# **DIW** Berlin

German Institute for Economic Research

### Introduction to the ECHP – Day 1

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#### Introduction

- Covered in the Course
  - Content of the ECHP
  - Structure of the UDB files
  - ➤ Transcript data files
  - Match data between units/across waves
  - Understand basic data issues
  - Sample weights
  - Further details



#### Introduction

- Outline/structure of the course
  - Morning session (9:30–12:30): presentation/lecture
  - Afternoon session (14:00–17:00): lab session



# Outline

- Monday: Getting started with the ECHP
- Tuesday: Cross-sectional issues and time-series
  matching
- Wednesday: Aggregation and matching across individuals
- Thursday: Longitudinal and cross-national analysis
- Friday: Exploring dimensions of living, online resources, looking ahead



### History of the ECHP

- 1991: Task Force on Household Incomes
- Task Force was mandated to assess whether income data in registers and existing national household surveys could be satisfactorily harmonised ex-post. → failure !
- Launch a specific EU survey, the European Community Household Panel (ECHP) with an input-oriented approach



### History of the ECHP

- Starting point: contract of Maastricht 1992
  - Creation of domestic market
  - Europe as 'social unit'
  - Definition of social objectives of member states
- Protocol on social policy:  $\S$  7: yearly reports
- Need for an harmonized, cross-national database

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# ECHP

- ECHP forms a closely co-ordinated component of the European system of social surveys.
- Information on living conditions of private households and persons: income (including social transfers etc.), labor, poverty, social exclusion, housing, health ....
- The multi-dimensional and multi-purpose nature of the survey enables the study of the interrelationships between these dimensions.
- supplies data on EU social dynamics i.e. it provides information on relationships and transitions over time at the micro level.



# ECHP

- Data are collected by National Data Collection Units (NDU).
- First wave (in 1994): 60,500 nationally representative households i.e. approximately 130,000 adults aged 16 years and over were interviewed in the then 12 Member States.
- 1995: Austria, 1996: Finland , 1997: Sweden



#### Main characteristics of the ECHP:

- 1. Panel survey: provides information on relationships and transitions over time at the micro level
- 2. Covers a wide range of topics concerning living conditions
- 3. Runs from 1994-2001
- **4**. Input harmonization ( $\rightarrow$  exceptions)



#### Harmonization issues

• Input harmonization



#### Harmonization issues

- Input harmonization
- Output harmonization



#### Harmonization issues

- Input harmonization
- Output harmonization
- Ex-ante harmonization

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#### Harmonization issues

- Input harmonization
- Output harmonization
- Ex-ante harmonization
- Ex-post harmonization



#### Harmonization issues II

- Most of the countries used the harmonized ECHP questionnaire.
- Some countries converted national data surveys into ECHP format
- Ex: Germany/United Kingdom: derived national data 1994–2001.
- Variables that were not collected in the national survey were imputed based on similar variables.



#### Countries

 $\langle M \rangle$ 

Countries	Full ECHP Data Format	ECHP Data Format derived from National Surveys
Belgium*, Denmark,France, Greece, Ireland, Italy, the Netherlands*, Spain, Portugal	1994-2001	_
Austria	1995–2001	_
Finland	1996–2001	_
Germany	1994–1996	1994–2001 (SOEP)
Luxembourg	1994–1996	1997–2001 (PSELL)
United-Kingdom	1994–1996	1994–2001 (BHPS)
Sweden	_	1997–2001 (SLCS) (Cross-sectional data only)



#### **Target population**

- Private households permanently resident in the country,  $\rightarrow$  the household population (frame population).
- Persons permanently resident abroad (without permanent address) were excluded
- Included: household members temporarily institutionalized or temporarily absent for other reasons



#### **Excluded:**

- All persons living in collective households or in institutions on a permanent basis
- Persons temporarily in collective households or institutionalized but not included in the categories described before



### Sampling method

- Broadly: Probability sampling in all countries
- However: variation of sampling procedures
- Usually, the sampling frame is either the population register or a master-sample
- Two stages:
  - 1. a sample of areas, usually the municipalities (primary sampling units = PSU)
  - a sample of addresses within each of these areas (random sample of households is drawn)



#### **Tracing rules I**

- Sample households/individuals: someone who was a member of an ECHP household in the first wave
- Or a child of a mother who is a sample person (even if born since the first wave)



## **Tracing rules II**

- Individuals of sample households are traced if:
  - > Moving within a country;
  - Moving abroad but within the European Union;
  - Leaving the sample household and forming one or more new households with non-sample or sample persons;
  - All members of such a household are interviewed to get total household income



# **Tracing rules III**

- Individuals of sample households are not traced if:
  - ➤ move outside EU,
  - move to institution
  - ➤ a non-sample person stop to live with at least one sample person



### **Tracing rules IV**

- Non-sample persons joining sample households;
- Children of a sample person and a non-sample person



# PDB

- National data: stored as 'Production Data Base' (PDB).
- PDB: due to data protection laws only accessible for the NDU's and Eurostat
- Access to a 'public use version' ('User's data base, UDB) via Eurostat.
- UDB: anonymised and converted
- Difference: variables have been sorted into a manageable and standardized format.



# **UDB** Files

- Household file (one/wave)
- Personal file (one/wave)
- Register file (one/wave)
- Relationship file (one/wave)
- Country file (one)
- Link file (one)



### Link File

- One record per person
- Includes information for all waves
- Each person that ever appeared in the ECHP has one record
- Includes constant data (PID, date of birth, sex)
- Includes wave-specific data
- Allows to construct the 'longitudinal status' of the person: household ID, whether household/person interviewed in wave *i* ...



### **Register File**

- Person level
- One register file /wave
- Includes all persons living in households with a completed household questionnaire in wave i
- Includes all persons in household (even non-interviewed adults)
  - General information
  - Demographic information



#### **Household File**

- One record for each household with a completed household interview
- One household file/wave.
- The information is grouped into 7 sections.
  - General & demographic information, household income, household financial situation, accommodation, durables, and children.



### **Relationship File**

- Includes relationship between household members
- A record includes the relationship of one household member to another
- One relationship file/wave
- PID1 ('ascendant' or older)
- Relationship
- PID2 ('descendant' or younger)



#### **Personal File**

- One record per Personal Interview
- 13 sections:
- general information/demographic information /current employment/ unemployment/search for a job/previous job / calendar of activities/income/education and training/health/social relations /migration, and/satisfaction with various aspects of life



#### **Country File**

- One record per country
  - > RATE: Exchange rates with Euro/wave
  - > PPP: Purchasing power parities/wave
  - POPTOT: Total population in private households/ wave
  - POP16P: Number of persons aged 16+ living in private households/wave
  - > POPHHD: Number of private households/wave



#### **Missing Information**

- Germany sometimes lacking variables due to conversion process, eg.
  - Household durables
  - Household financial situation
  - ≻ Health health
  - Personal satisfaction
  - Training and education



#### **Missing Information**

- Luxembourg some variables missing, eg.:
  - Household durables
  - Employment/unemployment variables
  - Current education/training
  - ≻ Health
  - Migration
  - Satisfaction



# Log in:

- Turn to your computers:
- Username: 'Schulung1', 'Schulung2' ...
- Password: 'Schulung1', 'Schulung2' ...
- Domain: DIW-Berlin-de



#### Find data:

• Directory: 'F:\\Schulung'

• or:

• Directory: 'DIW-01-501'



#### Find data:

- Directory 'ECHP-CSV'
- 'trn\_w1p.csv' 'trn\_w1h.csv' 'trn\_w1r.csv' ....



#### Have Fun!