



PRESS RELEASE

CONSUMER PRICE INDEX: November 2021, annual inflation 4.8%

The evolution of the Consumer Price Index (CPI) of November 2021 (reference year 2009=100.0) is depicted as follows:

The CPI in November 2021 compared with November 2020, increased by 4.8%. In November 2020, the annual rate of change of the CPI was -2.1% (Table 2).

The CPI in November 2021 compared with October 2021, increased by 0.5%. In November 2020, the monthly rate of change of the CPI was -0.9% (Table 1).

The average CPI for the twelve - month period from December 2020 to November 2021, compared with the corresponding index for the period December 2019 to November 2020 increased by 0.6%. The annual rate of change of the average CPI between the twelve - month period December 2019 to November 2020 in comparison to the period December 2018 to November 2019 was -1.0% (Table 3).

6 5 3 2 1 -1 -2 -3 2013 2014 2016 2018 2019 2020 2021 ---- CPI annual rates of change CPI annual average rates of change

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

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Analysis of changes of the CPI: November 2021

Monthly rates of change: November 2021 compared with October 2021 (Tables 1, 4)

The 0.5% increase of the Overall CPI in November 2021, compared with the corresponding index in October 2021 is, mainly, due to the changes in the groups of goods and services as follows:

1. An increase of:

- 0.8% in the group <u>Food and non-alcoholic beverages</u>, due to the increase, mainly, in the prices of: *other bakery products, beef, pork, lamb and goat, poultry, fresh fish, cheese, fresh fruit, preserved or processed vegetables, potatoes.* This increase was partly offset by the decrease, mainly, in the prices of: *olive oil, fresh vegetables*.
- 5.6% in the group Housing, due to the increase, mainly, in the prices of: electricity, natural gas.
- 0.2% in the group <u>Household equipment</u>, due to the increase, mainly, in the prices of: *non-durable household articles, domestic services*. This increase was partly offset by the decrease in the prices due to the 10-day period of winter sales.
- 0.2% in the group <u>Transport</u>, due to the increase, mainly, in the prices of: *new motorcars, fuels and lubricants*. This increase was partly offset by the decrease, mainly, in the prices of *tickets for passenger transport by air*.

2. A decrease of:

- 0.3% in the group <u>Alcoholic beverages and tobacco</u>, due to the decrease, mainly, in the prices of wines.
- 9.4 %in the group <u>Clothing and footwear</u>, due to the 10-day period of winter sales.
- 0.2% in the group <u>Miscellaneous goods and services</u>, due to the decrease, mainly, in the prices of *other appliances and articles* for personal care.

II. Annual rates of change: November 2021 compared with November 2020 (Tables 2, 5)

The 4.8% increase of the Overall CPI in November 2021, compared with the corresponding index in November 2020 is, mainly, due to the changes in the groups of goods and services as follows:

1. An increase of:

- 3.5% in the group <u>Food and non-alcoholic beverages</u> due to the increase, mainly, in the prices of: *bread, other bakery products, pasta products and couscous, beef, lamb and goat, poultry, other meat preparations, fresh fish, cheese, olive oil, other edible oils, fresh fruit, fresh vegetables, potatoes, chocolates-chocolate products, coffee.*
- 3.9% in the group Clothing and footwear, due to the increase in the prices of clothing and footwear.
- 17.7% in the group <u>Housing</u>, due to the increase, mainly, in the prices of: rentals for dwellings, electricity, natural gas, heating oil
- 2.3% in the group <u>Household equipment</u>, due to the increase, mainly, in the prices of: *furniture and furnishings, glassware-tableware and utensils of domestic use, non-durable household articles, domestic services*.
- 9.3% in the group <u>Transport</u>, due to the increase, mainly, in the prices of: *fuels and lubricants, new motorcars, tickets for passenger transport by air.*
- 0.9% in the group Education, due to the increase, mainly, in the prices of fees of secondary education.
- 1.3% in the group <u>Hotel-Cafés-Restaurants</u>, due to the increase, mainly, in the prices of: *restaurants-confectioneries-cafes*, *hotels-motels-inns*.

