



Piraeus, 10 April 2023

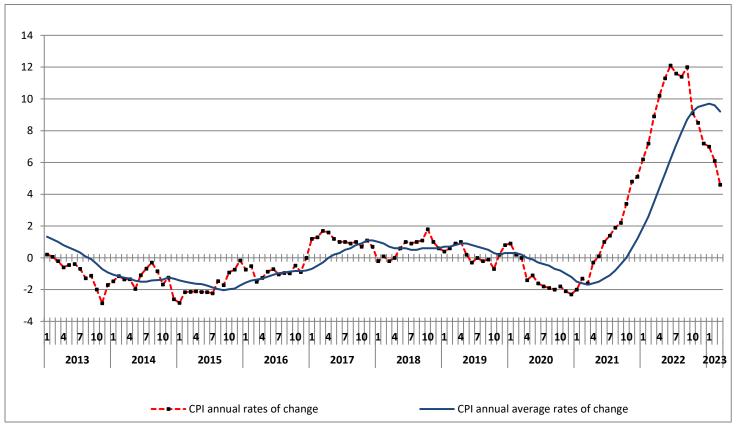
CONSUMER PRICE INDEX: March 2023, annual inflation 4.6%

The evolution of the Consumer Price Index (CPI) of March 2023 (reference year 2020=100.0) is depicted as follows:

The CPI in March 2023 compared with March 2022, increased by 4.6%. In March 2022, the annual rate of change of the CPI was 8.9% (Table 2).

The CPI in March 2023 compared with February 2023, increased by 1.2%. In March 2022, the monthly rate of change of the CPI was 2.7% (Table 1).

The average CPI for the twelve - month period from April 2022 to March 2023, compared with the corresponding index for the period April 2021 to March 2022 increased by 9.2%. The annual rate of change of the average CPI between the twelve - month period April 2021 to March 2022 in comparison to the period April 2020 to March 2021 was 3.5% (Table 3).



Graph 1. Annual and annual average rates of change (%) of CPI

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Analysis of changes of the CPI: March 2023

I. Monthly rates of change: March 2023 compared with February 2023 (Tables 1, 4)

The 1.2% increase of the Overall CPI in March 2023, compared with the corresponding index in February 2023 is, mainly, due to the changes in the groups of goods and services as follows:

1. An increase of:

- 0.1% in the group <u>Food and non-alcoholic beverages</u>, due to the increase, mainly, in the prices of: *bread and cereals, beef*, *pork, dried salted or smoked meat, cheese, preserved or processed vegetable, coffee*. This increase was partly offset by the decrease, mainly, in the prices of: *fresh fish, yoghurt, olive oil, fresh vegetables*.
- 1.2% in the group <u>Alcoholic beverages and tobacco</u>, due to the increase, mainly, in the prices of *alcoholic beverages (not served)*.
- 29.4% in the group <u>Clothing and footwear</u>, due to the recovery of part of prices up to normal levels as before the winter sales period.
- 1.2% in the group <u>Household equipment</u>, due to the recovery of prices up to normal levels as before the winter sales period and due to the increase, mainly, in the prices of *non-durable household articles*.
- 0.3% in the group <u>Health</u>, due to the increase, mainly, in the prices of *hospital and clinic services*.
- 0.8% in the group <u>Transport</u>, due to the increase, mainly, in the prices of: *second hand motor cars, tickets for passenger transport by air.* This increase was partly offset by the decrease, mainly, in the prices of *diesel*.
- 0.6% in the group <u>Hotel-Cafés-Restaurants</u>, due to the increase, mainly, in the prices of: *restaurants-confectioneries-cafes-buffets*, *hotels-motels-inns*.
- 0.8% in the group <u>Miscellaneous goods and services</u>, due to the increase, mainly, in the prices of *other appliances and articles for personal care.*

2. A decrease of:

- 1.9% in the group <u>Housing</u>, due to the decrease, mainly, in the prices of: *natural gas, heating oil*.
- 0.4% in the group <u>Communication</u>, due to the decrease, mainly, in the prices of *telephone services*.

