

## First Release

Year: LX.

Zagreb, 28 April 2023

ZUDP-2023-1-1

ISSN 1334-0557

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## **INDICATORS OF POVERTY AND SOCIAL EXCLUSION, 2022**

The Survey on Income and Living Conditions is the basis for the calculation of the indicators of poverty and social exclusion for the Republic of Croatia. The implementation of the Survey is in line with EU regulations and Eurostat's methodology for the EU-SILC Survey. At the EU level, SILC is an obligatory survey and a reference data source for the monitoring of income, poverty and social exclusion statistics. SILC is carried out in all Member States on a regular annual basis.

Due to the circumstances in 2022 caused by the COVID-19 pandemic, the Croatian Bureau of Statistics faced difficulties in collecting EU-SILC data. Adaptation to the new situation and partial mitigation of difficulties was achieved by extending the period of data collection, but also by applying the so-called CATI method along with the usual CAPI survey, which includes interviewers' visits to households.

The indicators are based on the concept of relative poverty, which takes into consideration the household disposable income, the number of household members (household size) and the income distribution within the population. The main indicator is the at-risk-of-poverty rate, which represents the percentage of persons with the equivalised total disposable income below the at-risk-of-poverty threshold. The at-risk-of-poverty rate does not show the actual number of poor people, but rather how many of them have an income below the at-risk-of-poverty threshold is determined as 60% of the middle value (median) of the equivalised disposable income of all persons.

According to the Survey data, the at-risk-of-poverty rate in 2022 was 18.0%.

The at-risk-of-poverty threshold for a one-person household amounted to 39 600 kuna per year in 2022, while for a household consisting of two adults and two children younger than 14 it was 83 160 kuna per year.

## 1 KEY INDICATORS OF POVERTY AND SOCIAL EXCLUSION, 2022

At-risk-of-poverty rate, %	18,0
People at risk of poverty or social exclusion, %	19,9
People severely materially and socially deprived (seven or more items), %	4,0
People living in households with very low work intensity, %	6,3
At-risk-of-poverty threshold, kuna	
One-person household	39 600
Household consisting of two adults and two children	83 160
At-risk-of-poverty rate before social transfers, %	
Social transfers excluded from income	22,8
Pensions and social transfers excluded from income	39,8
Average disposable income per household, kuna	126 399
Average equivalised disposable income, kuna	72 546

The People at risk of poverty or social exclusion indicator refers to persons who are at risk of poverty, or severely deprived, or living in a household with a low work intensity. According to this indicator for 2022, there were 19.9% of persons in that position in the Republic of Croatia.

The severe material and social deprivation rate presents the percentage of persons who live in households that cannot afford at least seven of thirteen deprivation items. In 2022, it was 4.0%.

The People living in households with very low work intensity indicator refers to persons (aged 0 – 64) living in households with a work intensity lower than 0.2. In 2022, it amounted to 6.3%.

The comparison between the standard at-risk-of-poverty rate and the **at-risk-of-poverty rate before social transfers** shows that the exclusion of social transfers from the income caused an increase in the percentage of persons at risk of poverty, from the standard 18.0% rate to the 22.8% rate. When both social transfers and pensions had been excluded from the income, the at-risk-of-poverty rate reached 39.8%.

Average disposable income per household was 126 399 kuna in 2022, while the average equivalised disposable income amounted to 72 546 kuna.

# 2 AT-RISK-OF-POVERTY RATE AND PEOPLE AT RISK OF POVERTY OR SOCIAL EXCLUSION, ACCORDING TO HR\_NUTS 2021. - HR NUTS 2

	Republic of Croatia	Pannonian Croatia	Adriatic Croatia	City of Zagreb	North Croatia
At-risk-of-poverty rate	18,0	25,9	18,2	9,5	16,0
People at risk of poverty or social exclusion	19,9	27,8	20,5	11,2	17,3

The size of the sample, on which the 2022 Survey was conducted, provides data for calculating statistically reliable indicators at the level of the Republic of Croatia and at lower spatial levels, four territorial units for statistics at NUTS 2 level – Pannonian Croatia, Adriatic Croatia, the City of Zagreb and North Croatia.

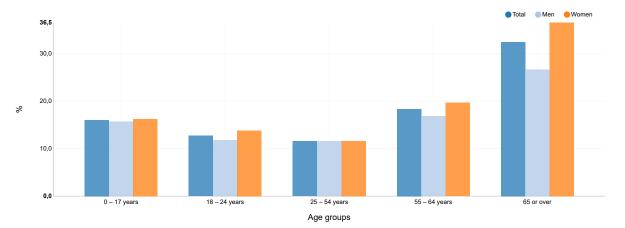
The at-risk-of-poverty rate amounted to 25.9% for Pannonian Croatia, 18.2% for Adriatic Croatia, 9.5% for the City of Zagreb and 16.0% for North Croatia.

