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QUALITY REPORT 2019

Survey on Income and Living Conditions - EU SILC

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Content:

1. Introduction – Basic information about the survey

1.1 Purpose, goal and subject of the survey

Survey on Income and Living Conditions - EU SILC annually provides comparable data on income, poverty, social exclusion and living conditions.

1.2 Legal basics

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 018/12 and 047/19) defines provisions for collection, processing and dissemination of data. The Law provides to the Statistical Office legal powers to collect and access the data necessary for the implementation of Programme and Annual Plan. The Law gives a priority to the use of administrative data and right of access to individual data that are a result of survey of other official statistical producers. As an annex to legal provisions, Statistical Office has signed several memoranda on cooperation with administrative data providers.

EU regulations defining this area of statistics:

Indicative regulation:

1. REGULATION (EC) No 1177/2003 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 June 2003 concerning Community statistics on income and living conditions (EU-SILC).

Implementation regulations:

1. COMMISSION REGULATION (EC) No 1980/2003 of 21 October 2003 implementing Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning Community statistics on income and living conditions (EU-SILC) as regards definitions and updated definitions;

2. COMMISSION REGULATION (EC) No 28/2004 of 5 January 2004 implementing Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning Community statistics on income and living conditions (EU-SILC) as regards the detailed content of intermediate and final quality reports;

3. Commission Regulation (EC) No 1981/2003 of 21 October 2003 implementing Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning Community statistics on income and living conditions (EU-SILC) as regards the fieldwork aspects and the imputation procedures;

4. COMMISSION REGULATION (EC) No 1982/2003 of 21 October 2003 implementing Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning Community statistics on income and living conditions (EU-SILC) as regards the sampling and tracing rules;

5. COMMISSION REGULATION (EC) No 1983/2003 of 7 November 2003 implementing Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning Community statistics on income and living conditions (EU-SILC) as regards the list of target primary variables;

6. COMMISSION REGULATION (EU) 2015/2256 of 4 December 2015 amending Regulation (EC) No 1983/2003 implementing Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning Community statistics on income and living conditions (EU-SILC) as regards the list of target primary variables - DOCUMENT 065.

1.3 Statistical units

Households and household members age 16 and over.

1.4 Coverage and scope of survey

1.4.1 Sectors

Not relevant.

1.4.2 Statistical population

Households in Montenegro and household members age 16 and over.

1.5 Referent geographical area

Montenegro

1.6 Concepts and definitions

At risk of poverty rate means a share of persons (in total population) whose equivalised disposable income is below the relative poverty line. These persons are not necessarily poor, but they are at higher risk to be poor.

At risk of poverty threshold (relative poverty line) represents 60% of the median of national equivalised disposable income of all households and it is expressed in euro.

Quintile share ratio (S80/S20) compares the total equivalised disposable income of the upper income quintile (20% of the population with the highest equivalised income) with those from the lower income quintile (20% of the population with the lowest equivalised income). It is an indicator of income inequality which measures the relationship between the first and fifth income distribution quintals.

Gini coefficient in this survey represents the measure of inequality in the distribution of equivalised disposable income. The value of this coefficient goes within the interval from 0 to 100, where 0 represents perfect equality, i.e. each person in society has equal income. The closer to 100 the value is, the income inequality is higher.

1.7 Classifications

- ISCED 1997
- ISCED 2011
- NACE Rev. 2
- ISCO 08

1.8 Frequency of data collection

Once a year for a period of two months (April and May).

1.9 Frequency of data dissemination

The data are published annually, in December of the current year for the previous year.

1.10 Methodology

The methodological explanations of the indicators of relative poverty are found in the Release of Survey on Income and Living Conditions, published at: https://www.monstat.org/eng/page.php?id=1531&pageid=1

1.11 Base period

Not relevant.

1.12 Unit of measure

The data obtained by this survey are expressed in euros and in percentages.

1.13 Source of data

Survey on Income and Living Conditions is a sample-based survey. The household selection framework is the Census of population, households and dwellings in 2011. The sample of households is a two-stage stratified sample by regions (north, center, south and Podgorica) and type of settlement (urban, others), where the units of the first stage are the enumeration areas and household as units of the second stage.

The annual sample is about **5 519** households. Household substitutions are not allowed. The sample follows the rotational scheme, which implies that a number of households remain in the sample (i.e. they can be interviewed) for four consecutive years. The total sample for each year is divided into four independent and non-overlapping subsamples - the so-called rotational groups, equal in size and sample design, which represent the whole population. Every year, one rotational group from the previous year is excluded from the sample and a new rotational group is included in the sample.