II. Annual rates of change: March 2023 compared with March 2022 (Tables 2, 5)

The 4.6% increase of the Overall CPI in March 2023, compared with the corresponding index in March 2022 is, mainly, due to the changes in the groups of goods and services as follows:

1. An increase of:

- 14.3% in the group <u>Food and non-alcoholic beverages</u> due to the increase, mainly, in the prices of: *bread and cereals, meat, fish, milk-cheese and eggs, oils and fats, fruit, vegetables, sugar-chocolates-sweets-ice creams, food n.e.c., coffee-cocoa-tea, mineral water-refreshments-fruit juices.*
- 3.7% in the group <u>Alcoholic beverages and tobacco</u>, due to the increase, mainly, in the prices of *alcoholic beverages (not served)*.
- 14.4% in the group <u>Clothing and footwear</u>, due to the increase in the prices of clothing and footwear.
- 11.0% in the group <u>Household equipment</u>, due to the increase, mainly, in the prices of: *furniture and furnishings, household appliances and repair, glassware-tableware and utensils of domestic use, non-durable household articles, domestic services*.
- 5.6% in the group <u>Health</u>, due to the increase, mainly, in the prices of: *pharmaceutical products, medical products, medical dental and paramedical services, hospital care.*
- 1.9% in the group <u>Transport</u>, due to the increase, mainly, in the prices of: *new motor cars, second hand motor cars, motor cycles, spare parts and accessories for motor cars, maintenance and repair of motor cars-motor cycles, passenger transport by taxi, tickets for passenger transport by air, tickets for passenger transport by sea. This increase was partly offset by the decrease, mainly, in the prices of <i>fuels and lubricants*.
- 2.9% in the group <u>Recreation and culture</u>, due to the increase, mainly, in the prices of: *small recreational items-flowers-pets*, *cinemas-theatres*, *stationary and drawing materials*, *package holidays*.
- 2.2% in the group Education, due to the increase, mainly, in the prices of: fees of primary education, fees of secondary education.
- 7.5% in the group <u>Hotel-Cafés-Restaurants</u>, due to the increase, mainly, in the prices of: *restaurants-confectioneries-cafes-buffets*, *hotels-motels-inns*.
- 6.2% in the group <u>Miscellaneous goods and services</u>, due to the increase, mainly, in the prices of: hairdressing salons and personal grooming establishments, other appliances and articles for personal care, private insurance connected with health.

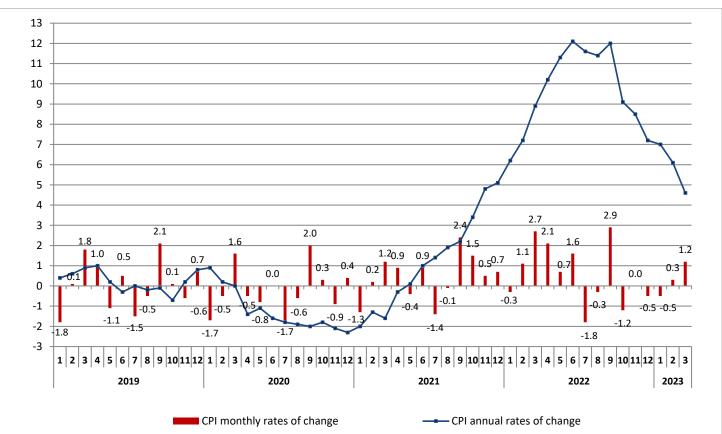
2. A decrease of:

- 10.4% in the group <u>Housing</u>, due to the decrease, mainly, in the prices of: *electricity, heating oil*. This decrease was partly offset by the increase, mainly, in the prices of: *rentals for dwellings, services for the repair and maintenance of the dwelling, coproprietor charges, natural gas, liquefied oil, solid fuels.*
- 1.9% in the group <u>Communication</u>, due to the decrease, mainly, in the prices of *telephone services*.

