



REPUBLIC OF CROATIA



CROATIAN BUREAU OF STATISTICS

QUALITY REPORT FOR STATISTICAL SURVEY
Survey on Income and Living Conditions (SILC)
For 2018

Organisational unit: Living Conditions and Economic Activity of
Population Statistics Department

Prepared by: Hrvoje Žagmeštar and Dražen Ferić

January 2021

0. Basic information

The survey collects data on gross and net income of households and all household members, data on education status of persons, activity status and employment, health care and childcare, data on financial and material status of households and data on other aspects of living standards of households.

The survey is a reference data source for monitoring income, poverty and social exclusion statistics.

Survey results include poverty and social exclusion indicators (monetary poverty, material deprivation indicators, distribution of income, housing conditions).

- Reference period

Calendar year

- Legal acts and other agreements

Official Statistics Act (NN, No 25/20)

Annual Implementation Plan of Statistical Activities of the Republic of Croatia for 2018
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)

Commission Regulation (EC) No 1980/2003 of 21 October 2003 implementing Regulation (EC) No 1177/2003 concerning EU-SILC as regards definitions and updated definitions

Commission Regulation (EC) No 1981/2003 of 21 October 2003 implementing Regulation (EC) No 1177/2003 concerning EU-SILC as regards the fieldwork aspects and imputation procedures

Commission Regulation (EC) No 1982/2003 of 21 October 2003 implementing Regulation (EC) No 1177/2003 concerning EU-SILC as regards the sampling and tracing rules

Commission Regulation (EC) No 1983/2003 of 7 November 2003 implementing Regulation (EC) No 1177/2003 concerning EU-SILC as regards the list of target primary variables

Commission Regulation (EC) No 28/2004 of 5 January 2004 implementing Regulation (EC) No 1177/2003 concerning EU-SILC as regards the detailed content of intermediate and final quality reports

Commission Regulation (EC) No 676/2006 of 2 May 2006 implementing Regulation (EC) No 1177/2003 concerning EU-SILC as regards definitions and updated definitions

EU-SILC 065 Description of Target Variables 2018, Eurostat

International Standard Classification of Education – ISCED-2011, UNESCO, 2012, ISBN 978-92-9189-123-8

- Classification system

Decision on the National Classification of Activities, 2007 version – NKD 2007. (NN, Nos 58/07 and 72/07)

National Classification of Occupations, NKZ 10. (NN, No. 147/10)

National Classification of Education – NSKO (NN, No. 105/01)

International Standard Classification of Education – ISCED 2011

Degree of Urbanisation (DEGURBA) 2011

Common Classification of Territorial Units for Statistics, 2013 version (NUTS)

Alphabetical Code List of States and Countries – Letter Codes of Settlements of the Republic of Croatia, 2018

All mentioned classifications are available on the website of the Croatian Bureau of Statistics in the KLASUS application: <http://www.dzs.hr/Hrv/important/Nomen/nomenclatures.htm>.

- Concepts and definitions

Definitions

Household is every family or other community of individuals who live together and jointly spend their income in order to meet the basic existential needs (accommodation, food etc.). Total disposable income of a household is the total net income received by a household and all its members during the defined reference period. Total income includes the income from paid employment, the income from self-employment, the property income, pensions, social transfers and other receipts from persons who are not household members.

Equivalised income is calculated in a way that the total household income is divided by equivalised household size calculated according to the modified OECD scale, in which the household head is given coefficient 1, every other adult aged 14 and over is given coefficient 0.5 and every child under 14 years of age is given coefficient 0.3.

This procedure is applied in order to allot equal share to each member with respect to joint earnings.

Purpose of indicators

At-risk-of-poverty rate is a percentage of persons with the equivalised disposable income below the at-risk-of-poverty threshold.

The at-risk-of-poverty threshold represents the borderline of the risk of poverty. It is determined by calculating the equivalised income per household member for all households. After that, the middle value (median) of the income distribution is determined and 60% of the median is determined as the risk-of-poverty threshold. It is presented in kuna.

The material deprivation rate presents the percentage of persons who live in households that cannot afford, exclusively due to lack of financial resources, at least three of nine deprivation items.

The quintile share ratio (S80/S20) is an indicator of income inequality and it measures ratio in the top and bottom quintiles. It represents the ratio between the total equivalised income of the 20% of population with the highest income and the 20% of population with the lowest income.

