Single Integrated Metadata Structure (SIMS v2.0)

(user oriented)

Country: Greece

Compiling agency: ELSTAT

Domain name: *Survey on Income and Living Conditions 2023*

ELSTAT metadata

Reference metadata

Contents

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1. Contact

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2. Metadata update

2.1 Metadata last certified	16.10.2023
2.2 Metadata last posted	16.10.2023
2.3 Metadata last update	16.10.2023

3. Statistical presentation

3.1 Data description

The European Union Statistics on Income and Living Conditions (EU-SILC) is a survey-based instrument aiming at collecting timely and comparable cross-sectional and longitudinal multidimensional microdata on income, poverty, social exclusion and living conditions. In addition, it collects module variables every three years, six years or ad-hoc new policy needs modules.

The EU-SILC instrument provides two types of data:

- Cross-sectional data pertaining to a given time or a certain time-period with variables on income, poverty, social exclusion, and other living conditions.

- Longitudinal data pertaining to individual-level changes over time, observed periodically over four-or more year rotation scheme (Annex III (2) of 2019/1700).

Social exclusion and housing condition information is collected mainly at household level while labour, education and health information is obtained for persons aged 16 and over. The core of the instrument is income information at very detailed component level and mainly collected at personal level.

3.2 Classification system

The EU-SILC results are produced in accordance with the relevant international classification systems. The main classifications used are:

• International Standard Classification of Education (ISCED'2011),

• International Standard Classification of Occupations (ISCO-08),

• Classification of Economic Activities (NACE Rev.2-2008),

• Common classification of territorial units for statistics (NUTS 2),

• SCL - Geographical code list (GEO),

• The recommendations made by the United Nations in the Canberra Group Handbook on Household Income Statistics should also be taken into account

For more details on the classification used please, see RAMON, Eurostat's metadata server.

3.3 Sector coverage

Data refer to all private households and individuals living in the private households in the national territory at the time of data collection.

The EU-SILC survey is a key instrument for the European Semester and the European Pillar of Social Rights, providing information on income distribution, poverty and social exclusion, as well as for various related living conditions and poverty EU policies, such as on child poverty, access to health care and other services, housing, e.tc.

It is also the main source of data for microsimulation purposes and flash estimates of income distribution and poverty rates.

3.4 Statistical concepts and definitions

Statistical concepts and definitions for EU-SILC are specified in Regulation (EU) 2019/1700, Commission Implementing Regulation (EU) 2019/2181, and Commission Implementing Regulation (EU) 2019/2242. Additional information is available in the EU statistics on income and living conditions (EU-SILC) methodology and in the methodological guidelines and description of EU-SILC target variables (see CIRCABC).

In addition, the following details are provided:

Income:
The total disposable income of a household is calculated by adding together the personal income received by all household members plus income received at household level minus regular taxes on wealth, regular inter-household cash transfer paid, tax on income and social insurance contributions.

Missing income information in individual questionnaires is imputed.

Disposable household income includes:

- income from work (employee wages and self-employment earnings)
- private income from investment and property
- transfers between households
- all social transfers received in cash including old-age pensions

Note: Some of the income components are mandatory only from 2007: Imputed rent, Interest paid on mortgage, value of goods from own consumption, employer's social insurance contributions. From the 2007 year on, all countries must supply gross income information.

Additionally, from 2021 onwards, imputed rent is not part of the nucleus but will be collected every 3 years (starting in 2020) as part of the rolling module on 'Labour and housing'.

Equivalence scale:
To take into account the impact of differences in household size and composition, the total disposable household income is "equivalized". The equivalized income attributed to each member of the household is calculated by dividing the total disposable income of the household by the equivalization factor. Equivalization factors can be determined in various ways. Eurostat applies an equalization factor calculated according to the OECD-modified scale first proposed in 1994 - which gives a weight of 1.0 to the first person aged 14 years or more, 0.5 to other persons aged 14 years or more and 0.3 to each person aged under 14 years (0-13).

Household definition:
A 'private household' means a person living alone or a group of persons who live together, providing oneself or themselves with the essentials of living. EU-SILC implementing regulation number 2019/2181 specifying technical characteristics, defines households in terms of sharing income or household expenses and (for non-

permanent members) in terms of duration of stay and (for temporarily absent members) in terms of duration of absence.

