



HARMONIZED INDEX OF CONSUMER PRICES: September 2023, annual increase 2.4%

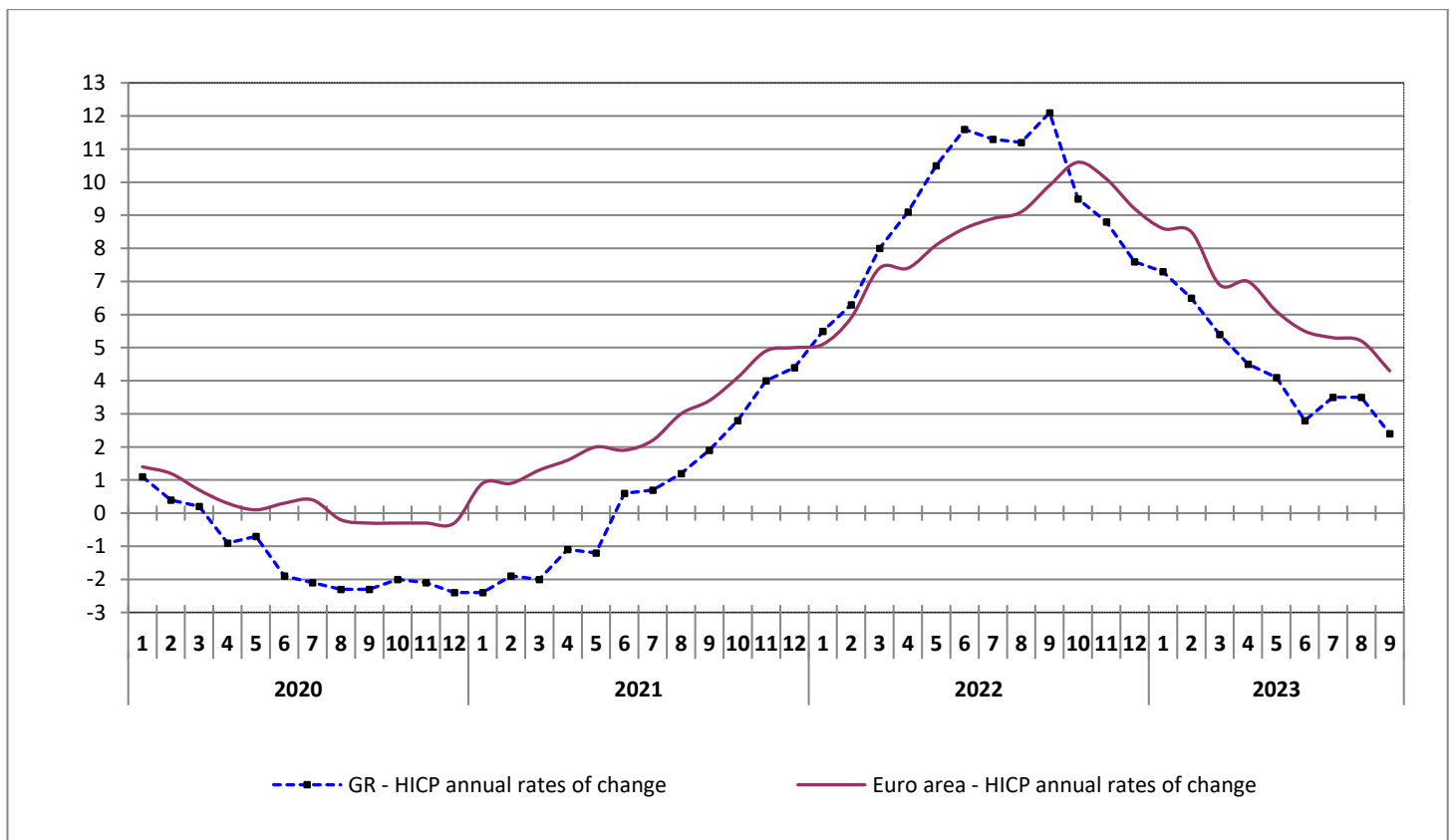
The evolution of the Harmonized Index of Consumer Prices (HICP) of September 2023 (reference year 2015=100.0) is depicted as follows:

The HICP in September 2023 compared with September 2022 increased by 2.4%. In September 2022, the annual rate of change of the HICP was 12.1% (Tables 1, 2).

The HICP in September 2023 compared with August 2023 increased by 1.9%. In September 2022, the monthly rate of change of the HICP was 3.0% (Table 2).

