



DigiGen

The impact of technological transformations on the

Digital Generation

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Instructions to accessing and using data
from large-scale sample surveys (ESS,
PISA, ICILS, EU SILC)

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Executive summary

This text provides detailed instructions for accessing and downloading primary data from the large-scale European and international sample surveys that were used to estimate the indicators presented on the interactive map (D2.4). Map users can therefore find here the necessary information about the databases used and receive guidance for accessing and using the data.



List of abbreviations

ESS	European Social Survey
PISA	Programme for International Student Assessment
ICILS	International Computer and Information literacy Study
EU SILC	European Union Statistics on Income and Living Conditions

1. Introduction

This file provides detailed instructions for accessing and using data from the large-scale sample surveys that were used in the assessment of the social indicators presented in the interactive map. More specifically, information is included on how to draw data from the European Social Survey (ESS), the OECD's Programme for International Student Assessment (PISA), the International Computer and Information literacy Survey (ICILS) and the European Union Statistics on Income and Living Conditions (EU SILC).

2. The European Social Survey (ESS)

The European Social Survey is a long-term research project, conducted across Europe every two years since 2002. The survey aims to document the attitudes, perceptions, and behaviours of different populations in more than thirty countries. The ESS homepage

[\(<https://www.europeansocialsurvey.org>\)](https://www.europeansocialsurvey.org) describes in detail how the data is collected, the methodology and the research updates. The European Social Survey (ESS) is an academically driven cross-national survey that has been conducted across Europe since its establishment in 2001. Every two years, face-to-face interviews are conducted with newly selected, cross-sectional samples.

The survey measures the attitudes, beliefs and behaviour patterns of diverse populations in more than thirty nations. The main aims of the ESS are:

- to chart stability and change in social structure, conditions and attitudes in Europe and to interpret how Europe's social, political and moral fabric is changing;
- to achieve and spread higher standards of rigour in cross-national research in the social sciences, including for example, questionnaire design and pre-testing, sampling, data collection, reduction of bias and the reliability of questions;
- to introduce soundly-based indicators of national progress, based on citizens' perceptions and judgements of key aspects of their societies;
- to undertake and facilitate the training of European social researchers in comparative quantitative measurement and analysis;
- to improve the visibility and outreach of data on social change among academics, policy makers and the wider public.



The ESS data is available free of charge for non-commercial use and can be downloaded from the website (<https://www.europeansocialsurvey.org/user/new>) after a short registration.

STEP 1: REGISTRATION and ACCOUNT ACTIVATION

To register and access the ESS data the user needs to register, i.e., fill in the online form with his/her personal details, as depicted in the Picture 2.1.

User Registration

Please enter your information in the fields below. Required fields are marked with a red dot. (Already registered? [sign in](#))

Title:

▪ First name:

▪ Surname:

▪ Email address:

If you are a private individual, please enter Private in the institution box.

▪ Institution:

Department:

▪ Country:

▪ Type of activity:

▪ Academic discipline:

Please click here if you would like to receive ESS News and User Bulletin by e-mail.

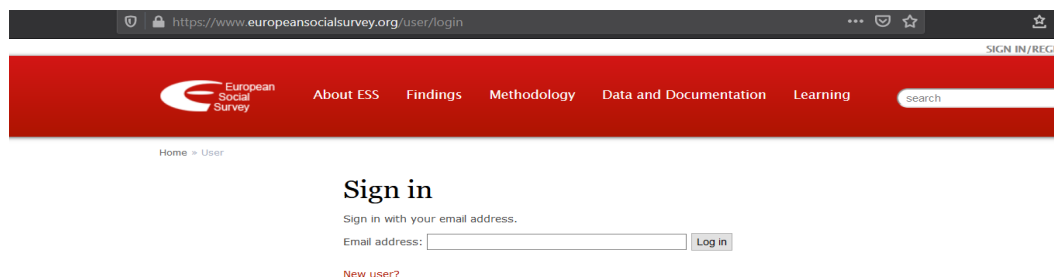
Picture 2.1 Example of online registration for the ESS data

According to the instructions, the user needs to click on the link that was sent to his/her email (or copy / paste the link into the browser) to activate the account.

