

# Using EU-SILC for demographic analysis in Europe

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#### **EU-SILC**

#### European Union Statistic of Income and Living Conditions

#### Aim of the conference:

- Present different ways to use the EU-SILC to study fertility, marriage, and other aspects of demographic interest
- Create an international network of SILC-users working on demographic issues

First part of the conference: presentation of the dataset and on the quality of demographic measures

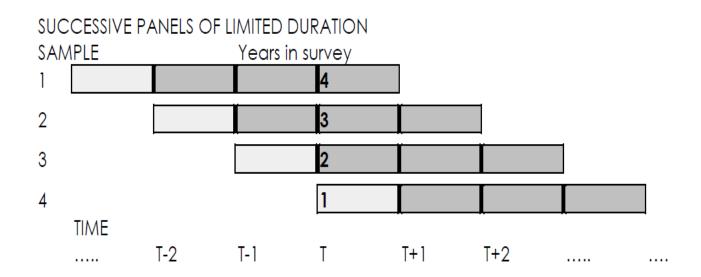
Second part of the conference: presentation of demographic research based on EU-SILC

#### Presentation of the database

- Harmonized survey provided by Eurostat
- Created in 2003 to replace the Euroean Community Household Panel (ECHP)
- Includes now 32 European countries
- Data at the individual and household level on on income, and living conditions (objective and subjective)
- Social exclusion and housing conditions collected at the household level (h-file)
- Education, income, labour market participation, health collected at the individual level (p-file for ages 16+)
- Demographic information on the individual level: r-file for all ages

## Desing of the database

- Two data types: cross-sectional data and longitudinal panel (4-year follow-up)
- Annual cross-sectional data are produced from the longitudinal panel (rotational panel)



### Design of the database

- Some countries provide a longer follow-up (FR, NO, LUX)
- No follow-up for Germany
- Most countries start in 2004 and 2005, several Eastern European countries joined later
- Households are generally followed when moving as a whole, but household-splits are difficult to follow (attrition)
- Attrition also in the CS data base (but information on rotational group)
- Cross-sectional weights, longitudinal weights

## Information on fertility

- No direct question about the number of children
- Children have their proper identification number (r-file: months and year of birth, sex, enrolment in education...)
- Merge of household members is possible (r-file: hh-id, partner-id, mother- and father-id)
- Own children method: children observed when living in the parental household
- No distinction possible between biological parents, adoptive parents, foster parents, step-parents... (risk of double-counts)
- Fertility-linked attrition (partners move toghether, household moves...), also in CS, not fully compensated by weights
- Children not observed any more when living outside the parental household

## Main advantages of EU-SILC

- Country coverage!
- Good economic measures: different income components, activity status on a monthly basis, hours worked per week, type of contract, hierarchy and sector...
- Partner merge possible
- GGS has lower country and time coverage, no partner information, less detailed employment measures
- ELFS: no information on income
- Follow-up allows distinguishing between causes and consequences of fertility behaviour

# Main pitfalls of EU-SILC

- Direct information on fertility is missing: risk of downward bias in TFR and CFR
- Migration, ethnic minorities: only distinction between natives, born in Europe and born outside Europe possible (but 2005 and 2011: intergenerational modules)
- Every country has its own data issues that have to be discovered by trial and error
  - Identic household-ids for different households
  - Monthly labour market status only observed for the principal respondent
  - Missings for health variables, type of contract
  - ....

More information on the EU-SILC database including a list of variables and the codebooks:

http://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions

#### Data Access:

http://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions

New tool to merge yearly published panels:

https://www.gesis.org/en/gml/european-microdata/eu-silc/

How about creating a research community?!

https://eu-islc.site.ined.fr/en/