Statistical survey on income and living conditions

IC_APUZ_A_EN_2020_1

Reference Metadata in ESMS 2.0 structure

1	**Contact**
1.1	**Contact organisation**
State Statistical Office	
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2	**Metadata update**
2.1	**Metadata last certified**
27.09.2022	
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3	**Statistical presentation**
3.1	**Data description**
Indicators in the area of housing, material deprivation, household income, health and Laeken indicators of poverty. The Survey on Income and Living Conditions provide data on poverty and social exclusion and living conditions. They are the basis for calculating the structural indicators for comparative analysis at the level of the European Union and the redistribution of incomes and the manifestation of poverty and social exclusion. To achieve these goals, the basic demographic and other characteristics of households and their members, monetary indicators of living standards and social fragmentation of the population, non-monetary indicators of living standards, economic activity, employment and unemployment are included. The data are used by external users: the Government of the Republic of North Macedonia, the Ministry of Labour and Social Policy, the Ministry of Finance, other state bodies, universities, media and other domestic and international users. The statistical survey on income and living conditions meets the principle of accuracy. All data are published according to the deadlines in the Release Calendar and timely transmitted / sent to Eurostat. Data on income and living conditions are comparable geographically and over time, cross-domain and internal coherence of data is ensured.	
3.2	**Classification system**
- National classification of activities, NKD Rev.2 (by NACE Rev.2) , **- National classification of occupations, NKZ (by ISCO) ,** **- Standard classification of education by levels, SKOB-S (by ISCED)**	
3.3	**Sector coverage**

The following social fields are included in the survey methodology.

- Basic demografic and other characteristics of the household and its members;

- Monetary indicators of living standards and social stratification of the population data on incomes from different sources;

- Non-monetary indicators of living standard, basic data on housing conditions, problems related to housing or neighborhood (location), acess to education,

health status and acess to healthcare;

- Economic activity, employment and unemployment of persons aged 16 and more;

- Social services and programs and the participation of the household or its members in them.

3.4 Statistical concepts and definitions

Equivalent household size:

In order to reflect differences in household size and composition, the income figures are given per equivalent adult.

This means that the total household income is divided by its equivalent size and result of that is equivalised income. The calculation uses the so-called modified OECD equivalence scale, which gives a weight of:

- 1,0 to the first adult;
- 0,5 to any other household member aged 14 or over;
- 0,3 to each child below age 14.

The resulting figure, which is the sum of these weights, is attributed to every member of the household.

Thus, for instance, a household that consists of 2 adults and 2 children below the age of 14 is therefore: 1.0 + 0.5 + (2*0.3) = 2.1.

At-risk-of-poverty threshold:

Referred to as the at-risk-of-poverty line. This is equivalent to 60 percent of the median national equivalised income of the persons living in households.

At-risk-of-poverty rate:

This indicator reflects the percentage of persons with an equivalised disposable income below the at-risk-of-poverty threshold.

The “at-risk-of-poverty rate before social transfers” shows the percentage of persons with an equivalised disposable income before social transfers excluding also old-age benefits below the “at-risk-of-poverty threshold”.

Most frequent activity status:

The most frequent activity status is defined as the status that individuals declare to have occupied for more than half the number of months in the income reference year. The most frequent activity status groups are employment, unemployment, retirement and other inactive persons.

Quintile:

A statistical value of a data set that represents 20% of a given population. The first quintile represents the lowest fifth of the data (1-20%); the second quintile represents the second fifth (21% - 40%) etc.

Dependent child:

The person is defined as a dependent child if he/she is:

- under 18 or;

- 18-24 years old and is inactive and living with at least one parent.

A person is otherwise referred to as an adult.

This term differs from the term “child” which corresponds to the persons aged under 18.

S80/S20 ratio:

The ratio between the sums of the highest and lowest 20 percent equivalised incomes of persons within the households.

Gini coefficient:

The Gini coefficient measures the inequality among values on frequencies of distribution of income). In theory, a Gini coefficient of zero expresses perfect equality of income distribution, (for example, where everyone has the same income), while a Gini coefficient of one (or 100%) expresses maximal inequality among values (for example, where only one person has all the income).

Households with a very low work intensity:

For each household the work intensity is calculated by dividing the sum of all the months actually worked by the working age members of the household (i.e. persons aged 18-59 who do not fall under the definition of dependent children), by the sum of the workable months in the household – i.e., number of months that could theoretically be worked within the household.