The registration process is complete.

STEP 2: LOG IN

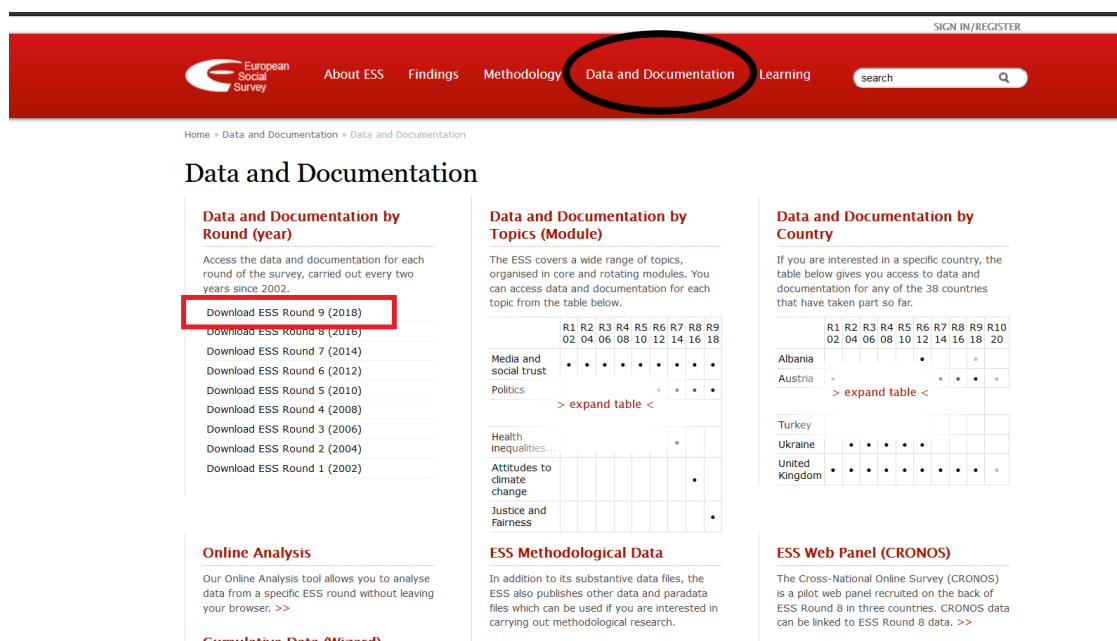
For log in, use the e-mail address entered during registration. No password is required when logging in (Picture 2.2).



Picture 2.2 Signing in to access the ESS data

STER 3: EXPLORING THE DATA

The “Data and Documentation” section of the ESS website lists the ways in which the user can explore and access research data. The data are presented per Round (year), by Topic or by country. The user can download the 2018 data for example by selecting ‘Download ESS Round 9 (2018)’ (Picture 2.3).



Picture 2.3 Exploring the ESS data

STER 4: DOWNLOADING THE DATA

On the next page, select the integrated file, by clicking on the box “ESS9 - integrated file, edition 3.1”. The integrated file contains the data for all countries participating in this round (Picture 2.4).



Picture 2.4 Accessing the ESS data

STER 5: CHOOSING DATA FORMAT

The user can choose the format in which the data will be downloaded. He/she can either download the data in SAS, SPSS or STADA by clicking on the respective tab (Picture 2.5).



