+382 20 230 811 (fax) +382 20 230 814

contact@monstat.org 
mediji@monstat.org

www.monstat.org &

RELEASE 127/2022

Date of publishing: 15 September 2022

## Consumer price indices

## August 2022

Prices of goods and services for personal consumption, measured by consumer price index, in August 2022, as compared to July 2022, increased by 0.2% on average. Consumer prices in August 2022, as compared to August 2021, increased by 15.0% on average. This was influenced mostly by increase in prices of: solid fuels; vegetables; accommodation services; milk, cheese and eggs; passenger transport by air; meat; fruit; stationery and drawing materials. Consumer prices in period January-August 2022 compared to the same period of previous year, were higher for 11.1% in average.

Observing the main groups by purpose of consumption, in August 2022 as compared to July 2022, monthly increase of prices was noticed in the following groups: Restaurants and hotels (4.3%); Housing, water, electricity, gas and other fuels (2.0%); Food and non-alcoholic beverages (1.4%); Recreation and culture (1.1%); Health (0.6%); Furnishing, household equipment and routine household maintenance (0.2%); Communication (0.2%); Alcoholic beverages and tobacco (0.1%), while decrease of prices was recorded in the following groups: Transport (-5.7%); Clothing and footwear (-2.7%); Miscellaneous goods and services (-0.2%).

Prices of other products and services mostly remained unchanged.

Graph 1. Annual and monthly rates of inflation (CPI), in %



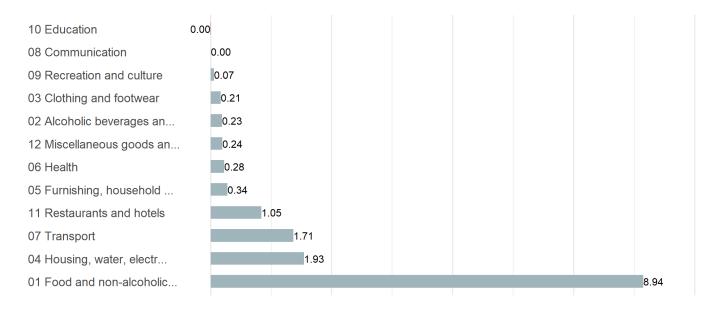
Table 1. Inflation rate measured by Consumer price indices (CPI)

|                        | Jan                   | Feb  | Mar | Apr  | May  | Jun  | Jul  | Aug  | Sep | Oct | Nov | Dec |
|------------------------|-----------------------|------|-----|------|------|------|------|------|-----|-----|-----|-----|
|                        | Annual inflation rate |      |     |      |      |      |      |      |     |     |     |     |
| 2021                   | -0.7                  | -0.1 | 0.8 | 2.2  | 2.4  | 2.4  | 3.1  | 3.1  | 2.9 | 3.8 | 4.4 | 4.6 |
| 2022                   | 5.7                   | 6.7  | 9.7 | 11.2 | 11.7 | 13.5 | 14.9 | 15.0 |     |     |     |     |
| Monthly inflation rate |                       |      |     |      |      |      |      |      |     |     |     |     |
| 2021                   | 0.3                   | 0.5  | 0.6 | 0.6  | 0.3  | 0.2  | 0.3  | 0.1  | 0.5 | 0.7 | 0.3 | 0.3 |
| 2022                   | 1.3                   | 1.5  | 3.4 | 1.9  | 0.8  | 1.8  | 1.5  | 0.2  |     |     |     |     |