2. A decrease of:

- 0.1% in the group Alcoholic beverages and tobacco, due to the decrease in the prices of wines.
- 0.1% in the group <u>Health</u>, due to the decrease, mainly, in the prices of *pharmaceutical products*. This decrease was partly offset by the increase, mainly, in the prices of *dental services*.
- 2.7% in the group <u>Communication</u>, due to the decrease, mainly, in the prices of: *telephone services, mobile telephone equipment*.
- 0.3% in the group Recreation and culture, due to the decrease, mainly, in the prices of major durables for outdoor recreation.
- 0.7% in the group <u>Miscellaneous goods and services</u>, due to the decrease, mainly, in the prices of: *other appliances and articles for personal care, motor vehicle insurance.*

Table 1. Monthly rates of change of CPI (Reference year: 2009=100.0)

	Main groups	Weights 2021	2021	2021	Rate of change	2020	2020	Rate of change
	of goods and services	(‰)	November	October	%	November	October	%
1.	Food & non-alcoholic beverages	232.58	110.74	109.90	0.8	107.00	106.73	0,3
2.	Alcoholic beverages and tobacco	34.27	148.16	148.60	-0.3	148.31	148.55	-0,2
3.	Clothing and footwear	59.63	93.87	103.58	-9.4	90.36	103.11	-12,4
4.	Housing	142.22	134.99	127.88	5.6	114.70	114.46	0,2
5.	Household equipment	47.87	86.96	86.77	0.2	84.96	86.07	-1,3
6.	Health	90.59	97.94	97.96	0.0	98.02	97.93	0,1
7.	Transport	124.20	128.94	128.63	0.2	117.97	117.81	0,1
8.	Communication	44.20	101.94	102.19	-0.2	104.75	104.79	0,0
9.	Recreation and culture	38.30	85.83	85.90	-0.1	86.09	86.24	-0,2
10.	Education	37.15	89.80	89.79	0.0	88.97	88.97	0,0
11.	Hotels-Cafés-Restaurants	70.17	109.72	109.70	0.0	108.32	108.67	-0,3
12.	Miscellaneous goods and services	78.84	88.43	88.58	-0.2	89.09	89.77	-0,8
	Overall Index	1000.00	109.90	109.38	0.5	104.84	105.77	-0.9

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

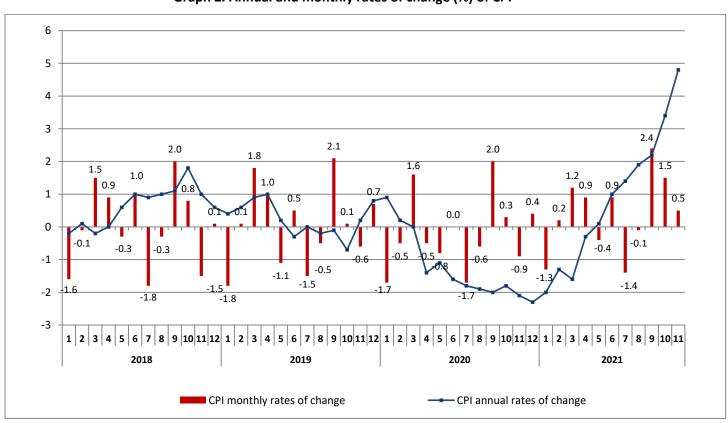


Table 2. Inflation – Annual rates of change of CPI (Reference year: 2009=100.0)

I: November 2021/2020

		November		Rate of	Impact	
	Main groups of goods and services	2021	2020	change (%)	pace	
1.	Food and non-alcoholic beverages	110.74	107.00	3.5	0.8422	
2.	Alcoholic beverages and tobacco	148.16	148.31	-0.1	-0.0059	
3.	Clothing and footwear	93.87	90.36	3.9	0.2684	
4.	Housing	134.99	114.70	17.7	2.5090	
5.	Household equipment	86.96	84.96	2.3	0.1114	
6.	Health	97.94	98.02	-0.1	-0.0077	
7.	Transport	128.94	117.97	9.3	1.1596	
8.	Communication	101.94	104.75	-2.7	-0.1188	
9.	Recreation and culture	85.83	86.09	-0.3	-0.0107	
10.	Education	89.80	88.97	0.9	0.0349	
11.	Hotels-Cafés-Restaurants	109.72	108.32	1.3	0.0942	
12.	Miscellaneous goods and services	88.43	89.09	-0.7	-0.0538	
	Overall Index	109.90	104.84	4.8		