Gini coefficient is the measure of income inequality distribution. If there were a perfect equality, that is, if each person received the same income, the Gini coefficient would be 0%. The closer to 100% the value is, the greater the income inequality is.

The relative at-risk-of-poverty gap is the difference between the at-risk-of-poverty threshold and the equivalised income median of persons below the at-risk-of-poverty threshold.

The dispersion around the at-risk-of-poverty threshold indicates a percentage of persons at the risk of poverty in case when the at-risk-of-poverty threshold is set at 40%, 50% and 70% of the equivalised income median.

- Statistical units

The survey is carried out on the sample of private households. Statistical units are all selected private households and all household members. Household members aged 16 and over (age as on 31 December 2017) are included in a detailed individual interview according to the prescribed methodology.

- Statistical population

The survey is carried out on the sample of private households. A private household is every family or other community of individuals who live together and jointly spend their income in order to meet the basic existential needs (accommodation, food etc.).

According to the methodology, institutional households (such as homes, prisons, hospitals for long-term treatment, etc.) are not covered.

1. Relevance

1.1. Data users

Data obtained in the SILC are used for creating social policies, in various scientific analyses and international comparisons and, in general, for informing the broad public on the social development status.

National users: scientific and research institutes (Institute for Public Finance, the Institute of Economics, etc.), ministries and agencies (Ministry of Social Policy, Croatian Employment Service etc.)

International users: scientific and research institutes, World Bank, UN, ILO, UNICEF

1.1.1. User needs

Scientific and research institutes as well as individual researchers use data for national and international scientific and research projects and papers aimed at developing recommendations for relevant institutions in order to improve the socio-economic status of the population in risk of poverty or social exclusion. The Ministry of Social Policy and the Croatian Employment Service use survey data for determining necessary improvements in their scope of work, e.g. in the area of social policy.

International users: Eurostat uses the survey data for a systematic and user-oriented presentation of internationally comparable indicators of the survey on income and living conditions of the population (for all EU Member States). UNICEF uses the indicators of poverty and living conditions of children to focus its activities and aid on the most vulnerable groups of children.

1.1.2. User satisfaction

The user satisfaction survey was conducted in 2013 and again in 2015, with a general topic on the work of the Croatian Bureau of Statistics. This survey in general included the domain of population income statistics. Currently, there is no special user satisfaction survey regarding the income and living conditions statistics.

1.2. Completeness

Data collected in this survey are set in the methodology as defined in EU regulations and Eurostat's methodology standards prescribed for the EU-SILC survey (Statistics on Income and Living Conditions). The conduct of that survey, data processing and data releasing are entirely harmonised with the defined methodology, which ensures full comparability of national data with other EU Member States' data.

1.2.1. Data completeness rate

Data completeness rate is 100%.

2. Accuracy and reliability

2.1. Sampling error

The sampling error shows the accuracy of estimating population parameters based on the sample. Sampling errors were calculated applying the linearization method or the Woodruff method (SAS SURVEYFREQ and SURVEYMEANS procedures). The calculation was done by fixing the at-risk-of-poverty threshold.

The following formula was used for the calculation of accuracy:

$$se < \sqrt{[(p \times (1-p))/X]},$$

Where: se = standard error

sqrt = square root

p = proportion (of the at-risk-of-poverty rate)

X = minimum effective sample size.

