SILC DISCLOSURE CONTROL RULES

YEAR 2018

LONGITUDINAL 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 2018 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

(computed only for RB110 in (1,2,3,4))

- RX010: Age at the time of interview
- RX020: Age at the end of income reference period
- HX010: Change rate
- HX040: Household size
- HX050: Equivalised household size
- HX090: Equivalised disposable income
- HX100: Equivalised disposable income quintile
PX010: Change rate
PX020: Age at the end of the income reference period
PX030: Household identification number
PX040: Selected respondent status

**VARIABLES REMOVED**

DB050: Primary strata
DB061: (not provided by all countries)
DB063: (not provided by all countries)
DB071: (not provided by all countries)
DB073: (not provided by all countries)
DB080: Household design weight
DB120: Contact at address
DB130: Household questionnaire result
DB135: Household interview acceptance

HB040: Day of household interview
HH070: Total housing cost
HH071: Mortgage principal repayment
HS160: Problems with the dwelling: too dark, not enough light
HS170: Noise from neighbours or from the street
HS180: Pollution, grime or other environment problems
HS190: Crime, violence or vandalism in the area

PB040: Personal cross-sectional weight
PB060: Personal cross-sectional weight for selected respondent

PB070: Personal design weight for selected respondent
PB090: Day of the personal interview

PB210: Country of birth
PB220A: Citizenship 1
PB220B: Citizenship 2
PE010: Current education activity
PE020: ISCED level currently attended
PE030: Year when highest level of education was attained
PH040: Unmet need for medical examination or treatment
PH050: Main reason for unmet need for medical examination or treatment
PH060: Unmet need for dental examination or treatment
PH070: Main reason for unmet need for dental examination or treatment
PL015: Whether person has ever worked
PL035: Worked at least one hour during the previous week
PL073: Number of months spent at full-time work as employee
PL074: Number of months spent at part-time work as employee
PL075: Number of months spent at full-time work as self-employed (including family worker)
**PL076:** Number of months spent at part-time work as self-employed (including family worker)  
**PL080:** Number of months spent in unemployment  
**PL085:** Number of months spent in retirement or early retirement  
**PL086:** Number of months spent as disabled or/and unfit to work  
**PL087:** Number of months spent studying  
**PL088:** Number of months spent in compulsory military service  
**PL089:** Number of months spent fulfilling domestic tasks and care responsibilities  
**PL090:** Number of months spent in other inactivity  
**PL100:** Total number of hours usually worked in second, third, … jobs  
**PL111:** NACE Rev.2  
**PL120:** Reason for working less than 30 hours  
**PL130:** Number of persons working at the local unit  
**PL150:** Managerial position  
**PY200g:** Gross monthly earnings for employees

**RB031:** Year of immigration  
**RB050:** Personal cross-sectional weight  
**RL010:** Education at pre-school  
**RL020:** Education at compulsory school  
**RL030:** Childcare at centre-based services  
**RL040:** Childcare at day-care centre  
**RL050:** Childcare by a professional child-minder at child's home or at child-minder’s home  
**RL060:** Childcare by grand-parents, other household members (outside parents), other relatives, friends or neighbours  
**RL070:** Childrens’ cross-sectional weight for childcare

### 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.

**PE040:** Highest ISCED level attained  
→ 5 and above for year < 2014.  
→ 500 and above for year >= 2014.

**PX020:** Age at the end of the income reference period  
→ 80 and above.
GROUPING / RECODING / PROCESSING

**DB040**: NUTS
→ NUTS 1 level only.

**RB070**: Month of birth
→ Grouped into quarters.

**RB140**: Month when the person moved out or died
→ Grouped into quarters.

**RB180**: Month when the person moved in
→ Grouped into quarters.

**HB050**: Month of household interview
→ Grouped into quarters.

**HH010**: Dwelling type
→ 5 recoded as missing.

**PB130**: Month of birth
→ Grouped into quarter.

**PB100**: Month of the personal interview
→ Grouped into quarters.

PERTURBATION / PROCESSING

**DB060**: PSU-1 (first stage)
→ Randomised.

**DB062**: PSU-2 (second stage)
→ Randomised.

2. **COUNTRY SPECIFIC RULES**

**BE**

**RB140**: Month when the person moved out or died
→ Not recoded in quarters.

**RB180**: Month when the person moved in
→ Not recoded in quarters.
No randomisation of Household and Personal ID

No randomisation of PSU1 and PSU2.