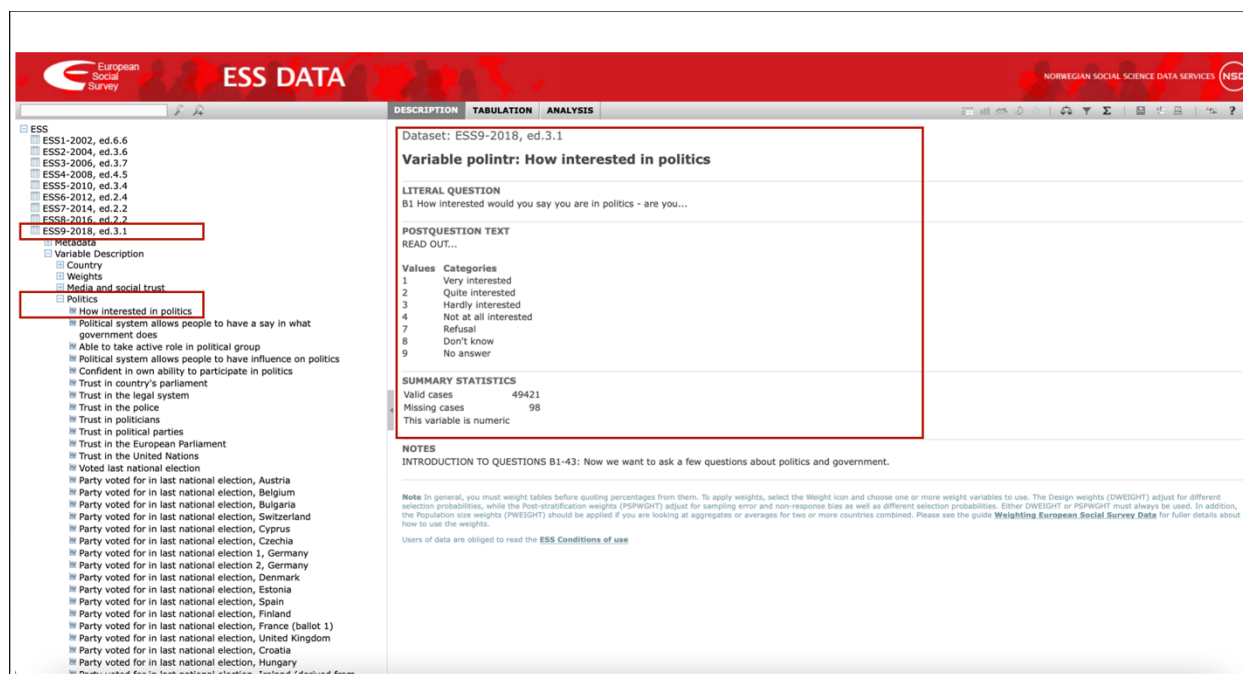
Picture 2.5 Selecting the format

A useful list of variables that are included in the survey files is also available in Data and Documentation → Online Analysis → Variable Description, which provides information on all variables, their values, and the corresponding questionnaire questions. For example, one of the variables that was analysed and is available on the map refers to the interest of young individuals in Politics. The following picture depicts the metadata of the variable used (Picture 2.6). On the left-hand side, the respective ESS round is selected (ESS9-2018, ed.3.1), which then makes two options available: *Metadata* and *Variable Description*. If *Variable Description* is selected, then the broader thematic categories become available. Choosing *Politics* will reveal all variables that are linked to this thematic category. *How interested in Politics* is then selected. Then all available information is

presented on the right-hand side. **Name:** *polintr*; **the exact question that was asked:** *How interested would you say you are in politics - are you...*, **the values:**

- 1 Very interested
- 2 Quite interested
- 3 Hardly interested
- 4 Not at all interested
- 7 Refusal
- 8 Don't know
- 9 No answer

a summary statistics (Valid cases: 49421, missing cases 98), **the type of the variable** (This variable is numeric).