Household type:

Commission Regulation (EU) 2019/1700 establishing a common framework for European statistics relating to persons and households, based on data at individual level collected from samples and data collection surveys including LFS, HBS and EU-SILC as well as the subsequent presentation of indicators relating to income, housing, education, healthcare, etc. Rather than focusing on "couples" and/or "families", the classification is constructed by reference to the number of adult members, their age and gender, and the number of dependent children living with them. This is reproduced below:

Type of household

Total
All households without dependent children
Single person household
One adult male
One adult female
One adult older than 65 years
One adult aged between 0 and 64 years
Two adults, no dependent children, younger than 65 years
Two adults, no dependent children, at least one aged 65 years and over
Three or more adults, no dependent children
All households with dependent children
Single parent with a least one dependent child
Two adults with one dependent child
Two adults with two dependent children
Two adults with three or more dependent children
Three or more adults with dependent children

Dependent children were previously defined as all persons aged less than 16, plus those economically inactive persons aged 16-24 living with at least one of their parents. Now a slightly different definition has been adopted: All persons aged less than 18 are considered as dependent children, plus those economically inactive persons aged 18-24 living with at least one of their parents.

Activity status:

Under EU-SILC, respondents are asked to declare the number of months during the year that they spent in a list of activity statuses (cross-sectional part). From this information, a "calendar of activities" can be constructed.

Note: Separate questions also allow the construction of an "ILO activity status".

Using the calendar of activities, the following classification of most frequent activity status is established:

Activity and/or professional status

Employee (full-time)
Employee (part-time)
Self-employed (full-time)
Self-employed (part-time)
Unemployed
Pupil, student, further training, unpaid work experience
In retirement or in early retirement or has given up business
Unfit to work
Soldier
Domestic tasks
Person with permanent disability

For the 'in work poverty risk indicators', an individual is considered as having a particular activity status if he/she has spent time during the reference year in that status.

For the pensions indicator 'aggregate replacement ratio' only persons who have spent the total reported time in the relevant activity status are considered.

Education level:
Under EU-SILC, the attainment levels of individuals are classified according to the 'International Standard Classification of Education' version of 2011.

Occupation:
Under EU-SILC, the occupational status of individuals is classified according to the 'International Standard Classification of Occupations' ISCO_08 (COM).

3.5 Statistical unit

Statistical units are private households and all persons living in these households who have usual residence in the Member State. Annex II of the Commission implementing regulation (EU) 2019/2242 defines specific statistical units per variable and specifies the content of the quality reports on the organization of a sample survey in the income and living conditions domain pursuant to Regulation (EU) 2019/1700 of the European Parliament and of the Council.

3.6 Statistical population

The target population is private households and all persons composing these households having their usual residence in the Member State. Private household means a person living alone or a group of persons who live together, providing oneself or themselves with the essentials of living.

3.6.1. Reference population

There are no differences with the standard EU-SILC concepts. Definitions of reference population, household and household membership are provided below.

Reference population	Private household definition	Household membership
The target population is private households and all persons composing these households. The source of our sample is the Census Population. This Census includes all private households and their current members residing in the territory independently of any socio-economic characteristics they may have. Persons living in collective households and in institutions are excluded from the target population as well as households with diplomatic missioners as members.	The definition of household that Eurostat recommends is used. A household is defined as a person living alone or a group of persons living together in the same dwelling and sharing income or expenditures including the joint provision of the essentials of living.	All household members aged 16 years and over at the time of the interview are selected for a personal interview. Subject to the further and specific conditions shown below, if the following persons share household expenses, must be regarded as household members: 1. Persons usually residents, related to other members. 2. Persons usually residents, not related to other members. 3. Resident boarders, lodgers, tenants 4. Visitors 5. Line-in domestic servants, au-pairs 6. Persons usually resident, but temporarily absent from the dwelling (for reasons of holiday travel, work, education or similar) 7. Children of the household being educated away from home 8. Persons absent for long periods, but having household ties: persons working away from home 9. Persons temporarily absent but having household ties: persons in hospitals, homes or other institutions Further conditions for inclusion as household members are as follows: (a) Categories 3,4 and 5: Such persons must currently have no private address elsewhere, or their actual or intended duration of stay must be six months or more. (b) Category 6: Such persons must currently have no private address elsewhere and their actual or intended duration of absence from the household must be less than six months. (c) Category 7 a) for primary/secondary students away from home during the week but returning to family home for weekends, b) for tertiary students, they either have to leave in a collective household (student dormitories) and receive income from the family home or leave in

		a private address irrespectively of their source of income:
		(d) Category 8:
		Irrespective of the actual or intended duration of absence, such persons must currently have no private address elsewhere, must be the partner or child of a household member and must continue to retain close ties with the household and consider this address to be their main residence.
		(e) Category 9:
		Such persons must have clear financial ties to the household and must be actually or prospectively absent from the household for less than six months.