**DB040**: Region
→ NUTS2.

**DE**

*HX040*: Household size
→ All records (at household and individual level) of Households with size 7 or over suppressed.

**DB040**: NUTS

**DB100**: Degree of urbanization

**RB070**: Month of birth

**RB140**: Month moved out or died

**RB160**: Number of months in household during income reference period

**RB180**: Month moved in

**HH010**: Dwelling type

**HH030**: Rooms available to the household

**HH081**: Bath or shower in dwelling

**HH091**: Indoor flushing toilet for sole use of household

**PB130**: Month of birth
→ Not provided.

**RB080**: Year of birth
→ Bottom coding and random perturbation performed at the first year a person participates in the survey.
→ The year of birth and age variables should be consistent over time in the longitudinal data file.
→ Bottom coding:
• implemented for every person who is at least 66 years (RB080 ≤ RB010-67) in his/her first year of participation;
• recoded to $RB080a=RB010-67$.
→ Random perturbation inside year age classes not exceeding 5 years:
• every person below 66 years (except new-born babies) is assigned to a perturbation class according to their year of birth in five year intervals in the first year of participation in the survey;
• new-born babies (RB110=4) are assigned to a separate perturbation class;
• within the perturbation classes, each person in that class is assigned a new year of birth $RB080a$ from the original values of $RB080$ in that class;
• when a person is assigned an anonymized year of birth on the first year, $RB080a$ in consecutive years is filled with $RB080a$ of the first year in the survey;
• thresholds for the classes are constant over time; the maximum range for the year of birth included in one perturbation class is 5 and the minimum is 1.

**PB140**: Year of birth
RX010: Age at the time of interview
RX020, PX020: Age at the end of income reference period
   → Recalculated using RB080a defined above.

RB090: Sex
PB150: Sex
   → Recoded sex for one partner when a couple is in a same sex relationship:
   • the sex of the younger partner should be female and that of the older male;
   • if a new same-sex partner moves into the household, only the sex of the new partner is adjusted.

PE040: Highest ISCED Level Attained
   → Additional to top coding, group PE040:
   340 - 354 = 300 “Upper secondary education (not further specified)”
   440 - 450 = 400 “Post-secondary non-tertiary education (not further specified)”

PL051: Occupation (ISCO-08)
   → Grouped according to:
   11 - 14 = 1 “Managers”
   21 - 26 = 2 “Professionals”
   31 - 35 = 3 “Technicians and associate professionals”
   41 - 44 = 4 “Clerical support workers”
   51 - 54 = 5 “Services and sales workers”
   61 - 63 = 6 “Skilled agricultural and fishery workers”
   71 - 75 = 7 “Craft and related trades workers”
   81 - 83 = 8 “Plant and machine operators and assemblers”
   91 - 96 = 9 “Elementary occupations”
   01 - 03 = 0 “Armed forces occupations”

HY040G/HY040N: Income from rental of a property or land
HY090G/HY090N: Interest, dividends, profit from capital investments in unincorporated business
HY140G/HY140N: Tax on income and social contributions
   → Top coding and replacement by mean of 5 highest values for each year separately:
   • select the 5 highest values for each of the variables;
   • replace them with the weighted mean of those 5 values.

HY140G/HY140N: Tax on income and social contributions
   → Bottom coding and replacement by mean of 3 lowest values for each year separately:
   • select the 3 lowest negative values (adjust the number if there are less than 3 such records);
   • replace them with the weighted mean of those 3 values.

PY010G/PY010N: Employee cash or near cash income
PY050G/PY050N: Cash benefits or losses from self-employment
PY080G/PY080N: Pension from individual private plans
PY090G/PY090N: Unemployment benefits
PY100G/PY100N: Old-age benefits
→ Top coding and replacement by mean of 5 highest values for each year separately:
- calculate the sum of income variable over all household members;
- select the 5 highest values of the sum;
- replace them with the weighted mean of those 5 summed up values;
- divide the mean between all household members according to their previous share of the sum.