2.1.1. Sampling error indicators

Table 1. Sampling error indicators for particular indicators, SILC 2018

Pokazatelj	Value	Standard error	Confidence interval 95%		Coefficient of variation (%)
			Lower limit	Upper limit	
At-risk-of-poverty threshold					
One-person household	29 820	333.53	29 166	30 474	1.12
Household consisting of two adults and two children	62 622	700.43	61 249	63 995	1.19
People at risk of poverty and social exclusion					
Total	24.8	0.68	23.5	26.2	2.74
Men	23.6	0.74	22.2	25.1	3.14
Women	25.9	0.72	24.5	27.3	2.80
0 – 17	23.7	1.36	21.1	26.4	5.74
18 – 64	22.9	0.73	21.4	24.3	3.19
65+	32.0	0.91	30.2	33.8	2.84
Adriatic Croatia	24.6	1.24	22.1	27.0	5.04
Continental Croatia	24.9	0.82	23.3	26.5	3.29
At-risk-of-poverty rate					
Total	19.3	0.62	18.1	20.5	3.21
Men	18.1	0.67	16.8	19.4	3.70
Women	20.4	0.65	19.1	21.6	3.19
0 – 17	19.7	1.30	17.1	22.2	6.60
18 – 64	16.4	0.63	15.1	17.6	3.84
65+	28.1	0.86	26.4	29.8	3.06
At-risk-of-poverty rate, by regions					
Adriatic Croatia	18.4	1.14	16.2	20.7	6.20
Continental Croatia	19.7	0.74	18.2	21.1	3.76
People severely materially deprived					
Total	8.6	0.44	7.7	9.4	5.12
Men	8.4	0.47	7.5	9.3	5.60
Women	8.7	0.46	7.8	9.6	5.29
0 – 17	7.6	0.89	5.8	9.3	11.71
18 – 64	7.9	0.45	7.0	8.7	5.70
65+	11.6	0.61	10.4	12.8	5.26
People living in households with very low work intensity					
Total	11.2	0.56	10.1	12.3	5.00
Men	11.2	0.60	10.1	12.4	5.36
Women	11.2	0.61	10.0	12.4	5.45
0 – 17	9.0	0.97	7.1	10.9	10.78
18 – 59	11.9	0.54	10.8	13.0	4.54

2.1.2. Bias in sample selection process

The indicator for this survey is not applicable.

2.2. Non-sampling error

Non-sampling errors include all other errors not related to the sample selection, such as the coverage error, the measurement error, the data processing error and the non-response error. Non-response errors are caused by the non-response of the whole survey unit (household or reference person – unit non-response) and by the non-response to a single item, i.e. question in the questionnaire (item non-response).

2.2.1. Coverage error

The sample frame for the new rotation group for the Income and Living Conditions Survey in 2018 was based on the data of the Census of Population, Households and Dwellings in 2011. The eligibility rate for a part of the sample that was included in the Survey for the first time (the part selected in 2018) was 89.25%.

Table 2. Eligibility rate by statistical regions for the new rotation group

Statistical region (NUTS 2)	Selected addresses	Valid addresses	Valid address rate (%)
Republic of Croatia	5 516	4 923	89.25
Adriatic Croatia	2 296	2 059	89.68
Continental Croatia	3 220	2 864	88.94

2.2.2. Over-coverage rate

The over-coverage rate is the share of units that do not belong to the target population. In the case of SILC, it represents the share of addresses selected into the sample, for which it was determined after the fieldwork (interviewing) that they did not exist, or that they were not occupied, or that the dwelling existed but it was not intended for permanent dwelling (business premises, cottages, summer houses etc.). It is calculated only for the new rotation group. The unweighted over-coverage rate is 10.55%.

2.2.3. Measurement errors

Measurement errors are all errors that may occur during the collection or entry of data into questionnaires. Those errors can be minimised by correctly defining the questionnaire, a detailed training of interviewers, implementing an adequate data collection method as well as by checking questionnaires during and after the fieldwork.

The data collection method implemented in the SILC 2018 was CAPI method (Computer-Assisted Personal Interview). This method ensures a standardised interviewing. The questionnaire has been designed in the Blaise application. Questions have been defined in a way that they contain all information sufficient for an answer. If there is a need for additional explanations regarding questions, the interviewer can at any time offer explanations that can be found under almost every question, or put down additional explanations regarding answers. The methodological unit in charge of the survey conducts a detailed testing of the questionnaire before the beginning of the survey. The questionnaire contains an integrated logical sequence of questions as well as logical checks of answers (checks of minimal and maximal values, logical connection between particular questions, checks of impossible values, categories of answers that are automatically adjusted to other answers etc.).

Data collection for SILC 2018 was carried out by 131 interviewers (71 external and 60 internal ones). Most of them already had some experience with conducting that kind of surveys from previous years. Interviewers who had been included in the SILC 2018 data collection for the first time attended a one-day training focused on the usage of the data management and transmission application (CMS – Case Management System), general functioning of the questionnaire in the Blaise application, interviewing skills and detailed methodological explanations and guidelines related to each individual question in the questionnaire for the SILC 2018.

Methodological guidelines for interviewers, which contain detailed instructions for each question in the questionnaire, were printed before the data collection for training purposes and fieldwork preparation, and were given to each interviewer, supervisor and research/supporting/management staff included in the SILC survey.