	Main groups	Weights	2023	2022	Rate of change	2022	2021	Rate of change
	of goods and services	2023 (‰)	March	February	%	March	February	%
1.	Food & non-alcoholic beverages	216.27	123.18	123.01	0.1	107.74	107.15	0.6
2.	Alcoholic beverages and tobacco	35.53	103.83	102.61	1.2	100.11	99.76	0.3
3.	Clothing and footwear	51.86	113.51	87.74	29.4	99.19	81.92	21.1
4.	Housing	136.85	118.63	120.90	-1.9	132.41	127.07	4.2
5.	Household equipment	46.94	114.37	113.02	1.2	103.06	102.25	0.8
6.	Health	73.28	105.00	104.67	0.3	99.39	99.40	0.0
7.	Transport	136.96	120.65	119.69	0.8	118.37	112.42	5.3
8.	Communication	42.29	93.86	94.23	-0.4	95.71	95.77	-0.1
9.	Recreation and culture	37.91	102.83	102.86	0.0	99.91	99.38	0.5
10.	Education	36.66	103.12	103.12	0.0	100.93	100.93	0.0
11.	Hotels-Cafés-Restaurants	115.24	109.88	109.25	0.6	102.23	101.10	1.1
12.	Miscellaneous goods and services	70.21	105.39	104.52	0.8	99.27	98.83	0.4
	Overall Index	1000.00	113.73	112.33	1.2	108.75	105.84	2.7

Table 1. Monthly rates of change of CPI (Reference year: 2020=100.0)

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 and monthly rates of change (%) of CPI

Table 2. Inflation – Annual rates of change of CPI (Reference year: 2020=100.0)

	1. 1410	1011 2023/ 2022			
		Ma	rch	Rate of	Impact
Main groups of goods and services		2023	2022	change (%)	impact
1.	Food and non-alcoholic beverages	123.18	107.74	14.3	2.9948
2.	Alcoholic beverages and tobacco	103.83	100.1	3.7	0.1348
3.	Clothing and footwear	113.51	99.19	14.4	0.8178
4.	Housing	118.63	132.41	-10.4	-1.7804
5.	Household equipment	114.37	103.06	11.0	0.4850
6.	Health	105.00	99.39	5.6	0.4287
7.	Transport	120.65	118.37	1.9	0.2718
8.	Communication	93.86	95.71	-1.9	-0.0791
9.	Recreation and culture	102.83	99.91	2.9	0.0970
10.	Education	103.12	100.93	2.2	0.0643
11.	Hotels-Cafés-Restaurants	109.88	102.23	7.5	0.7317
12.	Miscellaneous goods and services	105.39	99.27	6.2	0.4065
	Overall Index	113.73	108.75	4.6	

I: March 2023/2022

II: March 2022/2021

		M	arch	Rate of	Impact
	Main groups of goods and services	2022	2021	change (%)	mpoor
1.	Food and non-alcoholic beverages	107.74	99.68	8.1	1.8017
2.	Alcoholic beverages and tobacco	100.11	99.68	0.4	0.0197
3.	Clothing and footwear	99.19	93.14	6.5	0.2722
4.	Housing	132.41	101.91	29.9	4.3515
5.	Household equipment	103.06	99.34	3.7	0.1770
6.	Health	99.39	99.43	0.0	-0.0031
7.	Transport	118.37	102.54	15.4	2.0790
8.	Communication	95.71	98.58	-2.9	-0.1259
9.	Recreation and culture	99.91	99.80	0.1	0.0026
10.	Education	100.93	99.99	0.9	0.0348
11.	Hotels-Cafés-Restaurants	102.23	99.43	2.8	0.2470
12.	Miscellaneous goods and services	99.27	99.19	0.1	-0.0065
	Overall Index	108.75	99.91	8.9	

