



**HELLENIC STATISTICAL AUTHORITY**

**GENERAL DIRECTORATE OF STATISTICAL SURVEYS**  
**Economic and Short-Term Indices Division**  
**Retail Prices and Price Indices Section**

**Information note on the  
updating of the Consumer Price Indices,  
National Index (CPI) and Harmonised Index (HICP)**

**Base period: December 2015**

**Piraeus, February 2016**

## Introduction

The Hellenic Statistical Authority (ELSTAT), in the context of implementing the chain linking method for the compilation of the Consumer Price Index (national consumer price index:CPI and harmonised index of consumer prices:HICP) carried out the annual update of the indices in order to ensure their representativeness.

More specifically:

- updated the weights of the national index on the basis of the latest available data of the 2014 Households Budget Survey(HBS).
- updated the weights of the harmonised index on the basis of the latest available national accounts data of the year 2014, pursuant to Regulation (EC) 549/2013 on ESA 2010.
- Updated the population weights by taking into account expenditure data.
- Rescaling the HICP reference year to 2015=100.0.

### 1. Updating the weights of the National index of Consumer Prices (CPI)

The item's weights of CPI are based on the results of the 2014 HBS, adjusting the expenditure data of this survey to the prices of December 2015 which is the base month of the new CPI.

These weights refer to the average composition of monthly expenditure consumption of the total private households in the country, as resulted from the HBS. More specifically, the weight of each group, sub-group and species (of goods and services) represents the share of the average household expenditure for this group, sub-group and species in the total average household expenditure.

The weights of the items on the basis of the results of the 2014 HBS adjusted to December 2015 prices are expressed in ‰, for the 12 main Divisions in the following table. For comparison reasons, the weights of the CPI of December 2015, on the basis of the 2013 HBS, are also presented in the same table.

COICOP5	GROUPS – DIVISIONS	2016 w(‰)	2015 w(‰)
011	Food	206,37	199,16
012	Non alcoholic beverages (not served)	11,73	11,31
01	Food and non-alcoholic beverages	218,10	210,47
021	Alcoholic beverages (not served)	12,04	12,14
022	Tobacco	30,74	32,66
02	Alcoholic beverages and tobacco	42,79	44,80
031	Articles of clothing	52,10	48,07
032	Footwear	13,21	14,74
03	Clothing and footwear	65,30	62,81
041	Rentals	34,24	33,80
043	Repair and maintenance of the dwelling	6,92	8,56
044	Miscellaneous services relating to the dwelling	28,97	28,86
045	Electricity, natural gas and other fuels	59,06	64,22
04	Housing	129,19	135,43
051	Furnishings and other floor coverings	5,68	6,94
052	Household textiles	5,97	8,31
053	Household appliances and repair	7,30	7,19
054	Glassware, tableware and utensils of domestic use	3,06	3,38
055	Tools and equipment for house and garden	2,25	2,44
056	Goods and services for routine household maintenance	26,89	29,95

05	Durable goods - household articles and services	51,15	58,21
061	Medicinal - pharmaceutical products - therapeutic appliances	27,52	29,23
062	Medical, dental and paramedical services	22,99	24,24
063	Hospital care	24,91	21,48
06	Health	75,42	74,95
071	Purchase of vehicles	26,75	25,31
072	Operation of personal transport equipment	78,91	80,91
073	Transport services	16,73	17,04
07	Transport	122,40	123,26
081	Postal services	0,39	0,49
082	Telephone and telefax equipment	0,55	0,29
083	Telephone services	41,79	42,22
08	Communication	42,74	43,00
091	Audiovisual and information processing equipment	8,11	8,28
092	Major durables for recreation and culture	3,92	3,60
093	Small recreational items - flowers – pets	8,36	8,29
094	Recreational services	11,63	11,49
095	Newspapers, books and stationery	10,20	9,92
096	Package holidays	2,49	3,02
09	Recreation and culture	44,71	44,59
101	Pre-primary and primary education	7,65	7,63
102	Secondary education	18,10	18,34
103	Post-secondary non-tertiary education	4,33	3,86
104	Tertiary education	3,38	2,88
10	Education	33,47	32,71
111	Restaurants - confectioneries - cafes – buffets	98,76	92,90
112	Accommodation services	5,18	5,67
11	Hotels - cafes – restaurants	103,94	98,58
121	Barber's - hair dresser's shops - appliances for personal care	34,54	34,41
123	Personal effects	5,22	4,61
124	Social protection services	1,74	1,73
125	Insurance	20,72	21,86
126	Financial services	1,43	1,53
127	Other services	7,15	7,04
12	Miscellaneous goods and services	70,79	71,19
	Total	1000,00	1000,00

The weights on the basis of the 2014 HBS have been extrapolated to December 2015 prices reflecting a current pattern of the composition of the households' consumption expenditure.

