



## PRESS RELEASE

### CONSUMER PRICE INDEX: December 2015

(2009=100.0)

The Consumer Price Index (CPI) in December 2015 compared with December 2014 decreased by 0.2%. In December 2014, the annual rate of change of the CPI was -2.6% (Table 2).

The CPI in December 2015 compared with November 2015 increased by 0.1%. In December 2014, the monthly rate of change of the CPI was -0.5% (Table 1).

In the twelve-month period from January 2015 to December 2015, compared with the period from January 2014 to December 2014, the annual average rate of change of the CPI was -1.7%. The corresponding annual average rate of change of the CPI in the previous year (January 2014 to December 2014) was -1.3% (Table 3).

Information:

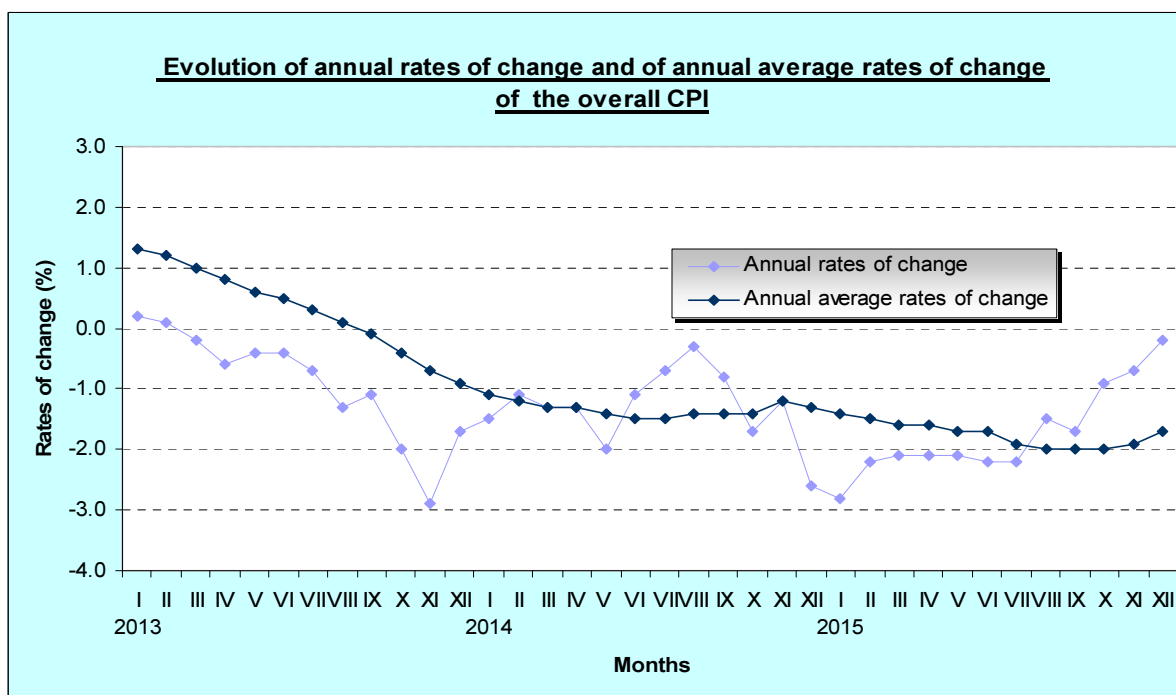
Economic and  
Short-Term  
Indicators  
Division

Argiro Kourtaki

Tel:0030213135  
2722

Fax:0030213135  
2724

[cpi@statistics.gr](mailto:cpi@statistics.gr)