The fieldwork was organised and controlled by 36 supervisors, who are experienced statisticians working in branch offices of the Croatian Bureau of Statistics. Supervisors in each of 20 branch offices provided the necessary support to interviewers involved in the fieldwork as well as necessary methodological explanations according to the guidelines of the central office of the Croatian Bureau of Statistics.

The data editing conducted by supervisors included approximately 20 error and inconsistency warnings, which are very important to be detected during the fieldwork in order to check the answers with the interviewers or with respondents themselves. Methodological guidelines with explanations and detailed instructions for warnings or errors were developed for supervisors. Also, supervisors attended one-day training, where they were given methodological guidelines and explanations regarding the usage of the CMS application.

The data collection was followed by detailed verification of all responses (such as the checks of minimum and maximum values, verification of all income items, check of impossible values etc.).

2.2.4. Non-response errors

The non-response error shows how many statistical units did not fill in the questionnaire. There are two types of non-response:

- non-response of the entire observation unit (household/reference person selected into the sample)
- non-response to individual questions – the selected observation unit is successfully interviewed, but answers regarding individual question/variable are not collected.

According to the Eurostat's recommendation, the unweighted non-response rate of households is calculated for households sampled for the first time, and, in 2018, the household non-response rate (Nrh) was 54.11%. The individual non-response rate (*Nrp) in 2018 was 54.33%.

2.2.5. Unit non-response rate

The unit non-response rate is divided into the non-response rate at household level and the non-response rate at individual level.

The non-response rate at household level is calculated according to the following formula:

$$NRh = (1 - (Ra \times Rh)) \times 100,$$

where:

Ra – means the number of successfully contacted addresses/the number of valid addresses

Rh – means the number of households successfully interviewed/the number of valid households living at contacted addresses.

The non-response rate at individual level is calculated according to the following formula:

$$Nrp = (1 - (Rp)) \times 100,$$

where:

Rp – means the number of completed individual interviews/the number of valid persons in successfully interviewed households

Table 3. Non-response rate

Rate of contacted addresses (Ra)		Rate of successfully interviewed households (Rh)		Rate of successfully completed individual interviews (Rp)		Non-response rate at household level (NRh)		Non-response rate at individual level (NRp)		Total non-response rate at individual level (UNRp)	
A	B	A	B	A	B	A	B	A	B	A	B
90.31	79.81	78.60	57.50	99.18	99.51	29.03	54.11	0.82	0.49	29.61	54.33

A = Total sample

B = New rotation group selected into the 2018 sample

Table 4. Distribution of contacted households by rotation groups

Rotation group	Interview accepted for database (DB135 = 1)		Interview rejected (DB135 = 2)	
	Number	%	Number	%
1	1 923	22.9	-	-
2	2 092	25.0	-	-
3	1 971	23.5	-	-
4	2 397	28.6	-	-
Total	8 383	100.0	-	-

Table 5. Distribution of households by successfully contacted address

Rotacijska skupina	Total		Address contacted (DB120 = 11)		Address not contacted (DB120 = 21 + 22 + 23)		Address cannot be located (DB120 = 21)		Address unable to access (DB120 = 22)		Address does not exist or is unoccupied (DB120 = 23)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1	2 148	17.14	2 075	19.4	73	3.9	36	3.2	1	5.0	36	5.0
2	2 431	19.39	2 331	21.9	100	5.4	48	4.3	-	-	52	7.2
3	2 367	18.88	2 270	21.3	97	5.2	56	5.0	-	-	41	5.7
4	5 589	44.59	3 991	37.4	1 598	85.5	985	87.5	19	95.0	594	82.1
Total	12 535	100.0	10 667	100.0	1 868	100.0	1 125	100.0	20	100.0	723	100.0

Table 6. Distribution of contacted addresses by outcome per interviewed household

Rotation group	Total		Interview successfully completed (DB130 = 11)		Interview not completed (DB130 = 21 + 22 + 23 + 24)		Interview rejected (DB130 = 21)		Entire household temporarily away for duration of fieldwork (DB130 = 22)		Household unable to respond (DB130 = 23)		Other reasons (DB130 = 24)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1	2 075	19.5	1 923	22.9	152	6.7	98	5.4	31	16.3	23	7.8	-	-
2	2 331	21.8	2 092	25.0	238	10.4	149	8.3	56	29.5	33	11.2	-	-
3	2 270	21.3	1 971	23.5	299	13.1	217	12.1	38	20.0	44	14.9	-	-
4	3 991	37.4	2 397	28.6	1 594	69.8	1 334	74.2	65	34.2	195	66.1	-	-
Total	10 667	100.0	8 383	100.0	2 283	100.0	1 798	100.0	190	100.0	295	100.0	-	-

2.2.6. Item non-response-rate

Item non-response rate is calculated only for aggregate income variables according to the Eurostat's methodology.