Table 2. Inflation rates measured by CPI, in %1

|    | Name  | Weights<br>‰ | Aug-22<br>Ø 2021 | <u>Aug-22</u><br>Jul-22 | <u>Aug-22</u><br>Aug-21 | Aug-22<br>Dec-21 | <u>Jan-Aug 2022</u><br>Jan-Aug 2021 |
|----|---|--------------|------------------|-------------------------|-------------------------|------------------|-------------------------------------|
| 00 | Total   | 1 000.0      | 15.2             | 0.2                     | 15.0                    | 13.0             | 11.1                                |
| 01 | Food and non-alcoholic beverages                                  | 353.8        | 26.3             | 1.4                     | 25.5                    | 22.4             | 19.4                                |
| 02 | Alcoholic beverages and tobacco                                   | 39.8         | 6.0              | 0.1                     | 5.8                     | 5.6              | 4.2                                 |
| 03 | Clothing and footwear   | 87.3         | -3.7             | -2.7                    | 3.0                     | -6.9             | 2.6                                 |
| 04 | Housing, water, electricity, gas and other fuels                  | 135.0        | 13.8             | 2.0                     | 14.1                    | 12.6             | 6.4                                 |
| 05 | Furnishing, household equipment and routine household maintenance | 39.0         | 9.5              | 0.2                     | 8.7                     | 8.6              | 6.1                                 |
| 06 | Health  | 40.3         | 7.1              | 0.6                     | 6.9                     | 6.2              | 3.8                                 |
| 07 | Transport   | 117.7        | 15.9             | -5.7                    | 14.6                    | 12.5             | 17.9                                |
| 80 | Communication   | 48.5         | 0.0              | 0.2                     | 0.0                     | 0.1              | -0.2                                |
| 09 | Recreation and culture  | 32.3         | 2.3              | 1.1                     | 2.1                     | 2.0              | 0.5                                 |
| 10 | Education   | 18.3         | -0.2             | 0.0                     | -0.2                    | -0.1             | -0.2                                |
| 11 | Restaurants and hotels  | 46.5         | 29.8             | 4.3                     | 20.8                    | 29.7             | 9.0                                 |
| 12 | Miscellaneous goods and services                                  | 41.4         | 6.0              | -0.2                    | 5.7                     | 5.5              | 4.2                                 |

Chart 2. Impacts of divisions on the annual inflation rate (in percentage points), August 2022



<sup>&</sup>lt;sup>1</sup> More detailed CPI data are available at the following link: **Data** 

**Table 3.** Groups with most important impacts on monthly inflation rate, August 2022

| ECOICOP | Group   | Weights ‰ | Monthly inflation % | Influence in percentage points |  |
|---------|---|-----------|---------------------|--------------------------------|--|
| 0454    | Solid fuels   | 31.8      | 7.0                 | 0.27                           |  |
| 0117    | Vegetables  | 36.0      | 6.4                 | 0.24                           |  |
| 1120    | Accommodation services                                | 18.6      | 8.9                 | 0.21                           |  |
| 0114    | Milk, cheese and eggs                                 | 76.9      | 2.1                 | 0.18                           |  |
| 0733    | Passenger transport by air                            | 2.9       | 16.3                | 0.05                           |  |
| 0112    | Meat  | 91.1      | 0.5                 | 0.05                           |  |
| 0116    | Fruit   | 20.3      | 1.6                 | 0.03                           |  |
| 0954    | Stationery and drawing materials                      | 1.2       | 25.1                | 0.03                           |  |
| 0321    | Shoes and other footwear                              | 37.9      | -1.4                | -0.04                          |  |
| 0115    | Oils and fats   | 16.3      | -2.6                | -0.05                          |  |
| 0312    | Garments  | 48.6      | -3.8                | -0.16                          |  |
| 0722    | Fuels and lubricants for personal transport equipment | 64.5      | -10.7               | -0.78                          |  |

Table 4. Groups with most important impacts on annual inflation rate, August 2022

| ECOICOP | Group   | Weights ‰ | Annual inflation % | Influence in percentage points |  |
|---------|---|-----------|--------------------|--------------------------------|--|
| 0114    | Milk, cheese and eggs   | 76.9      | 31.0               | 2.37                           |  |
| 0111    | Bread and cereals   | 60.1      | 34.2               | 1.99                           |  |
| 0454    | Solid fuels   | 31.8      | 54.0               | 1.65                           |  |
| 0112    | Meat  | 91.1      | 17.1               | 1.56                           |  |
| 0117    | Vegetables  | 36.0      | 36.9               | 1.24                           |  |
| 0722    | Fuels and lubricants for personal transport equipment                         | 64.5      | 18.2               | 1.13                           |  |
| 1120    | Accommodation services  | 18.6      | 35.5               | 0.75                           |  |
| 0115    | Oils and fats   | 16.3      | 35.4               | 0.58                           |  |
| 0118    | Sugar, jam, honey, chocolate and confectionery                                | 16.9      | 22.1               | 0.37                           |  |
| 0116    | Fruit   | 20.3      | 14.7               | 0.33                           |  |
| 1111    | Restaurants, cafes and the like   | 27.9      | 10.5               | 0.30                           |  |
| 0732    | Passenger transport by road   | 17.2      | 13.4               | 0.23                           |  |
| 0432    | Services for the maintenance and repair of the dwelling                       | 8.7       | 25.6               | 0.23                           |  |
| 0922    | Musical instruments and major durables for indoor recreation                  | 0.4       | -2.0               | 0.00                           |  |
| 1050    | Education not definable by level  | 0.7       | -6.4               | 0.00                           |  |
| 0960    | Package holidays  | 4.2       | -2.2               | -0.01                          |  |
| 0443    | Sewage collection   | 2.2       | -4.8               | -0.01                          |  |
| 0911    | Equipment for the reception, recording and reproduction of sound and pictures | 5.2       | -2.8               | -0.01                          |  |
| 0441    | Water supply  | 11.0      | -7.5               | -0.08                          |  |

