EU statistics on income and living conditions (EU-SILC) methodology - population structure

Statistics Explained

This article is part of a set of articles describing the methodology applied for the computation of the statistical indicators pertinent to the subject area of Population structure (ilc_lvps) within the overall domain of Income and living conditions . For these indicators, the article provides a methodological and practical framework of reference. The indicators relevant to the subject area of population structure concern the following:

- Distribution of population along with several combination of dimensions .

- Share of young adults aged 18-34 living with their parents

- Share of children (aged less than 18) living with their parents

Moreover, since the datasets are of multidimensional structure and can be analysed simultaneously along several dimensions, the separate datasets are presented along with the different combinations of dimensions.

Description

- The **distribution of population** along with the dimensions with which is disseminated, refers to the share of population in each combination of dimensions.

- The **share of young adults living with their parents** refers to the percentage of people aged 18-34 living with their parents over the population in the same age group.

- The **share of children living with their parents** refers to the percentage of population aged less than 18 according to the type of the household they live in.

Statistical population

The statistical population consists of all persons living in private private households . Persons living in collective households and in institutions are generally excluded from the target population.

However, the distribution of population refers to different subsets of population when presented along with different dimensions. More specifically, it covers the population aged less than 60, when broken down by work intensity of the household. The population aged 18 and over is covered when broken down by level of education, broad group of citizenship and country of birth. Additionally, when calculated for children (i.e. distribution of children along with the relevant dimensions), it refers to the population aged 0 to 17 living in private households. Finally, for the calculation of the distribution of population aged 65 and over along with the relevant dimensions, all persons aged 65 and over living in private households are included.

For the computation of the share of young adults living with their parents, all persons aged from 18 to 34 years living in private households are included. Specifically, when broken down by self-defined current economic status, people with less than 7 months declared in the calendar of activities are excluded from the computation.

With regard to the computation of the share of children living with their parents, all persons aged less than 18 are included.

In any case, people with missing values for equivalised income and for any of the different dimensions that the indicators are presented, are excluded from calculations.

Reference period

All indicators are collected and disseminated on an annual basis and refer to the survey year.

The reference period for all dimensions along with the indicators are disseminated is the survey year, except for age, income and household type. As far as age is concerned, it refers to the age of the respondent at the end of the income reference period, based on which the household type is also derived. For income, the income reference period is a fixed 12-month period (such as the previous calendar or tax year) for all countries except the United Kingdom, for which the income reference period is the current year, and Ireland, for which the survey is continuous and income is collected for the last twelve months.

Unit of measurement

All three indicators are made available as a percentage.

Dimensions

The separate datasets provide each indicator along with the Geopolitical entity and time and the dimensions presented below.

The distribution of population is presented along with the following dimensions:

- age group and sex

- household type and income group

- age group, sex, household type and work intensity of the household]]

- age group and educational level (ISCED)

- age group, sex, tenure status and broad group of citizenship (population aged 18 and over)

- age group, sex, tenure status and broad group of country of birth (population aged 18 and over)

- sex and household type

The distribution of population aged 65 years or over is broken down by household type.

Especially when the indicator is computed for children, i.e. distribution of children (aged less than 18), it is broken down by age group, highest educational level of parents and income group.

The share of young adults (18-34) living with their parents is presented along with the dimensions:

- age group and sex

- age group and self-defined current economic status

- age group and type of contract

The share of children (aged less than 18) living with their parent is broken down by household type (children living with parents).

Calculation method

1. Distribution of population along with the different combination of dimensions :

The distribution of population or subset of population, broken down by each combination of dimensions (k)$(DISP_{at_k})$

is calculated as the percentage of people, in each k over the total population.

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

$$DISP_{at_k} = \frac{\sum\limits_{\forall i_k} RB050a_i}{\sum\limits_{\forall i} RB050a_i} \times 100$$

Especially when the indicator is disseminated broken down by the level of education, age and sex, the personal cross sectional weight PB040 is used:

$$DISP_{at_k} = \frac{\sum\limits_{\forall i_k} PB040_i}{\sum\limits_{\forall i} PB040_i} \times 100$$

No methodological issues pertain to the calculation of the distribution of population along with the different combination of dimensions.

