treatment of seasonal products in the HICP. For clothing and footwear, fixed-weight approach in accordance with the Commission Regulation is used.

Seasonal food items: Seasonal food items are included in the CPI using fixed weights approach: the weights are kept constant over the year, while prices of out-of season products are estimated or imputed.

Seasonal Clothing: Seasonal clothing items are included in the CPI using fixed weights approach: the weights are kept constant over the year, while prices of out-of season products are estimated or imputed.

Method to impute the price of seasonal items: Impute the price by using price development of in-season products.

Treatment of housing

Treatment of owner-occupied housing: Not included in the CPI.

F: Computation

Formula used for calculation of elementary indices: The ratio of arithmetic mean prices (Dutot index) (Direct form)

Formula to aggregate elementary indices to higher level indices: Laspeyres methodology with fixed weights is used to aggregate base headings indices to higher levels. Over periods of more than one year, it is an annually chained Laspeyres-type index. The index formula used at is the following:

$$I_p = \frac{\sum W_{(t-2)} \frac{P_1}{P_{0(t-1)}}}{\sum W_{(t-2)}}$$

Where

$W_{(t-2)}$ = percentage share of each representative item or each group of representative items of goods or services in consumption in year t-2;

$\frac{P_1}{P_0}$ = the individual price index of each representative item (quotient of prices of the reference and the base month) or the price index of each group of goods or services;

I_p = the price index of each group of goods or services, or the aggregated group of these and the total of the groups.

The consumer price index is calculated *on three bases* every month, which are as follows: December of the previous year, the previous month and at last the corresponding month of the previous year.

Seasonally adjusted indices: Seasonally adjusted indices are computed and published monthly for core inflation.

G: Editing and validation procedures

Control procedures used to ensure the quality of data collected: In 2000 the HCSO developed a price collection questionnaire introducing a list of codes to describe the reasons for different changes in prices, (e.g. 1-sales, 2-sale is over, 7-item change without outlet change, 8-item and outlet change, 9-outlet change without item change, etc.). The price collectors must insert the appropriate code beside every price. This development has increased the quality of price collected and is one of the most important parts of the validation procedure.

Control procedures used to ensure the quality of data processed: When the collected data (both prices and codes) are fed to the computer, special software automatically checks the logical consistency between the previous month's price, the current price and the code. It is not possible to enter a code which indicates a contrary movement in prices than comes from the price quotation. The person in charge of prices for each local office examines the control list thoroughly. They correct the prices found to be inaccurate, indicating this correction on the list.

H: Documentation and dissemination

Timeliness of dissemination of the CPI data: CPI data is disseminated on 11th of the month following the reference month unless it falls on weekend or Monday. In these latter cases on the next Tuesday. In the months of January and February 3-4 working days after 11th, since in January not only the December, but also the annual data are published, while in February it is the production of the revised weight numbers used for January for the first time that requires extra time.

Level of detailed CPI published

Online: All items CPI, Division-level (12 Divisions)

Documentation

Publications and websites where indices can be found: New release on CPI is disseminated by HCSO and is available at http://www.ksh.hu/consumer_prices_tn

Publications and websites where methodological information can be found: Methodological information is available in statistical methodology booklets, number 39 - The method of consumer price statistics, HCSO, 2000

I: Other Information

Reported by the ILO in 2013.