**PY050G/PY050N**: Cash benefits or losses from self-employment
→ Bottom coding and replacement by mean of 3 lowest values for each year separately:
- calculate the sum of this variable over all household members;
- select the 3 lowest negative values (adjust the number if there are less than 3 such records);
- replace them with the weighted mean of those 3 summed up values;
- divide the mean between all household members according to their previous share of the sum.

**PY091G**: Unemployment benefits (C & MT)
**PY092G**: Unemployment benefits (C & NMT)
**PY093G**: Unemployment benefits (NC & MT)
**PY094G**: Unemployment benefits (NC & NMT)
**PY101G**: Old-age benefits (C & MT)
**PY102G**: Old-age benefits (C & NMT)
**PY103G**: Old-age benefits (NC & MT)
**PY104G**: Old-age benefits (NC & NMT)
→ Adjust to top-coded variables **PY090G** and **PY100G** according to their share of the original variables.

**HY010**: Total household gross income
**HY020**: Total disposable household income
**HY022**: Total disposable household income before social transfers other than old-age and survivor’s benefits
**HY023**: Total disposable household income before social transfers including old-age and survivor’s benefits
→ Adjust for the difference between the original and the top-coded variables **HY040G**, **HY090G**, **HY140G**, **PY010G**, **PY050G**, **PY080G**, **PY090G** and **PY100G**.
→ If the sign of **HY020** changes due to anonymization of its components, further adjust **HY140G** for the difference of the anonymized and original values of the income components so that **HY020** keeps its original value.

**HX090**: Equivalised disposable income benefits
→ Adjust for the difference between the original and the top-coded variables **HY040G**, **HY090G**, **HY140G**, **PY010G**, **PY050G**, **PY080G**, **PY090G** and **PY100G**.

**RB110**: Membership status
→ Recoding 6 “Died” to 5 “Moved out since prev. wave”
   In that case: RB120 recoding to 4 (Lost)
**EE**

**DB100**: Degree of urbanisation  
→ Merging "2" and "1" into "1".

**HY010**: Total household gross income  
**HY020**: Total disposable household income  
**HY022**: Total disposable household income before social transfers other than old-age and survivor's benefits  
**HY023**: Total disposable household income before social transfers including old-age and survivor's benefits  
**HY090G**: Net interest, dividends, profit from capital investment in unincorporated business  
**HY120G**: Regular taxes on wealth  
**HY140G**: Tax on income and social insurance contribution  
→ Perturbation of 3 highest **HY010** incomes:  
  • selection of the 3 highest **HY010**;  
  • replacement of recorded value by their weighted mean for **HY010, HY020, HY022, HY023, HY090G, HY120G and HY140G**;  
  • proportional adjustment of the related income sub-components.

**ES**

**DB040**: Region  
→ NUTS2.

**FI**

**DB040**: Region  
→ NUTS2 with FI20 included in FI1B.

**RB080**: Year of birth  
**RX010**: Age at the time of interview  
**RX020**: Age at the end of income reference period  
**PB140**: Year of birth  
**PX020**: Age at the end of income reference period  
→ Random perturbation of **RB080** inside appropriate year age classes (not exceeding 5 years) and appropriate modification of related age variables on selected households for all waves.

**FR**

**DB040**: Region  
→ NUTS2
**PY010G/N, PY050G/N, PY080G/N, PY090-1-2-3-4G/N, PY100-1-2-3-4G/N, PY110-1-2-3-4G/N, PY130-1-2-3-4G/N, HY020, HY022, HY023, HY040G/N, HY080G/N, HY081G/N, HY090G/N, HY130G/N, HY131G/N, HY145N**

→ Rounded to the next 10 €.

