

Single Integrated Metadata Structure (SIMS v2.0)

(user oriented)

Country: Greece

Compiling agency: ELSTAT

Domain name: Consumer Price Index (CPI)

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1. Contact Top	
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2. Metadata update

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2.1 Metadata last certified 29/04/2022

2.2 Metadata last posted 29/04/2022

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3. Statistical presentation

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3.1 Data description

The Consumer Price Index (CPI) measures the changes, over time, of the prices of consumer goods and services which compose the "household basket". The compilation of the CPI is based on the Household Budget Survey (HBS), which is conducted by ELSTAT and aims to collect data on consumption patterns of the households in the country in the context of the upper "household basket".

The compilation of a national price index is necessary for the country for a number of reasons, the most important being the need to identify the changes in the value of money.

3.2 Classification system

The applied classification of items (goods and services) included in the CPI is the European Classification of Individual Consumption by Purpose (ECOICOP), which is based on the corresponding international classification.

The main groups of the classification are:

- 00 All-items index
- 01 Food and non-alcoholic beverages
- 02 Alcoholic beverages and tobacco
- 03 Clothing and footwear
- 04 Housing
- 05 Household equipment
- 06 Health
- 07 Transport
- 08 Communication
- 09 Recreation and culture
- 10 Education
- 11 Hotels - Cafés - Restaurants
- 12 Miscellaneous goods and services

The structure of the classification has five levels:

- Level 1: All items index – Overall index
- Level 2: 12 Divisions – 2-digit codes
- Level 3: 47 Groups – 3-digit codes
- Level 4: 117 Classes – 4-digit codes
- Level 5: 303 Sub-classes – 5-digit codes

3.3 Sector coverage

The CPI covers the prices of goods and services offered for purchase by private households to meet their consumer needs. The index covers the resident households of the territory excluding collective households (hospital homes for the elderly, boarding homes, prisons, etc.) and non-resident households (tourists) in the country.

3.4 Statistical concepts and definitions

The data are published as follows:

CPI

1. Monthly data

- Indices (2009=100.0)
- Annual rates of change (%)
- Monthly rates of change (%)
- 12-month average rate of change (%)

2. Annual data

- Average index and rate of change (%)
- Item weights

3.5 Statistical unit

The basic unit of statistical observation are prices for consumer products.

3.6 Statistical population

The population coverage of the CPI covers the expenditures incurred by the private households of the permanent residents of the country, irrespective of their size, composition and the financial or social situation of the head of the household. It does not cover either collective households (hospitals, homes for the elderly, boarding schools, etc.) or non-resident households in the country (tourists). The consumer expenditures of all households in the country are collected through the Family Budget Survey (FSB) conducted by ELSTAT. The household spending on individual goods and services arises as the monthly averages of all households in each group, whether all households in a group have declared expenditure on the respective goods and services or not. The HBS data are collected throughout the year in order to obtain the best estimate of the average monthly household expenditure.

3.7 Reference area

The national CPI, refers to the whole of the country, being fully in line with the national CPI of the other EU Member States, as well as with the Greek HICP.

The sample of geographical areas, which are covered by the CPI, is designed in order to cover representatively all the Regions (NUTS 2) of the country, as regards price collection.

One or two price collection cities are selected from each Region, depending on both the size and particularities of their markets and the implied cost, with the exception of the Region of Kentriki Makedonia, where 3 cities are selected.

The cities for which prices are collected are presented by Region in the following table:

Region (NUTS 2)	Price collection cities
1. Anatoliki Makedonia, Thraki	Kavala, Komotini
2. Kentriki Makedonia	Thessaloniki, Serres, Edessa
3. Dytiki Makedonia	Kozani, Grevena
4. Ipeiros	Ioannina, Igoumenitsa
5. Thessalia	Larisa, Volos
6. Ionioi Nisoi	Kerkyra, Lefkada
7. Dytiki Ellas	Patra, Mesolongi
8. Sterea Ellas	Lamia, Amfissa
9. Attiki	Greater Athens area
10. Peloponnisos	Kalamata, Tripoli
11. Nisoi Voreiou Aigaiou	Mytilini, Chios
12. Nisoi Notiou Aigaiou	Rodos, Ermoupolis
13. Kriti	Irakleio, Agios Nikolaos, Chania

3.8 Time coverage

From January 1959 onwards, the time series of the CPI, with base year 2009=100.0, are released on a monthly basis.