Table 7. Item non-response-rate

Income variables Total number of households = 8 383 Total number of persons = 17 376		No income		Income		Full data on income amount		Partial or missing data on income amount	
		Number	%	Number	%	Number	%	Number	%
HY010	Total household gross income	29	0.35	8 354	99.65	6 073	72.70	2 281	27.30
HY020	Total disposable household income	25	0.30	8 358	99.70	3 871	46.31	4 487	53.69
HY022	Total disposable household income before social transfers other than old-age and survivors' benefits	264	3.15	8 119	96.85	5 805	71.50	2 314	28.50
HY023	Total disposable household income before social transfers including old-age and survivors' benefits	2 358	28.13	6 025	71.87	3 955	65.64	2 070	34.36
HY040G	Income from rental of a property or land	7 872	93.90	511	6.10	323	63.21	188	36.79
HY090G	Interest, dividends, profit from capital investments in unincorporated business	7 884	94.05	499	5.95	371	74.35	128	25.65
HY050G	Family/children related allowances	7 578	90.40	805	9.6	740	91.93	65	8.07
HY060G	Social exclusion not elsewhere classified	8 074	96.31	309	3.69	296	95.79	13	4.21
HY070G	Housing allowances	8 183	97.70	200	2.39	190	95.00	10	5.00
HY080G	Regular inter-household cash transfer received	7 874	93.93	509	6.07	331	65.03	178	34.97
HY081G	Alimonies received (compulsory + voluntary)	8 277	98.74	106	1.26	91	85.85	15	14.15
HY100G	Interest repayments on mortgage	8 049	96.02	334	3.98	334	100.00	-	-
HY110G	Income received by people aged under 16	7 912	94.38	471	5.62	341	72.40	130	27.60
HY130G	Regular inter-household cash transfer paid	8 038	95.88	345	4.12	312	90.43	33	9.57
HY131G	Alimonies paid (compulsory + voluntary)	8 299	99.00	84	1.00	74	88.10	10	11.90
HY140G	Tax on income and social contributions	3 179	37.92	5 204	62.08	5 204	100.00	-	-
HY170G	Value of goods produced for own consumption	5 064	60.41	3 319	39.59	2 902	87.44	417	12.56
PY010G	Employee cash or near cash income	11 447	62.31	6 925	37.69	5 186	74.89	1 739	25.11
PY020G	Non-cash employee income	17 590	95.74	782	4.26	462	59.08	320	40.92
PY021G	Income from using company car for private purposes	18 267	99.43	105	0.57	105	100.00	-	-
PY030G	Employer's social insurance contribution	11 380	61.94	6 992	38.06	6 992	100.00	-	-
PY031G	Optional employer's social insurance contributions	18 276	99.48	96	0.52	96	100.00	-	-
PY035G	Contributions to individual private pension plans	18 175	98.93	197	1.07	129	65.48	68	34.52
PY050G	Cash profits or losses from self-employment	16 383	89.17	1 989	10.83	1 545	77.68	444	22.32
PY080G	Pensions received from individual private plans	18 363	99.95	9	0.05	5	55.56	4	44.44
PY090G	Unemployment benefits	18 161	98.85	211	1.15	178	84.36	33	15.64
PY100G	Old-age benefits	13 118	71.40	5 254	28.60	4 840	92.12	414	7.88
PY110G	Survivor's benefits	17 207	93.66	1 165	6.34	1 110	95.28	55	4.72
PY120G	Sickness benefits	18 224	99.19	148	0.81	125	84.46	23	15.54
PY130G	Disability benefits	17 195	93.59	1 177	6.41	1 081	91.84	96	8.16
PY140G	Education-related allowances	18 214	99.14	158	0.86	143	90.51	15	9.49

2.2.7. Processing errors

During the data processing, a detailed verification of all responses is done, such as checks of input values by ranges, checks of possible answers, verification of all income items, logical data checks on economic activity and activity and occupation codes, educational status etc. These controls are carried out on a set of microdata at the level of the survey questionnaire. An error in the microdata base may occur during the final data processing and the preparation of data for the calculation of indicators.