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

Table 3. Comparisons of the overall CPI (Reference year: 2020=100.0)

Year and month	Overall Index	Monthly rates of change %	Annual rates of change Inflation %	Annual average index (moving average)	Annual average rates of change %
2020 : 1	100.49	-1.7	0.9	101.34	0.3
2	99.99	-0.5	0.2	101.35	0.3
3	101.57	1.6	0.0	101.35	0.2
4	101.11	-0.5	-1.4	101.23	0.0
5	100.29	-0.8	-1.1	101.13	-0.1
6	100.33	0.0	-1.6	101.00	-0.3
7	98.63	-1.7	-1.8	100.85	-0.4
8	97.99	-0.6	-1.9	100.69	-0.5
9	99.98	2.0	-2.0	100.52	-0.7
10	100.33	0.3	-1.8	100.37	-0.8
11	99.45	-0.9	-2.1	100.20	-1.0
12	99.84	0.4	-2.3	100.00	-1.2
Annual average	100.00	-	-	100.00	-1.2
2021 : 1	98.52	-1.3	-2.0	99.84	-1.5
2	98.72	0.2	-1.3	99.73	-1.6
3	99.91	1.2	-1.6	99.59	-1.7
4	100.82	0.9	-0.3	99.57	-1.6
5	100.43	-0.4 0.9	0.1 1.0	99.58	-1.5
6	101.36 99.96		1.0	99.66 99.78	-1.3
7	99.96	-1.4	1.4	99.78	-1.1 -0.8
8	102.19	-0.1 2.4	2.2	100.11	-0.8
10	103.75	1.5	3.4	100.11	0.0
10	104.24	0.5	4.8	100.40	0.6
12	104.24	0.7	5.1	101.22	1.2
Annual average	104.93	-	-	101.22	1.2
2022 : 1	104.68	-0.3	6.2	101.74	1.2
2	105.84	1.1	7.2	102.33	2.6
3	108.75	2.7	8.9	102.55	3.5
4	111.08	2.1	10.2	103.92	4.4
5	111.80	0.7	11.3	103.52	5.3
6	113.62	1.6	12.1	105.89	6.2
7	111.54	-1.8	11.6	106.86	7.1
8	111.21	-0.3	11.4	107.81	7.9
9	114.48	2.9	12.0	108.83	8.7
10	113.16	-1.2	9.1	109.61	9.2
11	113.15	0.0	8.5	110.36	9.5
12	112.53	-0.5	7.2	110.99	9.6
Annual average	110.99	-	-	110.99	9.6
2023 : 1	111.99	-0.5	7.0	111.60	9.7
2	112.33	0.3	6.1	112.14	9.6
3	113.73	1.2	4.6	112.55	9.2

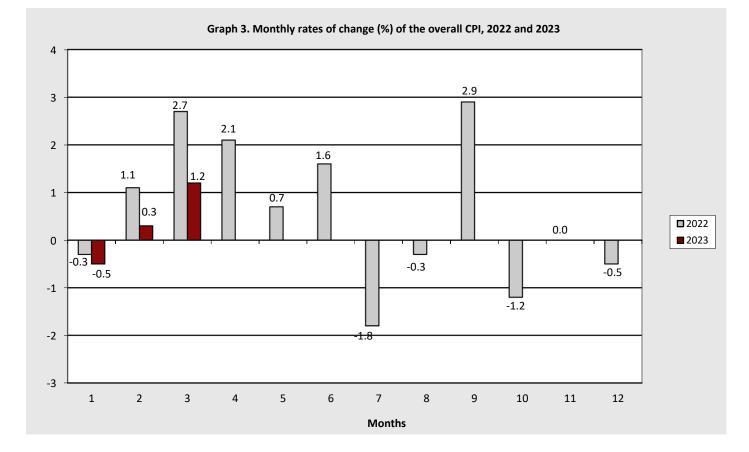
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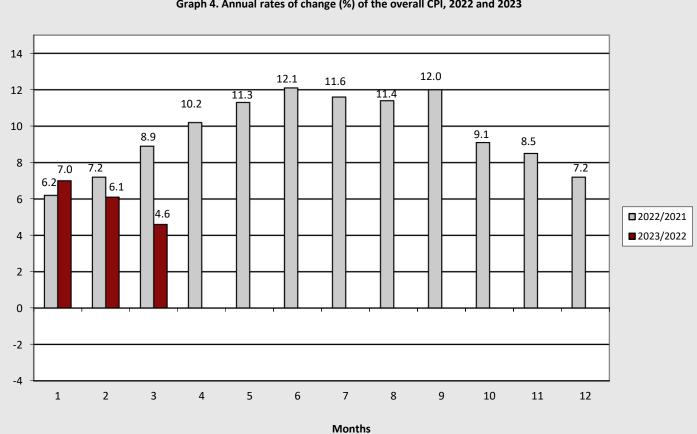
Table 4. Major price changes from index comparison between March 2023 and February 2023 and their impact on the Overall CPI