**Table 1**  
**Monthly rates of change of the Consumer Price Index – December 2015**  
**(2009=100.0)**

	Main groups of goods and services	Weights HBS 2013 (%)	2015		Rate of change %	2014		Rate of change %
			December	November		December	November	
1	Food & non-Alcoholic Beverages	210.47	104.90	105.92	-1.0	102.08	102.59	-0.5
2	Alcoholic Beverages & Tobacco	44.80	134.14	134.67	-0.4	132.32	132.69	-0.3
3	Clothing and Footwear	62.81	106.03	97.47	8.8	105.24	100.18	5.1
4	Housing	135.43	118.02	119.15	-0.9	122.43	124.83	-1.9
5	Household Equipment	58.21	94.62	94.28	0.4	96.28	95.66	0.6
6	Health	74.95	97.82	97.81	0.0	96.72	96.50	0.2
7	Transport	123.26	114.22	114.77	-0.5	116.69	120.19	-2.9
8	Communication	43.00	98.41	98.42	0.0	98.41	98.42	0.0
9	Recreation and Culture	44.59	92.13	92.19	-0.1	93.50	93.46	0.0
10	Education	32.71	89.35	89.91	-0.6	90.41	90.41	0.0
11	Hotels Cafés & Restaurants	98.58	104.51	104.58	-0.1	101.75	102.56	-0.8
12	Miscellaneous Goods & Services	71.19	95.85	95.80	0.1	99.45	99.24	0.2
	Overall Index	1000.00	105.61	105.51	0.1	105.79	106.30	-0.5

Note: 1. The indices are calculated with infinite decimal figures and rounded up to two decimal figures when published.

2. Percentage changes are calculated on the basis of indices with infinite decimal figures and rounded up to one decimal figure when published.

**Table 2**  
**Annual rates of change of the Consumer Price Index – December 2015**  
**(2009=100.0)**

**I**

	Main groups of goods and services	December		Rate of change (%)	Effect
		2014	2013		
1	Food and non Alcoholic Beverages	102.08	103.31	-1.2	-0.2358
2	Alcoholic Beverages and Tobacco	132.32	128.48	3.0	0.1450
3	Clothing and Footwear	105.24	109.48	-3.9	-0.2513
4	Housing	122.43	131.74	-7.1	-1.2915
5	Household Equipment	96.28	97.95	-1.7	-0.0903
6	Health	96.72	97.70	-1.0	-0.0611
7	Transport	116.69	121.86	-4.2	-0.6068
8	Communication	98.41	98.46	0.0	-0.0017
9	Recreation and Culture	93.50	95.14	-1.7	-0.0634
10	Education	90.41	93.34	-3.1	-0.0870
11	Hotels Cafés and Restaurants	101.75	102.99	-1.2	-0.1125
12	Miscellaneous Goods and Services	99.45	101.94	-2.4	-0.1541
	Overall Index	105.79	108.62	-2.6	

**II**

	Main groups of goods and services	December		Rate of change (%)	Effect
		2015	2014		
1	Food and non Alcoholic Beverages	104.90	102.08	2.8	0.5602
2	Alcoholic Beverages and Tobacco	134.14	132.32	1.4	0.0767
3	Clothing and Footwear	106.03	105.24	0.8	0.0471
4	Housing	118.02	122.43	-3.6	-0.5636
5	Household Equipment	94.62	96.28	-1.7	-0.0916
6	Health	97.82	96.72	1.1	0.0785
7	Transport	114.22	116.69	-2.1	-0.2875
8	Communication	98.41	98.41	0.0	-0.0001
9	Recreation and Culture	92.13	93.50	-1.5	-0.0578
10	Education	89.35	90.41	-1.2	-0.0327
11	Hotels Cafés and Restaurants	104.51	101.75	2.7	0.2570
12	Miscellaneous Goods and Services	95.85	99.45	-3.6	-0.2421
	Overall Index	105.61	105.79	-0.2	

Note: 1. The indices are calculated with infinite decimal figures and rounded up to two decimal figures when published.  
2. Percentage changes are calculated on the basis of indices with infinite decimal figures and rounded up to one decimal figure when published.