3.9 Base period

The reference year of the index is 2020 (2020= 100.0).

4. Unit of measure

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The following units of measure are used:

- Annual rate of change (percentage change on the same period of the previous year).
- Monthly rate of change (percentage change on the previous month).
- 12-month average rate of change (average of the annual rate of change of the last 12 months).
- Item weights (percentage share of the total 'household final monetary consumption expenditure').

5. Reference period

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One month (indices and rates).

One year (weights, indices and rates).

6. Institutional mandate

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6.1 Legal acts and other agreements

The legal framework concerning the organization and operation of ELSTAT is as follows:

- **Law 3832/2010** (Government Gazette No 38, Issue A): "*Hellenic Statistical System Establishment of the Hellenic Statistical Authority (ELSTAT) as an Independent Authority*", as amended and in force
- **Regulation on the Operation and Administration of the Hellenic Statistical Authority (ELSTAT)**, 2012, (Government Gazette No 2390, Issue B, 28-8-2012)
- **Regulation (EC) No 223/2009 of the European Parliament and of the Council**, on the European statistics (Official Journal of the European Union L 87/164).
- **Article 14 of the Law 3470/2006** (Government Gazette No 132, Issue A): "*National Export Council, tax regulations and other provisions*".
- **Article 3, paragraph 1c, of the Law 3448/2006** (Government Gazette No 57, Issue A): "*For the further use of information coming from the public sector and the settlement of matters falling within the responsibility of the Ministry of Interior, Public Administration and Decentralization*".
- **European Statistics Code of Practice**, adopted by the Statistical Programme Committee on 24 February 2005 and promulgated in the Commission Recommendation of 25 May 2005 on the independence, integrity and accountability of the national and Community statistical Authorities, after its revision, which was adopted on 28 September 2011 by the European Statistical System Committee.
- **Presidential Decree 226/2000** (Government Gazette No 195, Issue A): "*Organization of the General Secretariat of the National Statistical Service of Greece*".
- **Articles 4, 12, 13, 14, 15 and 16 of the Law 2392/1996** (Government Gazette No 60, Issue A): "*Access of the General Secretariat of the National Statistical Service of Greece to administrative sources and administrative files, Statistical Confidentiality Committee, settlement of matters concerning the conduct of censuses and statistical works, as well as of matters of the General Secretariat of the National Statistical Service of Greece*".

The Legal Framework is detailed in the following link:

<http://www.statistics.gr/en/legal-framework>

6.2 Data sharing

The CPI data are provided to the European Union (EU), the Organisation for Economic Co-operation and Development (OECD), the United Nations (UN), the International Energy Agency (IEA) and the International Labour Organization (ILO).

7. Confidentiality

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7.1 Confidentiality - policy

The issues concerning the observance of statistical confidentiality by the Hellenic Statistical Authority (ELSTAT) are arranged by articles 7, 8 and 9 of the Law 3832/2010 as in force, by Articles 8, 10 and 11(2) of the Regulation on Statistical Obligations of the agencies of the Hellenic Statistical System and by Articles 10 and 15 of the Regulation on the Operation and Administration of ELSTAT.

More precisely:

ELSTAT disseminates the statistics in compliance with the statistical principles of the European Statistics Code of Practice and in particular with the principle of statistical confidentiality.

<http://www.statistics.gr/en/statistical-confidentiality?inheritRedirect=true>

7.2 Confidentiality - data treatment

ELSTAT protects and does not disseminate data it has obtained or it has access to, which enable the direct or indirect identification of the statistical units that have provided them by the disclosure of individual information directly received for statistical purposes or indirectly supplied from administrative or other sources. ELSTAT takes all appropriate preventive measures so as to render impossible the identification of individual statistical units by technical or other means that might reasonably be used by a third party. Statistical data that could potentially enable the identification of the statistical unit are disseminated by ELSTAT if and only if:

a) these data have been treated, as it is specifically set out in the Regulation on Statistical Obligations of the agencies of the Hellenic Statistical System (ELSS), in such a way that their dissemination does not prejudice statistical confidentiality or

b) the statistical unit has given its consent, without any reservations, for the disclosure of data.

The confidential data that are transmitted by ELSS agencies to ELSTAT are used exclusively for statistical purposes and the only persons who have the right to have access to these data are the personnel engaged in this task and appointed by an act of the President of ELSTAT.

