



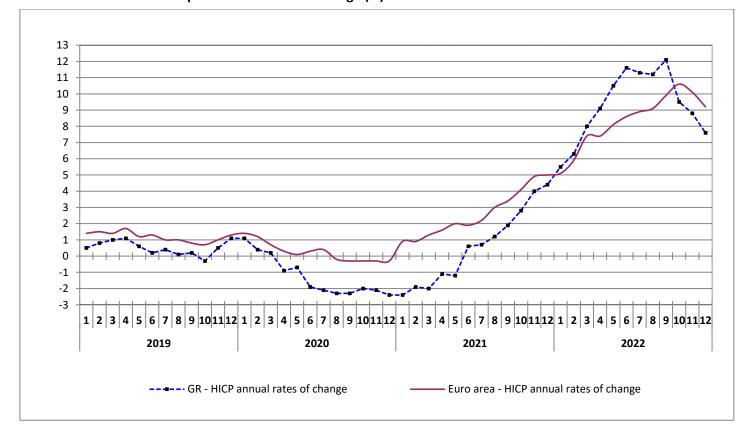
# HARMONIZED INDEX OF CONSUMER PRICES: December 2022, annual increase 7.6%

The evolution of the Harmonized Index of Consumer Prices (HICP) of December 2022 (reference year 2015=100.0) is depicted as follows:

The HICP in December 2022 compared with December 2021 increased by 7.6%. In December 2021, the annual rate of change of the HICP was 4.4% (Tables 1, 2).

The HICP in December 2022 compared with November 2022 decreased by 0.7%. In December 2021, the monthly rate of change of the HICP was 0.5% (Table 2).

The average HICP for the twelve - month period from January 2022 to December 2022, compared with the corresponding index for the period January 2021 to December 2021, increased by 9.3%. The annual rate of change of the average HICP between the twelve - month period January 2021 to December 2021 in comparison to the period January 2020 to December 2020 was 0.6% (Tables 2, 3).



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

Note: The Euro area - HICP data for December 2022 are provisional.

Information on methodological issues: Population, Employment and Cost of Living Statistics Division Section of Retail Price Indices Acting Head of Section: A. Kourtaki

Tel: +30 213 135 2128

email: a.kourtaki@statistics.gr

Information for data provision: Tel: +30 213 135 2022, 2308, 2310 email: data.dissem@statistics.gr

Table 1. HICP, December 2022 (Reference year: 2015=100.0)

	Weights(‰)		Indices	Annual rate of change (%)		
Main groups of goods and services	2022		December	December		
, and the second		2022 2021		2020	2022/2021 2021/2020	
Food and non-alcoholic beverages	210.42	121.83	105.57	101.21	15.4	4.3
2. Alcoholic beverages and tobacco	47.35	113.08	111.37	111.34	1.5	0.0
3. Clothing and footwear	58.04	112.66	107.00	104.09	5.3	2.8
4. Housing	126.35	115.07	112.28	94.49	2.5	18.8
5. Household equipment	38.77	102.92	92.78	90.67	10.9	2.3
6. Health	58.14	103.74	100.92	101.00	2.8	-0.1
7. Transport	130.53	117.21	106.56	99.54	10.0	7.1
8. Communication	49.86	101.91	104.04	106.71	-2.0	-2.5
9. Recreation and culture	41.68	99.16	96.28	96.82	3.0	-0.6
10. Education	22.49	101.77	99.61	98.68	2.2	0.9
11. Hotels-Cafés-Restaurants	158.03	114.59	105.44	103.72	8.7	1.7
12. Miscellaneous goods and services	58.34	98.32	93.35	93.72	5.3	-0.4
Overall index	1000.00	112.81	104.87	100.49	7.6	4.4