II: November 2020/2019

		Nove	ember	Rate of	Impact
	Main groups of goods and services	2020	2019	change (%)	impact
1.	Food and non-alcoholic beverages	107.00	105.02	1.9	0.3837
2.	Alcoholic beverages and tobacco	148.31	148.77	-0.3	-0.0129
3.	Clothing and footwear	90.36	93.74	-3.6	-0.2293
4.	Housing	114.70	120.01	-4.4	-0.6282
5.	Household equipment	84.96	87.31	-2.7	-0.1163
6.	Health	98.02	99.13	-1.1	-0.0859
7.	Transport	117.97	126.66	-6.9	-0.9963
8.	Communication	104.75	107.28	-2.4	-0.1019
9.	Recreation and culture	86.09	86.98	-1.0	-0.0403
10.	Education	88.97	88.98	0.0	-0.0006
11.	Hotels-Cafés-Restaurants	108.32	108.90	-0.5	-0.0587
12.	Miscellaneous goods and services	89.09	91.55	-2.7	-0.1783
	Overall Index	104.84	107.05	-2.1	

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: 2009=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 %
2018 : 1	104.58	-1.6	-0.2	105.81	1.0
2	104.52	-0.1	0.1	105.81	0.9
3	106.08	1.5	-0.2	105.79	0.7
4	107.05	0.9	0.0	105.80	0.6
5	106.70	-0.3	0.6	105.85	0.6
6	107.76	1.0	1.0	105.94	0.6
7	105.84	-1.8	0.9	106.01	0.5
8	105.49	-0.3	1.0	106.09	0.5
9	107.61	2.0	1.1	106.19	0.6
10	108.44	0.8	1.8	106.35	0.6
11	106.81	-1.5	1.0	106.43	0.6
12	106.92	0.1	0.6	106.48	0.6
Annual average	106.48	-	-	106.48	0.6
2019 : 1	105.04	-1.8	0.4	106.52	0.7
2	105.17	0.1	0.6	106.58	0.7
3	107.08	1.8	0.9	106.66	0.8
4	108.14	1.0	1.0	106.75	0.9
5	106.95	-1.1	0.2	106.77	0.9
6	107.46	0.5	-0.3	106.75	0.8
7	105.89	-1.5	0.0	106.75	0.7
8	105.31	-0.5	-0.2	106.74	0.6
9	107.53	2.1	-0.1	106.73	0.5
10	107.67	0.1	-0.7	106.66	0.3
11	107.05	-0.6	0.2	106.68	0.2
12	107.76	0.7	0.8	106.75	0.3
Annual average	106.75	-	-	106.75	0.3
2020 : 1	105.94	-1.7	0.9	106.83	0.3
2	105.41	-0.5	0.2	106.85	0.3
3	107.08	1.6	0.0	106.85	0.2
4	106.59	-0.5	-1.4	106.72	0.0
5	105.73	-0.8	-1.1	106.62	-0.1
6	105.77	0.0	-1.6	106.48	-0.3
7	103.97	-1.7	-1.8	106.32	-0.4
8	103.30	-0.6	-1.9	106.15	-0.5
9	105.40	2.0	-2.0	105.97	-0.7
10	105.77	0.3	-1.8	105.81	-0.8
11	104.84	-0.9	-2.1	105.63	-1.0
12	105.26	0.4	-2.3	105.42	-1.2
Annual average	105.42	-	-	105.42	-1.2
2021 : 1	103.86	-1.3	-2.0	105.25	-1.5
2	104.08	0.2	-1.3	105.14	-1.6
3	105.33	1.2	-1.6	104.99	-1.7
4	106.29	0.9	-0.3	104.97	-1.6
5	105.87	-0.4	0.1	104.98	-1.5
6	106.86	0.9	1.0	105.07	-1.3
7	105.38	-1.4	1.4	105.19	-1.1
8	105.24	-0.1	1.9	105.35	-0.8
9	107.73	2.4	2.2	105.54	-0.4
10	109.38	1.5	3.4	105.84	0.0
11	109.90	0.5	4.8	106.26	0.6