## 2. Updating the weights of the Harmonised index of Consumer Prices (HICP)

Pursuant to Regulation (EC) 1114/2010, the HICP class weights are based on the consumption pattern as this is derived from the national accounts data. Detailed product weights are derived from the HBS.

In order to calculate the weights of the HICP for the year 2016, national accounts data of the year 2014 are used after their extrapolation to December 2015 prices. It is noted that the latest national accounts data for the year 2014 have been calculated in compliance with the Regulation on the European Systems of Accounts ESA2010 (Regulation EC 549/2013).

The following table shows, for the 12 expenditure categories and the basic groups, in %, the weights for the year 2016 and the weights that were applied in the year 2015.

COICOP	GROUPS - DIVISIONS	2016 w(%)	2015 w(%)
011	Food	195,91	196,83
012	Non alcoholic beverages (not served)	11,56	15,04
01	Food and non-alcoholic beverages	207,47	211,88
021	Alcoholic beverages (not served)	10,02	11,02
022	Tobacco	39,91	42,67
02	Alcoholic beverages and tobacco	49,93	53,69
031	Articles of clothing	32,73	30,69
032	Footwear	10,61	12,38
03	Clothing and footwear	43,34	43,07
041	Rentals	37,79	39,82
043	Repair and maintenance of the dwelling	3,10	3,73
044	Miscellaneous services relating to the dwelling	18,48	19,94
045	Electricity, natural gas and other fuels	31,65	47,84
04	Housing	91,01	111,33
051	Furnishings and other floor coverings	5,71	6,23
052	Household textiles	5,13	6,64
053	Household appliances and repair	4,79	4,37
054	Glassware, tableware and utensils of domestic use	3,02	3,66
055	Tools and equipment for house and garden	4,06	2,48
056	Goods and services for routine household maintenance	16,93	20,06
05	Durable goods - household articles and services	39,64	43,44
061	Medicinal - pharmaceutical products - therapeutic appliances	17,87	20,89
062	Medical, dental and paramedical services	14,56	17,32
063	Hospital care	17,41	15,51
06	Health	49,85	53,73
071	Purchase of vehicles	36,39	26,15
072	Operation of personal transport equipment	50,84	52,46
073	Transport services	71,78	56,38
07	Transport	159,00	134,99
081	Postal services	0,58	0,62
082	Telephone and telefax equipment	0,37	0,23
083	Telephone services	41,77	43,82
08	Communication	42,72	44,67
091	Audiovisual and information processing equipment	3,90	5,46
092	Major durables for recreation and culture	4,50	4,25
093	Small recreational items - flowers - pets	7,87	7,96
094	Recreational services	13,07	12,13
095	Newspapers, books and stationery	9,56	9,65
096	Package holidays	4,74	6,57
09	Recreation and culture	43,63	46,02
101	Pre-primary and primary education	6,07	5,94
102	Secondary education	14,49	15,00
103	Post-secondary non-tertiary education	3,36	2,95
104	Tertiary education	2,75	2,36
10	Education	26,67	26,25
111	Restaurants - confectioneries - cafes - buffets	146,01	128,37
112	Accommodation services	31,01	27,69
11	Hotels - cafes - restaurants	177,02	156,06
121	Barber's - hair dresser's shops - appliances for personal care	27,45	26,06
123	Personal effects	7,44	7,32
124	Social protection services	4,52	4,25
125	Insurance	11,71	15,96
126	Financial services	2,62	2,83
127	Other services	15,98	18,46
12	Miscellaneous goods and services	69,71	74,87
	Total	1000,00	1000,00

### 3. Updating population weights based on expenditure data of households and population.

For the calculation of population weights, the population data of the 2011 census population and the results of the 2014 HBS were taken into account.

On the basis of the results of the HBS, i.e. the average monthly expenditure by expenditure category and per household in each of the 13 regions of the country and the number of households by region, as determined as an average by the HBS for the year 2014, the annual expenditure for the total number of the households by region was calculated, i.e., extrapolating the HBS results, on an annual basis, for the total number of the households in every region.

In a later stage, the number of households of each region was allocated in the price collection cities on the basis of the number of households of each city as derived from the 2011 census. The percentage distribution of population of the region on the price collection cities was implemented on the expenditure that was calculated for every expenditure category of COICOP12 at the level of the region, on the basis of the HBS results. The weighting coefficient of each city, by expenditure category, is calculated as the expenditure in each city to the total expenditure for this category in the country.

In general, the population weights are used for the weighting of the individual indices (sub-indices) of the items for each price collection city, in order to calculate these sub-indices for the whole country.