**Table 3**  
**Comparisons of the overall Consumer Price Index**  
**(2009=100.0)**

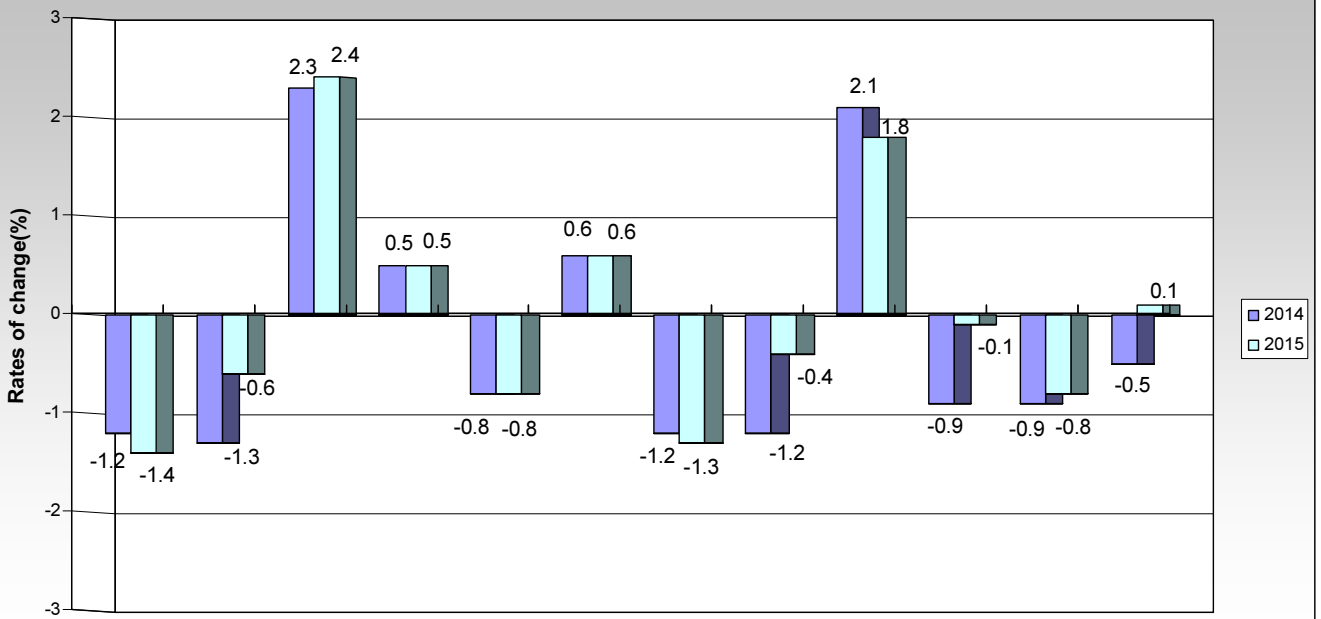
Year and month	Overall index	Monthly rates of change %	Annual rates of change %	Annual average index (moving average)	Annual average rates of change %
2012 : 1	108.75	-0.8	2.3	108.41	3.1
2	107.10	-1.5	2.1	108.59	2.9
3	110.13	2.8	1.7	108.74	2.7
4	111.07	0.8	1.9	108.91	2.5
5	110.71	-0.3	1.4	109.04	2.3
6	110.37	-0.3	1.3	109.16	2.2
7	108.88	-1.4	1.3	109.28	2.1
8	107.78	-1.0	1.7	109.43	2.1
9	110.44	2.5	0.9	109.51	1.9
10	111.34	0.8	1.6	109.66	1.8
11	110.80	-0.5	1.0	109.75	1.6
12	110.51	-0.3	0.8	109.82	1.5
<i>Annual average</i>	<i>109.82</i>	<i>-</i>	<i>-</i>	<i>109.82</i>	<i>1.5</i>
2013 : 1	108.97	-1.4	0.2	109.84	1.3
2	107.17	-1.6	0.1	109.85	1.2
3	109.90	2.5	-0.2	109.83	1.0
4	110.41	0.5	-0.6	109.78	0.8
5	110.21	-0.2	-0.4	109.73	0.6
6	109.95	-0.2	-0.4	109.70	0.5
7	108.13	-1.7	-0.7	109.64	0.3
8	106.41	-1.6	-1.3	109.52	0.1
9	109.20	2.6	-1.1	109.42	-0.1
10	109.13	-0.1	-2.0	109.23	-0.4
11	107.64	-1.4	-2.9	108.97	-0.7
12	108.62	0.9	-1.7	108.81	-0.9
<i>Annual average</i>	<i>108.81</i>	<i>-</i>	<i>-</i>	<i>108.81</i>	<i>-0.9</i>
2014 : 1	107.37	-1.2	-1.5	108.68	-1.1
2	105.94	-1.3	-1.1	108.58	-1.2
3	108.42	2.3	-1.3	108.45	-1.3
4	108.92	0.5	-1.3	108.33	-1.3
5	108.05	-0.8	-2.0	108.15	-1.4
6	108.75	0.6	-1.1	108.05	-1.5
7	107.40	-1.2	-0.7	107.99	-1.5
8	106.09	-1.2	-0.3	107.96	-1.4
9	108.29	2.1	-0.8	107.88	-1.4
10	107.30	-0.9	-1.7	107.73	-1.4
11	106.30	-0.9	-1.2	107.62	-1.2
12	105.79	-0.5	-2.6	107.38	-1.3
<i>Annual average</i>	<i>107.38</i>	<i>-</i>	<i>-</i>	<i>107.38</i>	<i>-1.3</i>
2015 : 1	104.32	-1.4	-2.8	107.13	-1.4
2	103.65	-0.6	-2.2	106.94	-1.5
3	106.10	2.4	-2.1	106.75	-1.6
4	106.63	0.5	-2.1	106.56	-1.6
5	105.73	-0.8	-2.1	106.36	-1.7
6	106.40	0.6	-2.2	106.17	-1.7
7	105.00	-1.3	-2.2	105.97	-1.9
8	104.54	-0.4	-1.5	105.84	-2.0
9	106.42	1.8	-1.7	105.68	-2.0
10	106.32	-0.1	-0.9	105.60	-2.0
11	105.51	-0.8	-0.7	105.54	-1.9
12	105.61	0.1	-0.2	105.52	-1.7
<i>Annual average</i>	<i>105.52</i>	<i>-</i>	<i>-</i>	<i>105.52</i>	<i>-1.7</i>