ELSTAT may grant researchers conducting statistical analyses for scientific purposes access to data that enable the indirect identification of the statistical units concerned. The access is granted provided the following conditions are satisfied:

a) an appropriate request together with a detailed research proposal in conformity with current scientific standards have been submitted;

b) the research proposal indicates in sufficient detail the set of data to be accessed, the methods of analyzing them, and the time needed for the research;

c) a contract specifying the conditions for access, the obligations of the researchers, the measures for respecting the confidentiality of statistical data and the sanctions in case of breach of these obligations has been signed by the individual researcher, by his/her institution, or by the organization commissioning the research, as the case may be, and by ELSTAT.

Issues referring to the observance of statistical confidentiality are examined by the Statistical Confidentiality Committee (SCC) operating in ELSTAT.

The responsibilities of this Committee are to make recommendations to the President of ELSTAT on:

- the level of detail at which statistical data can be disseminated, so as the identification, either directly or indirectly, of the surveyed statistical unit is not possible;
- the anonymization criteria for the microdata provided to users;

- the granting to researchers access to confidential data for scientific purposes.

The staff of ELSTAT, under any employment status, as well as the temporary survey workers who are employed for the collection of statistical data in statistical surveys conducted by ELSTAT, who acquire access by any means to confidential data, are bound by the principle of confidentiality and must use these data exclusively for the statistical purposes of ELSTAT. After the termination of their term of office, they are not allowed to use these data for any purpose.

Violation of data confidentiality and/or statistical confidentiality by any civil servant or employee of ELSTAT constitutes the disciplinary offence of violation of duty and may be punished with the penalty of final dismissal.

ELSTAT, by its decision, may impose a penalty amounting from ten thousand (10,000) up to two hundred thousand (200,000) Euros to anyone who violates the confidentiality of data and/or statistical confidentiality. The penalty is always imposed after the hearing of the defense of the person liable for the breach, depending on the gravity and the repercussions of the violation. Any relapse constitutes an aggravating factor for the assessment of the administrative sanction.

Pursuant to the Regulation on the protection of natural persons with regard to the processing of personal data [Regulation (EU) 2016/679 of the European Parliament and of the Council, of 27 April 2016 (General Data Protection Regulation - GDPR)], ELSTAT implements the appropriate technical and organisational measures for ensuring adequate level of security against risks for the personal data it collects and has access to, in the context of carrying out its tasks, in order to meet the requirements of this Regulation and to protect these personal data from any unauthorised access or illegal processing.

8. Release policy

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8.1 Release calendar

The release dates for CPI are set out at the end of the first semester of the previous calendar year and they figure in the Press Releases Calendar of ELSTAT (in Greek-English).

8.2 Release calendar access

The press releases calendar is disseminated to the media and it is available to users for free. The release calendar is also posted on the website of ELSTAT (www.statistics.gr/en/calendar), "Press Releases" / "Release Calendar" (Greek English).

8.3 User access

In compliance with the *European Statistics Code of Practice*, ELSTAT disseminates national statistical data on its website, fully observing professional independence and with a view to ensuring the simultaneous, equal and timely access of all users to statistical data.

Data are released simultaneously to all interest parties and to all users through the press release on the CPI, which is released on the website of ELSTAT (www.statistics.gr), according to the release calendar and it can also be transmitted to users by e-mail.

Neither users nor any government bodies have access to data before their official release.

9. Frequency of dissemination

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The CPI is disseminated on a monthly basis.

10. Accessibility and clarity

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10.1 News release

The CPI data are published on a monthly basis through a scheduled press release, during the first 10 days after the

end of each reference month (excluding the January Index, which is released around February 20). Every month, on a specific date and at 12:00, a press release is announced which presents the currently compiled indices and their changes in the Greek and English language. This press release is disseminated to the media and to other users, free of charge, through e-mail and is also available on the website of ELSTAT.

<http://www.statistics.gr/en/statistics/-/publication/DKT87/>

10.2 Publications

The CPI is included in the following publications:

- “Greece in figures” where annual average indices are published at the level of the general index and at the level of major groups.
- “The Greek Economy” where monthly and annual index data and rate changes are published for the last four years at the level of the general index.

10.3 On-line database

None.

10.3.1 Data tables - consultations

For the year 2021 users’ consultations, as regards the CPI data, amounted to 2,025,189 webpage hits. It is not possible to distinguish between data consultations and metadata consultations.

