



# SILC DISCLOSURE CONTROL RULES

YEAR 2020

## CROSS-SECTIONAL DATA

### DIFFERENCES BETWEEN ORIGINAL DATABASE (as described in the guidelines) AND THE ANONYMISED USER DATABASE

In order to ensure disclosure control and confidentiality of the UDB, some variables collected were removed or changed. On the other hand, in order to ease the use of the data, some variables were added.

This document summarizes the changes between the data collected by countries as described in the 2020 guidelines and the user database.

## 1. GENERAL RULES

Applied for all countries except when specified on point 2

### INCOME VARIABLES

All variables are in € (EURO). For the countries, not members of the euro area the conversion factor can be found in variables **HX010** and **PX010**.

Income data (euro) i.e. **HY020** \* **HX010** = income data (national currency).

### VARIABLES ADDED

**RX010**: Age at the time of interview

**RX020**: Age at the end of income reference period

**RX030**: Household identification number

**RX040**: Work intensity

**RX050**: Low work intensity status (0=no lwi, 1=lwi, 2=N/A)

**RX060**: Severely materially deprived (0=not deprived, 1=deprived)

**RX070**: At risk of poverty or social exclusion (1st digit= at risk of poverty, 2nd digit= Severely materially deprived, 3rd digit= Low work intensity (0 when LWI in (0,2) 1 when LWI=1)

***HX010:*** Change rate  
***HX040:*** Household size  
***HX050:*** Equivalised household size  
***HX060:*** Household type  
***HX070:*** Tenure status  
***HX080:*** Poverty indicator  
***HX090:*** Equivalised disposable income  
***HX120:*** Overcrowded household (*0=not overcrowded, 1=overcrowded, .=N/A*)

***PX010:*** Change rate  
***PX020:*** Age at the end of the income reference period  
***PX030:*** Household identification number  
***PX040:*** Selected respondent status  
***PX050:*** Activity status

## VARIABLES REMOVED

***DB050:*** Primary strata  
***DB080:*** Household design weight  
***DB120:*** Contact at address  
***DB130:*** Household questionnaire result  
***DB135:*** Household interview acceptance  
  
***HB040:*** Day of household interview  
  
***PB070:*** Personal design weight for selected respondent  
***PB090:*** Day of the personal interview  
***PB220B:*** Citizenship 2

## TOP/BOTTOM CODING

***RB080:*** Year of birth  
     → Year of survey minus 81 and below.  
  
***RX010:*** Age at the time of interview  
***RX020:*** Age at the end of income reference period  
     → 80 and above.  
  
***HH030:*** Number of rooms available to the household  
     → 6 and above.  
  
***PB140:*** Year of birth  
     → Year of survey minus 81 and below.  
  
***PE020:*** ISCED level currently attended  
     → 50 and above.  
  
***PE040:*** Highest ISCED level attained

→ 500 and above.

**PX020:** Age at the time of interview

→ 80 and above.

<b>GROUPING / RECODING / PROCESSING</b>
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**DB040:** NUTS

→ NUTS 1 level only.

**RB031:** Year of immigration

→ Grouped in 5-year classes according to:

**2020 - 2016** = 2020

**2015 - 2011** = 2015

**2010 - 2006** = 2010

**2005 - 2001** = 2005

**2000 - 1996** = 2000

**1995 - 1991** = 1995

**1990 - 1986** = 1990

**1985 - 1981** = 1985

**1980 - 1976** = 1980

**1975 - 1971** = 1975

**1970 - 1966** = 1970

**1965 - 1961** = 1965

**1960 - 1956** = 1960

**1955 - 1951** = 1955

**1950 - 1946** = 1950

**1945 - 1941** = 1945

**<=1940** = 1940

**RB070:** Month of birth

→ Grouped into quarters.

**HB050:** Month of household interview

→ Grouped into quarters.

**HH010:** Dwelling type

→ 5 recoded as missing.

**PB130:** Month of birth

→ Grouped in quarter.