Cities	COICOP 12 divisions of expenditure											
	01	02	03	04	05	06	07	08	09	10	11	12
Athens	42,29	39,09	36,52	42,95	44,27	44,14	46,73	43,78	45,04	46,41	41,59	41,05
Thessaloniki	12,94	12,89	15,21	14,98	13,18	12,75	10,89	11,53	13,71	12,49	13,96	13,29
Patra	4,72	5,70	4,43	2,87	4,53	3,09	4,27	3,67	4,01	4,71	4,05	4,63
Larisa	3,02	3,06	3,38	3,60	2,56	3,27	3,14	2,96	2,37	3,13	3,15	2,76
Iraklio	3,09	2,66	4,42	2,59	3,03	3,31	3,42	3,36	3,69	3,23	2,87	3,44
Kavala	2,67	3,59	2,33	2,71	2,16	2,51	1,92	2,42	1,98	1,80	2,85	2,31
Ioannina	2,07	2,07	2,06	2,10	1,97	1,90	1,62	1,99	1,69	2,28	1,87	2,02
Kalamata	2,51	3,12	3,02	2,10	2,74	2,27	2,40	2,79	2,21	2,21	2,35	2,83
Volos	2,14	2,17	2,39	2,55	1,82	2,32	2,22	2,09	1,68	2,22	2,23	1,96
Kozani	2,05	1,92	1,85	2,26	1,55	1,84	1,58	1,96	1,73	1,88	2,06	1,95
Komotini	2,36	3,18	2,06	2,40	1,92	2,23	1,70	2,14	1,75	1,59	2,52	2,05
Mytilini	0,94	0,87	0,73	0,80	0,92	0,94	0,91	0,97	0,74	0,45	0,78	1,04
Serres	2,09	2,08	2,45	2,41	2,12	2,05	1,76	1,86	2,21	2,01	2,25	2,14
Lamia	2,39	2,27	2,94	2,74	2,24	2,98	2,59	2,98	2,34	1,39	2,46	2,75
Kerkyra	1,19	0,99	1,08	1,16	1,37	1,62	1,28	1,59	1,03	1,04	1,27	1,19
Rodos	2,24	2,52	2,46	2,06	2,44	2,36	2,70	2,78	2,83	2,49	2,97	2,68
Tripoli	1,34	1,67	1,61	1,12	1,46	1,21	1,28	1,49	1,18	1,18	1,26	1,51
Edessa	1,54	1,53	1,81	1,78	1,57	1,52	1,29	1,37	1,63	1,48	1,66	1,58
Chania	1,62	1,39	2,31	1,35	1,58	1,73	1,78	1,76	1,93	1,69	1,50	1,79
Mesolongi	3,13	3,79	2,94	1,91	3,01	2,05	2,83	2,43	2,66	3,13	2,69	3,07
Agios Nikolaos	0,80	0,68	1,14	0,67	0,78	0,85	0,88	0,86	0,95	0,83	0,74	0,88
Lefkada	0,27	0,22	0,25	0,26	0,31	0,37	0,29	0,36	0,23	0,24	0,29	0,27
Amfissa	0,61	0,58	0,75	0,70	0,57	0,76	0,66	0,76	0,60	0,35	0,63	0,70
Igoumenitsa	0,52	0,52	0,52	0,53	0,50	0,48	0,41	0,50	0,43	0,58	0,47	0,51
Grevena	0,45	0,42	0,40	0,49	0,34	0,40	0,34	0,43	0,38	0,41	0,45	0,42
Chios	0,57	0,52	0,44	0,48	0,55	0,56	0,55	0,58	0,45	0,27	0,47	0,62
Ermoupolis	0,46	0,52	0,51	0,42	0,50	0,49	0,56	0,57	0,58	0,51	0,61	0,55
Total	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00

The 12 codes of expenditure Divisions in the COICOP classification are:

COICOP	12 divisions of the COICOP classification
01	Food and non-alcoholic beverages
02	Alcoholic beverages and tobacco
03	Clothing and footwear
04	Housing
05	Durable goods, household articles and services
06	Health
07	Transport
08	Communication
09	Recreation, cultural activities
10	Education
11	Hotels, cafes, restaurants
12	Miscellaneous goods and services

#### **4. Rescaling of the reference year of the Harmonised Index of Consumer Prices (HICP) to 2015 = 100.0.**

The Harmonized Indices of Consumer Prices 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, which lay down particular implementation measures governing the compilation of HICPs.

One of them is the common reference year of HICP. From January 2006 onwards the HICPs were being calculated with base year 2005=100.0 in the frame of the Regulation (EC) No 1708/2005 for all HICPs of EU Member States.

Regulation EE No 2015/2010 of 11 November 2015 established a new common reference year, 2015=100.0, to be implemented in January 2016. According to this Regulation, ELSTAT undertook a number of works aiming at the revision of the reference year of HICP which is published in February 2016 with January 2016 as the first reference month. The time series of the index with base year 2015=100.0 starts from January 1996.

In some cases, the revision of the reference year has as a result to appear small differences (of size 0.1) on the rates of change of the HICP indices in comparison with the previous chronological series with base year 2005 = 100.0.