3.7 Reference area
The whole country.

3.8 Time coverage
EU-SILC in Greece has been carried out on an annual basis since 2003. The income reference period is the calendar year prior to the survey year thus in EU-SILC 2023 survey the income reference period is 2022.

3.9 Base period
Not applicable.

4. Unit of measure

The data involves several units of measure depending upon the variables. Income variables are transmitted to Eurostat in national currency. For more information, see methodological guidelines and description of EU-SILC target variables available on CIRCABC.

5. Reference period

Description of reference period used for income

All reference periods used are consistent with technical specifications and no changes were applied to methodological guidelines.

Period for taxes on income and social insurance contributions	Income reference periods used	Reference period for taxes on wealth	Lag between the income ref period and current variables
The income reference period is a fixed twelve-month period, namely the previous calendar year. Tax refunds received during 2022 refer to income received in previous years.	For SILC 2023, the income reference period is the year 2022.	The reference period for taxes on wealth is 2022.	The income reference period is the previous calendar year (year 2022), while current variables refer to the fieldwork period (2023 survey fieldwork is planned for May – October 2023).

6. Institutional mandate

6.1 Legal acts and other agreements

Regulation (EU) 2019/1700 was publish in OJ on 10 October 2019, establishing a common framework for European statistics relating to persons and households, based on data at individual level collected from samples (IESS). The Annex to the Commission implementing regulation (EU) 2019/2180 of 16 December 2019 specifies the detailed arrangements and content for the quality reports pursuant to Regulation (EU) 2019/1700 of the European Parliament and of the Council and Regulation (EU) 2019/2242.

The legal framework concerning the organization and operation of ELSTAT is detailed in the following link:

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

6.2 Data sharing

Confidential microdata is not disclosed by Eurostat. Access to confidential microdata for scientific purposes may be granted on the basis of Commission Regulation 557/2013 and Regulation 223/2009 of the European Parliament and the Council on European statistics.

7. Confidentiality

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.

Protection of personal data

ELSTAT abides by the commitments and obligations arising from the applicable EU and national legislation on the protection of the individual from the processing of personal data and the relevant decisions, guidelines, and regulatory acts of the Hellenic Data Protection Authority.

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 organizational 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 unauthorized access or illegal processing.

The personal data collected by ELSTAT are used exclusively for purposes related to the conduct of surveys and the production of relevant statistics. Only ELSTAT has access to the data. The controller is the person appointed by law pursuant to the relevant provisions concerning the Legal Entities of Public Law and the Independent Authorities. The data are stored in the databases of ELSTAT for as long as required by the relevant legislation.

Legal basis of the processing: Article 6, para 1(c) and 1(d) of the General Data Protection Regulation (GDPR).

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 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:

  a) 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.
  b) the anonymization criteria for the microdata provided to users.
  c) 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 organizational 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 unauthorized access or illegal processing.

8. Release policy   Top

8.1 Release calendar

Releases of EU-SILC survey are published, on an annual basis, on the website of ELSTAT at 12:00 (EET) in accordance with the releases calendar (except in unforeseen circumstances). Release dates are planned during the previous calendar year and therefore changes may occur in the release dates.

8.2 Release calendar access

Please refer to the Release calendar - Eurostat (europa.eu) publicly available on the Eurostat's website.

8.3 User access

In line with the Community legal framework and the European Statistics Code of Practice, Eurostat disseminates European statistics on Eurostat's website (see section 10 - 'Accessibility and clarity'), respecting professional independence and in an objective, professional and transparent manner in which all users are treated equitably. The detailed arrangements are governed by the Eurostat protocol on impartial access to Eurostat data for users. Additional information about microdata access is available in Statistics on Income and Living Conditions - Access to microdata - Eurostat (europa.eu).

ELSTAT grants access to anonymized microdata, part of which is the survey on income and living conditions (EU-SILC), which have been anonymized in accordance with anonymization criteria it has predefined, so that the direct or indirect identification of surveyed units is not possible (Public Use Files). The list of the anonymization criteria, per statistical survey, is available on ELSTAT's website, at the link: Anonymization Criteria for Public Use Files of ELSTAT.