The average HICP for the twelve - month period from October 2022 to September 2023, compared with the corresponding index for the period October 2021 to September 2022, increased by 5.4%. The annual rate of change of the average HICP between the twelve - month period October 2021 to September 2022 in comparison to the period October 2020 to September 2021 was 8.1% (Tables 2, 3).

Graph 1. Annual rates of change (%) of GR - HICP and Euro area – HICP



Note: The Euro area - HICP data for September 2023 are provisional.

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Table 1. HICP, September 2023
(Reference year: 2015=100.0)

| Main groups of goods and services | Weights(%) 2023 | Indices | | | Annual rate of change (%) | |
|--------------------------------------|--------------------|---------------|---------------|---------------|---------------------------|-------------|
| | | September | | | September | |
| | | 2023 | 2022 | 2021 | 2023/2022 | 2022/2021 |
| 1. Food and non-alcoholic beverages | 203.27 | 130.28 | 118.80 | 105.30 | 9.7 | 12.8 |
| 2. Alcoholic beverages and tobacco | 44.51 | 115.18 | 113.43 | 112.14 | 1.5 | 1.2 |
| 3. Clothing and footwear | 46.67 | 115.72 | 108.90 | 105.81 | 6.3 | 2.9 |
| 4. Housing | 100.57 | 112.03 | 133.74 | 96.81 | -16.2 | 38.1 |
| 5. Household equipment | 37.13 | 104.03 | 100.42 | 92.07 | 3.6 | 9.1 |
| 6. Health | 47.77 | 109.51 | 103.65 | 100.88 | 5.7 | 2.7 |
| 7. Transport | 130.05 | 122.07 | 118.88 | 104.49 | 2.7 | 13.8 |
| 8. Communication | 47.27 | 99.19 | 102.46 | 104.59 | -3.2 | -2.0 |
| 9. Recreation and culture | 50.09 | 101.38 | 98.13 | 96.27 | 3.3 | 1.9 |
| 10. Education | 25.24 | 104.42 | 101.37 | 99.54 | 3.0 | 1.8 |
| 11. Hotels-Cafés-Restaurants | 205.65 | 127.53 | 121.59 | 106.39 | 4.9 | 14.3 |
| 12. Miscellaneous goods and services | 61.77 | 99.33 | 97.35 | 94.13 | 2.0 | 3.4 |
| Overall index | 1000.00 | 118.04 | 115.29 | 102.83 | 2.4 | 12.1 |

Note: The indices are rounded up to two decimal figures when published and percentage changes up to one decimal figure when published.

Table 2. Monthly evolution and rates of change (%) of HICP (Overall Index)
(Reference year: 2015=100.0)

| Months | Indices | | | Monthly rate of change (%) | | | Annual rate of change (%) | | Annual average rate of change (%) | |
|-----------------------|---------|---------------|---------------|----------------------------|------|------|---------------------------|-----------|-----------------------------------|------------|
| | 2023 | 2022 | 2021 | 2023 | 2022 | 2021 | 2023/2022 | 2022/2021 | 2023/2022 | 2022/2021 |
| 1 | 112.29 | 104.65 | 99.20 | -0.5 | -0.2 | -1.3 | 7.3 | 5.5 | 9.4 | 1.2 |
| 2 | 112.51 | 105.63 | 99.39 | 0.2 | 0.9 | 0.2 | 6.5 | 6.3 | 9.4 | 1.9 |
| 3 | 114.28 | 108.43 | 100.43 | 1.6 | 2.7 | 1.0 | 5.4 | 8.0 | 9.2 | 2.7 |
| 4 | 115.55 | 110.55 | 101.29 | 1.1 | 2.0 | 0.9 | 4.5 | 9.1 | 8.8 | 3.6 |
| 5 | 116.17 | 111.59 | 100.98 | 0.5 | 0.9 | -0.3 | 4.1 | 10.5 | 8.2 | 4.6 |
| 6 | 117.23 | 114.05 | 102.17 | 0.9 | 2.2 | 1.2 | 2.8 | 11.6 | 7.5 | 5.5 |
| 7 | 116.08 | 112.19 | 100.83 | -1.0 | -1.6 | -1.3 | 3.5 | 11.3 | 6.8 | 6.4 |
| 8 | 115.87 | 111.98 | 100.68 | -0.2 | -0.2 | -0.1 | 3.5 | 11.2 | 6.2 | 7.2 |
| 9 | 118.04 | 115.29 | 102.83 | 1.9 | 3.0 | 2.1 | 2.4 | 12.1 | 5.4 | 8.1 |
| 10 | | 113.85 | 104.00 | | -1.2 | 1.1 | | 9.5 | | 8.6 |
| 11 | | 113.55 | 104.35 | | -0.3 | 0.3 | | 8.8 | | 9.0 |
| 12 | | 112.81 | 104.87 | | -0.7 | 0.5 | | 7.6 | | 9.3 |
| Annual average | | 111.21 | 101.75 | | | | | | | 9.3 |