Goods and services	Rate of change (%)	Impact
Bread and cereals	0.4	0.01
Beef	1.0	0.02
Pork	2.0	0.02
Dried salted or smoked meat	2.5	0.01
Cheese	1.2	0.02
Preserved or processed vegetables	3.0	0.02
Coffee	2.0	0.01
Fresh fish	-1.6	-0.02
Yoghurt	-2.4	-0.01
Olive oil	-1.9	-0.02
Fresh vegetables	-4.7	0.07
Alcoholic beverages (not served)	2.8	0.04
Natural Gas	-26.1	-0.21
Heating oil	-2.9	-0.05
Non-durable household articles	1.0	0.02
Hospital and clinic services	0.7	0.02
Second hand motor cars	2.0	0.03
Passenger transport by air	8.3	0.08
Diesel	-3.0	-0.02
Telephone services	-0.4	-0.02
Restaurants-confectioneries-cafes-buffets	0.1	0.01
Hotels-motels-inns	9.9	0.06
Other appliances and articles for personal care	1.7	0.05
Recovery of prices up to normal levels before the winter sales period	-	1.17

Goods and services	Rate of change (%)	Impact
Bread and cereals	15.6	0.51
Meat	19.8	0.87
Fish	4.9	0.08
Milk cheese and eggs	23.1	0.76
Oils and fats	17.5	0.22
Fruit	0.6	0.01
Vegetables	8.8	0.25
Sugar-chocolates-sweets-ice creams	9.2	0.10
Food n.e.c.	13.5	0.06
Coffee-cocoa-tea	14.0	0.08
Mineral water-refreshments-fruit juices	9.3	0.05
Alcoholic beverages (not served)	9.3	0.13
Clothing and footwear	14.4	0.82
Electricity	-25.8	-1.66
Heating oil	-22.1	-0.70
Rentals for dwellings	3.9	0.14
Services for the repair and maintenance of the dwelling	4.1	0.03
Co-proprietor charges	1.9	0.01
Natural gas	9.2	0.26
Liquefied gas	16.4	0.02
Solid fuels	24.0	0.13
Furniture and furnishings	4.8	0.01
Household appliances and repair	6.6	0.04
Glassware-tableware and utensils of domestic use	5.3	0.01
Non-durable household articles	17.8	0.34
Domestic services	7.5	0.07
Pharmaceutical products	13.9	0.34
Medical products	2.7	0.02
Medical-dental and paramedical services	2.1	0.02
Hospital care	1.4	0.03
New motor cars	8.8	0.20
Second hand motor cars	10.5	0.16
Motor cycles		0.02
Spare parts and accessories of motor cars	<u>7.6</u> 11.4	0.04
Maintenance and repair of motor cars-motor cycles	5.3	0.03
Passenger transport by taxi	32.9	0.03
Passenger transport by air	32.2	0.25
Passenger transport by sea	12.8	0.02
Fuels and lubricants	-7.2	
Telephone services	-1.9	-0.50 -0.07
Small recreational items-flowers-pets		
Cinemas-theatres	4.2	0.03
Stationery and drawing materials	8.8	0.02
Package holidays	8.3	0.01
Primary education	13.8	0.02
Secondary education	2.6	0.01
Restaurants-confectioneries-cafes-buffets	2.7	0.05
Hotels-motels-inns	7.6	0.68
Hairdressing salons and personal grooming establishments	8.4	0.05
Other appliances and articles for personal care	3.6	0.03
Private insurance connected with health	11.7	0.33
י וויעניב וווסטרמוונב נטווובנובט שונוו וובמונוו	5.7	0.03