9. Frequency of dissemination   Top

Annually

10. Accessibility and clarity   Top

10.1 News release

Usually, the first press release is announced at the end of June, each year.
All EU-SILC related press releases for each year from the beginning of the survey can be found on:
https://www.statistics.gr/en/statistics/-/publication/SFA10/-

10.2 Publications

Further to the EU-SILC Press Releases mentioned in the previous paragraph, the *Living Conditions in Greece* publication aims to provide the latest statistics illustrating living conditions in Greece in a clear and comprehensive manner. Chapter 3 of the publication is dedicated to EU-SILC data while some other EU-SILC-stemming information is referred to in further chapters. The publication is written in both Greek and English and is designed for users of statistics who seek updated information on recent social developments, as well as long-term social trends. The publication is updated with the latest data every second month, the first Friday of

January, March, May, July, September, and November. To facilitate users, on page 6 of the publication there is a reference list containing all the tables that are updated with new or revised data. The publication can be found in the following link:

https://www.statistics.gr/en/living-conditions-in-greece#tab-2023

10.3 On-line database

ELSTAT grants access to anonymized microdata of the following statistical surveys it conducts, which have been anonymized in accordance with anonymization criteria it has predefined, so that the direct or indirect identification of surveyed units is not possible (Public Use Files). The list of the above anonymization criteria, per statistical survey, is available on ELSTAT's website, at the link: Anonymization Criteria for Public Use Files of ELSTAT.

List of surveys

1. Survey on income and living conditions (EU-SILC)

2. Labour Force Survey (LFS)

3. Household Budget Survey (HBS)

4. Survey on the use of information and communication technologies (ICT) by households

5. Survey on energy consumption in households

6. National health survey

7. Time use survey

8. Survey on road traffic accidents

9. Mortality Statistics

10.3.1 Data tables - consultations

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10.4 Micro-data access

Users can order statistical data, in electronic format, tailored to their needs, when these are not available at the "Statistics" section in ELSTAT webpage. They just have to fill in the application form that can be found by clicking on "Statistical data request" on the left, in the menu under "Products & Services" in ELSTAT webpage https://www.statistics.gr/en/statistical-data-request. The Statistical Data Dissemination Section accepts the data requests and replies to users as soon as possible. Everything related to access to both public use files and confidential data for scientific purposes can be found in ELSTAT webpage under: https://www.statistics.gr/en/public-use-files.

10.5 Other

Internal outputs produced by other statistical processes (Digital library).
10.5.1 Metadata – consultations

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10.6 Documentation on methodology

The available Methodological documentation is the following address:
https://www.statistics.gr/en/statistics/-/publication/SFA10/-
10.6.1 Metadata completeness – rate

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10.7 Quality documentation

Not applicable.

11. Quality management

11.1 Quality assurance

The quality of the survey is ensured by a) the existence of a methodological handbook issued by Eurostat, containing all the details and characteristics of the variables to be collected as well the format the information should be collected and transferred to ESTAT and suggested questions to be made to the interviewees, in order to improve comparability of results in all member states, and b) the implementation of Code of Practice for European Statistics.

More specifically, the EU-SILC survey is based on a framework Regulation (2019/1700) that defines the scope, definitions, time reference, characteristics of the data, data required, sampling, sample sizes, transmission of data, publication, access for scientific purposes, financing, reports and studies. In addition, Eurostat and Member States have developed the technical aspects of the instrument, in particular one Regulation on 'Quality Reports' (2019/2180).

Quality Assurance Framework of the European Statistical System

https://www.statistics.gr/en/hellenic-statistical-system

11.2 Quality assessment

Assessment of the quality is carried out by both ELSTAT and Eurostat. The sample size is such as to ensure high accuracy results according to Annex II of Regulation (EU) 2019/1700. The sample size represents the reference research population, and all necessary measures are taken to accomplish the appropriate checks and minimize measurement errors in data collection. The data are accompanied by quality reports according to the Single Integrated Metadata Structure (SIMS 2.0) analyzing the accuracy, consistency, and comparability of data.

After the checks to detect errors, which are being corrected and the estimation of sampling errors, the obtained results are considered of high quality.