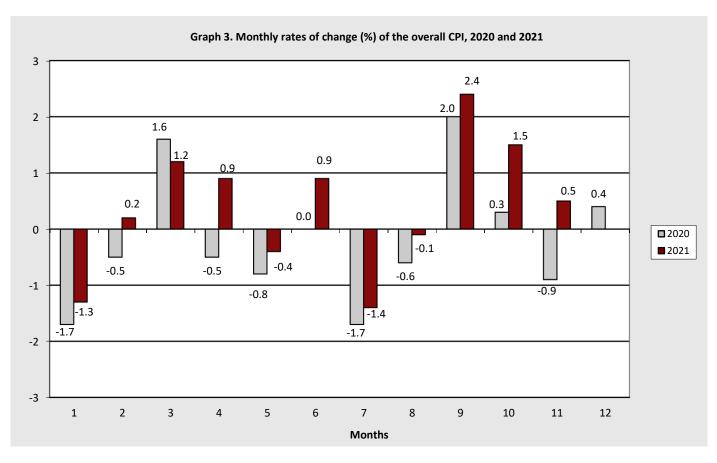
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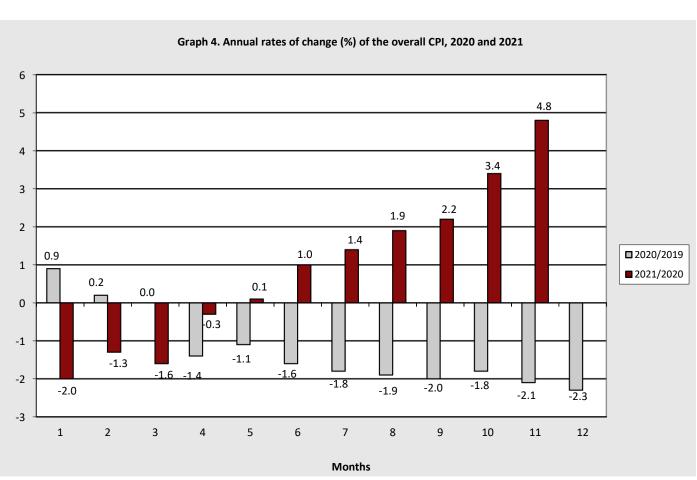
Table 4. Major price changes from index comparison between November 2021 and October 2021 and their impact on the Overall CPI

Goods and services	Rate of change (%)	Impact
Other bakery products	2.1	0.01
Beef	0.7	0.01
Pork	2.1	0.02
Lamb and goat	2.9	0.02
Poultry	1.2	0.01
Fresh fish	1.1	0.01
Cheese	2.1	0.04
Fresh fruit	3.5	0.06
Preserved or processed vegetables	1.7	0.01
Potatoes	3.2	0.01
Olive oil	-1.4	-0.01
Fresh vegetables	-3.4	-0.05
Wine	-2.6	-0.01
Electricity	15.9	0.71
Natural gas	31.7	0.13
Non-durable household articles	0.8	0.01
Domestic services	1.7	0.02
New motorcars	1.3	0.02
Fuels and lubricants	1.6	0.08
Passenger transport by air	-11.5	-0.07
Other appliances and articles for personal care	-0.4	-0.01
10-day winter sales	-	-0.57

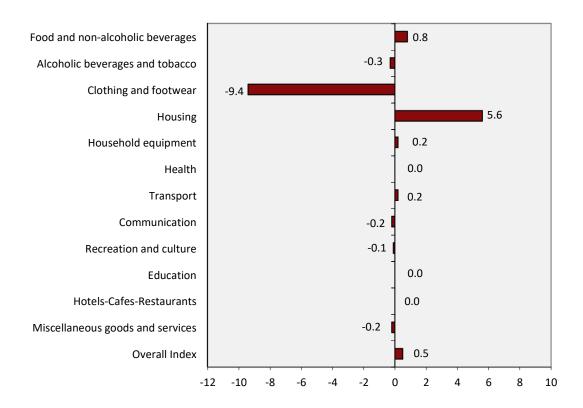
Table 5. Major price changes from index comparison between November 2021 and November 2020 and their impact on the Overall CPI

