



HELLENIC REPUBLIC



MINISTRY OF ECONOMY AND FINANCE



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HOUSEHOLDS' SURVEYS UNIT

STATISTICS ON INCOME AND LIVING CONDITIONS (EU-SILC)

METHODOLOGY FOR MEASURING POVERTY AND COMMON CROSS- SECTIONAL AND LONGITUDINAL EU INDICATORS' DEFINITION

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Introduction

With the Amsterdam Treaty the program of social action in all member states for the years 1998-2000 was defined as well as the legal frame ruling the production of Social Statistics. The fields of poverty and social exclusion were of high priority in the political agenda of the European Council in Lisbon, in March 2000 as well as in the proposal of Commission for a communal program for encouraging cooperation among the member states against social exclusion.

During the European Council of Lisbon (March 2000) several requests were submitted concerning the quality improvement of statistical data and among other things were discussed the effacement of absolute poverty, the cooperation program among member states against social exclusion as well as the constitution of structural indicators, such as indicators of unequal income distribution, poverty percentages before and after social transfers, intergenerational poverty, etc.

In December 2000, at the European Council that took place in Nice, France, the leaders of all member states confirmed the decision of Lisbon, that the battle against poverty and social exclusion is won using open methods of co-ordination and co-operation. Basic elements of this rapprochement are the determination of commonly accepted targets for the European Union and the elaboration of proper national action plans for the achievement of these targets, as well as the regular report and recording of the progress being made.

Under the pre-mentioned framework the European Council at Laeken, in December 2001 determined 18 common statistical indicators for social convergence, that will allow the recording, in a comparable way, of the progress being made in the member states, concerning the agreed targets. These indicators cover four extremely important folds of social convergence (financial poverty, employment, health and education) screening the multi-dimensional form of social exclusion.

More specifically, the agreed 18 indicators have been grouped by to the major 10 which cover the fields being more crucial for social exclusion and to the rest 8 which support the previous ones and depict other dimensions of the problem. From 2003 onwards these indicators consist part of the national action plans for social inclusion of country members and will be submitted every two years.

Basic aim of the action program on social exclusion is to analyze the characteristics, the causes, the fermentations and the trends of social exclusion, using harmonized methodology, and to develop comparable statistics both at national and European level.

The Statistical Office of the European Communities (Eurostat) in cooperation with the country members, designed a new statistical tool, which replaced the European Household Panel, from the year 2003 onwards. This new survey is the European Union Survey on Income and Living Conditions (EU-SILC) constituting the basic source for statistics on income, living conditions and social exclusion.

B. Data source for measuring poverty

The European Union Survey on Income and Living Conditions (EU-SILC) consists part of a European Statistical Program, to which all member states participate and replaced, from the year 2003, the European Household Panel Survey, in order to succeed quality improvement of statistical data concerning poverty and social exclusion.

Basic aim of the survey is the study, both at national and European level, of households' living conditions mainly in relation to their income. This survey is the basic source for comparable statistics on income distribution and social exclusion at European level. The comparability of data is obtained by using commonly accepted households.

With the survey examined are specific socio-economic magnitudes affecting population's living conditions. With collected information our country calculates the structural indicators for social cohesion and produces systematic statistics on income inequalities, inequalities on households' living conditions, poverty and social exclusion.

More specifically from the survey calculated are 12 indicators, out of the 18 social cohesion indicators of Laeken, concerning poverty and social inequality. These indicators, among other things, contribute in the configuration and practice of social politics in our country.

For the pre-mentioned reasons information is gathered, for the households as well as for their members, concerning:

- Income from any source (work, property, social benefits, etc.)
- occupation
- living conditions (*dwelling's quality, amenities, etc.*)
- educational level
- health status for all members of the household

B. Methodology for measuring poverty

The methodology for measuring poverty has been proposed by Eurostat and according to that poverty line is calculated with its relative concept and is defined at 60% of the median total equivalized disposable income of the household, using the modified OECD equivalized scale.

As total equivalized disposable income of the household is considered total net income (that is income after deducting taxes and social contributions) received from all household members.

More specifically the income components included in the survey are:

- Income from work
- Income from property
- Social transfers and pensions
- Monetary transfers from other households and
- Imputed income from the use of company car.

Income components, such as imputed rent from ownership-occupancy, indirect social transfers, income in kind and loan interest are possible to influence significantly the results and will be included in the survey from the year 2007, onwards.

For each person, equivalised disposable income (EQ_INC_i) is defined as the household's total disposable income divided by its "equivalent size", to take account of the size and composition of the household, and is attributed to each household member. The total disposable income of a household is calculated by adding together the personal income received by all of household members plus income received at household level.