Individuals are classified into work intensity categories that range from WI=0 (jobless household) to WI=1 (full work intensity, i.e. all working age household members worked during the income reference year).

Work intensity equal or inferior to 0.20 is considered as very low.

Severe material deprivation rate:

The severe material deprivation rate is defined as the percentage of the population with an enforced lack of at least four out of nine material deprivation items in the "economic strain and durables" dimension.

The nine items considered are: 1) arrears on mortgage or rent payments, utility bills, hire purchase instalments or other loan payments; 2) capacity to afford paying for one week's annual holiday away from home; 3) capacity to afford a meal with meat, chicken, fish (or vegetarian equivalent) every second day; 4) capacity to face unexpected financial expenses (set amount corresponding to the monthly national at-risk-of-poverty threshold of the previous year); 5) household cannot afford a telephone (including mobile phone); 6) household cannot afford a colour TV; 7) household cannot afford a washing machine; 8) household cannot afford a car and 9) ability of the household to pay for keeping its home adequately warm.

People at-risk-of-poverty rate or social exclusion, (AROPE) indicator:

This indicator is the headline indicator to monitor the EU 2020 strategy poverty target. It reflects the share of the population, which is either at risk of poverty, or severely materially deprived or lives in a household with a very low work intensity.

3.5	Statistical unit

Statistical units are individual households and people living in them aged 16 and over.

3.6	Statistical population

Statistical population are individual households and people living in them aged 16 and over.

3.7	Reference area

NTES 1 and 2 (Republic of North Macedonia)

3.8	Time coverage

Since 2010 onwards

3.9	Base period

Not applicable, the survey does not have a base (basis) for calculating indices.

4	Unit of measure

Percent (%), Denars (den.) and Number of persons

5	Reference period

EU-SILC uses the following reference periods for the different variables included in the survey:

- Constant

- Current

- Income reference period

The income reference period is the previous calendar year;

- Working life: period of time between the time that person started his her labor activity and now;

- Other periods of time associated with the data for the current economic activity, employment and unemployment for persons aged 16 and more:

- reference week - refer to the period "fom Monday to Sundy" of the week before the interview date.

- previous 4 week - refers to the previous 4 weeks ending with the reference week.

- last 12 months

6	Institutional mandate

6.1	Legal acts and other agreements

National: **Law on State Statistics** ("Official Gazette of the Republic of Macedonia" No. 54/97, 21/07, 51/11, 104/13, 42/14, 192/15, 27/16, 83/18 and 220/18), **Programme of Statistical Surveys 2018-2022** ("Official Gazette of the Republic of Macedonia" No. 22/18 and 224/18).

International: Regulation (EU) No. 112/2013, 1157/2010, 2015/245, 2016/114, 2017/310, 481/2010, 62/2012, 67/2014, (EC) No. 13/2005, 16/2004, 1980/2003, 1981/2003, 1982/2003, 1983/2003, 215/2007, 28/2004, 315/2006, 646/2009 of the Commission and Regulation (EC) No 362/2008 of the Council, implementing Regulation (EC) No 1177/2003 Regulation (EC) No 1177/2003 of the European Parliament and of the Council Regulation (EC) No 1553/2005 of the European Parliament and of the Council, amending Regulation (EC) No 1177/2003 Commission Regulation (EU) No 2015/2256, amending Regulation (EC) No 1983/2003 Commission Regulation (EC) No 676/2006, amending Regulation (EC) No 1980/2003, Regulation (EC) No 2018/174, Regulation (EC) No 2019/1700, Regulation (EC) No 2019/414

6.2 Data sharing

Time series of annual data: from 2010 onwards via eDAMIS to Eurostat.

7 Confidentiality

7.1 Confidentiality - policy

Individual data are protected by the **Law on State Statistics** . Data collected with statistical surveys from the reporting units or indirectly from administrative or other sources are confidential data and are used only for statistical purposes. Results from the statistical processing may also generate information considered as confidential, for example: anonymised individual data, tables with low level of aggregation, as well as unreleased data. The **Policy on Statistical Confidentiality** contains the basic principles used in the SSO.

7.2 Confidentiality - data treatment

All individual or personal data, in each phase of statistical processing, are treated as confidential data and may be used only for statistical purposes. When releasing data from this survey at an aggregated level, there is no need for additional data treatment for the purpose of ensuring confidentiality.

8 Release policy

8.1 Release calendar

Data are released in accordance with the Release Calendar, which is published on the web site of the State Statistical Office. The Release Calendar is prepared annually before the beginning of each year.