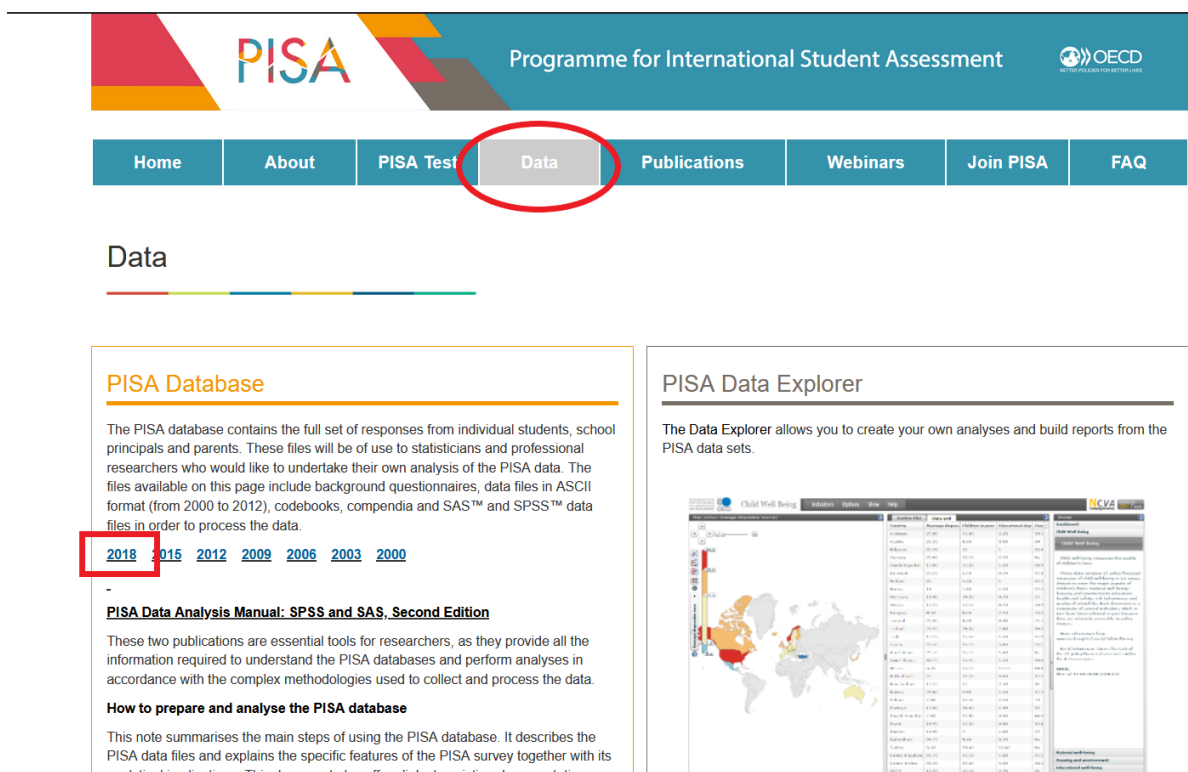
The screenshot shows the ESS DATA interface. On the left, a navigation tree lists various ESS datasets and categories like 'Media and social trust' and 'Politics'. The 'Politics' category is expanded, showing 'How interested in politics' selected. The main content area displays the variable description for 'polintr: How interested in politics' from the ESS9-2018 dataset. It includes the literal question, postquestion text, a list of values and categories (1-9), and summary statistics (Valid cases: 49421, Missing cases: 98). A note at the bottom explains the use of weights.

Picture 2.6 ESS variable description

3. OECD's Program for International Student Assessment (PISA)

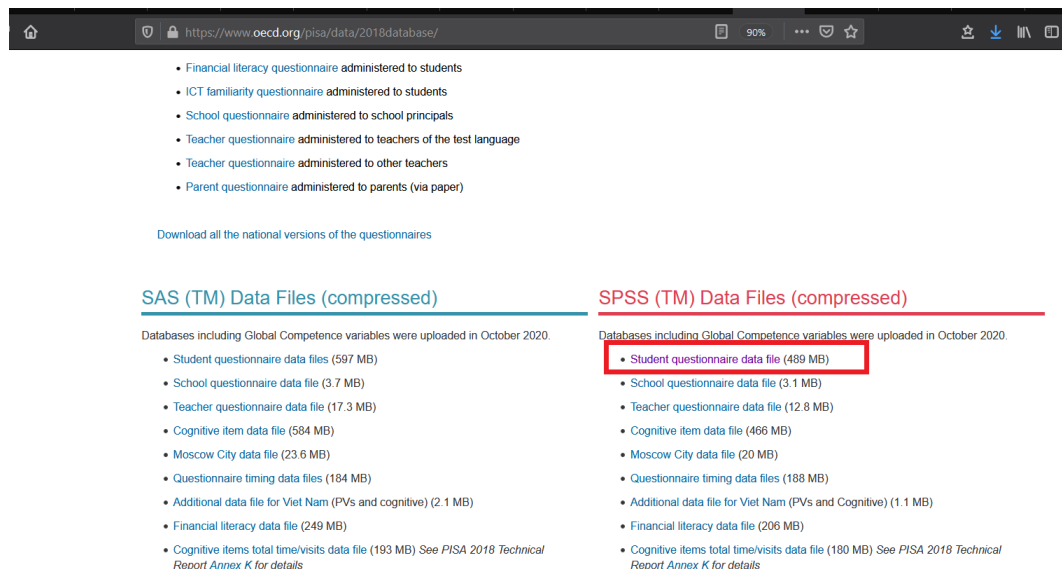
The OECD Program for International Student Assessment (PISA) aims to assess the extent to which 15-year-old students have acquired the knowledge and skills necessary for their full participation in modern societies. To this end, data are collected on student performance, their families and the institutional factors that may influence their educational careers. The PISA database contains a complete set of answers from individual students, school principals and parents.