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 (%)	
	2022	2021	2020	2022	2021	2020	2022/2021	2021/2020	2022/2021	2021/2020
1	104.65	99.20	101.63	-0.2	-1.3	-1.3	5.5	-2.4	1.2	-1.5
2	105.63	99.39	101.27	0.9	0.2	-0.4	6.3	-1.9	1.9	-1.7
3	108.43	100.43	102.51	2.7	1.0	1.2	8.0	-2.0	2.7	-1.9
4	110.55	101.29	102.39	2.0	0.9	-0.1	9.1	-1.1	3.6	-1.9
5	111.59	100.98	102.23	0.9	-0.3	-0.2	10.5	-1.2	4.6	-2.0
6	114.05	102.17	101.56	2.2	1.2	-0.7	11.6	0.6	5.5	-1.8
7	112.19	100.83	100.17	-1.6	-1.3	-1.4	11.3	0.7	6.4	-1.5
8	111.98	100.68	99.45	-0.2	-0.1	-0.7	11.2	1.2	7.2	-1.3
9	115.29	102.83	100.91	3.0	2.1	1.5	12.1	1.9	8.1	-0.9
10	113.85	104.00	101.13	-1.2	1.1	0.2	9.5	2.8	8.6	-0.5
11	113.55	104.35	100.31	-0.3	0.3	-0.8	8.8	4.0	9.0	0.0
12	112.81	104.87	100.49	-0.7	0.5	0.2	7.6	4.4	9.3	0.6
Annual average	111.21	101.75	101.17						9.3	0.6

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

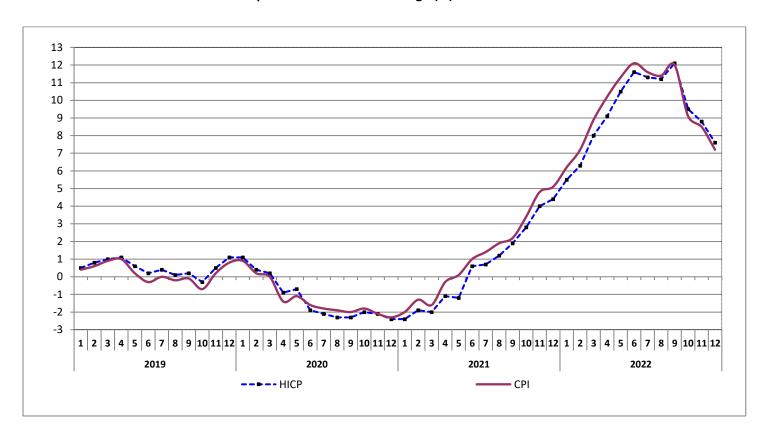
HICP (2015=100.0)

CPI (2020=100.0)

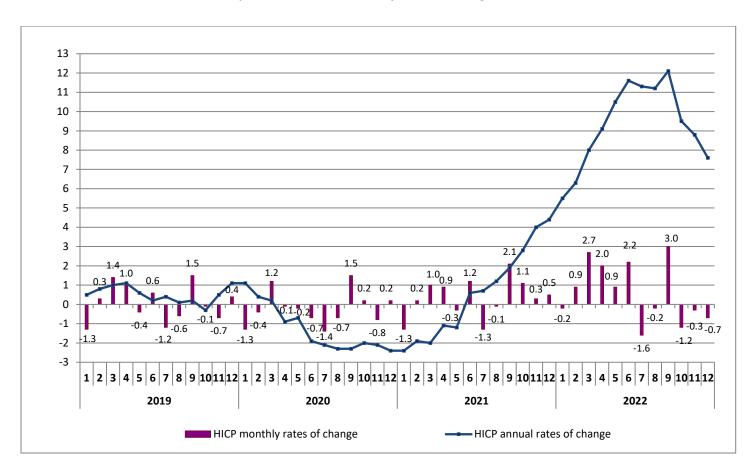
	HICP (2015	-100.0)	1	CPI (2020=100.0)				
Year and mont	h HICP	Annual rate of change (%)	Annual average rate of change (%)	СРІ	Annual rate of change (%)	Annual average rate of change (%)		
<b>2019</b> : 1	100.54	0.5	0.8	99.63	0.4	0.7		
2	100.86	0.8	0.8	99.76	0.6	0.7		
3	102.32	1.0	0.9	101.58	0.9	0.8		
4	103.33	1.1	1.0	102.58	1.0	0.9		
5	102.93	0.6	0.9	101.45	0.2	0.9		
6	103.54	0.2	0.9	101.93	-0.3	0.8		
7	102.32	0.4	0.8	100.44	0.0	0.7		
8	101.74	0.1	0.8	99.89	-0.2	0.6		
9	103.30	0.2	0.7	102.00	-0.1	0.5		
10	103.23	-0.3	0.5	102.13	-0.7	0.3		
11	102.51	0.5	0.5	101.55	0.2	0.2		
12	102.95	1.1	0.5	102.22	0.8	0.3		
Annual average		-	0.5	101.26	0.8	<b>0.3</b>		
	101.63	1.1	0.6		0.9	0.3		
2020: 1				100.49				
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		
<b>2021</b> : 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		-	0.6	101.22	-	1.2		
<b>2022</b> : 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	111.34	11.4	7.9		
9			8.1	111.21				
	115.29	12.1			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		

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

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).