10.4 Micro-data access

Micro-data are made available to users after submitting a request to the:

Statistical Information and Publications Division

46, Pireos & Eponiton Str, PO Box 80847

18510 Piraeus

Tel: +30 213 135 2022

e-mail: data.dissem@statistics.gr

For confidential reasons, access to micro-data is granted to users only under strict conditions and by always adhering to the relevant procedure

http://www.statistics.gr/en/scientific_provision_data.

10.5 Other

Users can be given data or other statistical analysis, through e-mail, upon request, after submitting an application to the Population Employment and Cost of Living Statistics Division-Retail Price Indices Section (B44) or to the Statistical Data Dissemination Section A54.

The contact e-mail addresses are:

api@statistics.gr, a.kourtaki@statistics.gr, data.dissem@statistics.gr,

data.supply@statistics.gr, data.source@statistics.gr

Users can have access to ELSTAT publications, even for previous years, where they can find data on the HICP, which are posted on the digital library of ELSTAT, through:

<http://dlib.statistics.gr/portal/page/portal/ESYE/>

The results of the CPI are posted on the website of ELSTAT, at the link:

<http://www.statistics.gr/en/statistics/-/publication/DKT90/>

Data are sent to Eurostat and published in Eurostat online database.

<http://ec.europa.eu/eurostat/web/hicp/data>.

Users can submit their requests via website:

<http://www.statistics.gr/en/provision-of-statistical-data>.

10.5.1 Metadata – consultations

See paragraph 10.3.1 above.

10.6 Documentation on methodology

A methodological publication containing detailed information on the sources and the related practices used for the compilation of the CPI is available in the Greek and English language on the website of ELSTAT.

http://www.statistics.gr/en/CPI_publication

There are also information notes about the updating works for the index.

http://www.statistics.gr/en/information_note_2014/DTK87

http://www.statistics.gr/en/information_note_2015/DTK87

http://www.statistics.gr/en/information_note_2016/DTK87

http://www.statistics.gr/en/information_note_2019/DTK87

10.6.1 Metadata completeness – rate

Metadata on the compilation of the CPI are available on the ELSTAT website: <http://www.statistics.gr/en/statistics/-/publication/DKT87/>, therefore metadata completeness is 100%.

10.7 Quality documentation

A concise Quality Report is available at the following link:

<http://www.statistics.gr/en/statistics/-/publication/DKT87/>

11. Quality management

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11.1 Quality assurance

Quality checks and validation of data are carried out through the whole process of the compilation of the index, from the stage of data collection to the final calculation of the index.

- Quality Policy and Quality Manual of ELSTAT are followed <http://www.statistics.gr/en/policies>
- At a first stage, each product selected to be monitored is fully and accurately defined on the basis of the characteristics, which define it (range, weight, packaging, other quality attributes).
- If certain items or product varieties cease to be representative or alter their determination characteristics, then new items or varieties replace the older ones.
- Well-trained and experienced staff is utilized for all the stages of the compilation of the index, that is, for data collection (including communication with the enterprises), initial checks, data entry and final checks, which are conducted after the calculation of the index. This way, the personnel have a comprehensive and longitudinal image of the enterprises under their responsibilities.
- Data are validated either before or after data entry by means of logical checks. During data processing data are checked in order to identify and correct any errors. When an error is identified, data are further investigated, in cooperation with the enterprises in order to confirm that it is an error or it is just an unusual price. At the same time, data are checked for completeness, accuracy and consistency of the correlating variables.
- The indices are calculated by means of specialised software, through computation routines, thus eliminating any errors to the final results. Nevertheless, even during this stage, consistency checks are carried out to the final results, mainly by means of comparing the percentage changes of the sub-indices and their impact on the overall index.
- Collaboration with technical experts to ensure the implementation of best practices.

11.2 Quality assessment

- The CPI is considered as a highly reliable index. It is being compiled for decades, thus the staff has acquired a lot of experience and expertise in its compilation.
- The concepts, definitions, and methodology of the CPI follow European and international standards and guidelines.

- The CPI is being compiled in Greece since 1924. More specifically, in 1924 the National Bank of Greece began compiling the "Cost of Living Index"; then, in 1931 the General Statistical Service of the Ministry of Commerce began compiling the "Cost of Living Price Index" for 44 cities. In 1938 the Bank of Greece compiled the "Cost of Living Price Index for Athens". From 1959 until 2000, *the National Statistical Service of Greece* (NSSG) had been compiling the "Consumer Price Index for the Greek urban areas" and from 2001 onwards, this Index was extended from the urban areas to the whole country. From 2014 onwards, the *Consumer Price Index* is revised on an annual basis utilizing the most recent results of the Household Budget Survey (HBS), which is conducted annually since 2008.