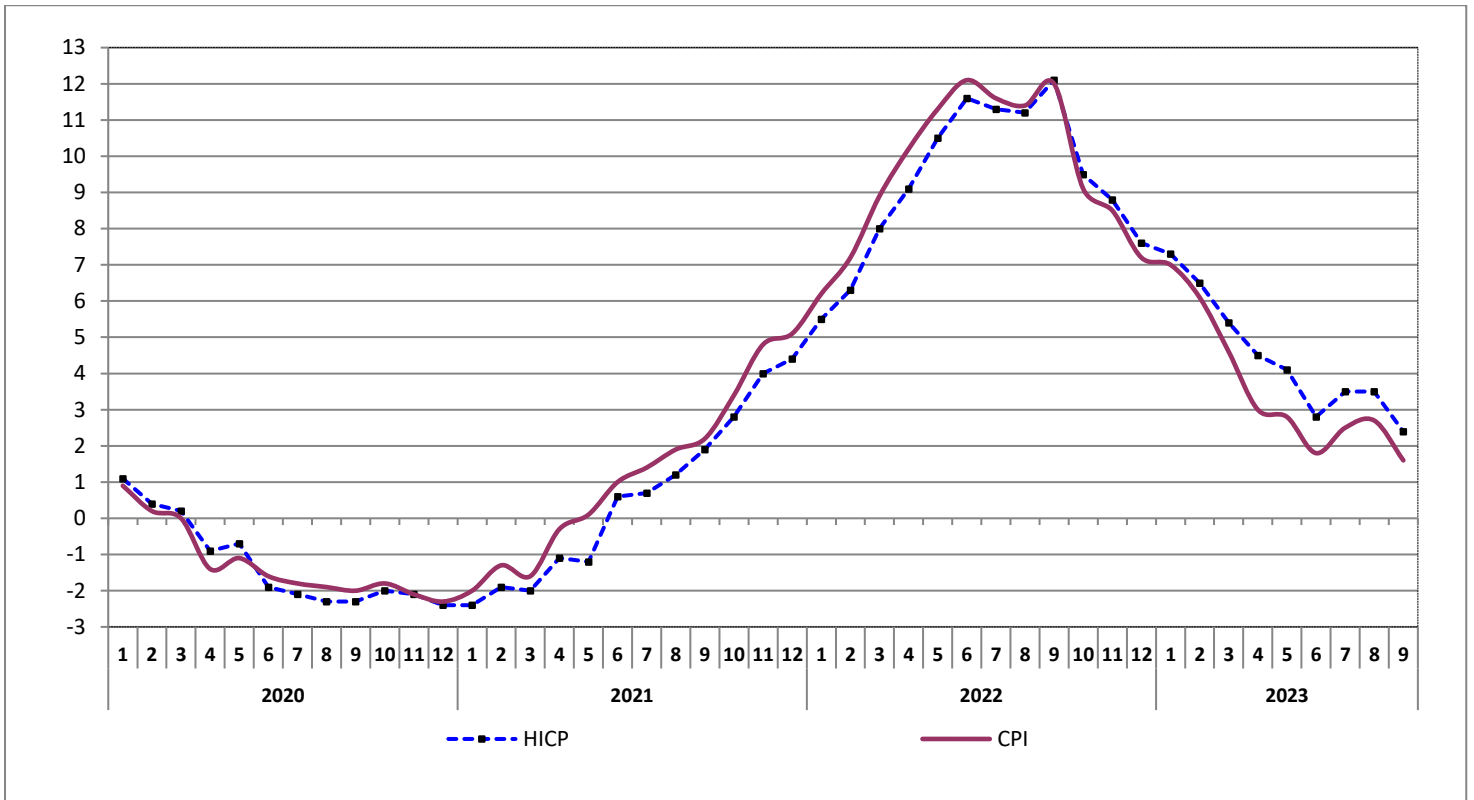
Note: The indices are rounded up to two decimal figures when published and percentage changes up to one decimal figure when published.