In 2022, the People at risk of poverty or social exclusion indicator amounted to 27.8% for Pannonian Croatia, 20.5% for Adriatic Croatia, 11.2% for the City of Zagreb and 17.3% for North Croatia.

## 3 AT-RISK-OF-POVERTY RATE, BY AGE AND SEX, 2022

Age groups	Total	Men	Women
Total	18,0	16,0	20,0
0 – 17 years	16,0	15,7	16,2
18 – 24 years	12,7	11,8	13,8
25 – 54 years	11,5	11,5	11,6
55 – 64 years	18,3	16,8	19,6
65 years or over	32,4	26,6	36,5

The at-risk-of-poverty rate, by age and sex, was the highest for persons aged 65 years or over and amounted to 32.4% in 2022. The difference by sex was the highest in this age group and amounted to 36.5% for women and to 26.6% for men. The lowest at-risk-of-poverty rate was recorded for persons aged from 25 to 54 and amounted to 11.5%. In this age group, it amounted to 11.5% for women.



#### G-1 AT-RISK-OF-POVERTY RATE, BY AGE AND SEX, 2022

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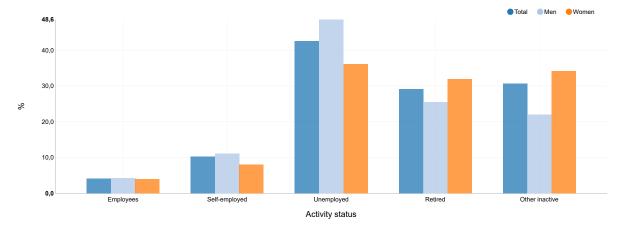
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# 4 AT-RISK-OF-POVERTY RATE, BY MOST FREQUENT ACTIVITY STATUS AND SEX, 2022

Activity status	Total	Men	Women
At work	4,7	5,1	4,3
Employees	4,1	4,2	4,0
Self-employed	10,3	11,1	8,0
Not at work	31,2	28,7	33,1
Unemployed	42,6	48,6	36,1
Retired	29,2	25,6	32,0
Other inactive	30,7	22,0	34,2

The at-risk-of-poverty rate, by the most frequent activity status, was calculated for persons aged 18 or over. The most frequent activity status is the one a person had for at least seven months in the reference period.

In 2022, the at-risk-of-poverty rate by the most frequent activity status was the highest for unemployed persons and amounted to 42.6%. It was 48.6% for unemployed men and 36.1% for unemployed women. The lowest at-risk-of-poverty rate by the most frequent activity status was recorded for employees, 4.1%. It amounted to 4.0% for female employees and 4.2% for male employees.



### G-2 AT-RISK-OF-POVERTY RATE, BY MOST FREQUENT ACTIVITY STATUS AND SEX, 2022

## 5 AT-RISK-OF-POVERTY RATE, BY HOUSEHOLD TYPE, 2022

Households without dependent children	22,1
One-person household	47,8
Men	35,4
Women	54,4
One-person household, person under 65 years	31,3
One-person household, 65 years or over	56,5
Two adults	23,6
Two adults, both under 65 years	15,3
Two adults, at least one adult 65 years or over	28,2
Two or more adults	15,8
Three or more adults	8,5
Households with dependent children	14,2
Single parent with one or more dependent children	24,9
Two adults with one dependent child	11,5
Two adults with two dependent children	10,8
Two adults with three or more dependent children	23,3
Two or more adults with dependent children	13,7
Three or more adults with dependent children	12,2

The at-risk-of-poverty rate, according to the household type, was calculated for the categories of households without dependent children and with dependent children.

Within the category of households with no dependent children, the highest at-risk-of-poverty rates in 2022 were recorded for one-person households, particularly for households consisting of persons aged 65 or over, 56.5%, and for single female households, 54.4%.

Within the category of households with dependent children, the highest at-risk-of-poverty rates were recorded for households consisting of a single parent with dependent children, 24.9%, and for households with two adults with three or more children, 23.3%.