The ‘Data’ section, which can be found on the main page of the survey, contains the data files, the questionnaires, as well as the description of all the survey variables. The user can choose to download the 2018 database or previous years as shown in the Picture 3.1.



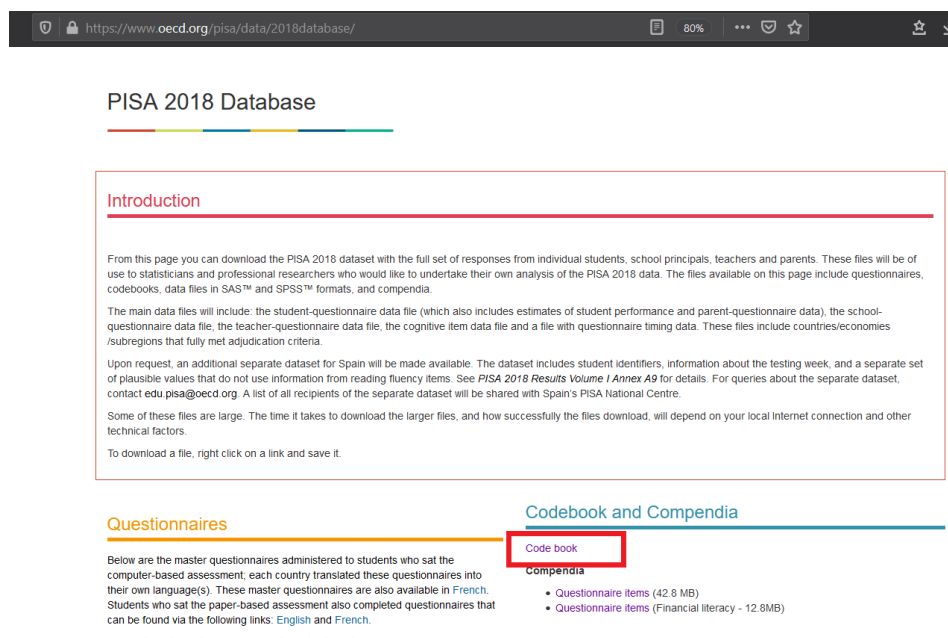
Picture 3.1 Access to PISA’s databases

All variables drawn from PISA and depicted in the interactive map come from the students’ questionnaires. The student file is the main data file and includes all the answers and scores of students and parents in the questionnaires, possible assessments for specific cognitive areas and repetitive weights. The user can move to the next page, and under the label ‘SPSS Data Files’, click on the .sav student questionnaire data file, downloaded and save it. Note that the data is also available as SAS files.



Picture 3.2 Access to PISA’s databases

Users can download a list of file codes (codebook.xlsx), which contains the full description and values of the variables.