2.2.8. Imputation rate

Imputation is a process applied to supplement the uncollected, invalid or inconsistent data that were impossible to edit. Regarding the SILC, all income variables for which a respondent claimed to receive but did not offer an answer to the question on their amount are imputed. All missing or inconsistent values are imputed by using one of the imputation methods, which means that the imputation rate equals the item non-response rate given in Table 7. Item non-response rate.

2.2.9. Editing rate

The editing rate is defined for particular key variables as the number of units for which source values have been corrected after data verification in relation to the total number of units. In other words, it is the ratio of the number of corrected data (either by repeating CAPI or by logical corrections) to the total number of available data, i.e. data that have been checked. That indicator was not computed for the SILC 2018 due to the fact that data verification is done in multiple phases, which involves multiple executors (during the fieldwork, data verification was done by supervisors in branch offices).

2.2.10. Hit rate

This indicator is not computed for the Income and Living Conditions Survey 2018.

2.2.11. Model assumption error

This indicator is not computed for the Income and Living Conditions Survey. All implemented data weighting models and imputation models for the missing data are accurate and harmonised with the Eurostat's recommendations and, therefore, there is no occurrence of any assumption error of the model used in the statistical processing.

2.3. Data revision

2.3.1. Data revision – policy

According to the Calendar of Statistical Data Issues in 2019, the SILC data for 2018 are released as provisional data and final data. Provisional data are issued in the Statistics in Line after all phases of processing are completed, except for Eurostat's final checks and verification. Final data are issued in the First Release after Eurostat's final checks and verification. In the final checks and before the verification, there is a possibility for certain changes in data to occur, which have only a minimum impact on the outcome.

2.3.2. Data revision – practice

If there is a need to correct some of the already published data (except the previous data), a correction is published along with a notice about the correction.

Also, if there is a need to revise already published data, e.g. in the First Release, a new version of the First Release containing the revised data is published.

2.3.3. Data revision – average size

It is not recommended for this quality indicator to be computed for annual surveys.

2.4. Seasonal adjustment

This indicator is not applicable to the Survey on Income and Living Conditions.

3. Timeliness and punctuality

3.1. Timeliness

3.1.1. Time lag – first results

According to the Calendar of Statistical Data Issues for 2019, the first results of the SILC 2018 survey are published six months after the reference period. The first results were published on 28 June 2019 (T + 6).

3.1.2. Time lag – final results

According to the Calendar of Statistical Data Issues for 2019, the final results of the SILC 2018 survey were published on 30 September 2019 (T + 9).

3.2. Punctuality

3.2.1. Punctuality – delivery and publication

Punctuality is the period between the actual date of data issue and the targeted date of data issue according to the Calendar of Statistical Data Issues for 2019. Publications containing data from the SILC 2018 survey are published within the deadlines defined in the Calendar of Statistical Data Issues for 2019. Therefore, punctuality is 100%.

4. Accessibility and clarity

Publications containing the survey results are available in electronic and printed form, as well as on the website of the Croatian Bureau of Statistics www.dzs.hr.

All additional information regarding the results and the survey can be requested via the following e-mail: stat.info@dzs.hr.

4.1. News release

Indicators of Poverty and Social Exclusion – provisional data (Statistics in Line)
Indicators of Poverty and Social Exclusion, 2018 (First Release)
Results of the Survey on Income and Living Conditions, 2018 (Statistical Report)

4.2. Other publications

The results of the SILC are published in other publications of the Croatian Bureau of Statistics: Statistical Yearbook, Statistical Information, Women and Men in Croatia, and Croatia in Figures.

4.3. Online database

The results of the SILC 2018 are currently available in the form of an online database only on the Eurostat website

<http://ec.europa.eu/eurostat/web/income-and-living-conditions/data>.

4.4. Micro-data access

The conditions under which certain users can access microdata are regulated by the Ordinance on the Conditions and Manner of Using Confidential Statistical Data for Scientific Purposes (NN, No. 137/13). Microdata are available at the level of variables defined in the EU methodology and not at the level of the questionnaire.