12. Relevance

12.1 User needs

The main users of EU-SILC statistical data are Eurostat, policymakers, research institutes, media, and students. Users (further to Eurostat) could be classified as follows:

- Institutional users like other Commission services, other European institutions (such as the ECB), national administrations (mainly those in charge of the monitoring of social protection and social inclusion, or other international organizations,
- Statistical users in Eurostat or in Member States National Statistical Institutes to feed sectoral or transversal publications such as report on progress towards the Sustainable Development Goals (SDGs) according to the United Nations 2030 Agenda, the Eurostat yearbook and various pocketbooks, among other reports,
- Researchers having access to microdata

End users - including the media - are interested in living conditions and social cohesion in the EU.

12.2 User satisfaction

The mission of the Hellenic Statistical Authority (ELSTAT) is to systematically develop, produce and disseminate official statistics of Greece, and to ensure and constantly improve the quality of the statistics of the Hellenic Statistical System (ELSS). ELSTAT pursues its mission by following the highest international statistical standards, and strictly adheres to the prescribed rules and fulfills its obligations in accordance with the European Statistics Code of Practice. The User Satisfaction Survey contains annual data on the number of users who submitted

requests for data provision to the Statistical Data Dissemination Section, and the Library and Web Content Management Section of ELSTAT, in combination with other parameters, such as the response rate to users' requests, the type of requested data and the dissemination mode of statistical information. The above information, for the year 2022, was collected using an online questionnaire (User Satisfaction Questionnaire). This questionnaire is addressed to all users who submit a request for data provision to the above Sections, while its completion is optional. The purpose of the User Satisfaction Survey is to:

• communicate with the users of official statistics, with the aim of further improving the quality of the produced statistical product of ELSTAT and the services provided by it,

• fully utilizing the collected data, such as for example those relating to the type of statistical data requested and investigating new needs.

Additionally, Eurostat carried out an online general User Satisfaction Survey (USS) in the period between April and July 2019 to obtain a better knowledge about users, considering their needs and satisfaction with the services provided by Eurostat. The survey has shown that EU-SILC is of very high relevance for users. For the majority, both aggregates and micro-data were important or essential in their work irrespective of the purpose of their use. The use of the ad-hoc modules was less widespread than the use of the nucleus variables. Nevertheless, there was high interest in repeating these modules to have the possibility of comparing data over time. Users emphasized their strong need for more detailed micro-data, which is currently not possible. Under the new legal framework implemented from 2021, the NUTS 2 division will be available for the main indicators. Finally, users were satisfied with the overall quality of the service delivered by Eurostat, which encompasses data quality and the supporting service provided to them.

For more information, please consult User Satisfaction Survey 2019.

12.3. Completeness
EU-SILC 2023 survey as contacted by ELSTAT covers all the variables (mandatory and optional) required in 2023 operation.

13. Accuracy and reliability

13.1 Overall accuracy

According to Reg. (EU) 2019/1700 Annex II, precision requirements for all data sets are expressed in standard errors and are defined as continuous functions of the actual estimates and of the size of the statistical population in a country or in a NUTS 2 region. For the income and living conditions domain, the estimated standard errors of the following indicators are examined according to certain parameters set:

- Ratio at-risk-of-poverty or social exclusion to population
- Ratio of at-persistent-risk-of-poverty over four years to population
- Ratio at-risk-of-poverty or social exclusion to population in each NUTS 2 region.

13.2 Sampling error

EU-SILC is a complex survey involving different sampling designs in different countries. In order to harmonize and make sampling errors comparable among countries, Eurostat (with the substantial methodological support of Net-SILC2) has chosen to apply the "linearization" technique coupled with the "ultimate cluster" approach for variance estimation.

Linearization is a technique based on the use of linear approximation to reduce non-linear statistics to a linear form, justified by the asymptotic properties of the estimator. This technique can encompass a wide variety of indicators, including EU-SILC indicators. The "ultimate cluster" approach is a simplification consisting in calculating the variance taking into account only variation among Primary Sampling Unit (PSU) totals. This

method requires first stage sampling fractions to be small which is nearly always the case. This method allows a great flexibility and simplifies the calculations of variances. It can also be generalized to calculate variance of the differences of one year to another.

The main hypothesis on which the calculations are based is that the "at risk of poverty" threshold is fixed. According to the characteristics and availability of data for different countries, we have used different variables to specify strata and cluster information.