The equivalised household size is defined according to the modified OECD scale (which gives a weight of 1.0 to the first adult, 0.5 to other household members aged 14 or over and 0.3 to household members aged less than 14).

C. Indicators' definition

This section provide the definitions of common cross-sectional EU indicators based on the cross-sectional and longitudinal component of EU-SILC as well as the equivalised disposable income and the unadjusted gender pay gap.

Primary indicators

1. At-risk-of-poverty rate (after social transfers)
 - 1a. At-risk-of-poverty rate by age and gender
 - 1b. At-risk-of-poverty rate by most frequent activity status and gender
 - 1c. At-risk-of-poverty rate by household type
 - 1d. At-risk-of-poverty rate by accommodation tenure status
 - 1e. At-risk-of-poverty rate by work intensity of the household
 - 1f. At-risk-of-poverty threshold (illustrative values)
2. Inequality of income distribution S80/S20 income quintile share ratio
3. At-persistent-risk-of-poverty rate by age and gender (60% median)
4. Relative median at-risk-of-poverty gap, by age and gender

Secondary indicators

5. Dispersion around the at-risk-of-poverty threshold
6. At-risk-of-poverty rate anchored at a moment in time
7. At-risk-of-poverty rate before social transfers by age and gender
8. Inequality of income distribution: Gini coefficient
9. At-persistent-risk-of-poverty rate, by age and gender (50% median)

Other indicators

10. Equivalised disposable income
11. The gender pay gap

1. At-risk-of-poverty rate (after social transfers)

The 'at-risk-of poverty rate (after social transfers)' is calculated as the percentage of persons (over the total population) with an equivalised disposable income below the 'at-risk of-poverty threshold' (i.e. the equivalised disposable income of each person is compared with the at-risk-of-poverty threshold).

Breakdown by:

- ***Age and gender***

- *Gender*

- *Total*
 - *Male*
 - *Female*

- *Age groups by gender*

- *Total*
 - *0-15*
 - *0-64*
 - *16+*
 - *16-64*
 - *16-24*
 - *25-49*
 - *50-64*
 - *65+*

- ***Most frequent activity status and gender***

The 'at-risk-of poverty rate (after social transfers)' broken down by most frequent activity status during the income reference period and gender is calculated as the percentage of persons in each breakdown (over the total population in the same breakdown) with an equivalised disposable income below the 'at-risk-of-poverty threshold' for the whole population .

The most frequent activity status is defined as the status that individuals declare themselves to have occupied for more than half the total number of months for which information on any status is available (from the cross-sectional variables).

People with less than 7 months declared in the calendar of activities are excluded from the calculation.

Breakdowns by gender and total:

- Employed
- Unemployed
- Retired
- Other inactive

- ***Household type***

- *Households without dependent children (total)*

- One person household, total
 - 2 adults, no dependent children, both adults under 65 years
 - 2 adults, no dependent children, at least one adult 65 years or more
 - Other households without dependent children

- *Households with dependent children (total)*

- Single parent household, one or more dependent children
 - 2 adults, one dependent child
 - 2 adults, two dependent children
 - 2 adults, three or more dependent children
 - Other households with dependent children

- Single households

- One person household, under 65 years
 - One person household, 65 years and over
 - One person household, male
 - One person household, female

- ***Accommodation tenure status***

The ‘at-risk-of poverty rate (after social transfers) broken down by accommodation tenure status is calculated as the percentage of persons in each modified accommodation tenure status (over the total population with the same modified accommodation tenure status) with an equivalised disposable income below the ‘at-risk-of-poverty threshold’.

Breakdown by:

- Total
- Own accommodation or rent free
- Rented

- ***Work intensity of the household***

The ‘at-risk-of-poverty rate (after social transfers) broken down by work intensity categories and broad household types is calculated as the percentage of persons in work intensity and household type (over the total population in the same group) with an equivalised disposable income below the ‘at-risk-of-poverty threshold’.

The work intensity (WI) of the household refers to the number of months that all working age household members have been working during the income reference period as a proportion of the total number of months that could be theoretically be worked within the household.

Breakdown by:

-Household without dependent children

- $WI = 0$
- $0 < WI < 1$
- $WI = 1$

- Household with dependent children

- $WI = 0$
- $0 < WI < 0.5$
- $0.5 \cdot WI < 1$
- $WI = 1$

- ***threshold (illustrative values)***

The value of the 'at-risk-of poverty threshold' in PPS, Euro and national currency. This indicator will be calculated for the total population, for a one-person household and for a household consisting of two adults and two children.