The HICPs are the basis for compiling the European Index of Consumer Prices (EICP) and the Monetary Union Index of Consumer Prices (MUICP), which provide the official measures of inflation in the EU27 and the Euro-zone (19 Member States), respectively.

#### Legal frame

The HICP indices are compiled by the Member States in the frame of the basic Council Regulation (EC) No 2494/95 "for the establishment of Harmonized Indices of Consumer Prices" and of other 19 Council and Commission EC Regulations.

### 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 (COICOP5/HICP), 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 Council Regulation (EC) No 1688/98, 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 COICOP5/HICP classification.

### Weights of items

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).

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.

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 1114/2010.

### **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

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

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 Press 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 (<a href="https://www.statistics.gr">www.statistics.gr</a>).

### ANNEX

## HARMONIZED INDEX OF CONSUMER PRICES AT CONSTANT TAX RATES: December 2022

The evolution of the Harmonized Index of Consumer Prices at constant tax rates (HICP-CT) of December 2022 (reference year 2015=100.0) is depicted as follows:

The HICP-CT in December 2022 compared with December 2021, increased by 7.6%. In December 2021, the annual rate of change of the HICP-CT was 4.5%.

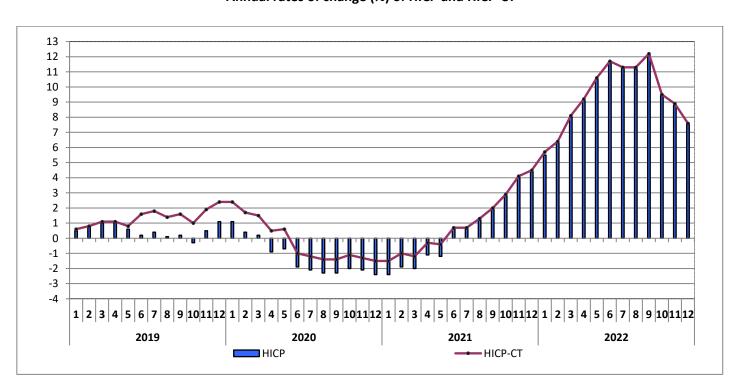
The HICP-CT in December 2022 compared with November 2022, decreased by 0.6%. In December 2021, the monthly rate of change of the HICP-CT was 0.5%.

# 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 (%)	
	2022	2021	2020	2022	2021	2020	2022/2021	2021/2020	2022/2021	2021/2020
1	104.54	98.94	100.48	-0.2	-1.3	-1.3	5.7	-1.5	1.6	-0.5
2	105.52	99.13	100.12	0.9	0.2	-0.4	6.4	-1.0	2.2	-0.7
3	108.30	100.17	101.36	2.6	1.0	1.2	8.1	-1.2	3.0	-1.0
4	110.43	101.13	101.39	2.0	1.0	0.0	9.2	-0.3	3.8	-1.0
5	111.47	100.83	101.23	0.9	-0.3	-0.2	10.6	-0.4	4.7	-1.1
6	113.92	102.01	101.31	2.2	1.2	0.1	11.7	0.7	5.6	-1.0
7	112.07	100.67	99.94	-1.6	-1.3	-1.4	11.3	0.7	6.5	-0.8
8	111.85	100.52	99.22	-0.2	-0.1	-0.7	11.3	1.3	7.3	-0.6
9	115.16	102.67	100.66	3.0	2.1	1.5	12.2	2.0	8.2	-0.3
10	113.72	103.85	100.88	-1.3	1.1	0.2	9.5	2.9	8.7	0.0
11	113.42	104.19	100.06	-0.3	0.3	-0.8	8.9	4.1	9.1	0.5
12	112.69	104.71	100.23	-0.6	0.5	0.2	7.6	4.5	9.4	1.0
Annual average	111.09	101.57	100.57						9.4	1.0

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**

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

The taxes considered in the HICP-CT are those directly linked to final consumption.

These taxes are:

- 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, 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 119/2013 "as regards establishing harmonized indices of consumer prices at constant tax rates". 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 Press Releases Calendar of ELSTAT.