

PRESS RELEASE

CONSUMER PRICE INDEX: March 2020, annual inflation 0.0%

The evolution of the Consumer Price Index (CPI) of March 2020 (reference year 2009=100.0) is depicted as follows:

The CPI in March 2020 compared with March 2019 remained unchanged. In March 2019, the annual rate of change of the CPI was 0.9% (Table 2).

The CPI in March 2020 compared with February 2020, increased by 1.6%. In March 2019, the monthly rate of change of the CPI was 1.8% (Table 1).

The average CPI for the twelve - month period from April 2019 to March 2020, compared with the corresponding index for the period April 2018 to March 2019 increased by 0.2%. The annual rate of change of the average CPI between the twelve - month period April 2018 to March 2019 in comparison to the period April 2017 to March 2018 was 0.8% (Table 3).

6 5 3 2 1 -1 -2 -3 2020 2010 2011 2012 2014 2015 2016 -- CPI annual rates of change CPI annual average rates of change

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

Information on methodological issues: Population, Employment and Cost of Living Statistics Division Section of Retail Price Indices Head of the Section M. Glenis Tel: +30 213 135 2128

Fax: +30 213 135 2724 email: m.glenis@statistics.gr

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

Analysis of changes of the CPI: March 2020

I. Monthly rates of change: March 2020 compared with February 2020 (Tables 1, 4)

The 1.6% increase of the Overall CPI in March 2020, compared with the corresponding index in February 2020 is, mainly, due to the changes in the groups of goods and services as follows:

1. An increase of:

- 0.4% in the group Alcoholic beverages and tobacco, due to the increase, mainly, in the prices of alcoholic beverages (not served).
- 44.4% in Clothing and footwear, due to the recovery of prices up to normal levels before the winter sales period.
- 0.6% in the group <u>Household equipment</u>, due to the recovery of prices up to normal levels before the winter sales period. This increase was partly offset by the decrease, mainly, in the prices of *non-durable household articles*.
- 0.1% in the group <u>Hotel-Cafés-Restaurants</u>, due to the increase, mainly, in the prices of hotels-motels-inns.

2. A decrease of:

- 0.6% in the group <u>Food and non-alcoholic beverages</u>, due to the decrease, mainly, in the prices of: *bread and cereals, fresh fish, cheese, fresh vegetables*. This decrease was partly offset by the increase, mainly, in the prices of: *pork, fresh fruit, olive oil*.
- 1.4% in the group Housing, due to the decrease, mainly, in the prices of: heating oil, natural gas.
- 1.2% in the group <u>Transport</u>, due to the decrease, mainly, in the prices of *fuels and lubricants*. This decrease was partly offset by the increase, mainly, in the prices of *tickets for passenger transport by air*.
- 0.5% in the group Communication, due to the decrease, mainly, in the prices of telephone services.

II. Annual rates of change: March 2020 compared with March 2019 (Tables 2, 5)

The Overall CPI remained unchanged in March 2020, compared with the corresponding index in March 2019 is, mainly, due to the changes in the groups of goods and services as follows:

1. An increase of:

- 0.3% in the group <u>Alcoholic beverages and tobacco</u>, due to the increase, mainly, in the prices of *alcoholic beverages (not served)*.
- 12.2% in Clothing and footwear, due to the increase in the prices of articles of clothing and footwear.
- 1.5% in the group Health, due to the increase, mainly, in the prices of pharmaceutical products.
- 0.5% in the group Education, due to the increase, mainly, in the prices of fees of pre-primary and primary education.
- 0.6% in the group <u>Hotel-Cafés-Restaurants</u>, due to the increase, mainly, in the prices of *restaurants-confectioneries-cafés-buffets*.

2. A decrease of:

- 0.1% in the group Food and non-alcoholic beverages due to the decrease, mainly, in the prices of: bread and cereals, fish, oils and fats, fresh vegetables, preserved or processed vegetables, potatoes, sugar-chocolates-sweets-ice creams, other food, coffee-cocoa-tea, fruit juices. This decrease was partly offset by the increase, mainly, in the prices of: beef, pork, lamb and goat, poultry, dried salted or smoked meat, fresh whole milk, fresh fruit.
- 2.9% in the group Housing, due to the decrease, mainly, in the prices of: heating oil, natural gas, electricity.
- 1.3% in the group <u>Household equipment</u>, due to the decrease, mainly, in the prices of: *household textiles, household appliances* and repair, non-durable household articles.
- 1.5% in the group <u>Transport</u>, due to the decrease, mainly, in the prices of *fuels and lubricants*. This decrease was partly offset by the increase, mainly, in the prices of *new motorcars*.
- 1.8% in the group Communication, due to the decrease, mainly, in the prices of telephone services.
- 1.4% in the group Recreation and culture, due to the decrease, mainly, in the prices of audiovisual and information processing equipment.
- 1.0% 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. This decrease was partly offset by the increase, mainly, in the prices of motor vehicle insurance.