Table 5. Inflation rate measured by Harmonised Indices of Consumer Prices (HICP)<sup>2</sup>

|      | Jan                    | Feb  | Mar | Apr  | May   | Jun         | Jul  | Aug  | Sep | Oct | Nov | Dec |
|------|------------------------|------|-----|------|-------|-------------|------|------|-----|-----|-----|-----|
|      | -                      |      | -   |      | Annua | l inflation | rate | -    | -   | -   | _   |     |
| 2021 | -0.7                   | -0.2 | 0.5 | 1.8  | 2.3   | 2.8         | 3.6  | 3.8  | 3.6 | 3.9 | 4.4 | 4.5 |
| 2022 | 5.4                    | 6.4  | 8.7 | 10.2 | 10.6  | 11.9        | 13.7 | 13.9 |     |     |     |     |
|      | Monthly inflation rate |      |     |      |       |             |      |      |     |     |     |     |
| 2021 | 0.3                    | 0.4  | 0.5 | 0.6  | 0.6   | 0.6         | 0.5  | 0.3  | 0.2 | 0.1 | 0.2 | 0.2 |
| 2022 | 1.2                    | 1.3  | 2.8 | 1.9  | 1.0   | 1.7         | 2.1  | 0.4  |     |     |     |     |

 $<sup>^2</sup>$  More detailed HICP data are available at the following link:  $\underline{\textbf{Data}}$ 

## **METHODOLOGICAL NOTES**

Consumer price indices (CPI) are one of the most important macroeconomic indicators and the basis for taking decisions in the area of economy and finance. Since January 2009 they are used as official measure of inflation in Montenegro.

Consumer price index is used for harmonising wages and salaries in accordance with collective contracts, pensions, and social benefits. Also, it is used for deflating certain macroeconomic aggregates in national accounts statistics and for other purposes.

Consumer price index is defined as measure of average price change of fixed goods and services basket bought by household for the purposes of satisfying its needs.

Weights used for calculation of the consumer price index express a relative importance of selected products and services in total household consumption at the domestic territory.

The list of products and services is regularly updated in order to preserve its representative characteristics regarding structure of consumption and consumers' habits.

The influence of certain groups on inflation rate indicates how much that group has influenced on the total inflation rate. The influence depends on weights and inflation rate of given group. The weights represents a relative share of household consumption of certain groups or subgroup of products in the total consumption. Consequently, weights have an important role in the calculation of inflation rate. They represent "importance" of certain product group in the total household consumption in certain reference period.

Monthly inflation rate represents price changes in the current month as compared to the previous month, in %.

Annual inflation rate represents price changes in the current month as compared to the same month of the previous year, in %.

While the consumer price index is mostly used as a general measure of inflation in the national context, the harmonised index of consumer prices represents a comparable measure of inflation in the European Union.

The basic differences between CPI and HICP are:

Purpose: CPI is used to measure the inflation in a country, while HICP is used to measure the inflation in EU.

Coverage: CPI covers final consumption of the resident population both in the country and abroad. HICP covers final consumption of the population, both resident and non-resident in a country.

Weights: In addition to differences in the coverage, there are differences in weights. The starting point is the final consumption of population but the concepts are different. The national concept is applied for the national CPI and the domestic concept for the HICP. The main data source for the calculation of the HICP weight structure at higher aggregation levels are the data obtained from the National Accounts, while the Household Budget Survey data are used at lower aggregation levels, which also represents the main data source for the calculation of the CPI weight structure.

Classification: ECOICOP (European Classification of Individual Consumption according to Purpose) is used for both indices.

List of products and services: The same list is used for products and services.

Calculation method: Laspeyre's type of index is used for the calculation of both indices.

Data are published according <u>Statistical Release</u> Calendar.

When using the data, state:

"Data source: Statistical Office - MONSTAT"

More data, as well as detailed methodological notes can be found in the section: Consumer Price Index

in