Note: 1. The indices are calculated with infinite decimal figures and rounded up to two decimal figures when published.

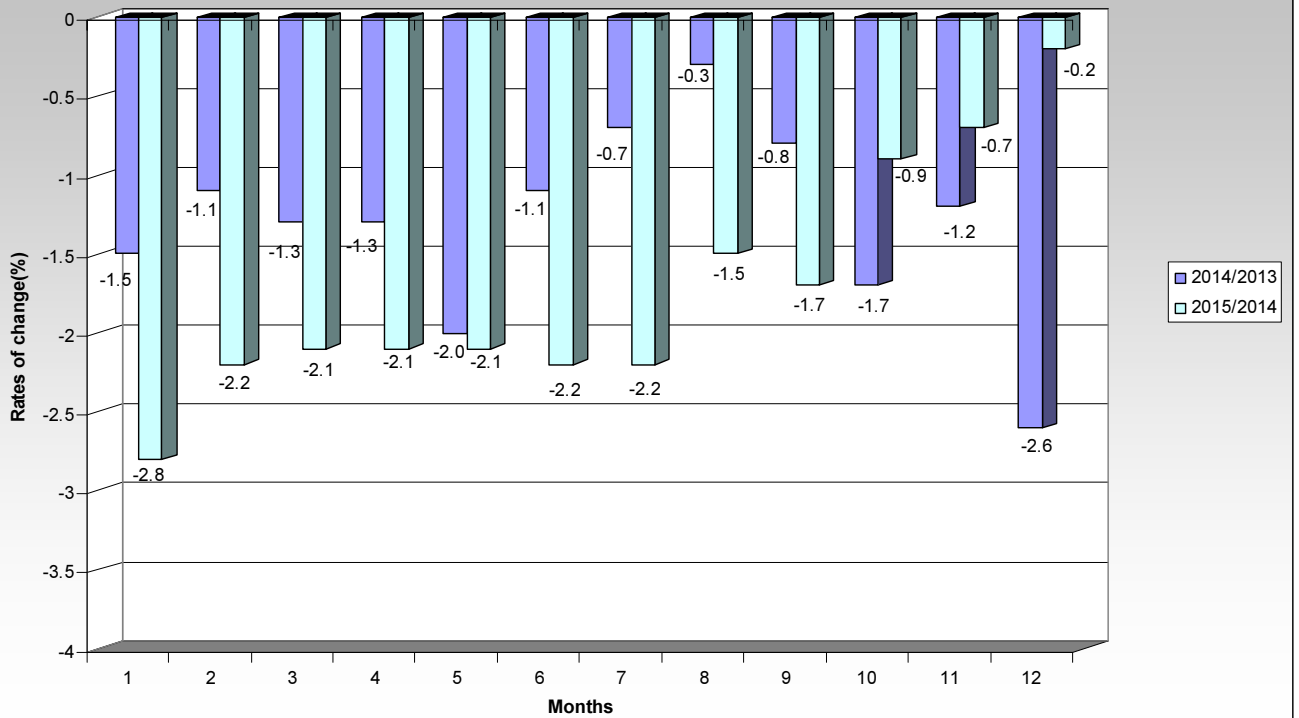
2. Percentage changes are calculated on the basis of indices with infinite decimal figures and rounded up to one decimal figure when published.

