

Bosnia and Herzegovina

A: Identification

Title of the CPI: Consumer Price Index

Organisation responsible: Agency for Statistics of Bosnia and Herzegovina

Periodicity: Monthly

Index reference period: 2010 = 100

Weights reference period: 2007 Household Budget Survey.

Main uses of CPI: Indexation of wages, pensions and/or social security payment, indexation of rents, contracts and/or other payments, main inflation indicator used for monetary policy, deflate household expenditures in national accounts and computation of purchasing power of households.

B: CPI Coverage

Geographical Coverage

Weights: Nation-wide

Price collection: Nation-wide

Population coverage: Resident households of nationals.

Consumption expenditure excludes:

- Foods produced for own final consumption;
- Other goods produced for own final consumption;
- Services produced for own final consumption;
- Gambling expenditure, gross of winnings

C: Concepts, definitions, classifications and weights

Definition of the CPI and its objectives: The consumer price index measures the change in prices of a basket of goods representative of the monetary household consumption expenditure of all households resident in the territory of Bosnia and Herzegovina.

Classification: COICOP (Classification of individual consumption by purpose) at the 6-digit level

Weights include value of consumption from own production: No

Sources of weights: Household expenditure surveys.

Frequency of weight updates: Every 3-5 years

Price updating of weight reference period to the index reference period: Weights are price updated every year according to changes in prices in a previous year.

D: Sample design

Sampling methods:

Outlets: Judgmental sampling

Products: Judgmental sampling

Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples: Locality selection: The localities chosen for the data collection in Bosnia Herzegovina are selected taking into account their weight in terms of population and their role with respect to the geographical areas they belong to (Canton or region capital or main centre). The other relevant aspect at this stage of selection is the presence of a statistical local office that is able to carry out the collection of the elementary quotations in the field and check them before sending the data to the statistical central offices in Sarajevo and Banja Luka or to BHAS.

Outlet selection: The judgmental approach is the most adopted sampling procedure to identify the outlets where the data collection is to be carried out. In the future greater attention has to be dedicated to the cut off approach. The judgement approach takes into account three criteria; i) the number of selected outlets depends on the demographic and geographic width of the town; ii) the type of outlet has to be selected on the basis of the weight of each typology in the local distribution; iii) outlets have to be selected so as to take into account the prevalent behaviour of consumers: the more frequented outlets have to be included in the sample.

Sample of products: The basket of products are selected in order to represent all the different typologies of products available in the market, to cover the entire spectrum of consumption that is summarized in COICOP classification and to take into account, the weights of the COICOP categories (the greater the weight of the category, the wider the spectrum of products belonging to that category). The assumption underlying the selection of the basket is that the prices of products belonging to the same category show a common profile, so that changes in the price of one of them should reflect the changes in the prices of the entire category.

Item selection: The detailed description of each product helps the collector identify the item for which the price has to be recorded. Variety, brand and package are important in fixing the level of the price of a product, and, depending on their mix, prices for the same product may vary noticeably. Therefore the mix of information regarding product, outlet, variety, brand and quantity collected identifies exactly the elementary item for which prices have to be collected monthly or bimonthly.

E: Data Collection

Approximate number of localities, outlets and price observations: Price observations: 21,000

Frequency with which prices are collected: Fresh fruits and vegetables prices are collected twice a month. Other product's prices are normally recorded monthly.

Reference period for data collection: Other products: Prices are recorded between 5th and 21st day of the month. Agricultural products: prices are collected in the 1st and 3rd week of a month.

Methods of Price Collection

- Personal data collection

Treatment of:

Discounts and sales prices: Reduced prices are not included in the price collection.

Missing or faulty prices: Missing prices are replaced by previously observed prices.

Period for allowing imputed missing prices: Estimated missing prices are allowed up to a maximum of 2 months.

Disappearance of a given type or quality from the market: Replacement is done for items that are no longer available on market.

Quality differences: The replacement of an item introduces the issue of quality adjustment. The quality adjustment method adopted is the overlap approach where the value of the quality change between the elementary item and the replacing one is assessed in terms of difference in price between the two items in a period when both items are available.

Treatment of seasonal items and seasonality

Items that have a seasonal character and their treatment: Natural seasonality, in particular, affects fresh food products such as fruits and vegetables, clothing and footwear, whereas conventional seasonality affects products such as education services, hotels, transports, tourism services. Prices of seasonal products have to be repeated in the months when the products are not available. A special approach is used for clothing and footwear since these categories of products are different in winter and summer. In this case, for the previous month the price of the item available in the previous similar season has to be entered, if the two items are comparable in terms of brand and materials used (type of garment, quality of leather, etc.).

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: The method used to impute price development in out-of season periods is carrying forward the last observed price.

Treatment of housing

Treatment of owner-occupied housing: Imputed rents as measure of the owner occupier housing costs is excluded from CPI.

F: Computation

Formula used for calculation of elementary indices: The ratio of geometric mean prices (Jevons index) (Chained form)

Formula to aggregate elementary indices to higher level indices: The aggregate indices are calculated by a Laspeyre's-type formula.

Seasonally adjusted indices: The data are not seasonally adjusted.

G: Editing and validation procedures

H: Documentation and dissemination

Timeliness of dissemination of the CPI data: The CPI is published on the BHAS website on the 15th of the month following the reference period. The entities disseminate the Entity CPI on the 10th day after the end of the reference month on their respective websites.

Level of detailed CPI published

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

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

Documentation

Publications and websites where indices can be found: Monthly; Press release CPI in Croatian, Serbian and Bosnian and English languages; Other: Annual bulletin on consumer prices that provides the monthly series of the CPI for the most recent year by COICOP divisions.

Publications and websites where methodological information can be found: The methodology (short version) is available on the Press releases. Full version is available on website: [www.bhas.ba/metodoloskidokumenti/Metodologija tom1 - engleski.pdf](http://www.bhas.ba/metodoloskidokumenti/Metodologija%20tom%201%20-%20engleski.pdf)

I: Other Information

Completed by ILO in 2013.