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

	Main groups	Weights HBS	2020	2020	Rate of change	2019	2019	Rate of change
	of goods and services	2018 (‰)	March	February	%	March	February	%
1.	Food & non-alcoholic beverages	202.67	106.59	107.24	-0.6	106.70	107.39	-0.6
2.	Alcoholic beverages and tobacco	37.07	148.97	148.43	0.4	148.53	148.90	-0.3
3.	Clothing and footwear	65.92	102.89	71.24	44.4	91.68	71.39	28.4
4.	Housing	141.50	117.40	119.05	-1.4	120.84	120.50	0.3
5.	Household equipment	43.08	86.92	86.41	0.6	88.09	87.03	1.2
6.	Health	76.74	99.01	99.01	0.0	97.52	97.53	0.0
7.	Transport	144.01	123.51	125.06	-1.2	125.44	120.92	3.7
8.	Communication	42.41	105.36	105.87	-0.5	107.25	106.58	0.6
9.	Recreation and culture	39.38	86.55	86.49	0.1	87.78	87.55	0.3
10.	Education	32.24	88.98	88.98	0.0	88.51	88.51	0.0
11.	Hotels-Cafés-Restaurants	109.23	109.03	108.89	0.1	108.42	108.24	0.2
12.	Miscellaneous goods and services	65.75	90.57	90.65	-0.1	91.50	91.74	-0.3
	Overall Index	1000.00	107.08	105.41	1.6	107.08	105.17	1.8

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

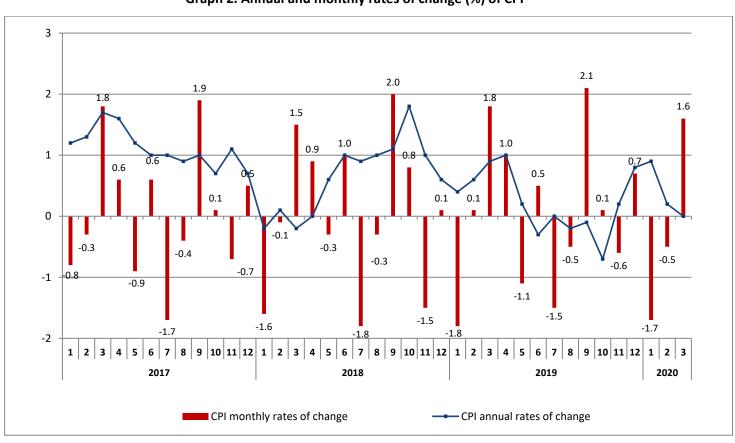


Table 2. Inflation – Annual rates of change of CPI (Reference year: 2009=100.0)

I: March 2020/2019

		Ma	rch	Rate of	Impact
	Main groups of goods and services		2019	change (%)	mpace
1.	Food and non-alcoholic beverages	106.59	106.70	-0.1	-0.0248
2.	Alcoholic beverages and tobacco	148.97	148.53	0.3	0.0102
3.	Clothing and footwear	102.89	91.68	12.2	0.7021
4.	Housing	117.40	120.84	-2.9	-0.4069
5.	Household equipment	86.92	88.09	-1.3	-0.0572
6.	Health	99.01	97.52	1.5	0.1132
7.	Transport	123.51	125.44	-1.5	-0.2193
8.	Communication	105.36	107.25	-1.8	-0.0760
9.	Recreation and culture	86.55	87.78	-1.4	-0.0555
10.	Education	88.98	88.51	0.5	0.0175
11.	Hotels-Cafés-Restaurants	109.03	108.42	0.6	0.0602
12.	Miscellaneous goods and services	90.57	91.50	-1.0	-0.0671
	Overall Index	107.08	107.08	0.0	