## DIAGRAMS

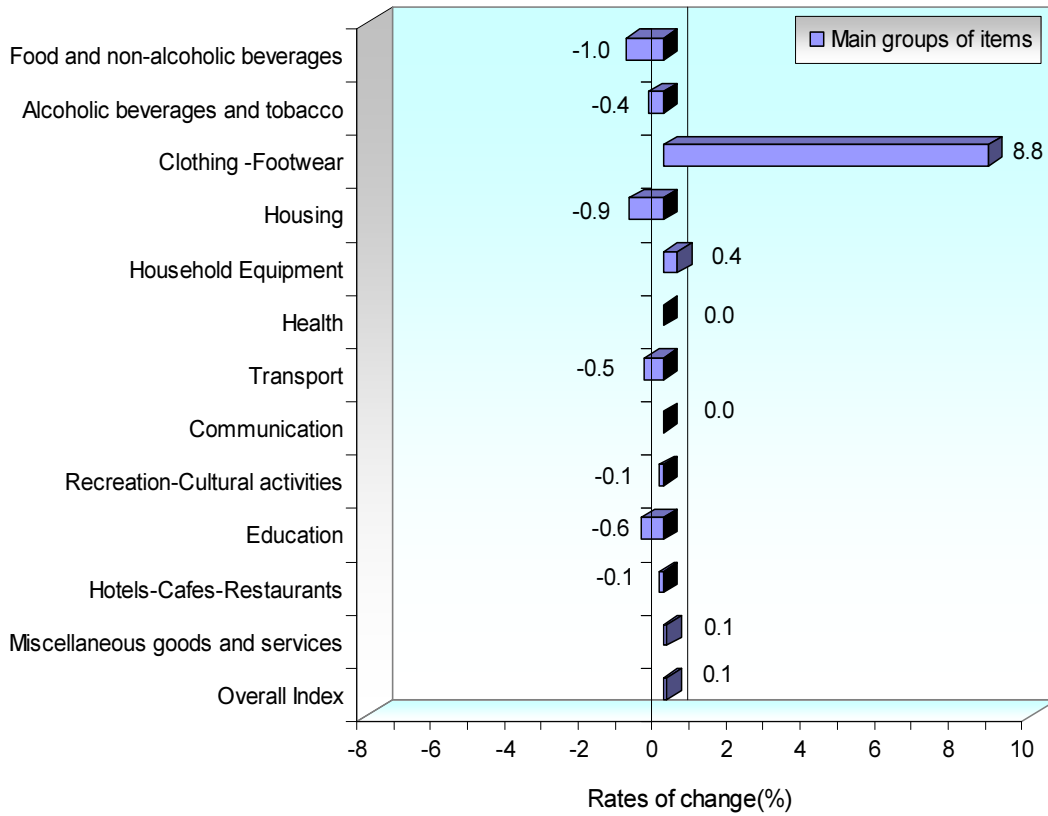
**Monthly rates of change (%) of the overall Consumer Price Index during the years 2014 and 2015**