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**IE**

**RB070**: Month of birth  
→ Not provided.

**PB130**: Month of birth  
→ Not provided.

**PE040**: Highest ISCED Level Attained  
→ Additional to top coding, group PE040:  
340 - 354 = 300 “Upper secondary education (not further specified)”  
440 - 450 = 400 “Post-secondary non-tertiary education (not further specified)”

**PL170**: Reason to change – Combine:  
→ 4 – Sale or closure of own/family business into  
7 – Other reasons

**PL180**: Most recent change in the individual’s activity status – Recoded:  
→ 1 – 3 = 1 – Employed – other  
4 – 6 = 2 – Unemployed – other  
7 – 9 = 3 – Retired - other  
10 – 12 = 4 – Other inactive – other

**PL190**: When began first regular job – bottom and top-coding:  
→ < 13 = 13  
> 30 = 30

**PL200**: Number of years spent in paid work – top coding  
→ > 55 = 55.

**HY010**: Total household gross income  
**HY020**: Total disposable household income  
**HY022**: Total disposable household income before social transfers other than old-age and survivor’s benefits  
**HY023**: Total disposable household income before social transfers including old-age and survivor’s benefits

→ Rounded to the next 10 €.

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**IS**

**HY010**: Total household gross income  
**HY020**: Total disposable household income  
**HY022**: Total disposable household income before social transfers other than old-age and survivor’s benefits  
**HY023**: Total disposable household income before social transfers including old-age and survivor’s benefits
**HY090G**: Net interest, dividends, profit from capital investment in unincorporated business

**HY120G**: Regular taxes on wealth

**HY140G**: Tax on income and social insurance contribution

→ Perturbation of 3 highest HY010 incomes for each wave:
  - selection of the 3 highest HY010;
  - replacement of recorded value by their weighted mean for HY010, HY020, HY022, HY023, HY090G, HY120G and HY140G;
  - proportional adjustment of the related income sub-components.

**RB080**: Year of birth

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

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

**PB140**: Year of birth

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

→ Random perturbation of RB080 inside appropriate year age classes (not exceeding 5 years) and appropriate modification of related age variables for 4 household with highest HY010 in each year, and appropriate modification for all waves.

**IT**

**PE040**: Highest ISCED level attained

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

**LV**

**DB100**: Degree of urbanisation

→ Merging "2" and "1" into "1".

**MT**

**DB100**: Degree of urbanisation

→ Merging "2" and "3" into "2".

**HX040**: Household size

→ Top-coded to "6".

**PB190**: Marital status

→ Recoded 3 and 5 into 3.

**PL051**: Occupation (ISCO-08)

→ Grouped according to:
  11 – 14 = “I” – Legislators, senior officials and managers
  21 – 26 = “2” – Professionals
  31 – 35 = “3” – Technicians and associate professionals
  41 – 44 = “4” – Clerks
51 – 54 = “5” – Service workers and shop and market sales workers
61 – 63 = “6” – Skilled agricultural and fishery workers
71 – 75 = “7” – Craft and related trades workers
81 – 83 = “8” – Plant and machine operators and assemblers
91 – 96 = “9” – Elementary occupations
01 = “10” – Armed forces

**PL180:** Most recent change in the individual's activity status – Recoded:

- 1 – 3 = 1 – Employed – other
- 4 – 6 = 2 – Unemployed – other
- 7 – 9 = 3 – Retired - other
- 10 – 12 = 4 – Other inactive – other

**PB130:** Month of birth

**RB070:** Month of birth

→ Not provided.

**RB080, PB140**

→ Bottom coding: year of survey minus 80 and below.
→ 5-year groups as follows:
  - 1937 or before
  - 1938-1942
  - 1943-1947
  - 1948-1952
  - 1953-1957
  - 1958-1962
  - 1963-1967
  - 1968-1972
  - 1973-1977
  - 1978-1982
  - 1983-1987
  - 1988-1992
  - 1993-1997
  - 1998-2002
  - 2003-2007
  - 2008-2012
  - 2013-2018

**RX010, RX020:**

→ Not provided

**PE040:** Highest ISCED level attained

→ 5 and above for year < 2014.
→ 500 and above for year >= 2014.
→ 300, 340, 342, 343, 344, 350, 352, 353 and 354 grouped into one category.
→ 400, 440 and 450 grouped into one category.

**PL031:** Self-defined current economic status

→ 6 and above, top-coded to "6".