4.5. Documentation on methodology

Notes on methodology are published in First Release and in the results of the Income and Living Conditions Survey (Statistical Report), while other methodological documents on the survey are available on the Eurostat's web site:

http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/methodology.

5. Comparability

5.1. Asymmetry for mirror flows statistics

This indicator is not applicable to the Survey on Income and Living Conditions 2018.

5.2. Comparability over time

The comparability over time, as one of the basic dimensions of quality, is related to the need for obtained data and information to be comparable over time.

Table 9. Comparison of individual statistics for income variables at household level, 2015 – 2018

SILC	2015. ¹⁾			2016. ²⁾			2017.			2018.		
Income variables at household level	Sum of weights	Number of observations	Median	Sum of weights	Number of observations	Median	Sum of weights	Number of observations	Median	Sum of weights	Number of observations	Median
HY010	1 488 466.05	6 521	84 265.44	1 485 489.75	7 539	85 930.92	1 481 583.40	7 809	90 966.54	1 470 507.92	8 354	100 848.00
HY020	1 489 264.08	6 525	71 600.00	1 485 938.68	7 542	73 800.00	1 482 338.97	7 814	78 000.00	1 470 888.79	8 358	82 800.00
HY022	1 425 310.26	6 182	65 320.00	1 448 356.46	7 304	68 784.00	1 449 335.94	7 599	72 912.00	1 435 623.98	8 119	77 900.00
HY023	1 167 051.17	4 833	63 660.00	1 149 517.81	5 483	67 160.00	1149110.90	5 678	72 800.00	1140194.41	6 025	78 000.00
HY030G	1 464 568.65	6 467	1 500.00	1 463 637.44	7 461	1 500.00	1 461 776.21	7 744	1 500.00	1 453 047.25	8 293	1 500.00
HY040G	79 095.96	397	14 600.00	82 637.25	480	13 500.00	77 921.86	456	16 500.00	80 774.55	511	17 000.00
HY050G	229 636.88	812	7 184.00	211 658.58	911	7 200.00	191 678.68	844	7 100.00	169 801.81	805	7 200.00
HY060G	73 176.59	330	8 400.00	47 365.60	263	9 600.00	51 172.52	294	9 600.00	51 773.43	309	9 600.00
HY080G	91 674.72	393	10 000.00	101 970.99	499	9 600.00	92 527.01	487	8 000.00	89 134.29	509	10 000.00
HY090G	101 838.28	469	1 000.00	106 842.38	538	1 164.96	92 139.83	513	1 152.07	90 825.08	499	1 160.09
HY100G	63 155.19	249	1 103.13	71 618.51	293	1 280.61	82 408.09	331	924.21	80 146.34	334	1 068.01
HY110G	104 451.73	370	800.00	105 480.13	435	1 000.00	95 922.53	411	1 000.00	104 077.87	471	1 000.00
HY120G	388 676.91	1 584	400.00	355 290.59	1 716	400.00	349 844.89	1 681	400.00	347 984.49	1 720	400.00
HY130G	81 554.93	332	5 000.00	85 182.97	404	6 000.00	70 068.2	379	5 000.00	65 415.65	345	6 000.00
HY140G	1 033 562.11	4 163	21 726.43	1 001 619.89	4 620	22 056.90	1 001 158.92	4 753	24 831.83	1 021 150.61	5 204	27 100.00
HY170G	642 877.98	2 999	2 400.00	597 569.80	3 261	3 000.00	568 618.01	3 309	2 640.00	519 546.34	3 319	3 000.00

1) Data are not fully comparable with data from previous years due to more detailed breakdown of particular income components in the questionnaire for 2015.

2) Data on variables related to disability pensions are not fully comparable to data from previous years due to the changes in the methodology of disability pensions. In the 2016 survey, disability pensions of persons who turned the age for old-age pensions were recorded as old-age pensions and are not included in the social transfers like it was the case in previous years.