2. Share of young adults living with their parents :

The distribution of young adults aged 18-34 living with their parents (either with mother or with father or with both) broken down by each combination of dimensions (k)$(DISLPR_{at_k})$

is calculated as the percentage of people living with their parents (PB160_F=1 OR PB170_F=1) in each k over the total population.

The weight variable used is the personal cross sectional weight PB040.

$$DISLPR_{k} = \frac{\sum\limits_{\substack{\forall i \ ;living \ ;with \ ;parents_k} PB040_i}}{\sum\limits_{\forall i_{at_k}} PB040_i} \times 100$$

No methodological issues pertain to the calculation of the share of young adults living with their parents.

3. Share of children (aged less than 18) living with their parents :

The percentage of children (aged less than 18 years) in the k dimension (i.e. in a given type of household (HHTYP2) in dataset's statistical population) is calculated with the formula that follows.

The weight variable used is the Adjusted Personal Cross Sectional weight RB050a.

$$DISCLPR_{k} = \frac{\sum\limits_{\forall i_{at_k}} RB050a_i}{\sum\limits_{\forall i} RB050a_i} \times 100$$

No methodological issues pertain to the calculation of the share of children living with their parents.

Moreover, there are some methodological limitations that pertain to the following dimensions accompanying the indicators: Age, Activity status, Household type, Education level, Self-defined current economic status.

Main concepts used

For the production of the indicators relevant to the subject area of population structure, the variables listed below are also involved in computations:

Age at the date of interview (AGE_IW), Household type (children living with parents), Equivalised disposable Income (EQ_INC), Work intensity (WI).

SAS program files

SAS programming routines developed for the computation of the EU-SILC population structure datasets along with the different dimensions, are listed below.

Dataset	SAS program file
Distribution of population by sex and age ilc_lvps01	_lvps01.sas
Distribution of population by household type and income group ilc_lvps02	_lvps02.sas
Distribution of population by work intensity of the household (population aged 0 to 59 years) ilc_lvps03	_lvps03.sas
Distribution of population aged 18 and over by educational attainment level and age group ilc_lvps04	_lvps04.sas
Share of young adults aged 18-34 living with their parents by age and sex ilc_lvps08	_lvps08.sas
Share of young adults aged 18-34 living with their parents by self-defined current economic status ilc_lvps09	_lvps09.sas
Share of young adults aged 18-34 living with their parents by type of contract ilc_lvps10	_lvps10.sas
Distribution of population by broad group of citizenship and tenure status (population aged 18 and over) ilc_lvps15	_lvps15.sas
Distribution of population by broad group of country of birth and tenure status (population aged 18 and over) ilc_lvps16	_lvps16.sas
Share of children (aged less than 18) living with their parents by type of household ilc_lvps20	_lvps20.sas
Distribution of children (aged less than 18) by educational attainment level of their parents and income group ilc_lvps25	_lvps25.sas
Distribution of population aged 65 and over by type of household ilc_lvps30	_lvps30.sas

See also

- EU statistics on income and living conditions (EU-SILC) methodology (overview of all articles)
- Living conditions in Europe - housing

Main tables

- Income and living conditions (t_ilc)

Database

- Living conditions and welfare (livcon), see:

  Income and living conditions (ilc)

  Living conditions (ilc_lv)

  Population structure (ilc_lvps)

Dedicated section

  Income and living conditions (ilc)

Publications

- European social statistics (2013) — Statistical books
- Housing conditions in Europe (2009) — Statistics in focus 4/2011
- Income and living conditions in Europe (2010) — Statistical books
- Combating poverty and social exclusion
- Household structure in the EU - Working paper (2010 edition)
- Household composition, poverty and hardship across Europe (2013 edition)
- 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

- Employment and Social Situation Quarterly Review — September 2013
- Employment and Social Developments in Europe (2013)
- OECD — Housing
- United Nations — Housing and its environment

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