

# EU statistics on income and living conditions (EU-SILC) methodology - people at risk of poverty or social exclusion

Statistics Explained

**At risk of poverty or social exclusion**, abbreviated as **AROPE**, corresponds to the sum of persons who are either at [risk of poverty](#), or [severely materially and socially deprived](#) or [living in a household with a very low work intensity](#). People are included only once even if they are in more than one of the situations mentioned above. The **AROPE rate** is the share of the total population which is at risk of poverty or social exclusion. It is the main indicator to monitor the [EU 2030](#) target on poverty and social exclusion and was the headline indicator to monitor the [EU 2020 Strategy](#) poverty target.

## Description

[At-risk-of poverty or social exclusion \(AROPE\)](#).

## Statistical population

The indicator refers to the population aged 18 and over living in [private households](#). Persons living in [collective households and in institutions](#) are generally excluded from the target population. Additionally, when the indicator is calculated for children (i.e. children at risk of poverty or social exclusion), it refers to the population aged 0 to 17 living in private households.

## Breakdowns

The indicator can be displayed along with the [Geopolitical entity](#), [time](#), and the different breakdowns/characteristics listed below:

- age and sex
- activity status (population aged 18 and over)
- income quantile and household type
- educational level ([ISCED](#)) (population aged 18 and over)
- citizenship (population aged 18 and over)
- country of birth (population aged 18 and over)
- tenure status
- NUTS 2 regions

- degree of urbanisation (DEGURBA)

highest educational level of parents (population aged 0 to 17 years –when the indicator is calculated for children –i.e. children at risk of poverty or social exclusion-).

## Reference period

The indicator is collected and disseminated on an annual basis.

The reference period of the indicator is the survey year, except when the calculation involves age, income, variables on arrears, work intensity of the household, country of birth and activity status. As far as age is concerned, it refers to the age of the respondent at the end of the income reference period. For income, the income reference period is a fixed 12-month period (such as the previous calendar or tax year) for all countries except Ireland, for which the survey is continuous and income is collected for the last twelve months. Variables on arrears refer to the last 12 months, while work intensity of the household refers to the number of months that all working age household members have been working during the income reference year. For activity status, the reference year is the year previous to survey year. Country of birth is constant.

## Unit of measurement

The indicator is expressed as percentage of the total population or in thousands of persons (number of persons at risk of poverty or social exclusion).

## Calculation method

At-risk-of-poverty or social exclusion rate (AROPE) presented along with the [breakdowns](#)  $(k)$   $(AROPE_{at\_k})$

is calculated as the percentage of people (or thousands of people) in each  $k$  breakdown who are [at-risk-of-poverty](#) (EQ\_INC20<ARPT60) or [severely deprived](#) (SEV\_DEP) or [living in a household with very low work intensity](#) (WI<0.2) over the total population in that dimension.

The weight variable used is the Adjusted Cross Sectional Weight (RB050a).

$$AROPE_{at\_k} = \frac{\sum_{i=j}^{at\_k} ;RB050a_{i}}{\sum_{i}^{at\_k} ;RB050a_{i}} \times 100$$

$$AR_{k,t} = \frac{\sum_{i=j} AR_{k,t}}{RB050a_{i,t} \cdot 1000}$$

where j denotes the population, or [subset of population](#), who is at risk of poverty (EQ\_INC20<ARPT60) or severely deprived (SEV\_DEP) or living in a household with very low work intensity (WI<0.2).

With regard to the calculation of the indicators, the following methodological issues should be taken into consideration:

- Unless specified, at-risk-of-poverty rates are assumed to be 'after social transfers' (i.e. they include social benefits such as pensions and unemployment benefits).
- Unless specified, at-risk-of-poverty rates relate to the at-risk-of-poverty threshold that is calculated for the total population of a member state at 60 % median equivalised disposable income level. The severe deprivation threshold is set to four and the very low work intensity threshold is 20 %. The choice of these cut-off thresholds is arbitrary; Eurostat calculates a range of complementary poverty rates according to different thresholds.
- Income poverty risk at a given point in time may not necessarily imply low living standards in the short term, for example if the persons at risk have access to savings, to credit, to private insurance, tax credits, to financial assistance from friends and relatives etc. In particular, the cumulative impact of extended periods at risk is to be further assessed.
- Measuring incomes at the level of private households may have certain implications. The exclusion of collective households might lead to an underrepresentation of certain groups (e.g. the elderly, persons with disabilities).

Moreover, there are some methodological limitations that pertain to the following dimensions accompanying the indicator: age, activity status, citizenship, country of birth, degree of urbanisation, educational level, highest educational level of parents, household type, NUTS region, tenure status.

## Main concepts used

Additional information for the computation of the related indicators on poverty and social exclusion can be found below.

- [At-risk-of poverty rate](#),
- [Severe material and social deprivation rate](#),
- [People living in households with very low work intensity](#).

## SAS program files

SAS programming routines developed for the computation of the EU-SILC datasets providing the Europe 2020 target on poverty and social exclusion along with the different dimensions are listed below.