It is worth mentioning that since 1959 the Index, compiled by ELSTAT, is called "Consumer Price Index", following the proposal of the UN International Labour Office on the replacement of the previous term "Cost of Living Index", which was approved by the 6th Conference of Statistical Representatives of Member States (1947).

12. Relevance

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12.1 User needs

The CPI covers primarily national needs, since the needs of European and other foreign users for international comparisons of inflation are covered by the Harmonised CPI (HICP) of the country.

The CPI is mainly used for:

- The estimation of the purchasing power of money.
- The calculation of the real wages and salaries.
- The readjustment of several commitments arising from contracts, compensations, etc.
- The readjustment of rents (according to law No 2741/1999).
- The deflation of several values and their calculation at fixed prices.
- The drawing up of socio-economic policy.

The main domestic users of the Consumer Price Index are the Government, public entities, the Central Bank and commercial banks, enterprises, universities, research organizations, while at international level Eurostat, the European Central Bank (ECB) the International Monetary Fund (IMF), the Organisation for economic co-operation and development (OECD), the United Nations (UN), the International Energy Agency (IEA), the International Labour Organisation (ILO), etc.

12.2 User satisfaction

Users' needs are monitored on a regular basis Price Indices Section (B44) and the Statistical Data Dissemination Section (B31) of the Statistical Information and Publications Division, to their satisfaction. Generally, there is a good cooperation and as immediate as possible response to requests, with positive comments obtained from users.

At the same time, ELSTAT conducts a user satisfaction survey every six months the results of which are published in the [Library's Newsletter](#) a bilingual publication issued by the Library and Website Content Management Section and the Statistical Data Dissemination Section utilizing the user questionnaire. This publication presents half-yearly figures of the number of users, in combination with some other variables, such as the degree of coverage of requests, the type of the requested statistics, and the dissemination of statistical information. These characteristics are tabulated into absolute values and in percentages.

ELSTAT in an effort to explore the basic characteristics of the users of statistical information and record their needs, collects on a daily basis the User Questionnaire in order to collect important information for its products and services and thus contributing to their improvement. These statistical data are presented on an annual basis.

Finally, ELSTAT has been conducting since 2010, annually, a Users Conference. Users Conferences help ELSTAT to draw useful conclusions on the areas where statistical output and services can be improved and to be more responsive to the evolving needs of users. These conclusions are included in the annual and medium term statistical work programs of ELSTAT.

The results of User Satisfaction Survey are presented at the following link on the portal ELSTAT:

<http://www.statistics.gr/en/user-satisfaction-survey>

12.3 Data completeness

The compilation of the CPI and the reported data are fully inline with the relevant Regulations. All indices and item weights are available since January 1959.

13. Accuracy and reliability

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13.1 Overall accuracy

The accuracy of CPI is generally considered to be high. The accuracy of source data is monitored by assessing the methodological soundness of weight and price sources and the adherence to the methodological recommendations. The National Accounts data and Household Budget Survey (HBS) are the main source for weights every year. Local price collection (visits to local retailers and service providers) and central price collection (post, telephone, e-mail and the internet) are the data sources for prices. The items selected for pricing and the method selected for price collection reflect both consumer choice and behaviour. The type of survey and the price collection methods ensure sufficient coverage and timeliness.

13.2 Sampling error

The CPI is a statistical estimate that is subject to sampling errors because it is based on a sample of consumer prices and household expenditures, which are not the complete universe of all prices/expenditures.

Numerical estimates of CPI sampling errors are not produced, which are difficult to quantify due to the complexity of price index structures and the common use of non-probability sampling.

The sampling errors are reduced by selecting a large and representative sample of consumer prices from a stratified sample, given resource constraints.

13.3 Non-sampling error

The non-sampling errors of the CPI are not quantified. ELSTAT try to reduce non-sampling errors through continuous methodological improvements and survey process improvements, which can help avoiding coding and typing errors.

14. Timeliness and punctuality

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14.1 Timeliness

The index is published within the first 10 days after the end of the reference month, except for the index of January, which is announced until the 20th of February.