II: March 2019/2018

		M	March		Impact
	Main groups of goods and services	2019	2018	change (%)	
1.	Food and non-alcoholic beverages	106.70	105.23	1.4	0.2906
2.	Alcoholic beverages and tobacco	148.53	146.67	1.3	0.0541
3.	Clothing and footwear	91.68	94.97	-3.5	-0.2093
4.	Housing	120.84	118.71	1.8	0.2469
5.	Household equipment	88.09	89.36	-1.4	-0.0639
6.	Health	97.52	96.47	1.1	0.0806
7.	Transport	125.44	122.62	2.3	0.3310
8.	Communication	107.25	100.37	6.9	0.2876
9.	Recreation and culture	87.78	89.28	-1.7	-0.0686
10.	Education	88.51	89.22	-0.8	-0.0259
11.	Hotels-Cafés-Restaurants	108.42	107.85	0.5	0.0554
12.	Miscellaneous goods and services	91.50	91.99	-0.5	-0.0355
	Overall Index	107.08	106.08	0.9	

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: 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 %
2017 : 1	104.76	-0.8	1.2	104.75	-0.7
2	104.46	-0.3	1.3	104.86	-0.5
3	106.33	1.8	1.7	105.01	-0.3
4	107.01	0.6	1.6	105.16	0.0
5	106.06	-0.9	1.2	105.26	0.2
6	106.72	0.6	1.0	105.35	0.3
7	104.94	-1.7	1.0	105.44	0.5
8	104.48	-0.4	0.9	105.51	0.6
9	106.45	1.9	1.0	105.60	0.8
10	106.56	0.1	0.7	105.67	0.9
11	105.77	-0.7	1.1	105.77	1.1
12	106.33	0.5	0.7	105.82	1.1
Annual average	105.82	-	-	105.82	1.1
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

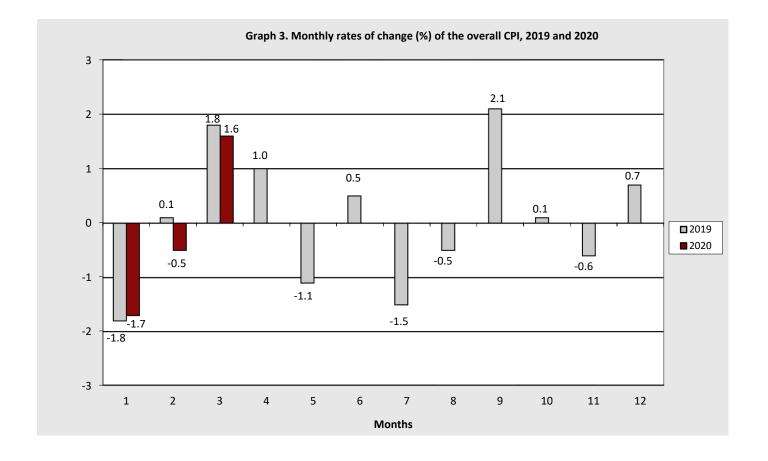
Note: The indices are rounded up to two decimal figures when published and percentage changes up to one decimal figure when published.

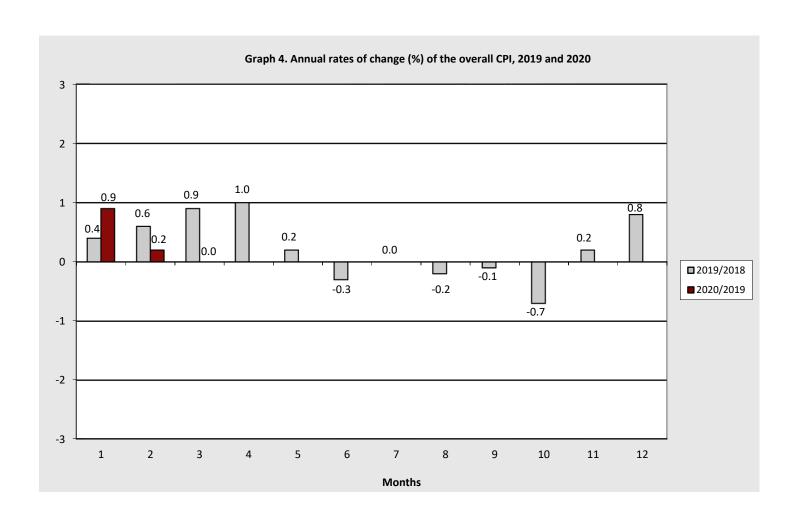
Table 4. Major price changes from index comparison between March 2020 and February 2020 and their impact on the Overall CPI