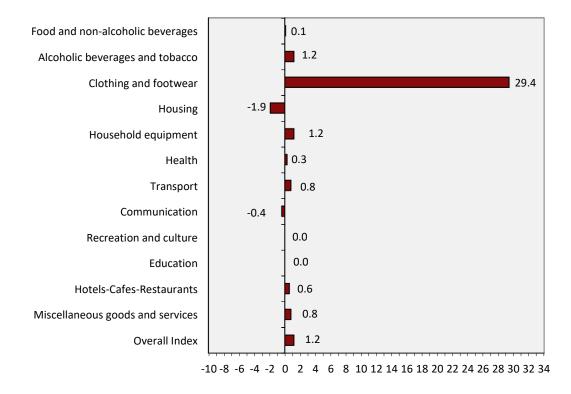
Table 5. Major price changes from index comparison between March 2023 and March 2022 and their impact on the Overall CPI

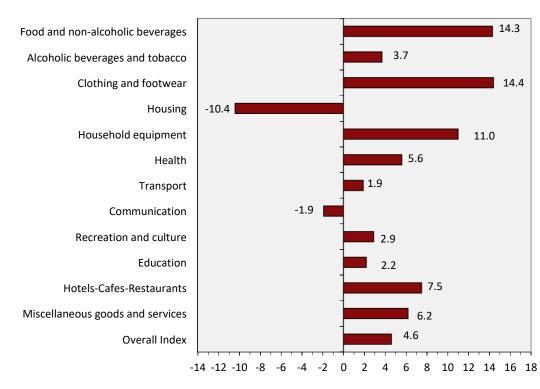




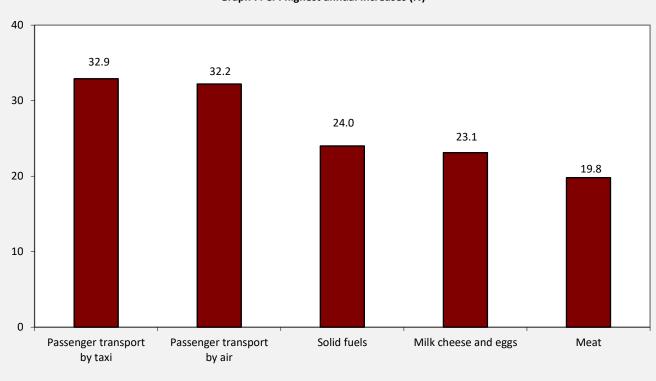
Graph 4. Annual rates of change (%) of the overall CPI, 2022 and 2023