- Single households
- Households with 2 adults and 2 dependent children

2. Inequality of income distribution S80/S20 income quintile share ratio

Ratio of total income received by the 20% of the country's population with the highest income (top quintile) to that received by the 20% of the country's population with the lowest income (lowest quintile).

3. At-persistent-risk-of-poverty rate by age and gender (60% median)

Share of population with an equivalised disposable income consistently below the 'at-risk-of-poverty threshold' for a four-year period. The 'at-risk-of-poverty threshold' defined as 60% of the median-equivalised disposable income. This indicator will be calculated with EU-SILC longitudinal component after 4 years of the panel survey

Breakdown by:

- ***Age and gender***
 - *Gender*
 - *Total*
 - *Male*
 - *Female*

➤ *Age groups by gender*

- *Total*
- 0-15
- 0-64
- 16+
- 16-64
- 16-24
- 25-49
- 50-64
- 65+

4. Relative median at-risk-of-poverty gap, by age and gender

The difference between the median equivalised disposable income of persons below the at risk of poverty threshold and the at-risk of poverty threshold itself, expressed as a percentage of the at-risk-of-poverty threshold. Gender and age breakdown and total.

Breakdown by:

- ***Age and gender***

➤ *Gender*

- *Total*
- Male
- Female

➤ *Age groups by gender*

- *Total*
- 0-15 (only for the total population)
- 16+
- 16-64

5. Dispersion around the at-risk-of-poverty threshold

The percentage of persons, over the total population, with an equivalised disposable income below 40%, 50% and 70% of the national median equivalised disposable income.

Breakdown by:

- ***Gender***
 - *Gender*
 - *Total*
 - *Male*
 - *Female*

6. At-risk-of-poverty rate anchored at a moment in time

For a given year 't', the 'at-risk-of-poverty rate anchored at a moment in time is defined as the percentage of the population whose equivalised total disposable income in that given year is below a risk-of-poverty threshold calculated in the standard way for the earlier year 't-3' and then up-rated for inflation

For example: base year:2004

1. Risk-of-poverty 2007
2. Risk-of-poverty 2003, the inflation rate to be applied, will be, in general, that for the period 2003 - 2005

7. At-risk-of-poverty rate before social transfers by age and gender

The 'at-risk-of-poverty rate before social transfers except old-age and survivors' benefits' shows the percentage of persons (over the total population) having an equivalised disposable income before social transfers except old-age and survivors' benefits below the national 'at-risk-of-poverty threshold'.

The 'at-risk-of-poverty rate before social transfers including old-age and survivors' benefits' shows the percentage of persons (over the total population) having an equivalised disposable income before

social transfers including old-age and survivors' benefits below the national 'at-risk-of-poverty threshold'.

Breakdown by:

- ***Age and gender***

- *Gender*

- *Total*
 - Male
 - Female

- *Age groups by gender*

- *Total*
 - 0-15
 - 16+
 - 16-64
 - 65+

8. Inequality of income distribution: Gini coefficient

This is the relationship between cumulative shares of the population arranged according to the level of income and the cumulative share of total income received by them. If there was perfect equality (i.e. each person receives the same income) the Gini coefficient would be 0%. A Gini coefficient of 100% would indicate there was total inequality and the entire national income was in the hands of one person. As for example, if Gini Coefficient has been calculated equal to 30% this means that if we randomly choose 2 persons, then it is expected that their income to differ by 30% from the mean income.

9. At-persistent-risk-of-poverty rate, by age and gender (50% median)

Share of population with an equivalised disposable income consistently below the ‘at-risk-of-poverty threshold’ for a four-year period. The ‘at-risk-of-poverty threshold’ defined as 50% of the median-equivalised disposable income. This indicator will be calculated with EU-SILC longitudinal component after 4 years of the panel survey

Breakdown by:

- ***Age and gender***

- *Gender*

- *Total*
 - Male
 - Female

- *Age groups by gender*

- *Total*
 - 0-15
 - 0-64
 - 16+
 - 16-64
 - 16-24
 - 25-49
 - 50-64
 - 65+

10. Mean equivalised disposable income

The equivalised disposable income is defined as the mean of the equivalised disposable income of each person.

11. The gender pay gap

The ‘gender pay gap in unadjusted form’ is the difference between men’s and women’s average gross hourly earnings as a percentage of men’s average gross hourly earnings. The population consists of all paid employees aged 16 – 64 that are ‘at work > 15 hours per week’. (

For further information

- EU-SILC 131-rev/04, Working Group on Statistics on Income and Living Conditions (EU-SILC) 29-30 March 2004, Eurostat, Luxembourg, Common Cross-sectional EU indicators based on EU-SILC; the gender pay

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