Goods and services	Rate of change (%)	Impact
Bread and cereals	-0.4	-0.01
Fresh fish	-1.6	-0.02
Fresh fruit	0.7	0.01
Fresh vegetables	-6.9	-0.11
Pork	1.2	0.01
Cheese	-0.8	-0.01
Olive oil	1.1	0.01
Alcoholic beverages (not served)	1.2	0.01
Natural gas	-3.5	-0.01
Heating oil	-9.4	-0.20
Fuels and lubricants	-5.5	-0.32
Passenger transport by air	9.1	0.14
Telephone services	-0.5	-0.02
Non-durable household articles	-1.5	-0.02
Hotels-motels-inns	2.5	0.01
Recovery of prices up to normal levels before the winter sales period	-	2.08

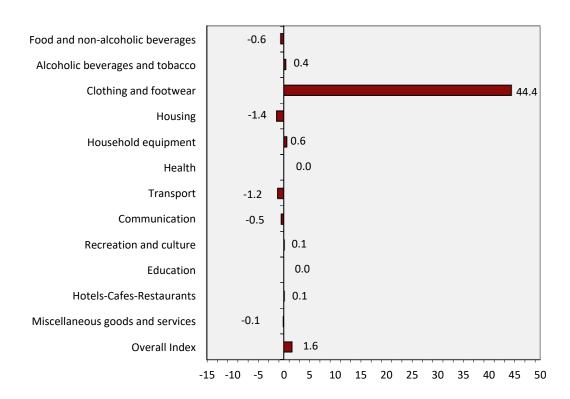
Table 5. Major price changes from index comparison between March 2020 and March 2019 and their impact on the Overall CPI

Goods and services	Rate of change (%)	Impact
Oils and fats	-6.6	-0.07
Fresh whole milk	5.6	0.04
Fresh fruit	14.5	0.18
Fresh vegetables	-4.3	-0.06
Bread and cereals	-1.6	-0.05
Preserved or processed vegetables	-1.6	-0.01
Sugar-chocolates-sweets-ice creams	-4.1	-0.04
Other food	-3.3	-0.01
Coffee-cocoa-tea	-7.0	-0.04
Fruit juices	-7.5	-0.02
Fish	-2.0	-0.03
Potatoes	-15.4	-0.08
Beef	0.6	0.01
Pork	5.2	0.04
Poultry	4.1	0.04
Lamb and goat	9.7	0.04
Dried salted or smoked meat	5.1	0.02
Alcoholic beverages (not served)	0.9	0.01
Clothing and footwear	12.2	0.70
Heating oil	-14.0	-0.31
Electricity	-0.4	-0.01
Natural gas	-27.7	-0.11
Non-durable household articles	-0.7	-0.01
Household textiles	-4.3	-0.02
Household appliances and repair	-2.9	-0.02
Pharmaceutical products	4.3	0.11
Fuels and lubricants	-4.2	-0.24
New motorcars	1.3	0.02
Telephone services	-1.6	-0.07
Audiovisual and information processing equipment	-6.8	-0.04
Pre-primary and primary education	2.2	0.02
Restaurants-confectioneries-cafes-buffets	0.6	0.06
Pre-primary and primary education	-2.9	-0.08
Motor vehicle insurance	1.0	0.02