8.2 Release calendar access

The Release Calendar is available on web site: **Advance Release Calendar**

8.3 User access

In accordance with the dissemination policy, all users have equal access to statistical data at the same time. Data are released on the web site at the same time for all users, which are informed with the Release Calendar, and no user has privileged access.

9 Frequency of dissemination

Annual

10 Accessibility and clarity

10.1 News release

Annual News Release: **Laeken poverty indicators in 2020 -final data**

10.2 Publications

Publication:

MakStat Selection

North Macedonia in Figures

Statistical Yearbook

10.3 On-line database

MAKStat-Standard of Living/Laeken poverty indicators

10.4 Micro-data access

According to the **Law on State Statistics** (Article 41) and the **Policy on Access to Anonymised Microdata for scientific purposes** , data collected for the purpose of official statistics may be used for scientific purposes if there is no risk of direct or indirect identification, i.e. disclosure of data individuality. Access to microdata is possible only in the safe room at the SSO, based on a submitted and approved request and a signed agreement.

10.5 Other

10.6	Documentation on methodology

Methodological explanations are published on the website of the State Statistical Office

Methodological explanations for EU-SILC,2020 are published on the website of Eurostat

10.7	Quality documentation

Quality Report for 2017, by the SSO

Number of metadata views = 8

11	Quality management

11.1	Quality assurance

The commitment of the SSO to ensuring quality of products and services is described in the:
- **Law on State Statistics**
- **Strategy of the State Statistical Office Quality**
- **Policy of the State Statistical Office**

as well as in the continuous efforts for harmonisation with the European Statistics Code of Practice . The main aspects and procedures for quality management in the phases and sub-processes of the Statistical Business Process Model, as well as the good practices for ensuring quality are documented in the internal document called "Guide for ensuring quality of statistical processes". Input and output metadata, as well as relevant quality indicators for certain sub-processes are described in the document "Guide for survey managers".

11.2	Quality assessment

The State Statistical Office implements statistical activities in accordance with the Statistical Business Process Model, which is based on the international model - Generic Statistical Business Process Model (GSBPM).

12	Relevance

12.1	User needs

Data from this survey are used to monitor macroeconomic developments, the distribution of income and monetary poverty indicators, to calculate the actual quantitative information on social exclusion and material deprivation. SILC is used by external users; Government of the Republic of North Macedonia, Ministry of Labour and Social Policy, Ministry of Finance, other state bodies, universities, media and other domestic and international users.

12.2	User satisfaction

The State Statistical Office conducts the **User Satisfaction Survey** . This survey was conducted in 2009, 2012, 2015, 2017 and last one in 2019.

12.3	Completeness

All levels of aggregation, according to regulations for short-term statistics, are calculated and published at national level and are transmitted to Eurostat.
Completeness of data at the national level = 100%.
Completeness of Eurostat data = 90%.

13	Accuracy and reliability

13.1	Overall accuracy

As with any other statistical survey, SILC may be burdened with errors due to sampling and other relating to the inability to be interviewed some of the units in the sample as well as the errors taking place at the stage of data reccording data proccesing, etc.

Regulation 1177/2003 defines the minimum effective sample sizes to be achived to compensate for all kinds of non-response. The allocation of the effective sample size is done according to the size of the country and ensuring minimum precision criteria for the key indicator at national level (absolute precision of the at-risk-of-poverty rate of 1%).

13.2	Sampling error

The commonly used measurment of sampling errors are:

Standard errors (**SE**)
Coefficient of variation (**CV**)
Confidence interval (**CI**)

Coefficient of variation for key variables, in%

Total disposable income	1.65
Wages and salary	2.22
Income from self-employment	4.87
Income from property	48.42
Pensions	2.52
Social transfers	5.07
Received private transfers	7.50
Other income	41.44
Paid private transfers	11.20

13.3 Non-sampling error

For non-sampling errors, the observational and non-observational errors are described (qualitatively and quantitatively). Observational errors described are: overcoverage, errors in measurement, errors in data processing. Of the non-observational errors non-response is described.

A non-response questionnaire was used to determine the reasons of household non-response. Based on that calculationsn were made of the non-response rate and other non-sampling errors.

The unit non-response rate is 10.5%

14 Timeliness and punctuality

14.1 Timeliness

At most 15 months after the end of the reference period (T+450).

14.2 Punctuality

Data are disseminated within the established deadlines in accordance with the Release Calendar.