14.2 Punctuality

The data on the index are released as scheduled, in accordance with the [Press releases Calendar](#) of ELSTAT.

15. Coherence and comparability

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15.1 Comparability - geographical

The compilation of the index follows the Regulations and the basic methodological principles of the Harmonized Index of Consumer Prices (HICP), which ensures comparability with other national indices and the European statistics, taking always into consideration specific conditions in each country, which may require minor deviations from methodology.

15.1.1 Assymetry for mirror flows statistics – coefficient

Not applicable.

15.2 Comparability over time

The CPI time series data are fully comparable over time.

15.3 Coherence cross-domain

Checks and comparisons are always carried out on the basis of the national Consumer Price Index (CPI).

The national CPI and the Greek HICP present several similarities but also some differences with the following being the most important.

- The HICP reference year is 2015 = 100.0 and CPI 2020 = 100.0.
- The HICP covers all consumption expenditure, which takes place on the economic territory of Greece, irrespective of the consumer (residents and non-residents) while the national CPI covers only the consumption expenditure of private households, which take place on the economic territory of the country and abroad. The HICP weights of items are calculated on the basis of National Accounts data and HBS data while the CPI weights are calculated using HBS data.

15.3.1 Coherence – sub annual and annual statistics

Not applicable.

15.3.2 Coherence – National Accounts

The CPI data is available in the National Accounts for their estimates.

15.4 Coherence - internal

The CPI is internally coherent. Higher-level aggregations derived from detailed indices according to well-defined procedures.

16. Cost and burden

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Not available.

17. Data revision

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17.1 Revision policy

The Index follows the revision policy of ELSTAT:

<http://www.statistics.gr/en/policies>.

The CPI meets its purpose provided the composition of consumption (consumption pattern) has not changed significantly in the course of time. Otherwise, the index does not fulfil its mission and has to be revised.

The main purpose of the revisions of the CPI is the adjustment of the weights and the renewal of the sample of items (goods and services), which are included in the Index, taking into account the most up-to-date composition of consumption, which is based on the results of the latest HBS.

17.2 Revision practice

The revision of CPI is carried out on an annual basis, using the "chain linking" method, so that the new weights are incorporated annually, and calculated, according to the latest available data of the Family Budget Survey. Therefore, each year has the December of the previous year as basis of the calculations.

For the CPI revision, international practices are taken into account,

18. Statistical processing

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18.1 Source data

The sample of surveyed goods and services is updated annually, using the results of the latest available Household Budget Survey and other market research. 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 are to be included in the calculation of groups and sub-groups of the index.

The number of consumer goods and services of the CPI comes to 800 and they are further broken down into a greater number of varieties.

All the items, for which prices are collected, are defined by their specification, namely the particular characteristics which determine the quality, appearance and general commercial identity of the goods (such as brand, variety, weight, packaging, etc.) in order to avoid any price changes, which are due to differences in the specification. The detailed specification of an item is not uniform throughout the Country and may differ not only from one price collection city to another, but also from one store of the city to another, since it is determined on the basis of the economic conditions and the local consumer habits.

Sample size (2022)

		Number of items	Number of prices per month
00	All-items index	799	49,497
01	Food and non-alcoholic beverages	245	16,802
02	Alcoholic beverages and tobacco	14	860
03	Clothing and footwear	92	5,835
04	Housing	27	2,374
05	Household equipment	118	7,254
06	Health	34	2,152
07	Transport	43	2,033
08	Communication	11	338
09	Recreation and culture	89	4,664
10	Education	8	257
11	Hotels - Cafés - Restaurants	45	2,669
12	Miscellaneous goods and services	73	4,241

18.2 Frequency of data collection

The frequency of price collection depends on the nature of goods and services. For the majority of items, the prices are collected once a month. The prices of fresh products (fresh fruit and vegetables, fresh fish), which are affected by external factors (such as weather conditions) are collected every week, always on the same day (Tuesday or Thursday).

For the items whose prices are fixed administratively (public utility tariffs, tickets of public transports, postal services) and for some other items (tuition fees, insurance premiums) the prices are collected once a year (items for yearly price collection). For these items the prices are collected right after the new prices and tariffs are released and put into force. In case the prices of these items change and are readjusted within the same year, their prices are collected again.

For the items whose prices are collected on a monthly basis, price collection takes place, in general, approximately in the middle of the month.