1.14 Method of data collection

Data collection in the Survey on Income and Living Conditions is done using the face-to-face method, using a paper version of the questionnaire (PAPI method).

2. Relevance – Data users

2.1 User needs

International users:

- *Eurostat;*
- *World Bank;*
- *UN organizations;*
- *International Monetary Fund*.

National users:

- *Ministries and other public administration bodies;*
- *Local government and other local government bodies;*
- *Central bank;*
- *Non-governmental organizations;*
- *Students;*
- *Researchers;*
- *Media*.

2.2 User satisfaction

The Statistical Office has adopted the Quality Management Strategy, the Guidebook to the Implementation of the Quality Management Strategy, as well as the Plan for the Implementation of the Quality Policy. In order to measure the degree to which fulfills obligations towards users and within the new quality policy, the Statistical Office conducted User satisfaction survey. The results of the survey are available on the Statistical Office website, link:

http://monstat.org/uploads/files/2.%20Izvjestaj%20o%20zadovoljstvu%20korisnika%20ENG%20(Autosaved).pdf

3. Accuracy and reliability

3.1 Accuracy – Overall remark

Survey on Income and Living Conditions is sample-based survey, and accordingly the results obtained from the sample are subject to the usual types of errors related to sampling techniques and interviews, such as: sampling errors, non-sampling errors, measurement errors, processing errors and non-response.

3.2 Sampling error

EU-SILC is a complex survey involving different sampling design in different countries. In order to harmonize and make sampling errors comparable among countries, Eurostat has chosen to apply the "linearization" technique coupled with the "ultimate cluster" approach for variance estimation. The "ultimate cluster" approach is a simplification consisting in calculating the variance taking into account only variation among Primary Sampling Unit (PSU) totals. According to the characteristics and availability of data for different countries, different variables for determining the strata and clusters were used. For sample design, MONSTAT uses a two-stage stratified sample DB050 (primary strata) to determine the stratum and DB060 (PSU) to determine the cluster.

Indicators of sampling error (A1)

	Total	Standard error	Half CI (95%)
At risk of poverty rate (60% Me)	24.5%	0.004832	0.009

3.3 Non-sampling error

Non-sampling errors are basically of 4 types:

1) *Coverage errors* - errors due to divergences existing between the target population and the sampling frame;

2) *Measurement errors* - errors that occur at the time of data collection. There are a number of sources for these errors such as the information system, the interviewer and the mode of collection;

3) *Processing errors* - errors in post-data-collection processes such as data entry, keying, editing and weighting;

4) *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 and

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

3.3.1 Coverage error

Coverage errors include:

1) over-coverage;

2) under-coverage

Over-coverage represents the proportion of units from the sample frame that does not belong to the target population.

Under-coverage is a problem that arises due to under-coverage or non-eligibility of the sample selection framework (i.e. non-inclusion of newly built flats that are settled, as well as non-inclusion of persons who arrive at a place with the intention to remain there for a year and longer). The under-coverage rate is difficult to estimate because it is not possible to know which units are not included in the target population.

Indicators of coverage error (A2)

For Survey on Income and Living Conditions the sample is extracted from the Census of population, households and dwellings from 2011 which is not updated regularly. This database gives a relatively good coverage of households within the different geographical areas. This database also contains auxiliary information on the private households, like that their current members, which was also used for EU SILC survey. However, because this database is not regularly updated, there are concerns due to possible over and under-coverage in the next period, i.e. until Census 2021 is conducted. This was the cause of the 166 households in 2019 in the sample were ineligible addresses that correspond to 3.01 percent of the total sample selected.

3.3.2 Error of measurement

A paper version of the questionnaire, face-to-face method (PAPI) is used to implement Survey on Income and Living Conditions. Errors of measurement that can be generated using the paper version of the questionnaires are minimized. Measurement errors are mostly followed through the structure of the questionnaire and the logical order of asking questions. In addition, the insignificant impact is the quality of maintaining the instruction for interviewers, finding the address of the household or person in another place of residence (compared to SILC 2018), the ability of the interviewer to contact a new household or household from the previous wave, as well as logic control of entered questionnaires.

3.3.3 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:

1) *Unit non-response* which refers to the absence of information of the whole units (households and/or persons) selected into the sample;

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.

Unit non-response rate (A3)

Unit non-response rate indicates how many units (households) have not responded to questionnaire in survey. In 2019, the household non-response rate (NRh) was 16.41%.

Item non-response rate (A4)

Not available.