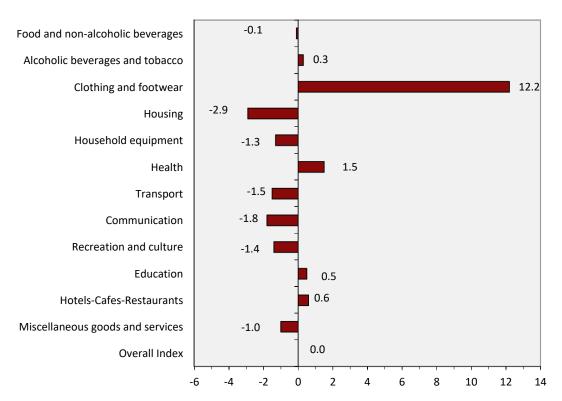


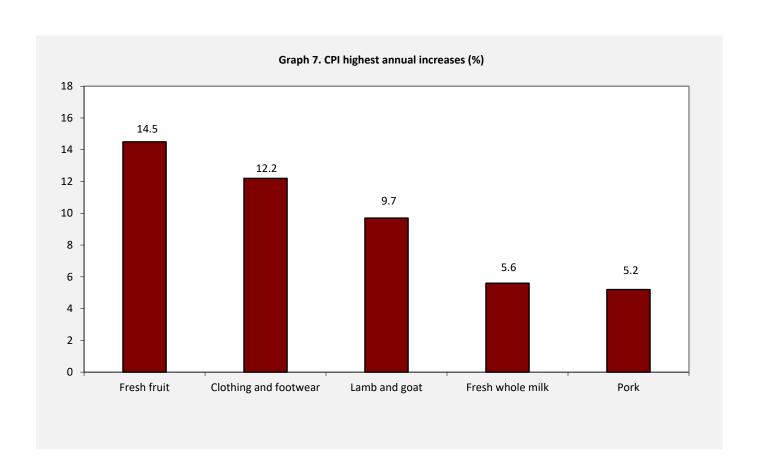


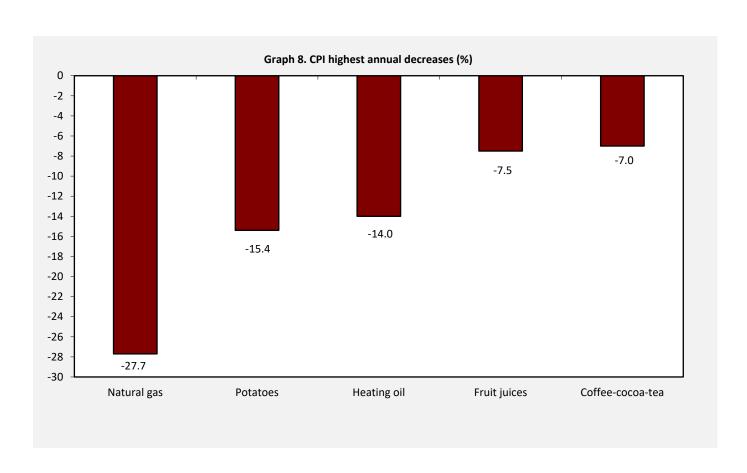
Graph 5. Monthly rates of change (%) of CPI between March 2020 and February 2020



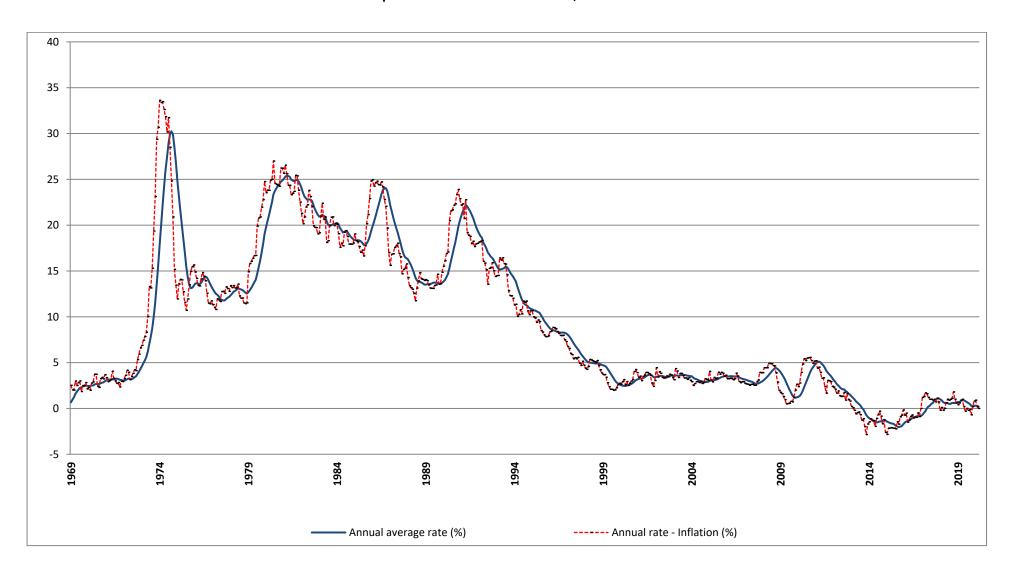
Graph 6. Annual rates of change (%) of CPI between March 2020 and March 2019







Graph 9. Historical evolution of CPI, 1969 – 2020



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:

 $R_{\rm h}^{12,T-1}$ = 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.

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

 $R_{\rm i}^{12,T-1}$ = 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 Methodological Publication CPI (2009=100.0) and the Single Integrated Metadata Structure (SIMS).