



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 2018

Piraeus, February 2019

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 2017 Households Budget Survey (HBS).
- Updated the weights of the harmonised index on the basis of the latest available national accounts data of the year 2017, pursuant to Regulation (EC) 549/2013 on ESA 2010.
- Updated the population weights by taking into account expenditure data.
- Implemented the “consumer profile” method in telecommunication services.

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 2017 HBS, adjusting the expenditure data of this survey to the prices of December 2018 which is the base month of the new CPI.

These weights refer to the average composition of monthly total expenditure consumption of the 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 2017 HBS adjusted to December 2018 prices are expressed in ‰, for the 12 main Divisions in the following table. For comparison reasons, the weights of the CPI of December 2017, on the basis of the 2016 HBS, are also presented in the same table.

COICOP5	GROUPS – DIVISIONS	2019 w(‰)	2018 w(‰)
011	Food	194.58	195.06
012	Non alcoholic beverages (not served)	11.18	11.15
01	Food and non-alcoholic beverages	205.76	206.21
021	Alcoholic beverages (not served)	11.67	12.01
022	Tobacco	27.90	31.54
02	Alcoholic beverages and tobacco	39.57	43.55
031	Articles of clothing	51.67	52.53
032	Footwear	13.12	12.46
03	Clothing and footwear	64.79	64.99
041	Rentals	34.62	31.93
043	Repair and maintenance of the dwelling	7.70	7.15
044	Miscellaneous services relating to the dwelling	26.12	25.14
045	Electricity, natural gas and other fuels	72.90	72.50
04	Housing	141.34	136.71
051	Furnishings and other floor coverings	3.60	4.52
052	Household textiles	5.46	4.99
053	Household appliances and repair	6.48	6.00
054	Glassware, tableware and utensils of domestic use	2.70	2.88
055	Tools and equipment for house and garden	1.58	1.97
056	Goods and services for routine household maintenance	23.47	24.86

05	Durable goods - household articles and services	43.29	45.23
061	Medicinal - pharmaceutical products - therapeutic appliances	28.20	26.74
062	Medical, dental and paramedical services	22.74	23.11
063	Hospital care	23.23	24.17
06	Health	74.17	74.02
071	Purchase of vehicles	30.54	25.86
072	Operation of personal transport equipment	82.99	88.96
073	Transport services	29.46	31.37
07	Transport	142.99	146.20
081	Postal services	0.53	0.49
082	Telephone and telefax equipment	0.78	0.56
083	Telephone services	42.54	40.83
08	Communication	43.85	41.89
091	Audiovisual and information processing equipment	6.12	7.55
092	Major durables for recreation and culture	5.10	3.98
093	Small recreational items - flowers – pets	8.00	7.98
094	Recreational services	8.97	9.31
095	Newspapers, books and stationery	9.12	9.62
096	Package holidays	2.46	2.57
09	Recreation and culture	39.76	41.00
101	Pre-primary and primary education	7.42	6.87
102	Secondary education	18.50	19.80
103	Post-secondary non-tertiary education	2.63	2.31
104	Tertiary education	3.95	3.56
10	Education	32.49	32.54
111	Restaurants - confectioneries - cafes – buffets	100.70	94.86
112	Accommodation services	5.95	6.47
11	Hotels - cafes – restaurants	106.64	101.33
121	Barber's - hair dresser's shops - appliances for personal care	34.84	32.97
123	Personal effects	5.96	6.73
124	Social protection services	1.02	0.99
125	Insurance	20.25	21.17
126	Financial services	0.14	0.20
127	Other services	3.12	4.29
12	Miscellaneous goods and services	65.33	66.34
	Total	1000.00	1000.00

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 2019, national accounts data of the year 2017 are used after their extrapolation to December 2018 prices. It is noted that the latest national accounts data for the year 2017 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 2019 and the weights that were applied in the year 2018.