In particular, countries have been split into 3 groups:

1. BE, BG, CZ, IE, EL, ES, FR, HR, IT, LV, HU, PL, PT, RO, SI, UK and AL, whose sampling design could be assimilated to a two-stage stratified type we used DB050 (primary strata) for strata specification and DB060 (Primary Sampling Unit) for cluster specification.
2. DK, DE, EE, CY, LT, LU, NL, AT, SK, FI, CH whose sampling design could be assimilated to a one stage stratified type we used DB050 for strata specification and DB030 (household ID) for cluster specification.
3. MT, SE, IS, NO, whose sampling design could be assimilated to a simple random sampling, we used DB030 for cluster specification and no strata.

13.3 Non-sampling error

Non-sampling errors are basically of four (4) types:

- Coverage errors: errors due to divergences existing between the target population and the sampling frame.
- Measurement errors: errors that occur at the time of data collection. There are a number of sources for these errors such as the survey instrument, the information system, the interviewer and the mode of collection.
- Processing errors: errors in post-data-collection processes such as data entry, keying, editing and weighting.
- Non-response errors: errors due to an unsuccessful attempt to obtain the desired information from an eligible unit. Two main types of non-response errors are considered:

  - Unit non-response: refers to absence of information of the whole units (households and/or persons) selected into the sample.
  - Item non-response: refers to the situation where a sample unit has been successfully enumerated, but not all required information has been obtained.

13.3.1 Coverage error

Coverage errors are caused by the imperfections of a sampling frame for the target population of the survey. Coverage errors include over-coverage, under-coverage and misclassification:

- Over-coverage: relates either to wrongly classified units that are in fact out of scope, or to units that do not exist in practice.
- Under-coverage: refers to units not included in the sampling frame.
- Misclassification: refers to incorrect classification of units that belong to the target population.

A systematic source of coverage problems is the time lag between the reference date for the selection of the sample and the fieldwork period, which should be made the shortest.

13.3.2 Measurement error

Measurement errors can occur from the questionnaire (design, content and wording), the interviewers and

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their training, the respondents, the routing, and the skills testing before starting the fieldwork.

As the 2023 survey is the twenty-first (21st) in row, the quality has been significantly improved due to the information provided by the interviewers and the continuous improvement in data analysis.

13.3.3 Non-response error

Non-response errors are errors due to an unsuccessful attempt to obtain the desired information from an eligible unit. Two main types of non-response errors are considered: unit non-response and item-non response.

1. **Unit non-response** which refers to the absence of information of the whole units (households and/or persons) selected into the sample. According to Annex VI of the Reg.(EU) 2019/2242

- **Household non-response rates (NRh)** is computed as follows:

NRh=(1-(Ra * Rh)) * 100

Where Ra is the address contact rate defined as:

Ra= Number of address/selected person (including phone, mail if applicable) successfully contacted/Number of valid addresses/selected person (including phone, mail if applicable) selected

and Rh is the proportion of complete household interviews accepted for the database

Rh=Number of household interviews completed and accepted for database/Number of eligible households at contacted addresses (including phone, mail if applicable)

- **Individual non-response rates (NRp)** is computed as follows:

NRp=(1-(Rp)) * 100

Where Rp is the proportion of complete personal interviews within the households accepted for the database **Rp= Number of personal interview completed/Number of eligible individuals in the households whose interviews were completed and accepted for the database**

- **Overall individual non-response rates (*NRp)** is computed as follows:

***NRp=(1-(Ra * Rh * Rp)) * 100**

2. **Item non-response** which refers to the situation where a sample unit has been successfully enumerated, but not all the required information has been obtained.

13.3.4 Processing Error

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14. Timeliness and punctuality

14.1 Timeliness

Pursuing annex V of the IESS regulation, Member States have to submit for the Income and Living Conditions domain pre-checked microdata without direct identifiers, according to the following deadlines (IESS Regulation (EU) 2019/1700 establishing a common framework for European statistics relating to persons and households, based on data at individual level collected from samples):

• By the end of year N, submission of cross-sectional and longitudinal variables for the data collection of year N, including cross-sectional weights.

• In exceptional cases, microdata concerning income variables may be submitted as provisional data.

• By 28 February of year N+1, receipt of revised, final income data is expected.

• By the end of October of year N+1, at the latest, longitudinal weights are to be submitted to complete the data files.

The first years of implementing IESS regulation, for some of the countries were granted a new deadline for data submission as specified in the annex to 'Commission Implementing Decision (EU) 2020/2050. According to this, derogation period has been granted to Greece for 3 years (2021-2023). For the 2023 data collection, the files have to be transmitted to Eurostat by the end of February 2024.