18.3 Data collection

Price collection outlets

The prices collection outlets are retail stores and services enterprises, which sell particular species and varieties of species that are consumed by the majority of households in the area.

The selected outlets are representative of the branches of stores in the 27 selected price collection cities where the households make their purchases.

The representativeness criteria for the selection of the outlets are the volume of sales, their geographic location and the availability of items, for which prices are collected, on a continuous basis. The biggest urban centers of Greece, Greater Athens area and Thessaloniki, are divided into zones depending on the income of their inhabitants. Therefore, the price collection outlets in these cities are selected on the basis of the criterion according to which the consumers from all income levels are represented.

The sample of price collection sources does not include shops, mainly small, with low-quality products, as well as some luxury stores with products at extremely high prices. Furthermore, prices are not collected for items sold on

street-carts but on the contrary, price collection includes open-air markets but only for fresh fruit and vegetables.

The chain linking methodology allows the annual renewal of collection price outlets and their number, in order to maintain their representativeness on the calculation of HICP. At each updating of the index, only the representative sample price collection outlets are kept, while those that do not fulfil the necessary selection requirements are replaced. Moreover, the sample is extended to cover the price collection of new items.

The sample size of outlets, in each price collection city, depends on the market size (population) of each area.

Depending on the items, the outlets are distinguished in department stores, specialized stores, supermarkets, open-air markets and services enterprises. For certain items whose prices are collected by the central office (electricity, tickets of public transport, etc), the necessary data are collected from the competent corporations, organizations and agencies.

Price Collection

The collection of prices for almost all the items of CPI is carried out by visiting ELSTAT employees on the price collection outlets of a specific period of the month (month/week). Prices are also collected by e-mail (private school fees, car insurance premiums and bicycles, etc.) as well as via the Internet (gas prices, car and bicycle toll rates, mobile telephony prices, ship and plane ticket prices, etc.).

There are some items whose prices are uniform across the country. The prices of these items are collected by the central office of ELSTAT and they are broken down into two categories:

- a) Items whose prices are the same throughout the country and are determined by the forces of supply and demand (cigarettes, motor vehicles, newspapers and magazines, insurance premium, banking services, etc). Their prices are collected on a monthly or yearly basis,
- b) Items whose prices are the same throughout the country and are set by the government (electricity, motor vehicle registration fees, road tolls, medicines, postal services). Their prices are collected on a yearly basis.

18.4 Data validation

Data is validated through regular and logical checks. During data processing any errors are identified and are dully corrected. Special emphasis is placed on the errors that may have major impact on the results. After identifying the errors, they are further checked and cross-checked in cooperation with the enterprises in order to confirm that it is an error or it is just about an unusual price. At the same time, data are checked for completeness, accuracy and consistency of the correlating variables. Data processing and data validation are carried out either during or after data entry. The data are compared with data from previous months and with data of the corresponding month of previous years and in case of large deviations, a more thorough investigation is necessary.

18.5 Data compilation

Weights of items

The expenditures of the private households of permanent residents in the financial territory of the country constitute the data for the calculation of the weights of the items which consist the CPI compilation. The expenses of the collective households (hospitals, nursing homes, boarding schools, etc.) as well as the households of non-resident residents in the country (tourists) are not included. The weights of the items are updated every January with the prices of the previous December. The source of the expenditure data for the calculation of the CPI weights of the CPI are the Family Budget Survey (FSB).

The weights of the CPI items - in percentages per thousand (‰) - as they have been adjusted, since January 2022, for the 12 main item groups (2-digit COICOP / HICP analysis) are shown in the table below:

Main groups of items of the COICOP classification	Weights (‰)	
	Year 2021	Year 2022
1. Food and non-Alcoholic Beverages	232.58	210.62
2. Alcoholic beverages and tobacco	34.27	37.28
3. Clothing and footwear	59.63	62.93
4. Housing	142.22	161.24
5. Household Equipment	47.87	44.99
6. Health	90.59	81.02
7. Transport	124.20	137.64

8. Communication	44.20	39.59
9. Recreation and Culture	38.30	33.67
10. Education	37.15	30.59
11. Hotels, Cafés and Restaurants	70.17	95.39
12. Miscellaneous Goods and Services	78.84	65.05
Total Consumer Price Index	1000.0	1000.0

Computation of lowest-level indices

The geometric mean is used for the elementary indices in pricing cities level as no weighting information is available and for the calculation of elementary aggregate indices for the whole country, population weights are used for weighting the individual indices of price collection cities.