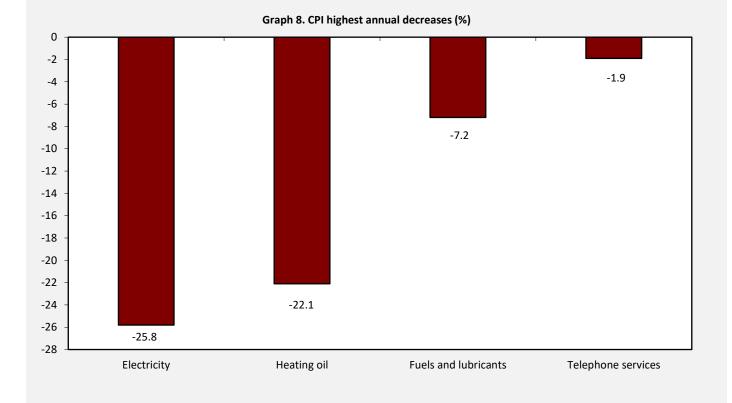
Graph 5. Monthly rates of change (%) of CPI between March 2023 and February 2023



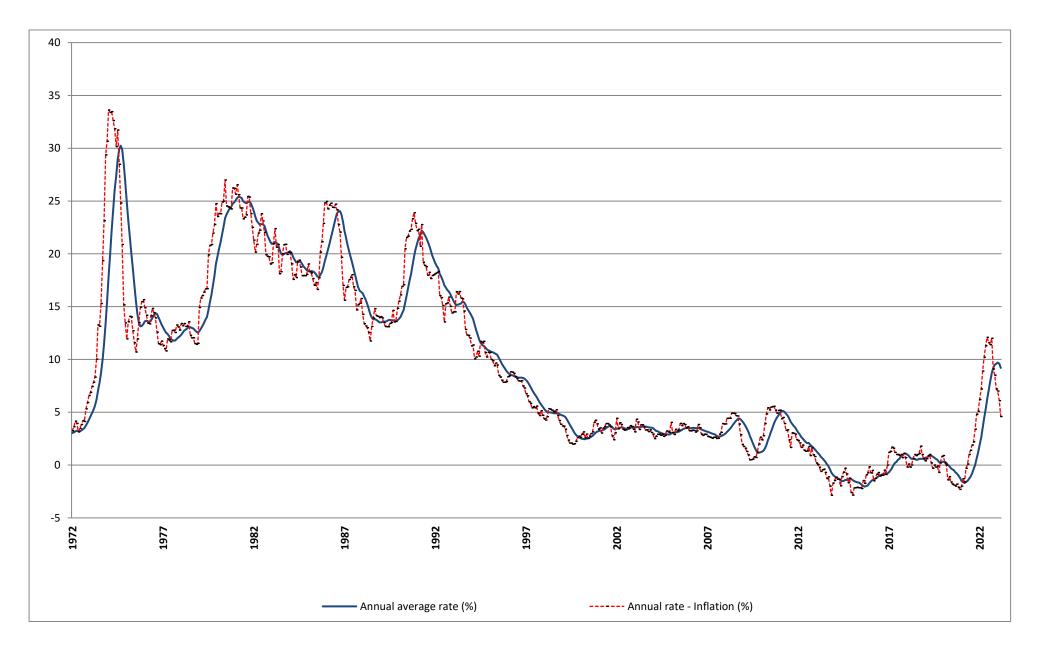


Graph 6. Annual rates of change (%) of CPI between March 2023 and March 2022





Graph 7. CPI highest annual increases (%)