Table 3. Comparison between HICP and CPI

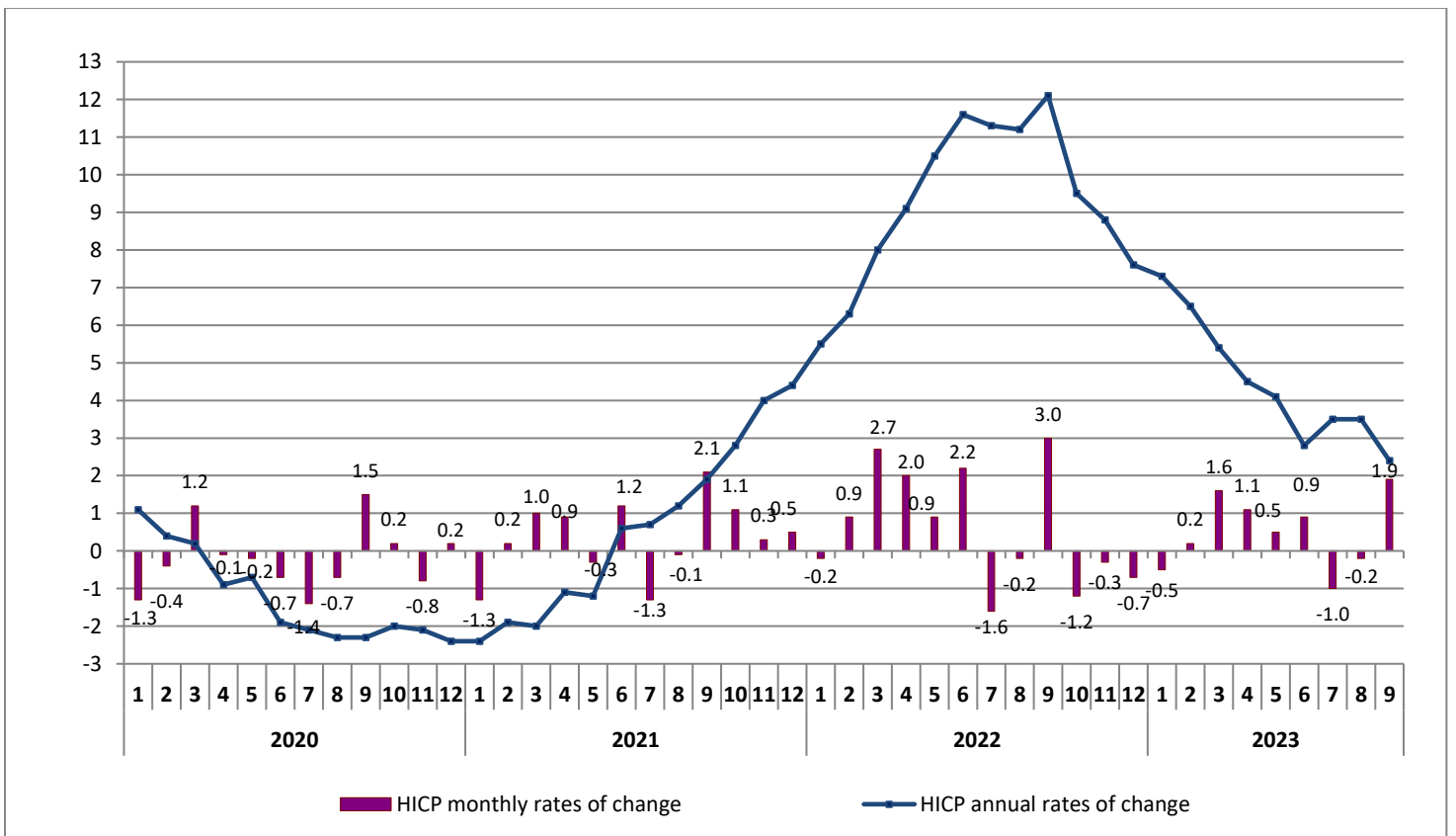
| Year and month | HICP (2015=100.0) | | | CPI (2020=100.0) | | |
|-----------------------|-------------------|---------------------------|-----------------------------------|------------------|---------------------------|-----------------------------------|
| | HICP | Annual rate of change (%) | Annual average rate of change (%) | CPI | Annual rate of change (%) | Annual average rate of change (%) |
| 2020 : 1 | 101.63 | 1.1 | 0.6 | 100.49 | 0.9 | 0.3 |
| 2 | 101.27 | 0.4 | 0.5 | 99.99 | 0.2 | 0.3 |
| 3 | 102.51 | 0.2 | 0.5 | 101.57 | 0.0 | 0.2 |
| 4 | 102.39 | -0.9 | 0.3 | 101.11 | -1.4 | 0.0 |
| 5 | 102.23 | -0.7 | 0.2 | 100.29 | -1.1 | -0.1 |
| 6 | 101.56 | -1.9 | 0.0 | 100.33 | -1.6 | -0.3 |
| 7 | 100.17 | -2.1 | -0.2 | 98.63 | -1.8 | -0.4 |
| 8 | 99.45 | -2.3 | -0.4 | 97.99 | -1.9 | -0.5 |
| 9 | 100.91 | -2.3 | -0.6 | 99.98 | -2.0 | -0.7 |
| 10 | 101.13 | -2.0 | -0.8 | 100.33 | -1.8 | -0.8 |
| 11 | 100.31 | -2.1 | -1.0 | 99.45 | -2.1 | -1.0 |
| 12 | 100.49 | -2.4 | -1.3 | 99.84 | -2.3 | -1.2 |
| Annual average | 101.17 | - | -1.3 | 100.00 | - | -1.2 |
| 2021 : 1 | 99.20 | -2.4 | -1.5 | 98.52 | -2.0 | -1.5 |
| 2 | 99.39 | -1.9 | -1.7 | 98.72 | -1.3 | -1.6 |
| 3 | 100.43 | -2.0 | -1.9 | 99.91 | -1.6 | -1.7 |
| 4 | 101.29 | -1.1 | -1.9 | 100.82 | -0.3 | -1.6 |
| 5 | 100.98 | -1.2 | -2.0 | 100.43 | 0.1 | -1.5 |
| 6 | 102.17 | 0.6 | -1.8 | 101.36 | 1.0 | -1.3 |
| 7 | 100.83 | 0.7 | -1.5 | 99.96 | 1.4 | -1.1 |