**PX020:** Age at the end of the income reference period
→ Variable to be removed.

HH060; HH070; HH071; HS130; HX040; HX040; HX090; HX090; HY010; HY020; HY022; HY023; HY030; HY040; HY050; HY052; HY053; HY054; HY060; HY063; HY070; HY073; HY080; HY081G; HY090; HY100G; HY110G; HY130G; HY131G; HY140G; PL060; PY010G; PY020G; PY021G; PY035G; PY050G; PY080G; PY090G; PY100G; PY110G; PY120G; PY130G; PY140G

As ‘continuous/quantitative variables’;

→ Detection and elimination of outliers in a ‘unique combination’ of Sex, 5 year age group and degree of urbanisation.

If a ‘continuous/quantitative variable’ of a person in a ‘unique combination’ is an outlier then the ‘continuous/quantitative variable’ is bottom/top coded to the Lower / Upper risk threshold of the ‘continuous/quantitative variable’.

**Method of ‘unique combination’ (persons that are unique in their group):**

- The ‘unique combination’ is checked in person data.
- The variables participating in the construction of the groups of ‘unique combination’:
  1. Sex (RB090)
  2. Age at the end of income reference period (PX020)
  3. Degree of urbanisation (DB100)

Outliers of the ‘continuous/quantitative variables’ of the persons in the ‘unique combinations’ are detected. If there is no ‘unique combination’ then there is no need to check and detect outliers.

**Method of detection of outliers for each ‘continuous/quantitative variables’:**

An outlier is a ‘continuous/quantitative variable’ outside the interval below.

Lower Risk Threshold < ‘pro capite’ value < Upper Risk Threshold

Whereby the ‘pro capite’ value is

- The actual value of the numeric variable divided by the total number of members in the household in case of household variables.
- The actual value (i.e. no division is done) of the variable related to individuals.

The thresholds are calculated using the whole population.

Lower Risk Threshold= Q1-3*IQR
Upper Risk Threshold=Q3+3*IQR

Q1 = Quartile 1 (i.e. the 25th percentile)
Q3 = Quartile 3 (i.e. the 75th percentile)
IQR = Q3-Q1

The ‘continuous/quantitative variable’ outliers are bottom/top coded.
Method of the top/bottom coding

- In case of household variables the Lower/Upper Risk Threshold is multiplied by the members in the household.
- In case of individuals (person-related variables) the Lower/Upper Risk Threshold (i.e. no multiplication is done) substitutes the actual value.

**NL**

- **DB040**: Region
- **DB100**: Degree of urbanisation
- **RB070**: Month of birth
- **PB130**: Month of birth
  → Not provided.

- **RB140**: Month when the person moved out or died
- **RB180**: Month when the person moved in
  → Not provided.

**PL**

- **PE040**: Highest ISCED level attained
  → Not top-coded.

**PT**

- **DB040**: Region
  → NUTS2.

- **HH031**: Year of contract or purchasing or installation
  → Bottom coding: year of survey minus 55 and below.

- **RB080**: Year of birth
  → Bottom coding: year of survey minus 80 and below.

- **PB140**: Year of birth
  → Bottom coding: year of survey minus 80 and below.

- **PL200**: number of years spent in paid work
  → Top coding 65 and above.

- **PL051**: Occupation (ISCO-08 (com))
  - if **PL051** in (11,12,13,14) → Grouping 14;

**SI**

For each wave:

- **DB100**: Degree of urbanisation
**RB070**: Month of birth  
**PB130**: Month of birth  
→ Not provided.

**HH031**: Year of contract or purchasing or installation  
→ Bottom coding: year of survey minus 71 and below.

**PE040**: Highest ISCED level attained  
→ Bottom coding: grouping 0, 1, 2 into 2 for year < 2014.  
→ Bottom coding: grouping 000, 100, 200 into 200 for year >= 2014.