14.2 Punctuality

15. Coherence and comparability

15.1 Comparability - geographical

Since common variable definitions and data production methods have been implemented not only in all geographical regions of the country but also among all EU countries, no geographical comparability problems have been caused.

Additionally, a number of studies commissioned by EUROSTAT have been conducted to specify precision requirements for the NUTSII regions of Greece.

15.1.1 Asymmetry for mirror flows statistics – coefficient

Not applicable.

15.2 Comparability over time

The EU-SILC survey was designed in 2003 to provide reliable estimates on the variables and indicators of interest at national level. In 2019 the sample design was refined and improved based on the results of the "Study of the current sampling design of the Survey of Income and Living Conditions (SILC) with the objective to increase/adjust the sample at regional (NUTSII) level" in order to improve the estimates of regional SILC indicators (NUTSII level). The data are comparable from the first year of the survey, i.e. 2003

15.3 Coherence cross-domain

Coherence between two or more statistical results refers to the degree of using the same definitions and methods in order to produce the statistics.

15.3.1 Coherence – sub annual and annual statistics

Comparisons of indicators, incomes and other characteristics are implemented with data from other surveys (HBS, LFS) and administrative sources.

15.3.2 Coherence – National Accounts

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15.4 Coherence - internal

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16. Cost and burden

EU-SILC was designed to keep respondent burden controlled so to avoid high non-response rate and to ensure good quality of the information collected.

17. Data revision

17.1 Revision policy

The revision policy may relate to the survey data and the survey itself, i.e. the questionnaire, the sample, etc., and takes into account users' needs in additional statistical information.

The Hellenic Statistical Authority (ELSTAT) has a revision policy defining standard rules and principles for data revisions, in accordance with the European Statistics Code of Practice and the principles for a common revision policy for European Statistics contained in the Annex of the European Statistical System (ESS) guidelines on revision policy.

This policy is available on the ELSTAT's website in the section https://www.statistics.gr/en/policies.

17.2 Revision practice

After identifying the users' needs (e.g. Eurostat's) questionnaires are, whenever needed, redesigned with care not to danger comparability over time and at European level.

A review of data is being made after the application of checks by ELSTAT and by Eurostat, and after correcting any inconsistencies that may exist in the data, both cross-sectionally and longitudinally.

18. Statistical processing

18.1 Source data

The EU-SILC survey is annual and uses a stratified two–stage area sampling design with rotating panels. For each survey year, the sample is made up of four subsamples (panels), each one used for four consecutive years and then rotating out of the survey and being replaced by a newly selected panel. The reference population of the survey is stratified by geographic area, namely, 13 regions (the NUTSII level of administrative division) plus the metropolitan areas of Athens and Salonica, and by population density (rural, semi-urban and urban areas). The number of strata in the 13 regions, in Athens and Thessalonica are 50, 31 and 9, respectively, a total of 90 strata. In the first sampling stage a number of geographic clusters, Primary Sampling Units (PSU), are selected within each stratum with probability proportional to their size (number of private households). In the second sampling stage, a fixed number of dwellings is selected in each PSU with systematic sampling, and all households therein (and their eligible current members) are surveyed.

The determination of the sample design and data collection will be completed within the year 2021, while the weighing, the compilation of indicators and the other work for the preparation of the data quality report will be carried out within the year 2022.

18.2 Frequency of data collection

ELSTAT collects EU-SILC data annually.

18.3 Data collection

The method of data collection is mainly the Paper-Assisted Personal Interview (PAPI) and by telephone (CATI). Other modes are used in much lower percentages. However, ELSTAT understands the need for higher use of other modes of data collection.

18.4 Data validation

According to Regulation (EU) No 2019/1700, the results of the survey are checked and validated. For this purpose, the SAS programs produced by ESTAT are used.

These programs concern the following: i) Cross and Long weights checking procedures (summary statistics, outliers' detection) ii) Analysis of basic characteristics of the SILC iii) Outliers on income variables on household and personal levels iv) Year-to-year comparison of distributions and v) Comparison between the observations of two different revised set of SILC files.

18.5 Data compilation

Tables will be produced for weighted data. Details on the data compilation procedures will be presented in more detail once the survey has been contacted and finalized.

18.5.1 Imputation – rate
Not applicable.

18.6 Adjustment

Not applicable.

18.6.1 Seasonal adjustment

Not applicable.

19. Comment	Top

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