| 8 | 100.68 | 1.2 | -1.3 | 99.83 | 1.9 | -0.8 |
| 9 | 102.83 | 1.9 | -0.9 | 102.19 | 2.2 | -0.4 |
| 10 | 104.00 | 2.8 | -0.5 | 103.75 | 3.4 | 0.0 |
| 11 | 104.35 | 4.0 | 0.0 | 104.24 | 4.8 | 0.6 |
| 12 | 104.87 | 4.4 | 0.6 | 104.95 | 5.1 | 1.2 |
| Annual average | 101.75 | - | 0.6 | 101.22 | - | 1.2 |
| 2022 : 1 | 104.65 | 5.5 | 1.2 | 104.68 | 6.2 | 1.9 |
| 2 | 105.63 | 6.3 | 1.9 | 105.84 | 7.2 | 2.6 |
| 3 | 108.43 | 8.0 | 2.7 | 108.75 | 8.9 | 3.5 |
| 4 | 110.55 | 9.1 | 3.6 | 111.08 | 10.2 | 4.4 |
| 5 | 111.59 | 10.5 | 4.6 | 111.80 | 11.3 | 5.3 |
| 6 | 114.05 | 11.6 | 5.5 | 113.62 | 12.1 | 6.2 |
| 7 | 112.19 | 11.3 | 6.4 | 111.54 | 11.6 | 7.1 |
| 8 | 111.98 | 11.2 | 7.2 | 111.21 | 11.4 | 7.9 |
| 9 | 115.29 | 12.1 | 8.1 | 114.48 | 12.0 | 8.7 |
| 10 | 113.85 | 9.5 | 8.6 | 113.16 | 9.1 | 9.2 |
| 11 | 113.55 | 8.8 | 9.0 | 113.15 | 8.5 | 9.5 |
| 12 | 112.81 | 7.6 | 9.3 | 112.53 | 7.2 | 9.6 |
| Annual average | 111.21 | - | 9.3 | 110.99 | - | 9.6 |
| 2023 : 1 | 112.29 | 7.3 | 9.4 | 111.99 | 7.0 | 9.7 |
| 2 | 112.51 | 6.5 | 9.4 | 112.33 | 6.1 | 9.6 |
| 3 | 114.28 | 5.4 | 9.2 | 113.73 | 4.6 | 9.2 |
| 4 | 115.55 | 4.5 | 8.8 | 114.45 | 3.0 | 8.6 |
| 5 | 116.17 | 4.1 | 8.2 | 114.91 | 2.8 | 7.8 |
| 6 | 117.23 | 2.8 | 7.5 | 115.62 | 1.8 | 7.0 |
| 7 | 116.08 | 3.5 | 6.8 | 114.30 | 2.5 | 6.2 |
| 8 | 115.87 | 3.5 | 6.2 | 114.26 | 2.7 | 5.5 |
| 9 | 118.04 | 2.4 | 5.4 | 116.34 | 1.6 | 4.7 |

Note: The indices are rounded up to two decimal figures when published and percentage changes up to one decimal figure when published.