Goods and services	Rate of change (%)	Impact
Bread	4.3	0.07
Other bakery products	2.4	0.02
Pasta products and couscous	3.9	0.01
Beef	1.5	0.03
Lamb and goat	21.3	0.11
Poultry	5.6	0.06
Other meat preparations	6.1	0.01
Fresh fish	9.8	0.10
Cheese	3.5	0.06
Olive oil	18.5	0.17
Other edible oils	16.7	0.02
Fresh fruit	0.4	0.02
Fresh vegetables	2.5	0.04
Potatoes	11.9	0.04
Chocolates-chocolate products	3.8	0.01
Coffee	3.9	0.02
Wines	-1.8	-0.01
Clothing and footwear	3.9	0.27
Rentals for dwellings	0.3	0.01
Electricity	37.8	1.48
Natural gas	180.9	0.37
Heating oil	45.2	0.63
Furniture and furnishings	3.2	0.01
Glassware-tableware and utensils of domestic use	5.3	0.02
Non-durable household articles	1.8	0.03
Domestic services	5.7	0.06
Pharmaceutical products	-1.1	-0.03
Dental services	1.1	0.01
Fuels and lubricants	24.9	1.09
New motorcars	6.3	0.12
Passenger transport by air	12.1	-0.07
Telephone services	-2.6	-0.11
Mobile telephone equipment	-8.5	-0.01
Major durables for outdoor recreation	-1.3	-0.01
Secondary education	1.4	0.03
Restaurants-confectioneries-cafes	1.1	0.07
Hotels-motels-inns	12.8	0.02
Other appliances and articles for personal care	-1.0	-0.03
Motor vehicle insurance	-1.9	-0.03

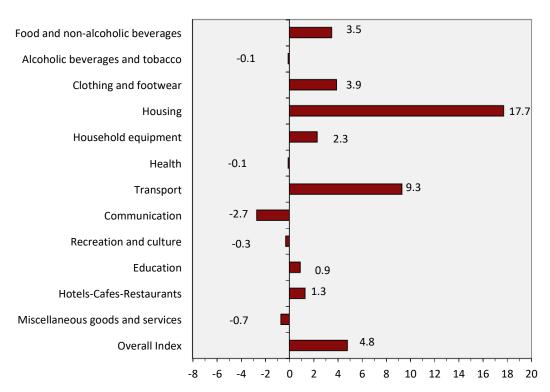


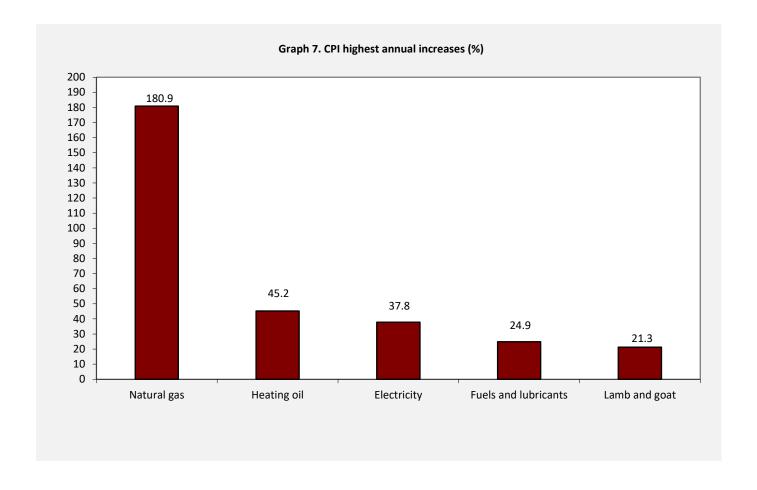


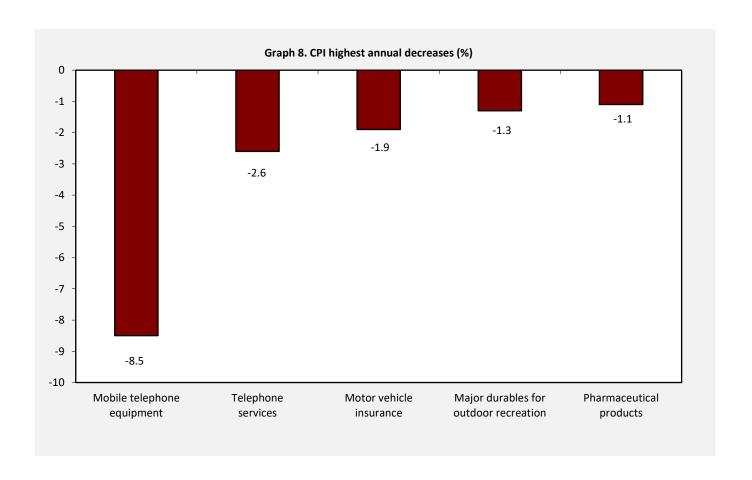
Graph 5. Monthly rates of change (%) of CPI between November 2021 and October 2021