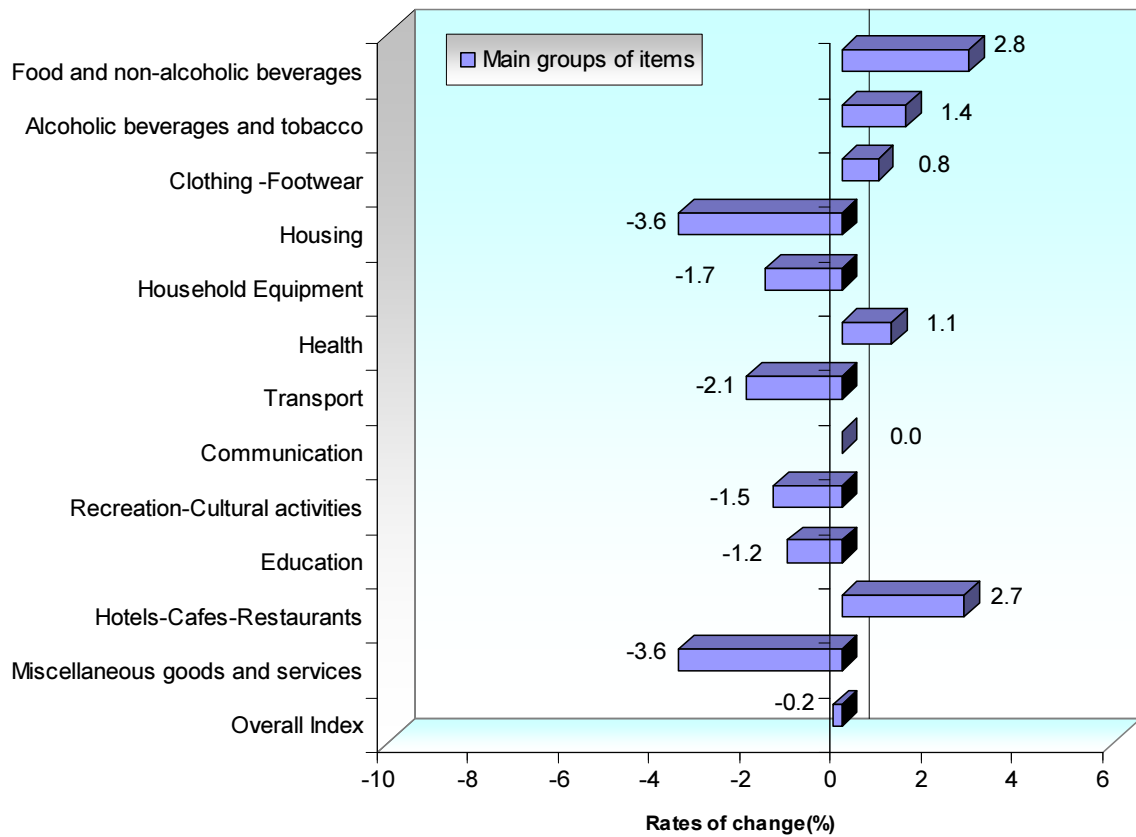
**Annual rates of change (%) of the overall Consumer Price Index during the years 2014 and 2015**