Graph 2. Annual rates of change (%) of HICP and CPI



Graph 3. Annual and monthly rates of change (%) of HICP



METHODOLOGICAL NOTES

| | |
|--|---|
| Generally | The Harmonized Index of Consumer Prices (HICP) is compiled in parallel with the national Consumer Price Index (CPI) by the Hellenic Statistical Authority (ELSTAT) since 1996. |
| Purpose and use of the HICPs | <p>The HICP indices are compiled by the EU Member States in accordance with Regulations of the European Union, in order to provide comparable data for the inflation of the Member States and for the assessment of the convergence criterion of price stability, in the frame of the European Monetary Union (EMU).</p> <p>The HICPs are the basis for compiling the Harmonised Index of Consumer Prices for European Union (EU) and the Harmonised Index of Consumer Prices for Euro Area (EA), which provide the official measures of inflation in the EU27 and the Euro-zone (20 Member States), respectively.</p> |
| Legal frame | The HICP indices are compiled by the Member States in the frame of Regulation (EU) 2016/792 of the European Parliament and of the Council of 11 May 2016 "on harmonized indices of consumer prices and the house price index and repealing Council Regulation (EC) No 2494/95". |
| Reference period | Month. |
| Base | December of the previous year. |
| Reference year | 2015=100.0. |
| Characteristics of the HICPs | The characteristic of the HICPs is that they are compiled according to several technical measures as defined in the above European Regulations. The main technical measures are: the use of a common classification of the items (ECOICOP), the selection of the computation formula for the individual indices, the geographical and population coverage of the whole of the country, the item coverage and compilation of specific sub-indices, the minimum standards for price collection and sampling, the adjustments due to quality differences of items, the common treatment of tariffs of Public Utility Services, the common reference year (2015=100.0) and retrospective calculations of the indices data from January 1996 onwards. |
| Geographical and population coverage of the HICPs | The geographical and population coverage of the HICPs is defined by the European Regulation (EU) No 2016/792, which specifies that the HICP of each Member State should cover all final monetary consumption expenditure which takes place in the economic territory of the Member State. |
| Classification of items | The classification of HICP items (goods and services) 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 with the ECOICOP classification. |
| Weights of items | <p>The weights of the HICP items are updated every year on the basis of the consumption expenditure, which takes place in the economic territory of each Member State independently of the consumer category (private households, individuals living in institutions, foreign visitors).</p> <p>Consequently, the expenditures used for the calculation of the weights of the items taken into account for the computation of the HICP include the expenditures of private households, the expenditure of foreign visitors and the expenditure of individuals living in collective households, while the expenditure of residents abroad are excluded.</p> <p>The sources of the expenditure data used for the calculation of the weights of HICP items are National Accounts and the Household Budget Survey (HBS) as provided for in Commission Regulation 2020/1148.</p> |
| Collected prices | The prices used for the computation of the HICPs are the prices actually faced by households to purchase goods and services in their monetary transactions. |

Comparison between the national CPI and the HICP

There are similarities and differences between the national CPI and the HICP.

The similarities refer to the following :

- Geographic coverage, given that both indices refer to the whole country.
- Prices collection cities.
- Items coverage, except from the road circulation taxes and the public television fees which are excluded from the HICP.
- Use of the classification of items (COICOP5/HICP).
- Outlets for the price collection.
- Frequency of price collection.
- Price data.
- Method of the time series calculation (chain linking).
- Use of the same formula for the computation of the individual indices for the price collection cities (geometric mean).
- Treatment of the seasonality of items and of reduced and missing prices.
- Dates of release of the indices.
- Annual updating of the weights and price updating of them to previous December prices.