15 Coherence and comparability

15.1 Comparability - geographical

There is geographical comparability of the released data at national level. With respect to geographical comparability with other EU countries, it is also ensured because data are collected in line with EU regulations.

15.2 Comparability - over time

Comparability over time is insured since 2010, and there is no gap in the time series. Number of reference periods in time series is 10.

15.3 Coherence - cross domain

The cross-sectional data for EU-SILC 2020 were compared to the Labour force survey 2020 and HBS 2020.

When comparing SILC and HBS we mast take to account the discrepaincies. The differences are to great extent brought abouth by methodological diversity. Here are the main methodological differences:

- Different reference periods for income variables - in HBS the main variables on income is estimated quarterly and yearly and presented in form of average values. In EU-SILC the reference period is previous calendar year;

- Different types of incume are taken into account i.e. in HBS yhe information is collected both about the income in cash and in kind, while in EU-SILC - only about the income in cash (with a few expections), which may be important for the income from farming and social benefits other than retirement pay and pension;

- Different way of data collection - in HBS respondents make record in the so called dairy. They have determine the data sources themselves and do not have them listed in the dairy. In EU-SILC each respondent is asked detailed questions. In EU-SILC all the income missing data are imputed, while there is no imputation in HBS;

15.4 Coherence - internal

Compare all data with data from the same survey on an annual basis. Internal coherence of data is ensured.

16 Cost and burden

Burden on data providers is controlled over the method of selection of the sample.

The average time for completing the questionnaire is about 1 hour.

17 Data revision

17.1 Data revision - policy

The data audit is done in accordance with the SSO Audit Policy: **Statistical Data Revision Policy** .

17.2 Data revision - practice

The data from the survey are published as preliminary and as final (revised) data.

18 Statistical processing

18.1 Source data

The Survey on Income and Living Conditions in 2020 was conducted on a sample of 6000 households. All regions by type of settlement are covered in proportion to the target population. With this survey, the whole territory of the Republic of North Macedonia is presented geographically, and the sample is two-stage stratified. In the first stage, primary sampling units - enumeration areas from the 2002 Census of Population, Households and Dwellings are selected with a simple random sample. In the second stage, secondary sampling units (households) are selected with a simple random sample by assigning random numbers. The stratification is done by region (8 regions - NUTS levels) and type of settlement (urban and other), and a total of 16 strata were obtained. The sample frame is the 2002 Census of Population, Households and Dwellings. In each stratum, the number of selected enumeration areas is proportional to the population in the corresponding stratum.

18.2 Frequency of data collection

Annually

18.3 Data collection

The data on individual households are collected by personal interview method PAPI, using interviewers that fill in statistical questionnaires:

- Questionnaire "**Register of households**" (covering all households and household members)
- "**Questionnaire for household**" (which covered all household members, regardless of age) This questionnaire contains information about the place of residence of the household, the composition of the household, family relationships, housing and living conditions, household incomes, and other household characteristics. This questionnaire contains questions about the household relating to the module in the corresponding year.
- "**Individual questionnaire**" (for each person aged 16 and over) This questionnaire contains information about each person in the household, aged 16 and over, about their health, education, economic status, income, etc. This questionnaire contains questions about the persons relating to the module in the corresponding year.

18.4 Data validation

Data are first checked by the interviewer when he / she is in the field in order to solve potential misunderstandings with the household as a reporting unit. Data are coded and checked again by the persons employed in the regional offices. A very detailed logical and mathematical control is prepared during the data entry process. After data entry, data are stored in the database, and there is final data check in the subject-matter department before they are ready for compilation. For this survey, there is an extensive national validation procedure applied before finalising SILC databases for the so-called "cross-sectional" and "longitudinal" wave. After all national logical controls, all data are checked and approved by the recommended Eurostat's validations.

18.5 Data compilation

Processes that take place from the moment of beginning of data entry to preparing dissemination tables:

- Data entry is in Blaise software with included mathematical and logical controls, on-line and additional batch controls, national and Eurostat's validations of data entry,
- Validation and compilation of all data is performed in SAS 9.1
- Weighting with sample weights is done in estimation procedures of the survey, adjusted for non-response of the survey
- Calibration using the population projections in CALMAR
- Imputation of income is made by the method of regression using the software IVEware
- Conversion of net income to gross is made with Siena Micro Simulation Model (SM2)
- Additional calculations are made for compiling the Laeken indicators as calculation categories or derived variables.

18.6 Adjustment

Not applicable, adjustments to the time series and seasonal adjustment of data are not made.

19 Comment

No comment

A.1	Annexes