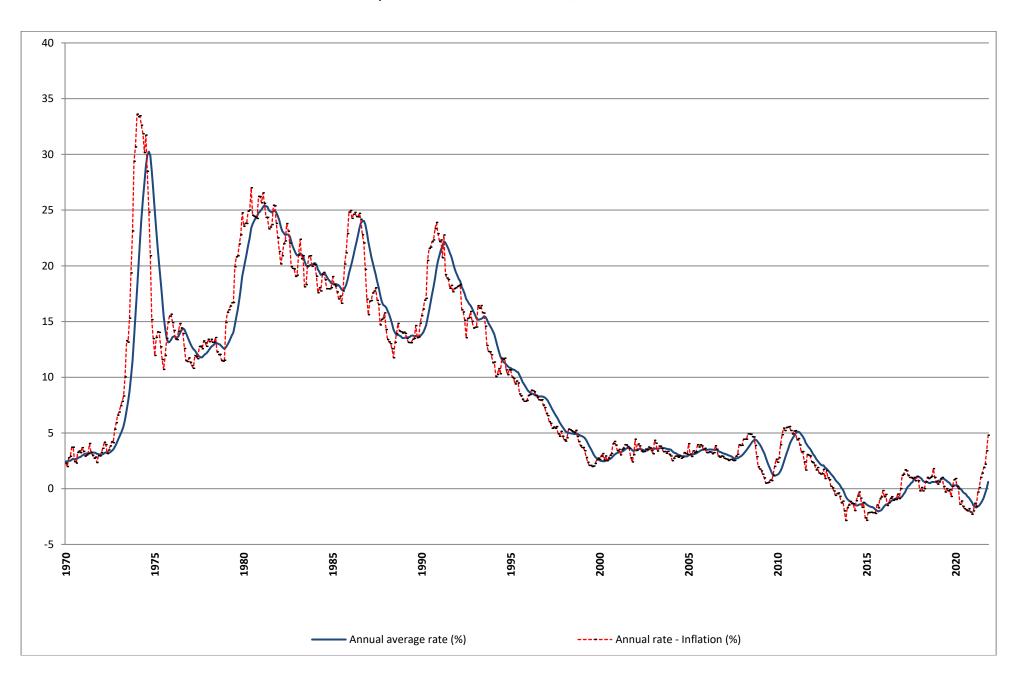
Graph 6. Annual rates of change (%) of CPI between November 2021 and November 2020







Graph 9. Historical evolution of CPI, 1970 – 2021



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 2009=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.

Calculation of the Consumer Price Index

The Consumer Price Index is a Laspeyres-type index and it is calculated based on December of the previous year.

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:

$$R_{h}^{t,T} = R_{h}^{12,T-1} \left[\frac{\sum_{i=1}^{q} w_{i}^{T} R_{i}^{t,T} / R_{i}^{12,T-1}}{\sum_{i=1}^{q} w_{i}^{T}} \right],$$

where:

 $R_{\perp}^{12,T-1}$ = the index of the five-digit item h, in December of year T-1.

 $\mathbf{W}_{:}^{\mathrm{T}}$ = the weight of the price collected item I, in year T.

 $\mathbf{R}^{t,T}$ = the index of the price collected item I, in month t of year T.

 $R_{i}^{12,T-1}$ = the index of the price collected item I, in December of year T-1.

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

Publication of data

The published CPI time series (reference year 2009=100.0), covers the period from January 1959 onwards. The CPI data are released each month as scheduled, in accordance with the Press Releases Calendar of ELSTAT, with the Press Release and the tables.

References

Further information concerning the methodology and the compilation of the CPI is available in the <u>Methodological Publication CPI (2009=100.0)</u> and the <u>Single Integrated Metadata Structure (SIMS)</u>.