The differences refer to the following:

- The HICP reference year is 2015=100.0 and CPI 2020=100.0.
- The HICP covers all consumption expenditure, which takes place on the economic territory of Greece independently of the consumer (permanent and non permanent residents), while the national CPI covers only the consumption expenditure of the residents of private households which take place on the economic territory of the country and abroad.
- The HICP weights of the items are calculated on the basis of National Accounts data and HBS data while the CPI weights are calculated using only HBS data.

Publication of data

The HICP data are released each month as scheduled, in accordance with the Releases Calendar of ELSTAT. The available HICP time series are published with reference year 2015=100.0 starting from January 1996 onwards.

References

More information about the methodology concerning the compilation and calculation of the index and for the time series is available on the ELSTAT website (www.statistics.gr).

ANNEX

HARMONIZED INDEX OF CONSUMER PRICES AT CONSTANT TAX RATES: September 2023

The evolution of the Harmonized Index of Consumer Prices at constant tax rates (HICP-CT) of September 2023 (reference year 2015=100.0) is depicted as follows:

The HICP-CT in September 2023 compared with September 2022, increased by 2.4%. In September 2022, the annual rate of change of the HICP-CT was 12.2%.

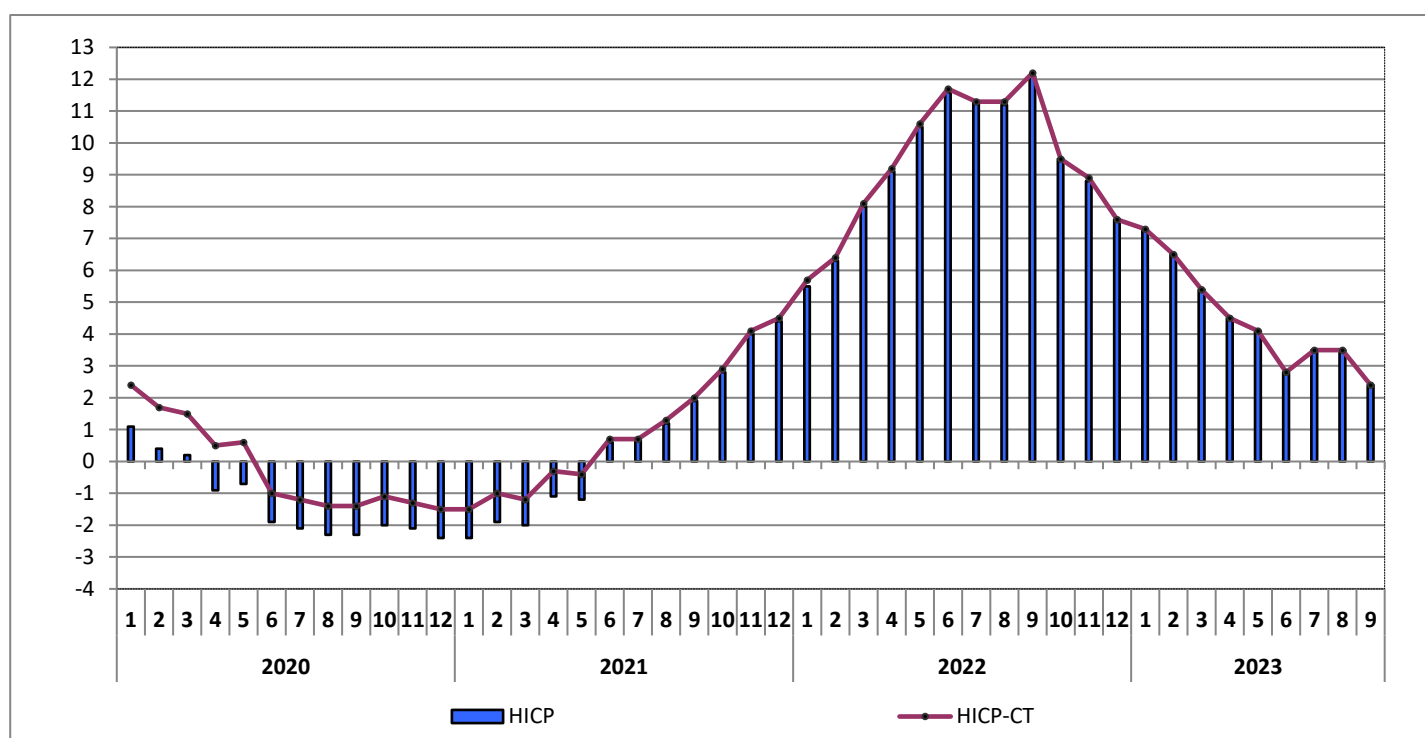
The HICP-CT in September 2023 compared with August 2023, increased by 1.9%. In September 2022, the monthly rate of change of the HICP-CT was 3.0%.