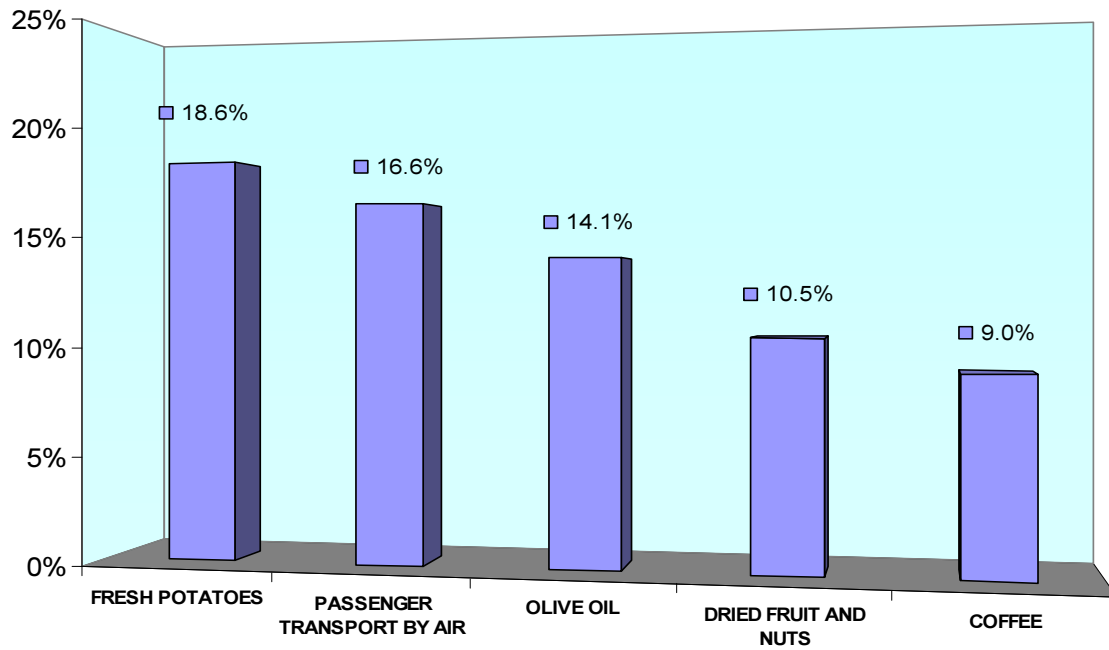
**Monthly rates of change (%) of the CPI between December 2015 and November 2015**



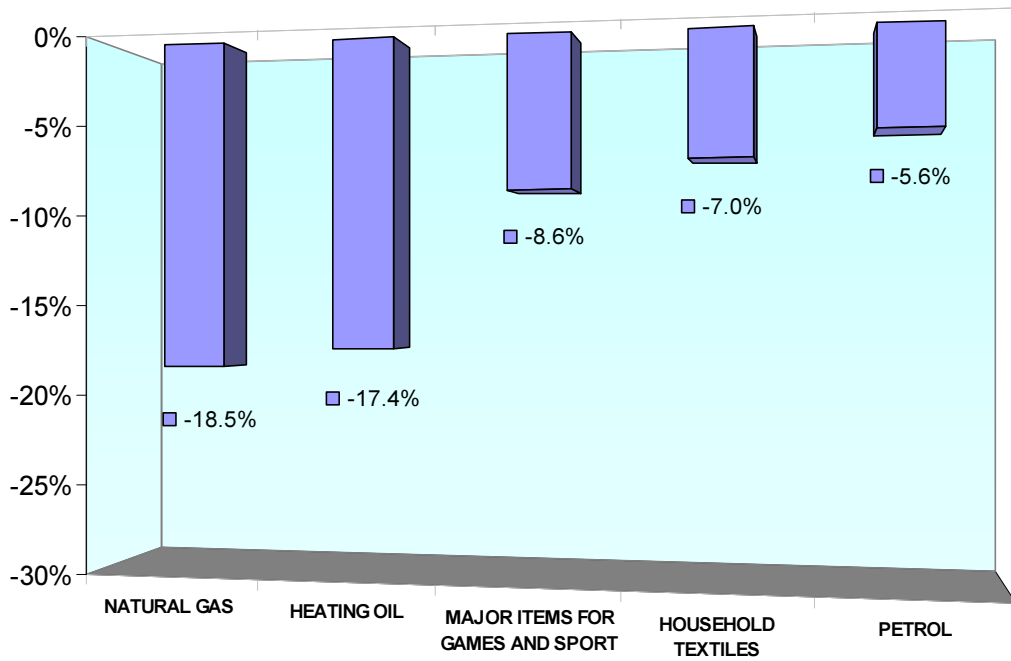
**Annual rates of change (%) of the CPI between December 2015 and December 2014**



CPI higher annual increases (%)



CPI higher annual decreases (%)