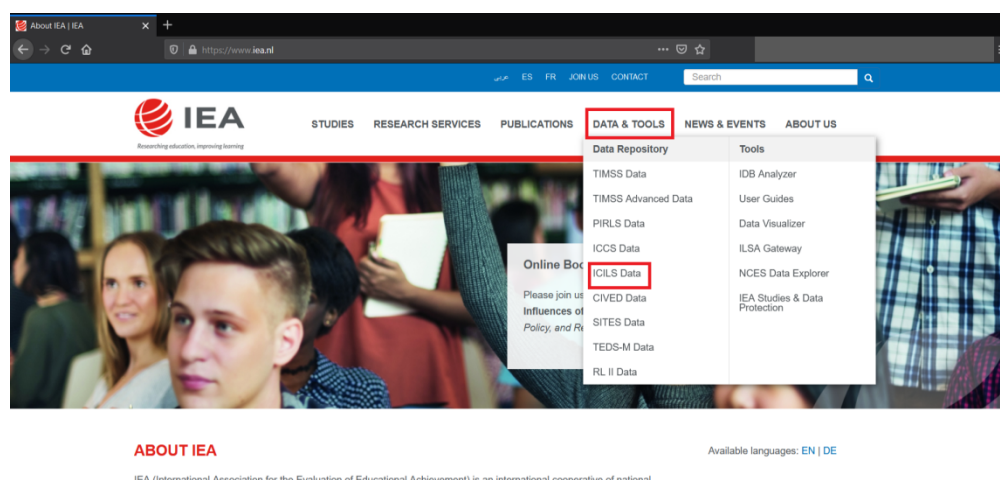
Picture 3.3 Access to PISA’s codebooks

4. International Computer and Information Literacy Study (ICILS)

The International Computer Science and Literacy Study, ICILS, collects a rich body of data on students' ability to use computers and computer science in their research, creation, and communication in everyday life. The aim of the research is to understand how well students in the participating countries are preparing for study, work, and life in a digital world and to provide educational policy makers with evaluation results of educational programs related to information literacy. The research was conducted by the International Association for the Evaluation of Educational Achievement, IEA (International Association for the Evaluation of Educational Achievement) in collaboration with the Australian Council for Educational Research (ACER-Australian Council for Educational Research), in 2013 and 2018, while the next wave is expected to take place in 2023 (<https://www.iea.nl/studies/iea/icils>).

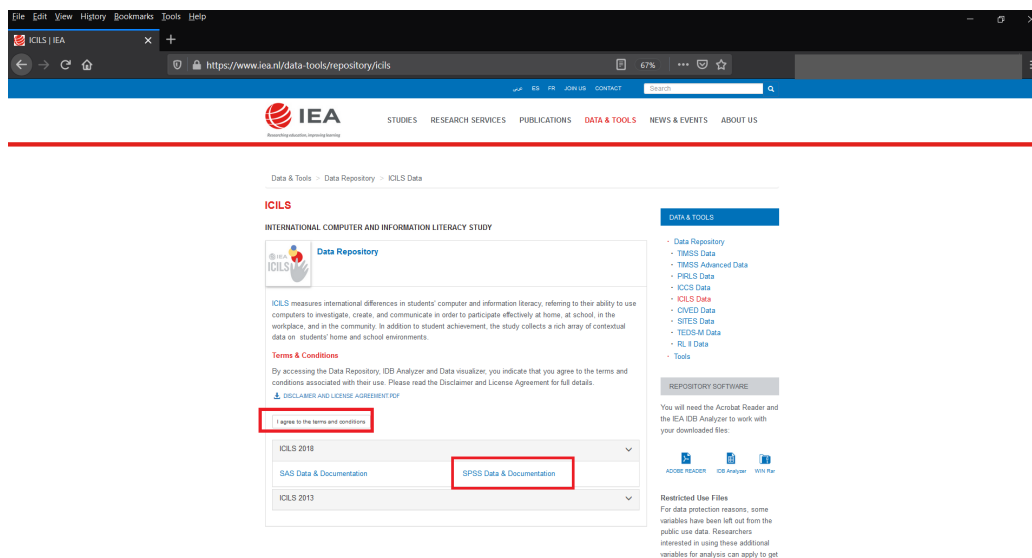
Data and access

On the IEA home page, under the label 'DATA & TOOLS' select 'ICILS DATA', as shown in the Picture 4.1.