**Monthly evolution and rates of change (%) of HICP-CT
(Reference year: 2015=100.0)**

| Months | Indices | | | Monthly rate of change (%) | | | Annual rate of change (%) | | Annual average rate of change (%) | |
|-----------------------|---------|---------------|---------------|----------------------------|------|------|---------------------------|-----------|-----------------------------------|------------|
| | 2023 | 2022 | 2021 | 2023 | 2022 | 2021 | 2023/2022 | 2022/2021 | 2023/2022 | 2022/2021 |
| 1 | 112.16 | 104.54 | 98.94 | -0.5 | -0.2 | -1.3 | 7.3 | 5.7 | 9.5 | 1.6 |
| 2 | 112.39 | 105.52 | 99.13 | 0.2 | 0.9 | 0.2 | 6.5 | 6.4 | 9.5 | 2.2 |
| 3 | 114.16 | 108.30 | 100.17 | 1.6 | 2.6 | 1.0 | 5.4 | 8.1 | 9.2 | 3.0 |
| 4 | 115.42 | 110.43 | 101.13 | 1.1 | 2.0 | 1.0 | 4.5 | 9.2 | 8.8 | 3.8 |
| 5 | 116.05 | 111.47 | 100.83 | 0.5 | 0.9 | -0.3 | 4.1 | 10.6 | 8.3 | 4.7 |
| 6 | 117.11 | 113.92 | 102.01 | 0.9 | 2.2 | 1.2 | 2.8 | 11.7 | 7.5 | 5.6 |
| 7 | 115.96 | 112.07 | 100.67 | -1.0 | -1.6 | -1.3 | 3.5 | 11.3 | 6.9 | 6.5 |
| 8 | 115.75 | 111.85 | 100.52 | -0.2 | -0.2 | -0.1 | 3.5 | 11.3 | 6.2 | 7.3 |
| 9 | 117.92 | 115.16 | 102.67 | 1.9 | 3.0 | 2.1 | 2.4 | 12.2 | 5.4 | 8.2 |
| 10 | | 113.72 | 103.85 | | -1.3 | 1.1 | | 9.5 | | 8.7 |
| 11 | | 113.42 | 104.19 | | -0.3 | 0.3 | | 8.9 | | 9.1 |
| 12 | | 112.69 | 104.71 | | -0.6 | 0.5 | | 7.6 | | 9.4 |
| Annual average | | 111.09 | 101.57 | | | | | | | 9.4 |

Note: The indices are rounded up to two decimal figures when published and percentage changes up to one decimal figure when published.

Annual rates of change (%) of HICP and HICP-CT



METHODOLOGICAL NOTES

| | |
|---|---|
| Generally | The HICP-CT measures the changes in consumer prices without the impact of changes on tax rates on products or services during the same period of time. The HICP-CT does not provide an exact measure of the impact of changes on tax rates, but rather an indication for the upper limit of the impact. |
| Computation | The HICP-CT follows the same computation principles as the HICP, the same goods and services as those covered by the HICP and the same weighting which is applied for the HICP, but it is based on prices at constant tax rates of December of the previous year. |
| Tax coverage | <p>The taxes considered in the HICP-CT are those directly linked to final consumption.</p> <p>These taxes are:</p> <ul style="list-style-type: none">• value added tax (VAT).• excise duties on alcoholic beverages, tobacco and energy items (petrol, heating oil, natural gas, electricity usage), mobile telephony, vehicles and motor cycles.• taxes such as registration fees on some specific items such as cars. |
| Differences between HICP and HICP-CT | The difference between the HICP and the HICP-CT growth rates points to the theoretical impact of tax changes on overall HICP inflation since December of the previous year, assuming an instantaneous pass-through of tax rate changes on the price paid by the consumer. In principle, all taxes taken into account in the HICP-CT are kept constant. |
| Legal frame | The Harmonized Index of Consumer Prices at constant tax rates is compiled by the Member States in the frame of the Commission Regulation (EU) No 2020/1148. According to this Regulation the relative data has to be transmitted to Eurostat in a regular monthly base, in parallel with HICP data. |
| Reference period | Month. |
| Base | December of the previous year. |
| Reference year | 2015=100.0. |
| Publication of data | The HICP-CT data are released each month with the HICP, in accordance with the Releases Calendar of ELSTAT. |