METHODOLOGICAL NOTES

Generally	The Consumer Price Index (CPI) is compiled by the Hellenic Statistical Authority (ELSTAT) since 1959. Until the year 2000, the CPI referred to the urban areas of the Country, while from 2001 onwards it refers to the whole Country covering urban, semi-urban and rural areas.
Purpose of the index	The purpose of the CPI is to measure the general level of prices of goods and services purchased by the average Greek household.
Legal basis	Law 3832/2010.
Reference period	Month.
Base	December of the previous year.
Reference year	2020=100.0.
Chain linking Index	The CPI index follows the chain linking method, introducing new weights annually and having as a base the December of the previous year. The weights are estimated on the basis of the most recent available data of the Household Budget Survey (HBS), extrapolated to the prices of December. The CPI, adjusted on an annual basis to the most recent consumption expenditure pattern of the private households of the Country, ensures the representativeness of goods and services, which compose the "basket" of purchases of the average household.
Geographical and population coverage of the CPI	The CPI refers to the whole Country and covers the resident households of the territory excluding collective households (hospitals, homes for the elderly, boarding houses, prisons, etc.) and non-resident households (tourists) in the Country.
Classification of items	The classification of the CPI items (goods and services) is based on the international classification COICOP (Classification of Individual Consumption by Purpose) 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 CPI items are updated every year, on the basis of the most recent available data of HBS. The weights are calculated as the share (‰) of the expenditures for each group, subgroup and item (good or service) to the total household expenditure of the average household.
Price collection Cities	The CPI prices are collected in 27 cities with representative markets for the coverage of the 13 Regions of the Country. The selection criteria of the price collection cities are the size and the particularities of their markets, the possibility of continuous price collection, the comparability of the index and the cost of price collection.
Population weights	The calculation of the population weights by regions is based on the population data of the 2011 General Population Census and the expenditure data of the latest available HBS by regions.
Selection of items	The composition of the "household basket" i.e. the selection of goods and services which are included in the calculation of CPI is updated annually, using the results of the latest available HBS, other market research, etc. The chain linking methodology allows the change of items of the household basket on an annual basis, in order to ensure the representativeness of the items involved in the calculation of groups and subgroups of CPI.
Price collection-Outlets	The prices collection outlets are retail stores, enterprises providing services, street markets etc. which are considered representative of the branches of shops, where the households make their purchases in the 27 selected cities. The methodology allows the renewal of price collection sources, annually, in order to maintain their representativeness in the calculation of CPI. Prices are collected by employees of ELSTAT as well as by external price collectors, hired on a temporary basis. They pay a visit to the selected outlets within a specific time period of a month (monthly prices) or on a specific day of the week (weekly prices). The collected prices correspond to the prices actually faced by the consumer.
Specification- Substitution of items	All the collected items are defined by the specification, that is the particular characteristics which determine the quality, the trade show and the identity, in general, of good products (such as brand, weight, package etc), in order to avoid any price variations attributable to differences in the specification. Once a specified item (good or service) is no longer available in the market or has ceased to be important, as regards consumption, it is substituted by a newly specified item, which has taken its place in the market.

Implementation of formula in five-digit level of COICOP5

Specifically, if the five-digit item h includes q price collected items, then its index in month t of year T, $R_h^{t,T}$, is given by the following formula:

$$\mathbf{R}_{h}^{t,T} = \mathbf{R}_{h}^{12,T-1} \left[\frac{\sum_{i=1}^{q} \mathbf{w}_{i}^{T} \mathbf{R}_{i}^{t,T} / \mathbf{R}_{i}^{12,T-1}}{\sum_{i=1}^{q} \mathbf{w}_{i}^{T}} \right]$$

where:

 $\begin{array}{ll} R_{h}^{12,T-1} & = \mbox{the index of the five-digit item h, in December of year T-1.} \\ & \mathbf{W}_{i}^{T} & = \mbox{the weight of the price collected item I, in year T.} \\ & \mathbf{R}_{i}^{t,T} & = \mbox{the index of the price collected item I, in month t of year T.} \\ & \mathbf{R}_{i}^{12,T-1} & = \mbox{the index of the price collected item I, in December of year T-1.} \end{array}$

A similar methodology is followed for the calculation of indices in the upper levels (two-digit, three-digit and fourdigit) of COICOP5 and the calculation of the overall CPI as well.

- Publication of data The published CPI time series (reference year 2020=100.0), covers the period from January 1959 onwards. The CPI data are released each month as scheduled, in accordance with the Releases Calendar of ELSTAT, with the Release and the tables.
 - **References** Further information concerning the methodology and the compilation of the CPI is available in the <u>Methodological</u> <u>Publication CPI (2009=100.0)</u> and the <u>Single Integrated Metadata Structure (SIMS)</u>.