**PB210:** Country of birth

→ Recoded "LOC", "EU" "OTH".

**PB220A:** Citizenship 1

→ Recoded "LOC", "EU" "OTH".

**PB100:** Month of the personal interview

→ Grouped into quarters.

**PL111: NACE (Rev 2)**

1 – 3= " a" /\* Agriculture, forestry and fishing\*/  
5 – 39="b – e"/\* Mining and quarrying, Manufacturing, Electricity, gas, steam and air conditioning supply, Water supply\*/  
41 – 43=" f" /\* Construction \*/  
45 – 47=" g" /\* Wholesale retail \*/  
49 – 53=" h" /\* Transportation and storage\*/  
55 – 56=" i" /\* Accommodation and food service activities\*/  
58 – 63=" j" /\* Information and communication \*/  
64 – 66=" k" /\* Financial and insurance activities \*/  
68 – 82="l – n" /\* Real estate activities, Professional, scientific and technical activities, Administrative and support service activities \*/  
84=" o" /\* Public administration and defence, compulsory social security \*/  
85=" p" /\* Education \*/  
86 – 88=" q" /\* Human health and social work activities\*/  
90 – 99="r – u"/\* Arts, entertainment and recreation, Other service activities, Activities as household as employer..., Activities of extraterritorial organisations and bodies\*/

<b>PERTURBATION / PROCESSING</b>
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**DB030: Household ID**

→ Randomised and appropriate modification of related identification numbers (**RB030, RX030, RB220, RB230, RB240, RB270, HB030, HB070, HB080, HB090, PB030, PX030, PB160, PB170, PB180**).

**DB060: PSU-1 (first stage)**

→ Randomised.

**DB062: PSU-2 (second stage)**

→ Randomised.

## **2. COUNTRY SPECIFIC RULES**

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<b>IT</b>
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**PE020: ISCED level currently attended**

→ 30, 34, 35 grouped into 30.  
→ 40, 44, 45 grouped into 40.

**PE040: Highest ISCED level attained**

→ 300, 340, 342, 343, 344, 350, 352, 353, 354 grouped into 300.  
→ 40, 440, 450 grouped into 400.

### 3. ADDITIONAL VARIABLES

#### **RX010: Age at the time of interview**

A household member coded "80" is 80 years old or over

*RX010* is calculated by subtracting date of birth (in year and month) from date of interview (in year and month). *RX010* may vary from one digit compared to real age at the exact day of interview, as the day of birth is not known.

#### **RX020: Age at the end of income reference period**

A household member coded "80" is 80 or over

A household member coded "-1" is born between the end of income reference period and the data collection

#### **RX030: Household identification number**

*RX030* = *DB030*

#### **RX040: Work intensity**

Continuous variable from 0 to 1 (People older than 59 has *WORK\_INT* = 99)

Based on persons aged 18-59 (students excluded)

The work intensity status is assigned to each household member

#### **RX050: Low work intensity status**

0= no LWI, 1= LWI, 2= N/A

#### **RX060: Severely materially deprived household**

0=not severely deprived, 1= severely deprived

#### **RX070: At risk of poverty or social exclusion**

1st digit= at risk of poverty, 2nd digit= severely materially deprived, 3rd digit= low work intensity (0 when LWI in (0,2) 1 when LWI=1)

#### **HX010: Change rate**

Conversion factor: euro / national currency

It is the average exchange rate based on the year prior to the survey

The value is missing when the national currency is the Euro

Income data (euro) i. e. *HY020* \* *HX010* = income data (national currency)

Should you wish to compute the amount in ppp (purchasing power parities), apply:

- For countries members of the euro area: *HY020/ ppp*
- For countries not members of the euro area: *HY020\*HX010/ ppp*

The ppp values of each country can be found in the XL-file included in the UDB documentation on CIRCABC.