**PL051**: Occupation (ISCO-08 (COM))  
→ Grouping according to the first digit.

**HY040G/HY040N**: Income from rental of a property or land  
**HY050G/HY050N**: Family/Children-related allowances  
**HY060G/HY060N**: Social exclusion not elsewhere classified  
**HY070G/HY070N**: Housing allowances  
**HY090G/HY090N**: Interest, dividends, profit from capital investments in unincorporated business  
**HY110G/HY110N**: Income received by people aged under 16  
**HY120G/HY120N**: Regular taxes on wealth  
**PY035G/PY035N**: Contributions to individual private pension plans  
**PY080G/PY080N**: Pension from individual private plans  
**HY081G/HY081N**: Alimonies received (compulsory + voluntary)  
**HY131G/HY131N**: Alimonies paid (compulsory + voluntary)  
**PY021G/PY021N**: Company car  
→ Top coding »10-20« (version 1), i.e.:  
• selection of the 10 IDs with the highest original value of the gross variable;  
• selection of the 10 IDs with the highest original value of the net variable;  
• union of selected IDs (contains at least 10 and not more than 20 IDs);  
for the IDs from the union:  
• replacement of original values with weighted average for the gross variable;  
• replacement of original values with weighted average for the net variable.  
→ Rounded to the nearest 10 €.

**HY080G/HY080N**: Regular inter-household cash transfer received (related variables are **HY081G/HY081N**: Alimonies received (compulsory + voluntary))  
**HY130G/HY130N**: Regular inter-household cash transfer paid (related variables are **HY131G/HY131N**: Alimonies paid (compulsory + voluntary))  
**PY020G/PY020N**: Non-Cash employee income (related variables are **PY021G/PY021N**: Company car)  
→ Top coding »10-40«, i.e.:  
• selection of the 10 IDs with the highest original value of the gross variable;  
• selection of the 10 IDs with the highest original value of the net variable;  
• among the 10 IDs with the highest original value of the related gross variable, selection of IDs for which the original value of the gross variable is greater or equal than the original value of the related gross variable;
• among the 10 IDs with the highest original value of the related net variable, selection of IDs for which the original value of the net variable is greater or equal than the original value of the related net variable;
• union of selected IDs (contains at least 10 and not more than 40 IDs); for the IDs from the union:
  • replacement of original values with weighted average for the gross variable;
  • replacement of original values with weighted average for the net variable.
→ Rounded to the nearest 10 €.

**PY031G**: Optional employer’s social insurance contributions
→ Top coding: for the highest 10 original values, replacement of original values with their weighted average.
→ Rounded to the nearest 10 €.

**PY030G**: Employer's social insurance contribution (related variable is **PY031G**: Optional employer's social insurance contributions)
→ Top coding »10-20 (version 2)«, i.e.:
  • selection of the 10 IDs with the highest original value of the variable;
  • selection of the 10 IDs with the highest original value of the related variable;
  • union of selected IDs (contains at least 10 and not more than 20 IDs); for the IDs from the union:
  • replacement of original values with weighted average for the variable.
→ Rounded to the nearest 10 €.

**PY010G/PY010N**: Employee cash or near cash income
**PY050G/PY050N**: Cash benefits or losses from self-employment
**PY090G/PY090N**: Unemployment benefits
**PY100G/PY100N**: Old-age benefits
**PY110G/PY110N**: Survivor’s benefits
**PY120G/PY120N**: Sickness benefits
**PY130G/PY130N**: Disability benefits
**PY140G/PY140N**: Education-related allowances
→ Top coding »20-40«, i.e.:
  • selection of the 20 IDs with the highest original value of the gross variable;
  • selection of the 20 IDs with the highest original value of the net variable;
  • union of selected IDs (contains at least 20 and not more than 40 IDs); for the IDs from the union:
  • replacement of original values with weighted average for the gross variable;
  • replacement of original values with weighted average for the net variable.
→ Rounded to the nearest 10 €.

**HY145N**: Repayments/receipts for tax adjustment
→ Top coding: for the highest 10 original values, replacement of the original values with their weighted average.
→ Bottom coding: for the lowest 10 original values, replacement of the original values with their weighted average.
→ Rounded to the nearest 10 €.

**HY010**: Total household gross income
**HY020**: Total disposable household income
HY022: Total disposable household income before social transfers other than old-age and survivor’s benefits

HY023: Total disposable household income before social transfers including old-age and survivor’s benefits

HY140G/HY140N: Tax on income and social contributions – calculated as HY140G = (HY040G-HY040N) + (HY050G-HY050N)+(HY060G-HY060N)+(HY070G-HY070N)+(HY110G-HY110N)+[for all household members](PY010G-PY010N)+(PY021G-PY021N)+(PY050G-PY050N)+(PY080G-PY080N)+(PY090G-PY090N)+(PY100G-PY100N)+(PY110G-PY110N)+(PY120G-PY120N)+(PY130G-PY130N)+(PY140G-PY140N)+HY145N

HY140N: Tax on income and social contributions – calculated as HY140N = HY140G

HY073G: Housing allowances (NC & MT) – calculated as HY073G = HY070G

PY122G: Sickness benefits (C & NMT) – calculated as PY122G = PY120G

HX090: Equivalised disposable income

→ Computed from other (already protected) variables.