COICOP	GROUPS - DIVISIONS	2019 w(%)	2018 w(%)
011	Food	183.27	186.41
012	Non alcoholic beverages (not served)	10.85	10.93
01	Food and non-alcoholic beverages	194.12	197.34
021	Alcoholic beverages (not served)	10.63	10.70
022	Tobacco	38.88	42.73
02	Alcoholic beverages and tobacco	49.50	53.43
031	Articles of clothing	33.73	34.58
032	Footwear	14.96	15.09
03	Clothing and footwear	48.69	49.68
041	Rentals	35.06	36.07
043	Repair and maintenance of the dwelling	2.58	3.06
044	Miscellaneous services relating to the dwelling	17.91	18.21
045	Electricity, natural gas and other fuels	38.84	40.34
04	Housing	94.39	97.68
051	Furnishings and other floor coverings	2.66	2.71
052	Household textiles	4.32	4.20
053	Household appliances and repair	4.33	4.01
054	Glassware, tableware and utensils of domestic use	2.87	2.61
055	Tools and equipment for house and garden	2.30	2.57
056	Goods and services for routine household maintenance	15.71	16.02
05	Durable goods - household articles and services	32.19	32.12
061	Medicinal - pharmaceutical products - therapeutic appliances	20.40	17.98
062	Medical, dental and paramedical services	16.06	15.87
063	Hospital care	16.52	17.00
06	Health	52.99	50.86
071	Purchase of vehicles	35.66	32.87
072	Operation of personal transport equipment	56.73	64.70
073	Transport services	69.72	67.49
07	Transport	162.11	165.06
081	Postal services	0.68	0.63
082	Telephone and telefax equipment	0.35	0.30
083	Telephone services	52.96	51.83
08	Communication	53.99	52.76
091	Audiovisual and information processing equipment	2.73	2.81
092	Major durables for recreation and culture	5.42	4.74
093	Small recreational items - flowers - pets	7.47	7.43
094	Recreational services	10.18	9.89
095	Newspapers, books and stationery	7.37	7.60
096	Package holidays	5.81	5.48
09	Recreation and culture	38.96	37.95
101	Pre-primary and primary education	5.68	5.19
102	Secondary education	14.08	14.90
103	Post-secondary non-tertiary education	1.97	1.67
104	Tertiary education	3.03	2.67
10	Education	24.77	24.44
111	Restaurants - confectioneries - cafes - buffets	148.07	138.65
112	Accommodation services	32.61	32.70
11	Hotels - cafes - restaurants	180.69	171.36
121	Barber's - hair dresser's shops - appliances for personal care	25.57	25.23
123	Personal effects	6.84	6.75
124	Social protection services	4.40	3.72
125	Insurance	11.84	12.67
126	Financial services	2.43	2.69
127	Other services	16.50	16.28
12	Miscellaneous goods and services	67.59	67.34
	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 2017 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 2017, 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	42.97	42.04	46.05	44.12	47.61	44.95	47.45	45.24	48.68	49.05	45.64	44.69
Thessaloniki	12.39	13.95	11.56	12.89	10.42	14.39	9.95	11.43	11.73	9.07	11.93	13.09
Patra	3.06	2.83	4.24	2.27	2.57	2.00	2.91	2.74	2.39	3.21	3.72	3.11
Larisa	3.68	3.80	2.59	4.10	2.77	3.82	3.41	3.49	2.44	3.24	3.81	3.08
Iraklio	2.86	2.76	3.16	2.90	3.89	2.60	3.74	3.34	2.40	3.80	2.61	2.96
Kavala	2.73	3.15	2.52	3.08	2.68	2.43	3.04	2.71	2.82	2.44	2.54	2.76
Ioannina	2.64	1.93	2.15	2.07	2.34	1.76	1.97	2.00	1.93	2.17	1.67	2.20
Kalamata	3.21	3.36	2.71	2.50	3.05	2.48	2.34	3.21	2.87	2.98	2.92	3.24
Volos	2.61	2.69	1.84	2.91	1.96	2.71	2.41	2.47	1.73	2.29	2.70	2.18
Kozani	1.87	2.16	1.59	2.21	1.41	1.79	1.91	1.75	1.41	1.98	1.78	1.73
Komotini	2.42	2.79	2.23	2.73	2.38	2.15	2.70	2.40	2.50	2.17	2.25	2.45
Mytilini	0.75	0.65	0.79	0.82	0.75	0.84	0.84	1.00	1.15	0.60	0.84	0.89
Serres	2.00	2.25	1.86	2.08	1.68	2.32	1.60	1.84	1.89	1.46	1.92	2.11
Lamia	2.23	1.60	1.54	2.32	1.36	2.15	1.65	1.97	1.05	1.65	1.53	1.32
Kerkyra	1.91	1.47	1.67	1.46	2.16	1.88	1.62	1.59	1.99	1.36	1.29	1.71
Rodos	2.24	2.48	2.72	2.06	2.65	2.53	2.46	2.48	3.70	2.23	2.80	2.19
Tripoli	1.71	1.80	1.44	1.33	1.63	1.33	1.25	1.71	1.53	1.59	1.56	1.73
Edessa	1.47	1.66	1.37	1.53	1.24	1.71	1.18	1.36	1.39	1.08	1.42	1.56
Chania	1.50	1.44	1.65	1.51	2.03	1.36	1.95	1.74	1.26	1.98	1.36	1.54
Mesolongi	2.03	1.88	2.81	1.51	1.71	1.32	1.93	1.82	1.58	2.13	2.47	2.07
Agios Nikolaos	0.74	0.71	0.81	0.75	1.00	0.67	0.96	0.86	0.62	0.98	0.67	0.76
Lefkada	0.44	0.33	0.38	0.33	0.49	0.43	0.37	0.36	0.45	0.31	0.29	0.39
Amfissa	0.57	0.41	0.39	0.59	0.35	0.55	0.42	0.50	0.27	0.42	0.39	0.34
Igoumenitsa	0.67	0.49	0.54	0.52	0.59	0.44	0.50	0.51	0.49	0.55	0.42	0.56
Grevena	0.41	0.47	0.35	0.48	0.31	0.39	0.42	0.38	0.31	0.43	0.39	0.38
Chios	0.45	0.39	0.47	0.49	0.45	0.51	0.51	0.60	0.69	0.36	0.50	0.53
Ermoupolis	0.46	0.51	0.56	0.42	0.54	0.52	0.51	0.51	0.76	0.46	0.58	0.45
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. Implementation of “consumer profile” method for calculating sub-indices of HICP telephone services

Since January 2019, a new method for calculating sub-indices of HICP telephone services, namely the “consumer profile” method, has been put into effect by ELSTAT. This method is recommended by EUROSTAT¹ as the preferred one for the compilation of the indices in reference.

According to this method, consumers are divided into three categories on the basis of their typical usage patterns (low consumption - medium consumption - high consumption) and for each category current prices (pricelist prices) for the most representative telephony packages of the category are collected by each telephone service provider.

Until December 2018, the publically available pricelists of the telephone service companies were taken into account for the indices compilation; that is the “tariff method”, which is also in accordance with the relevant Regulation, was implemented.

Note that the HICP telephone services sub-indices, already announced on 14 February 2019 through the January 2019 Press Releases, both of the national and the harmonized Consumer Price Index, had been compiled using the consumer profile method.

The consumptions patterns will be updated annually so as the market developments are reflected in the indices.

¹ Harmonised Index of Consumer Prices (HICP), Methodological Manual, November 2018, Eurostat, ISBN 978-92-79-76861-3