Table 10. Comparison of individual statistics for income variables at individual level, 2015 – 2018

SILC	2015. ¹⁾			2016.			2017.			2018		
Income variables at household level	Sum of weights	Number of observations	Median	Sum of weights	Number of observations	Median	Sum of weights	Number of observations	Median	Sum of weights	Number of observations	Median
PY010G	1 372 965.44	5 109	62 226.01	1 417 598.93	6 024	61 718.61	1 503 127.55	6524	63 464.12	1 508 330.27	6 925	66 802.18
PY020G	169 020.24	628	4 500.00	188 237.15	717	4 031.25	189 565.31	761	4 000.00	186 134.64	782	5 381.25
PY030G	1 376 002.34	5 120	25 186.09	1 425 502.73	6 059	23 532.95	1 519 643.82	6599	23 608.65	1 519 848.74	6 992	23 064.00
PY035G	64 367.07	212	1 810.00	35 955.24	163	2 000.00	5 0631.13	211	2 938.00	45 696.18	197	2 500
PY050G	413 422.29	1 698	12 973.75	389 993.11	1 910	15 000.00	386 527.89	1913	15 732.00	363 125.19	1989	16 400.00
PY090G	60 567.74	251	6 000.00	58 932.51	264	6 400.00	50 319.30	232	6 700.00	37 851.41	211	7 000.00
PY100G	658 558.16	3 278	30 000.00	766 764.23 ²⁾	4 454 ²⁾	30 000.00 ²⁾	795 584.77	4810	30 000.00	802 342.14	5 254	30 000.00
PY110G	202 691.10	971	22 800.00	203 694.87 ²⁾	1 111 ²⁾	23 268.00 ²⁾	192 969.62	1122	22 800.00	183 428.12	1 165	24 000.00
PY130G	290 267.19	1 372	24 000.00	206 981.61	1 118	19 950.00	19 8034.86	1098	20 352.00	202 390.50	1 177	20 280.00
PY200G	1 365 560.08	5 085	5 371.16	1 412 150.03	6 002	5 426.07	1 447 149.33	6280	5 746.27	1 444 548.47	6 649	6 154.91

1) Data are not fully comparable with data from previous years due to more detailed breakdown of particular income components in the questionnaire for 2015.

2) Data for 2016 on variables related to disability pensions are not fully comparable to data from previous years due to the changes in the methodology of disability pensions. In the 2016 survey, disability pensions of persons who turned the age for old-age pensions were recorded as old-age pensions and are not included in the social transfers like it was the case in previous years.

5.2.1. Length of comparable time series

The length of comparable time series is the number of reporting periods within time series since the last break, i.e., since the introduction of the survey into the statistical system. The Income and Living Conditions Survey was introduced into the statistical system of the Republic of Croatia in 2010, as a regular annual survey. A comparable nine-year data series for the period from 2010 to 2018 is available to users, with certain minor methodological changes concerning the compilation of some indicators. In 2015, particular income components were broken down in more detail in the survey questionnaire, while in 2016, some changes were introduced in recording of disability pensions. As a result, data for some indicators are not fully comparable with previous periods.

5.2.2. Reasons for break in time series

Data for the 2015 SILC are not fully comparable with data from previous years due to more detailed breakdown of particular income components in the questionnaire for 2015.

As regards the 2016 SILC survey, the figure that refers to the at-risk-of poverty indicator before social transfers, when social transfers are not included in income, is not fully comparable to data from previous years due to the changes in recording of disability pensions. In the 2016 survey, disability pensions of persons who turned the age for old-age pensions were recorded as old-age pensions and are not included in the social transfers like it was the case in previous years.

6. Coherence

6.1. Coherence – short-term and structural data

This indicator is not computed for the Income and Living Conditions Survey 2018.

6.2. Coherence – national accounts

This indicator is not computed for the Income and Living Conditions Survey 2018.

6.3. Coherence – administrative sources

This indicator is not computed for the Income and Living Conditions Survey 2018.

7. Cost and burden

7.1. Cost

The fieldwork costs for the Income and Living Conditions Survey 2018 amounted to 1.383.560 kuna and included costs of interviewers. A part of the interviewers are employees of the Croatian Bureau of Statistics in branch office units, while others are external interviewers employed on contractual basis. Those costs included also the transportation costs for interviewers attending trainings.

7.2. Burden

The burden on respondents implies the amount of time spent in responding to the survey questionnaire. An important factor affecting the burden on respondents is the number of questions in the questionnaire. The Survey on Income and Living Conditions had approximately 375 questions. Although each respondent does not answer to every single question, the participation in the survey is a significant burden on respondents due to the built-in automatic jumps in the input data software. The average interview duration per household in the SILC 2018 survey was 157 minutes. Therefore, in the following period, it is necessary to make efforts to reduce the burden on respondents (using administrative data sources, etc.).