## METHODOLOGICAL NOTES

<b>Generally</b>	The Consumer Price Index (CPI) in Greece is compiled by the Hellenic Statistical Authority (ELSTAT) since 1959. Up to the year 2000, the CPI referred to the urban areas of the country, while from 2001 onwards it refers to the whole country.
<b>Purpose of the index</b>	The purpose of the Consumer Price Index is to measure the general level of prices of goods and services purchased by the average Greek household.
<b>Legal basis</b>	Law 3832/10
<b>Reference period</b>	Month
<b>Base</b>	December of the previous year
<b>Reference year</b>	2009=100.0
<b>Chain linking Index</b>	<p>Until 2013, the weights underlying the CPI were revised periodically (usually every five years) on the basis of the results of the latest Household Budget Survey (HBS), which was conducted every 5 years. Until December 2013, the CPI was a fixed-base index with the reference year being 2009=100.0. From January 2014 onwards, the revised CPI index follows the chain linking method, where new weights are introduced annually with every year having as a base the December of the previous year. The weights are estimated on the basis of the most recent available data from the Household Budget Survey, which is now conducted on an annual basis, extrapolated in the prices of December.</p> <p>The CPI, adjusted on an annual basis to the latest consumption expenditure pattern of the private households of the country, ensures the representativity of goods and services, which compose the “basket” of purchases of the average household.</p>
<b>Geographical and population coverage of the CPI</b>	<p>The CPI refers to the whole of the country covering the urban, semi-urban and rural areas.</p> <p>As regards the population coverage of the Index, in terms of the weights, it covers the resident households of the territory excluding collective households (hospital homes for the elderly, boarding homes, prisons, etc.) and non-resident households (tourists, and expatriates visiting home) in the country.</p>
<b>Classification of items</b>	The classification of items (goods and services) that are included in the index 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, thus creating the COICOP5/HICP classification.
<b>Weights of items</b>	From December 2013, the weights of items are updated every year, on the basis of the most recent available data from the Household Budget Survey. 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.
<b>Price collection Cities</b>	The prices of the items of CPI are collected in 27 cities, aiming at a representative 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 and the comparability of the index and the required cost of price collection.
<b>Population weights</b>	The calculation of the population weights by regions is based on the population data of the General Population Census for the year 2011 and the expenditure data of the HBS by regions for the years 2012 and 2013.
<b>Selection of items</b>	The composition of the “household basket” i.e. the selection of goods and services which are included in the calculation of CPI will be updated annually from December 2014 using the results of the latest available Household Budget Survey, 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 items, which take part in the calculation of groups and subgroups of CPI.



**Price collection- Outlets** Prices for CPI's items are collected from retail sales outlets, enterprises providing services, street markets etc. (price collection outlets) which are considered representative of the branches of shops, where the households make their purchases in the 27 selected price collection cities. The new methodology allows the renewal of price collection sources in order to maintain their representativeness in the calculation of CPI.

Prices are collected by experienced and well-trained staff of ELSTAT. They visit the selected outlets within a certain time period of a month (monthly prices) or on a certain day of the week (weekly prices) and register the prices into special price collection forms (questionnaires). The collected prices correspond to the prices actually faced by the consumer.

**Specification- Substitution of items** All the items, for which prices are collected, are defined by the specification, that is the particular characteristics which determine the quality, the trade show and the identity, in general, of goods (such as brand, weight, package etc), in order to avoid any price variations attributable to differences in the specification.

When a specified item (good or service) is no longer available in the market or has ceased to be important, as regards consumption, then it is replaced 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 formula below:

$$R_h^{t,T} = R_h^{12,T-1} \left[ \frac{\sum_{i=1}^q w_i^T R_i^{t,T} / R_i^{12,T-1}}{\sum_{i=1}^q w_i^T} \right],$$

where:

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

$w_i^T$  = the weight of the price collected item i, in year T,

$R_i^{t,T}$  = 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 available time series of the Consumer Price Index with the same reference year (2009=100.0) starts back from January 1959 onwards.

The CPI data are released each month in the anticipated press release to a pre-defined timetable, which is normally based on the previous years publication dates. These data is posted on the ELSTAT website ([www.statistics.gr](http://www.statistics.gr)), under the link "timeseries".

**References** Further information concerning the Consumer Price Index can be found in the Methodological Publication CPI (2009=100.0), and also in the information note for CPI of January 2015, which are posted on the homepage of ELSTAT ([www.statistics.gr](http://www.statistics.gr)).