## 6 AT-RISK-OF-POVERTY RATE, BY WORK INTENSITY OF HOUSEHOLD, 2022

Households without dependent children	
Very low work intensity (0 – 0.2)	76,8
Low work intensity (0.2 – 0.45)	17,2
Medium work intensity (0.45 – 0.55)	7,4
High work intensity (0.55 – 0.85)	2,6
Very high work intensity (0.85 – 1)	1,4
Households with dependent children	
Very low work intensity (0 – 0.2)	86,2
Low work intensity (0.2 – 0.45)	42,1
Medium work intensity (0.45 – 0.55)	26,2
High work intensity (0.55 – 0.85)	6,5
Very high work intensity (0.85 – 1)	2,6

At-risk-of-poverty rate by work intensity of a household was calculated for households without dependent children and households with dependent children for persons aged 0 – 64.

The at-risk-of-poverty rate by work intensity in 2022 was the highest for households with very low work intensity. Thus, for households with dependent children it amounted to 86.2%, while for households without dependent children it amounted to 76.8%. Very low work intensity refers to the situation of persons living in households where nobody works or works very little, meaning that working-age household members work up to 20.0% of the total number of months they could have worked in the reference period.

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Percentage of persons living in household that suffer from:	
– Inability to keep home adequately warm during the coldest, %	7,0
– Inability to afford a one-week annual holiday away from home, %	41,7
– Inability to afford a meal with meat, chicken, fish or vegetarian equivalent every second day, %	6,9
– Inability to face unexpected financial expenses, %	44,8
– Being in arrears with mortgage or rent payments, utility bills or hire purchase, %	15,7
Ability to make ends meet, %	
- With great difficulty	8,0
- With difficulty	18,6
- With some difficulty	42,7
– Fairly easily	23,9
– Easily	5,2
- Very easily	1,5
Material and social deprivation rate, %	8,4

Material and social deprivation refers to the indicators showing material conditions affecting the quality of life of households and persons.

In 2022, according to the Survey data, there were:

- 7.0% of persons living in households that could not afford to keep home adequately warm during the coldest months

- 41.7% of persons living in households that could not afford a one-week annual holiday away from home for all household members

- 6.9% of persons living in households that could not afford a meal with meat, chicken, fish (or a vegetarian equivalent) every second day

- 44.8% of persons living in households that could not face unexpected financial expenses from own resources (2 950 kuna)

- 15.7% of persons living in households who were in arrears with mortgage or rent payments, utility bills or hire purchase in the last 12 months due to financial difficulties

- 8.0% of persons living in households that made ends meet with great difficulty, 18.6% of persons living in households that made ends meet with difficulty and 42.7% of persons living in households that made ends meet with some difficulty. The lowest percentage of persons (1.5%) lived in households that made ends meet very easily.

**The material and social deprivation rate** presents the percentage of persons who live in households that cannot afford, exclusively due to lack of financial resources, at least five of thirteen material and social deprivation items. The material and social deprivation rate in 2022 for the Republic of Croatia was 8.4%.

## 8 OTHER POVERTY INDICATORS, 2022

Inequality of income distribution – quintile share ratio (S80/S20)	4,6
Gini coefficient	28,5
Relative at-risk-of-poverty gap, %	25,3
Dispersion around at-risk-of-poverty threshold, %	
40% cut-off	6,9
50% cut-off	12,2
70% cut-off	25,3
At-risk-of-poverty rate by tenure status, %	
Tenant	26,2
Owner or rent free	17,8

The quintile share ratio (S80/S20) is an indicator of income inequality and it measures the ratio in the top and bottom quintiles. It represents the ratio between the total equivalised income of the 20.0% of population with the highest income and the 20.0% of population with the lowest income. This ratio reached 4.6 in 2022, which means that 20.0% of the population with the highest equivalised disposable income received 4.6 times as much income as 20.0% of the population with the lowest equivalised disposable income.

Gini coefficient is a measure of income inequality distribution, and in 2022, it was 28.5%. 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.

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. In 2022, it was 25.3%.

**The dispersion around the at-risk-of-poverty threshold** indicates the 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 medians. In 2022, the at-risk-of-poverty rate was 6.9% for the threshold set at 40% of the median, 12.2% for the threshold set at 50% of the median and 25.3% for the threshold set at 70% of the equivalised income median.

The at-risk-of-poverty rate by tenure status in 2022 was higher for tenants, amounting to 26.2%, than for owners or rent-free occupants, for which that rate amounted to 17.8%.

## NOTES ON METHODOLOGY

The poverty indicators for the Republic of Croatia presented in this First Release were calculated by using data collected in the Statistics on Income and Living Conditions, which was carried out in 2022 (SILC 2022). It is an annual survey that is carried out on the random sample of private households. According to the methodology, institutional households (such as homes, prisons, hospitals for the permanent accommodation of patients etc.) are not covered, and neither is the population of islands that form a specific spatial unit due to lower accessibility, except for islands that are connected to the mainland by a bridge (Krk, Čiovo, Vir, Murter and Pag).