HY052G: Family/Children-related allowances (C & NMT) (related variable is HY050G)

HY053G: Family/Children-related allowances (NC & MT) (related variable is HY050G)

HY054G: Family/Children-related allowances (NC & NMT) (related variable is HY050G)

HY063G: Social exclusion not elsewhere classified (NC & MT) (related variable is HY060G)

HY064G: Social exclusion not elsewhere classified (NC & NMT) (related variable is HY060G)

PY092G: Unemployment benefits (C & NMT) (related variable is PY090G)

PY094G: Unemployment benefits (NC & NMT) (related variable is PY090G)

PY102G: Old-age benefits (C & NMT) (related variable is PY100G)

PY103G: Old-age benefits (NC & MT) (related variable is PY100G)

PY104G: Old-age benefits (NC & NMT) (related variable is PY100G)

PY112G: Survivor’ benefits (C & NMT) (related variable is PY110G)

PY113G: Survivor’ benefits (NC & MT) (related variable is PY110G)

PY114G: Survivor’ benefits (NC & NMT) (related variable is PY110G)

PY132G: Disability benefits (C & NMT) (related variable is PY130G)

PY133G: Disability benefits (NC & MT) (related variable is PY130G)

PY134G: Disability benefits (NC & NMT) (related variable is PY130G)

PY143G: Education-related allowances (NC & MT) (related variable is PY140G)

PY144G: Education-related allowances (NC & NMT) (related variable is PY140G)

→ Calculate the share of the variable’s value in the non-protected related variable’s value. Replace the variable’s value so it will have the same share in the protected related variable’s value.

RB090: Sex

PB150: Sex

→ Recoded sex for one partner when a couple is in a same sex relationship:
  * the sex of the younger partner should be female and that of the older male;
  * if a new same-sex partner moves into the household, only the sex of the new partner is adjusted.
UK

All records (at household and individual level) pertaining to households of size 10 and over are suppressed.

**RB070**: Month of birth
**PB130**: Month of birth
→ Not provided.

**HY010**: Total household gross income
**HY020**: Total disposable household income
**HY022**: Total disposable household income before social transfers other than old-age and survivor's benefits
**HY023**: Total disposable household income before social transfers including old-age and survivor's benefits
**HY090G**: Net interest, dividends, profit from capital investment in unincorporated business
**HY120G**: Regular taxes on wealth
**HY140G**: Tax on income and social insurance contribution
→ Perturbation of 3 highest **HY010** incomes for each wave:
  • selection of the highest **HY010**;
  • replacement of recorded value by their weighted mean for **HY010**, **HY020**, **HY022**, **HY023**, **HY090G**, **HY120G** and **HY140G**;
  • proportional adjustment of the related income sub-components.

All **HY** and **PY** variables (including disaggregated variables), as well as **HH060**, **HH061**, **HH070**, **HH071** and **HS130** are rounded to the nearest 50 €.

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

**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. \(HY020 \times HX010\) = income data (national currency)

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

- For countries members of the euro area: \(HY020/\text{ppp}\)
- For countries not members of the euro area: \(HY020 \times HX010/\text{ppp}\)

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:

\[ HX050 = 1 + 0.5 \times (HM14^+ - 1) + 0.3 \times HM13^- \]

**HX090: Equivalised disposable income**

\[ HX090 = \frac{HY020}{HX050} \]

**HX100: Equivalised disposable income quintiles**

Values: 1 - 5

1: household pertains to the lower (1st) quintile
2: household pertains to the 2nd quintile
3: household pertains to the 3rd quintile
4: household pertains to the 4th quintile
5: household pertains to the upper (5th) quintile

**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

**Income flags**

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


- 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
4. VARIABLE CONTENT

D-file variables

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