#### **HX040: Household size**

Number of current household members

In practise; number of person pertaining to the same household having an observation in the R-file (personal register file)

#### **HX050: Equivalised household size**

Calculation of equivalised household size

Let us consider:

- *HM14+* : number of household members aged 14 and over (at the end of income reference period)
- *HM13-* : number of household members aged 13 or less(at the end of income reference period)

The equivalised household size is defined as:

$$HX050= 1+ 0.5 * (HM14+ -1) + 0.3 * HM13-$$

#### **HX060: Household type**

- 5 - One person household
- 6 - 2 adults, no dependent children, both adults under 65 years
- 7 - 2 adults, no dependent children, at least one adult 65 years or more
- 8 - Other households without dependent children
- 9 - Single parent household, one or more dependent children
- 10 - 2 adults, one dependent child
- 11 - 2 adults, two dependent children
- 12 - 2 adults, three or more dependent children
- 13 - Other households with dependent children
- 16- Other (these household are excluded from Laeken indicators calculation)

Where dependent children is defined as:

- Household members aged 17 or less
- Household members aged between 18 and 24; economically inactive and living with at least one parent.

### **HX070: Tenure status**

*HX070* is derived from *HH021* and is used to calculate all “by tenure status” LAEKEN indicators

if *HH021* in (1,2,5) then *TENSTA* =1;

else if *HH021* in (3,4) then *TENSTA* =2;

else *TENSTA* =.;

### **HX080: Poverty indicator**

*HX080* = 0    when *HX090* >= at risk of poverty threshold (60% of MEDIAN *HX090*)

*HX080* = 1    when *HX090* < at risk of poverty threshold (60% of MEDIAN *HX090*)

### **HX090: Equivalised disposable income**

*HX090* = (*HY020* / *HX050*)

### **HX120: Overcrowded household**

0 = not overcrowded, 1 = overcrowded, . = N/A

### **PX010: Change rate**

Conversion factor: euro / national currency

It is the average exchange rate based on the year prior to the survey

The value is missing when the national currency is the Euro

Income data (euros) \* *PX010* = income data (national currency)

### **PX020: Age at the end of the income reference period**

A household member coded "80" has 80 or over

A household member coded "-1" is born between the end of income reference period and the data collection

### **PX030: Household identification number**

*PX030* = *DB030*

### **PX040: Selected respondent status**

*PX040* = *RB245*

### **PX050: Activity status**

1 =

- 2 = SAL
- 3 = NSAL
- 4 = other employed (when time of SAL and NSAL is  $> \frac{1}{2}$  of total time calendar)
- 5 = unemployed
- 6 = retired
- 7 = inactive
- 8 = other inactive (when time of unemployed, retirement and inactivity is  $> \frac{1}{2}$  of total time calendar)

<b>Income flags</b>
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1) *HY040N, HY050N, HY060N, HY070N, HY080N, HY081N, HY090N, HY110N, HY130N, HY131N, HY170N, PY010N, PY020N, PY021N, PY050N, PY070N, PY080N, PY090N, PY100N, PY110N, PY120N, PY130N, PY140N*:

- *VAR\_F* contains 2 digits: 1st digit=collected net or gross + 2nd digit=type of net recorded value
- *VAR\_I* contains: first digit=imputation method + from the 2nd digit=imputation factor

2) *HY100N, HY120N, HY140N, HY145N, HY040G, HY050G, HY060G, HY070G, HY080G, HY081G, HY090G, HY100G, HY110G, HY120G, HY130G, HY140G, HY170G, HY010, HY020, HY022, HY023, PY035N, PY010G, PY020G, PY021G, PY030G, PY031G, PY035G, PY050G, PY070G, PY080G, PY090G, PY100G, PY110G, PY120G, PY130G, PY140G, PY200G*:

- *VAR\_F* contains only collected net or gross.
- *VAR\_I* contains: 1st digit=imputation method + from the 2nd digit=imputation factor. If *VAR\_F* = "-" or "0" then *VAR\_I*=.

Definition in Doc65:

Imputation factor = (collected value / recorded value) \* 100

Example:

Collected value = 912

Recorded value = 1000

Imputation factor to be recorded: 091