3.3.4 Processing error

Data entry and coding

During data entry, paper form of questionnaires and data which were entered were compared, but for small number of questionnaires. Only minor mistakes were found from this exercise. Coding was carried out by statisticians who are experienced with classifications of occupations and activities. Also some part of logical control included codes for occupation and activities, and there was possibility for correction.

A lot of logical checks were done. Examples of logical checks:

Soft syntax error: Variable (PL060): Number of hours usually worked per week in main job: if person who was doing data entry, entered less than 8 or more than 80 hours, there was a signal: Is it data entered good? The answer could be Yes or No.

Hard syntax error: Variable HB080/HB090: Person 1 and Person 2 responsible for the accommodation - if interviewer entered two times the same person, there was a hard error - Person 1 responsible for the accommodation and Person 2 responsible for the accommodation cannot be the same.

Logical error: Variable PE030 - Year when the highest level of education was attained / PE040 - Highest ISCED level attained - cannot be the same level of education for variable PE030 and PE040.

Editing controls

The system of processing, checking and correcting was programmed in SAS. There are various logical and consistency checks, the extreme values of all income components and variables with amounts from questionnaire were checked (for example total housing costs). During the editing procedures the detected errors are corrected. After editing the data, so called integrated database is composed, with all the data. In the case of logical mistakes and inconsistency of the data, the data were corrected.

Imputation rate (A5)

Not available.

3.4 Seasonal adjustment

Not relevant.

3.5 Data revision

3.5.1 Data revision policy

Statistical Office has adopted the revision policy and it is available on the website
http://www.monstat.org/eng/page.php?id=1411&pageid=1411

3.5.2 Data revision practice

Not available.

3.5.3 Data revision - average size (A6)

Not available.

4. Timeliness and punctuality

4.1 Timeliness

The preliminary data are published 19 months after the completed reference period. The final data are published 31 months after the completed reference period.

Timeliness of final data: T+31 months after the completed reference period.

Time lag of the first results

The time lag of preliminary results indicator represents time between the date of the last day of reference period and the date of publication of preliminary data. The preliminary data are published 19 months after the completed reference period.

Timeliness of preliminary data: T+19 months after the completed reference period.

Time lag of the final results

The time lag of final results indicator represents time between the date of the last day of reference period and the date of publication of final data. The final data are published 31 months after the completed reference period.

Timeliness of final data: T+31 months after the completed reference period.

4.2 Punctuality

The punctuality indicator represents the time difference between the actual publication of the data and the planned publication of the data. Deadlines of dissemination of the EU-SILC data at the website are defined in the Statistical Release Calendar and these deadlines are respected.

Indicator TP3 (punctuality) is 0, i.e. no difference between the actual publication of the data and the planned publication of the data, that means that the Releases are published according to the deadlines which are defined in the Statistical Release Calendar.

5. Availability and clarity

5.1 Release calendar

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 018/12 and 047/19) stipulates that official statistical producers prepare, update and publish Statistical Release Calendar. It is published on the website of Statistical Office not later than 20 December for the next year, for all official statistical producers that includes date of releasing statistical data. Any change in date of releasing in the Calendar is published in advance in accordance with the Procedure on Unplanned Revisions.

5.2 Release calendar access

Statistical Release Calendar is avaliable on the following link:

http://www.monstat.org/eng/page.php?id=12&pageid=12

5.3 Release

The Release of Survey on Income and Living Conditions is published on the following link: http://monstat.org/eng/page.php?id=1587&pageid=1431

5.4 Publication

All publication published by Statistical Office are available at the following link:
http://monstat.org/eng/publikacije.php

5.5 Online database

Database are available on following link: http://monstat.org/eng/pxweb.php

5.6 Access to micro data

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 018/12 and 047/19) regulates rules under which external users can obtain an access to individual data for needs of research. Article 58 defines types of scientific and research organizations that can obtain such data. Providing individual data without identifier is possible only upon a written request of scientific and research institutions, with purpose of performing scientific and research activities as well as international statistical organizations and statistical producers from other countries. Research entity signs the agreement with Statistical Office, and it signs the statement on respecting the confidentiality principle. Official statistical producers keeps a separate records on users and purpose of using the statistical data given to these users.

5.7 Metadata occupancy

Not available

6. Comparability

6.1 Spatial comparability

The indicators obtained based on the Survey on Income and Living Conditions are fully comparable with respective indicators in EU countries, i.e. with all countries that use the same methodology for poverty measurement which is harmonized with EU standards.

6.2 Time comparability

The data of the Survey on Income and Living Conditions are fully comparable over time and available from 2013 to 2019 on the Monstat website in the section Data, link:

https://www.monstat.org/eng/page.php?id=1531&pageid=1

Time comparability indicator
Not avaliable