For the calculation of population weights, the new population data as derived from the 2011 population census and the results of the 2019 Household Budget Survey (HBS) were taken into account.

For the weighting of the sub-indices of some items of the Index (e.g. urban transports), where accurate data on the local consumption value are available, these data are used instead of the above-mentioned population weights.

Missing prices

The treatment of missing prices depends on the category of items, for which prices are collected.

For seasonal items (fresh vegetables, fresh fruit, clothing and footwear, etc.) the standardized method for dealing with the seasonality of these items is applied.

The treatment of missing prices for the other items depends on the duration of the item's absence from the outlet. If the item is absent for a period up to 2 months, then the price, which will be recorded, is the latest regular price observed. If the item is absent for more than 2 months, then the item is replaced, according to the procedure described below "replacement of items".

Replacement of items

When a specified item (variety) is no longer available in the market or it is no longer important, in terms of consumption, because of a new variety, then it is replaced by the item, which has taken its place in the market.

The criterion for this substitution depends on the most sold variety in terms of volume rather than in value for the specific item in the surveyed outlet.

According to the method of "bridged overlap" in the substitution process, either the price of the new product for the previous month is taken into account, if known, or an estimate is made of this price according to the dynamics of the prices of similar products belonging to the same group with the product to be substituted.

Seasonality of items

a. Fresh fruit and vegetables

The seasonality of fresh fruit and vegetables is addressed by using the method of "Class-confined seasonal weights", which fully meets the requirements of the latest Council Regulation No 330/2009 .

According to the method, when some products are out of season then they remain out of the "basket" with no weighting factors.

b. Clothing and footwear

The same class-confined seasonal weights method is applied to address the seasonality of clothing and footwear.

The items of clothing and footwear of the HICP are divided in the following groups:

- i. Clothing and footwear items available only in winter (winter items)
- ii. Clothing and footwear items available only in summer (summer items)
- iii. Clothing and footwear items available during all of the year (all-seasons items)

The items of the group (i) and (ii) are considered seasonal items.
Prices for the aforementioned seasonal items are collected during:

October-April: winter items
May-September: summer items

Offers and discounts

The reductions in the prices of individual products and services are taken into account for the compilation of the HICP only in the following cases:

- a) The reductions are offered to all potential buyers, without discrimination
- b) The buyer is aware of these reductions the moment he is making his purchases
- c) The reductions can be applied at the moment of the purchase

Therefore, reductions due to special offers or sales, which are offered only to specific consumer groups (e.g, pensioners, cooperative's members, etc), are not taken into account for the compilation of the HICP. Accordingly, special offers, such as offering another product as a gift, or special offers on goods close to the expiry date or due to damage are not taken into account for the compilation of the HICP.

In addition, for the compilation of the HICP special offers available only in some stores (by means of bonus cards or coupons) are not taken into account because these offers are considered to be discriminatory.

On the contrary, the reduced prices of general offers and discounts are taken into account during the price collection of the HICP, In Greece the general winter and summer sales are established by law as follows:

- Ten days winter discount: 10 first days of November
- Winter sales: mid January - end February
- Ten days summer discount: 10 first days of May
- Summer sales: mid July - end August

After the end of the sales period, the prices come again to their normal level before the sales, therefore not affecting the Index over a 12-month period.

Public Utility Corporations tariffs

The readjustment in the tariffs of public utility corporations (DEH - Electric Power Corporation, EYDAP - Water supply corporation for Athens, etc) are treated by calculating the mean weighted changes in the relevant tariffs, recorded for the total of the household of the country and on the basis of the data provided by the public utility corporations, These data are provided by the corporations in the framework of Commission Regulation (EC) No 2646/98 "as regards minimum standards for the treatment of tariffs in the compilation of the Harmonized Index of Consumer Prices"

18.6 Adjustment

The methods of quality adjustment which are followed are mainly, three:

- a) the overlap method used in cases where the old (to be replaced) product and the new product have common price collection period,
- b) the bridged overlap method (connection with increase or decrease on index) and
- c) quantity adjustment, (when the quantity of an item changes though its price remains the same).

Therefore, when a good is sold in a higher or lower quantity than usual, with the same price, then the value is adjusted on the basis of the offered quantity (quantitative adjustment).

18.6.1 Seasonal adjustment

Not applicable.

19. Comment

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None.