## See also

- [Living conditions in Europe - income distribution and income inequality](#)
- [Living conditions in Europe - poverty and social exclusion](#)

Europe 2030		Europe 2020	
Dataset	SAS program file	Dataset	SAS program file
People at risk of poverty or social exclusion by age and sex - new definition ( <a href="#">ilc_peps01n</a> )	peps01n.sas	People at risk of poverty or social exclusion by age and sex ( <a href="#">ilc_peps01</a> )	peps01.sas
People at risk of poverty or social exclusion by most frequent activity status (population aged 18 and over) - new definition ( <a href="#">ilc_peps02n</a> )	peps02n.sas	People at risk of poverty or social exclusion by most frequent activity status (population aged 18 and over) ( <a href="#">ilc_peps02</a> )	peps02.sas
People at risk of poverty or social exclusion by quintile and household type - new definition ( <a href="#">ilc_peps03n</a> )	peps03n.sas	People at risk of poverty or social exclusion by quintile and household type ( <a href="#">ilc_peps03</a> )	peps03.sas
People at risk of poverty or social exclusion by educational attainment level (population aged 18 and over) - new definition ( <a href="#">ilc_peps04n</a> )	peps04n.sas	People at risk of poverty or social exclusion by educational attainment level (population aged 18 and over) ( <a href="#">ilc_peps04</a> )	peps04.sas
People at risk of poverty or social exclusion by broad group of citizenship (population aged 18 and over) - new definition ( <a href="#">ilc_peps05n</a> )	peps05n.sas	People at risk of poverty or social exclusion by broad group of citizenship (population aged 18 and over) ( <a href="#">ilc_peps05</a> )	peps05.sas
People at risk of poverty or social exclusion by broad group of country of birth (population aged 18 and over) - new definition ( <a href="#">ilc_peps06n</a> )	peps06n.sas	People at risk of poverty or social exclusion by broad group of country of birth (population aged 18 and over) ( <a href="#">ilc_peps06</a> )	peps06.sas
People at-risk-of poverty or social exclusion by tenure status - new definition ( <a href="#">ilc_peps07n</a> )	peps07n.sas	People at-risk-of poverty or social exclusion by tenure status ( <a href="#">ilc_peps07</a> )	peps07.sas
People at risk of poverty or social exclusion by NUTS region - new definition ( <a href="#">ilc_peps11n</a> )	peps11n.sas	People at risk of poverty or social exclusion by NUTS region ( <a href="#">ilc_peps11</a> )	peps11.sas
People at risk of poverty or social exclusion by degree of urbanisation - new definition ( <a href="#">ilc_peps13n</a> )	peps13n.sas	People at risk of poverty or social exclusion by degree of urbanisation ( <a href="#">ilc_peps13</a> )	peps13.sas
Children at risk of poverty or social exclusion by educational attainment level of their parents (population aged 0 to 17 years) - new definition ( <a href="#">ilc_peps60n</a> )	peps60n.sas	Children at risk of poverty or social exclusion by educational attainment level of their parents (population aged 0 to 17 years) ( <a href="#">ilc_peps60</a> )	peps60.sas

## Main tables

- [Income and living conditions \(t\\_ilc\)](#)

## Database

- Living conditions and welfare (livcon), see:

[Income and living conditions \(ilc\)](#)

People at risk of poverty or social exclusion (Europe 2020 strategy) ([ilc\\_pe](#))

Main indicator - Europe 2020 target on poverty and social exclusion ([ilc\\_peps](#))

## Dedicated section

[Income and living conditions \(ilc\)](#)

## Publications

- [Smarter, greener, more inclusive? - Indicators to support the Europe 2020 strategy](#)
- [23 % of EU citizens were at risk of poverty or social exclusion in 2010 - Statistics in focus 9/2012](#)
- [Children were the age group at the highest risk of poverty or social exclusion in 2011 - Statistics in focus 4/2013](#)
- [European social statistics \(2013\) - Statistical books](#)
- [In 2011, 24 % of the population were at risk of poverty or social exclusion – News release](#)
- [In 2011, 27 % of children aged less than 18 were at risk of poverty or social exclusion – News release](#)

- [The continuity of indicators during the transition between ECHP and EU-SILC](#)
- [Comparative EU quality reports](#)
- [Modules: assessment of implementation](#)

## Methodology

- [Income and living conditions \(ilc\) \] \(ESMS metadata file — ilc\\_esms\)](#)
- [Operation guidelines](#)
- [Methodological guidelines and description of EU-SILC target variables](#)

## Legislation

- [Regulation 1177/2003](#) of 16 June 2003 concerning Community statistics on income and living conditions (EU-SILC)
- [Summaries of EU Legislation: EU statistics on income and living conditions](#)
- [Regulation 1553/2005](#) of 7 September 2005 amending Regulation 1177/2003 concerning Community statistics on income and living conditions (EU-SILC)
- [Regulation 1791/2006](#) of 20 November 2006 adapting certain Regulations and Decisions in the fields of ... statistics, ..., by reason of the accession of Bulgaria and Romania

## External links

- [European Commission, The European Platform against Poverty and Social Exclusion: A European framework for social and territorial cohesion, COM\(2010\) 758 final, Brussels, 2010](#)
- [European Commission website Europe 2020](#)
- [OECD - Better Life Initiative: Measuring Well-being and Progress](#)
- [The social dimension of the EUROPE 2020 strategy - A report of the social protection committee \(2011\)](#)