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 Statistics on Income and Living Conditions was introduced in the statistical system of Republic of Croatia in 2010 and is in line with EU regulations and Eurostat's methodology for the EU-SILC survey. On the EU level, the SILC is an obligatory survey and presents a reference data source that provides for the monitoring and comparability of the income, poverty and social exclusion statistics.

#### Data collection and the impact of the COVID-19 pandemic

Data are collected using the CAPI method, which is done using a personal computer for data entry, that is, the electronic questionnaire. The field work is carried out by specially educated interviewers.

In view of the extraordinary situation caused by the COVID-19 pandemic, the Croatian Bureau of Statistics takes all necessary measures to prevent the spread of the infection, so in 2022, household interviewing was carried out not using the CAPI method, but also using the CATI method.

The interviewers' work is organised by the Croatian Bureau of Statistics, which checks, processes and tables the data collected. The results are published at the annual level.

Reference periods to which the data refer are defined by the type of collected data. The reference period for income data, which are the most important part of this survey, is the previous calendar year, which makes the year 2021 the reference period for the SILC 2022 survey on income data. For other data, the reference period is different, for example, the previous month from the time of the interview, previous six months, current period, previous 12 months etc.

According to the Official Statistical Act (NN, No. 25/20), the confidentiality of all personal data on households and its members given by respondents is guaranteed. The collected data are used solely for statistical purposes and they are published in aggregate form.

#### 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.). A household is also considered every person who lives alone (one-person household).

**Total disposable income** of a household is the total net income received by household and all its members during the reference period, which is the previous year. It includes the income from paid employment, the income from self-employment, the property income, pension, social transfers and other receipts received from persons who are not household members.

**Equivalised disposable income** is calculated in a way that the total disposable 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.

The at-risk-of-poverty threshold 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. Persons with the income below the threshold are at higher risk of poverty than others, but do not necessarily live in deprivation. The at-risk-of-poverty threshold is presented in kuna.

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

People at risk of poverty or social exclusion is an indicator that represents persons (as percentage of persons in total population) who are at risk of poverty or severely materially or socially deprived or living in a household with very low work intensity.

The at-risk-of-poverty rate before social transfers is calculated by excluding social transfers and pensions when defining an income. This indicator is used in combination with a standard at-risk-of-poverty rate in order to evaluate the impact of social transfers on the risk of poverty.

The National Classification of Statistical Regions 2021 (HR\_NUTS 2021. – HR NUTS 2) is a statistical standard used for the collection, entering, processing, analysis and dissemination of regional statistics according to the spatial distribution levels of the Republic of Croatia. Territorial units for statistics at HR NUTS 2 level are Pannonian Croatia, Adriatic Croatia, the City of Zagreb and North Croatia.

Pannonian Croatia encompasses the following counties: Bjelovar-Bilogora, Virovitica-Podravina, Požega-Slavonia, Slavonski Brod-Posavina, Osijek-Baranja, Vukovar-Sirmium, Karlovac and Sisak-Moslavina.

Adriatic Croatia encompasses the following counties: Primorje-Gorski kotar, Lika-Senj, Zadar, Šibenik-Knin, Split-Dalmatia, Istria and Dubrovnik-Neretva.

The City of Zagreb is a special statistical region at NUTS 2 level.

North Croatia encompasses the following counties: Međimurje, Varaždin, Koprivnica-Križevci, Krapina-Zagorje and Zagreb.

At-risk-of-poverty rate by most frequent activity status is calculated for persons aged 18 years and over according to the prevailing activity status in the reference period. The prevailing activity status of a person is the status which a person had for at least seven months in the reference period.

**The work intensity of a household** is the ratio of the total number of months that all working-age household members have worked during the income reference year and the total number of months the same household members theoretically could have worked in the same period. A working-age person is a person aged 18 – 64 years, excluding students in the 18 – 24 age group and persons who are retired according to their activity status, except persons who receive survivor's pension and inactive persons aged 60 – 64 years who live in households in which the main source of income is pension.

The work intensity is defined as: very low (0 - 0.2), low (0.2 - 0.45), medium (0.45 - 0.55), high (0.55 - 0.85) and very high (0.85 - 1). Very low work intensity refers to the situation of persons living in households where nobody works (or works very little), meaning that working-age household members work 20.0% or even less than the total number of months they could have worked in the reference period.

Dependent children include all persons aged below 18 as well as persons aged 18 to 24 years, living with at least one parent and economically inactive.