Picture 4.1 Accessing the ICILS data

After reading the Terms and Conditions of Use and clicking on the 'I agree to the terms and conditions' box, the available databases will appear below. Select 'ICILS 2018' PS → 'SPSS Data & Documentation' to download the file in SPSS and save the zip folder to your computer (Picture 4.2).



Picture 4.2 Download the SPSS file

The file includes the survey databases, by country, in three categories: student data file (BSG), school data file (BCG) and teacher data file (BTG). It also includes a user guide and a list of codes with the full description of the variables, as well as reports with the results of the research.

5. The EU Statistics on Income and Living Conditions (EU SILC)

The European Union Statistics on Income and Living Conditions (EU-SILC) aims at collecting timely and comparable cross-sectional and longitudinal multidimensional microdata on income, poverty, social exclusion and living conditions. The EU-SILC project was launched in 2003 in six Member States (Belgium, Denmark, Greece, Ireland, Luxembourg and Austria) and Norway. The EU-SILC legal basis entered into force in 2004 and covers now all EU countries, Iceland, Norway, Switzerland; some other countries participated on the voluntary basis.

The EU-SILC provides two types of data:

- Cross-sectional data concerning a given time or a certain time period with variables on income, poverty, social exclusion and other living conditions
- Longitudinal data concerning individual-level changes over time, observed periodically over a four-year period.

Information on social exclusion and housing conditions is collected mainly at household level, while labour, education and health information is obtained from individual persons aged 16 and over. Also, income variables at detailed component level are mainly collected from persons EU-SILC data are collected by National Statistical Institutes and could come from different sources. In some participant countries a new survey was launched with cross-sectional and longitudinal elements. In other

countries a combination of registers and surveys is used, that is the data for the same respondents are collected partly by interview and partly from register.

The EU-SILC dataset has been produced in accordance with EU regulations under guidance from Eurostat. The data contains interview survey data for adults aged 16 years and over, plus basic demographic information for children in the register files. These variables cover topics such as:

- basic personal and household data
- childcare
- dwelling type, tenure status and housing conditions
- housing costs and amenities
- housing and non-housing related arrears
- non-monetary household deprivation indicators
- physical and social environment
- household and personal level income
- education
- health and access to healthcare
- labour information.

In addition, every year a European Commission regulation describing the list of secondary target variables (annual modules) is published. These ad-hoc modules are developed each year in order to complement the variables permanently collected in EU-SILC with supplementary variables highlighting unexplored aspects of social inclusion:

- 2012 ad hoc module: *Housing conditions*
- 2011 ad hoc module: *Intergenerational transmission of disadvantages*
- 2010 ad hoc module: *Intra-household sharing of resources*
- 2009 ad hoc module: *Material deprivation*
- 2008 ad hoc module: *Over-indebtedness and financial exclusion*
- 2007 ad hoc module: *Housing conditions*
- 2006 ad hoc module: *Social participation*
- 2005 ad hoc module: *Intergenerational transmission of poverty.*

Access to microdata

Access to the EU SILC microdata is granted **only for scientific purposes**. To apply for access to Eurostat's microdata, in general the applicant's organisation must first be recognised by Eurostat as a research entity – a university, research institution or research department in public administration, statistical institute etc.

Applying for access

Step 1 – Application to have the research organisation recognised as a research entity. This only needs to be done once.

Step 2 – Application for access to microdata. Once the organisation is recognised as a research entity, the applicant can apply for access by submitting a research proposal (the procedure takes around 8 weeks).

Bibliography

Buckley, Jennifer (2018). *How to find and access data: guide to getting started [European Social Survey]*. Bergen, Norway: CESSDA ERIC.I

European Social Survey website, www.europeansocialsurvey.org

EU-SILC, <https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions>

International Association for the Evaluation of Educational Achievement (IEA) website, ICILS <https://www.iea.nl/studies/iea/icils>.

PISA, OECD website, <https://www.oecd.org/pisa/>



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