**Inability to afford a one-week annual holiday away from home** refers to households that cannot afford a one-week annual holiday away from home to its members due to financial difficulties. Holidays that include staying with friends or relatives, charge-free accommodation in their own cottage, summer house etc. is considered a vacation. If just one household member cannot go on holiday due to financial difficulties, it is considered that the whole household is unable to go on holiday. If a household borrow money from bank, friends, relatives etc. to pay a holiday, it is considered as it is payed from own resources.

Inability to afford a meal with meat, chicken, fish or vegetarian equivalent every second day refers to households that cannot afford a meal with meat, chicken, fish or vegetarian equivalent every second day solely due to financial difficulties.

**Inability to face unexpected financial expenses** refers to households that cannot pay unexpected financial expenses solely from own resources and without additional loans. The unexpected financial expense presents a monthly value of the at-risk-of-poverty threshold for one-person household in the previous year. In 2022, it amounted to 2 950 kuna. Additional debts imply that the household does not need any financial help from others (bank, friends etc.) and that it is not an issue of paying regular ongoing expenses. Unexpected financial expenses include, for example, expenditure for the repair of an extraordinary breakdown in the flat or the replacement of a durable good with a new one, etc.

Being in arrears with mortgage or rent payments, utility bills or hire purchase implies the percentage of persons living in households that paid some of these financial liabilities in the last 12 months after the due date or the due date of the invoice for payment solely due to financial difficulties. Mortgage or rent payments are related to the main dwelling of the household. Utility bills are bills for electricity, water, gas, heating, sewage removal and other bills connected with the dwelling in which the household lives. The exception are phone bills (fixed or mobile), which are not considered utility bills within this indicator.

Ability to make ends meet presents the household's ability to regularly pay usual and necessary expenses in relation to the total income of all household members. The ability of the household is divided in the following six levels according to which the household declares itself: with great difficulty, with difficulty, with some difficulty, fairly easily, easily and very easily.

The material and social deprivation items concerned are the following:

1) being in arrears with mortgage or rent payments, utility bills, hire purchase instalments or other loan payments

2) inability of a household to afford a one-week annual holiday away from home for all member of the household

3) inability of a household to afford a meal with meat, chicken, fish or vegetarian equivalent every second day 4) inability of a household to face unexpected financial expenses

5) inability to have an internet connection

6) inability of a household to afford a car

7) inability of a household to afford keeping home adequately warm in the coldest months

8) inability of a household to replace worn-out furniture

9) inability of a person to replace worn-out clothes with some new ones

10) inability of a person to afford two pairs of properly fitting shoes

11) inability of a person to spend a small amount of money each week on him/herself ("pocket money")

12) inability of a person to have regular leisure activities

13) inability of a person to get together with friends/family for a drink/meal at least once a month

Relative at-risk-of-poverty gap is the difference between the at-risk-of-poverty threshold and equivalised income median of persons below the at-risk-of-poverty threshold, expressed as a percentage of the at-risk-of-poverty threshold.

The tenure status of a household is defined in relation to the housing unit in which the household was living at the time when the Survey was performed, that is, in relation to their status with regard to that dwelling. In this respect, there are two different statuses: owner and tenant. The owner status includes households whose members are either owners or co-owners of the dwelling in which they live, with or without mortgage or obligation to repay the dwelling, or tenants that do not pay rent for the dwelling in which they live. The tenant status includes households that pay full (market) rent or reduced rent for the dwelling.

#### Design and sample size

The SILC survey is a panel sample survey of randomly chosen private households. The panel sample implies that selected households remain in the sample for four consecutive years and that they are repeatedly interviewed. The sample frame used in 2022 for the selection of dwellings occupied by private households was based on the Census of Population, Households and Dwellings in the Republic of Croatia in 2011. The total sample consisted of 12 031 households. The sample selected for 2022 consisted of 8 168 successfully interviewed private households and the response rate at the household level was 72.50%.

#### Abbreviations

CAPI	computer-assisted personal interviewing
CATI	computer-assisted telephone interviewing
COVID-19	Corona Virus Disease-19
EU	European Union
EU-27	European Union (27 Member States)
Eurostat	Statistical Office of the European Union
HR_NUTS 2021. – HR NUTS 2	National Classification of Territorial Units for Statistics 2021 – 2 <sup>nd</sup> level statistical regions
NN	Narodne novine, official gazette of the Republic of Croatia
OECD	Organisation for Economic Co-operation and Development
SILC	Statistics on Income and Living Conditions

#### Published by the Croatian Bureau of Statistics, Zagreb, Ilica 3, P. O. B. 80

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