



# Introduction to EU-LFS

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# Introduction to EU-LFS

1. Policy background
2. Organization of EU-LFS
3. EU-LFS: design, processing and dissemination aspects
4. Microdata access
5. EU-LFS anonymised datasets for scientific purposes



# 1. Policy background

## Europe 2020 is the EU's growth strategy for the current decade

Goal: "Smart, sustainable and inclusive growth"

5 headline targets for 2020 agreed for the whole EU by the Council in June 2010:

- 1) 75 % of the population aged 20-64 should be employed (EU-LFS)
- 2) 3% of the EU's GDP should be invested in R&D
- 3) The '20/20/20' climate/energy targets should be met
- 4) The share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree (EU-LFS)
- 5) At least 20 million people should be lifted out of the risk of poverty and exclusion (EU-SILC)

Progress monitored through the Joint Assessment Framework (JAF) which includes a list of indicators based on EU-LFS (and EU-SILC)

## 2. Organization of EU-LFS

### Legal basis ('regulatory framework') at European level:

- Clear specifications of deliverables
- Obligation of Member States to deliver data
- Harmonisation

but

- Changes require (time-consuming) negotiations and consensus

### Task sharing:

- National level: survey implementation, microdata collection and processing
- Eurostat level: validation of transmitted data according to common standards, computation and dissemination of indicators. Coordination of methodological developments.



## 2. Organization of EU-LFS

### **NSIs are responsible for the survey at national level:**

- Some flexibility in the implementation (survey design, data sources, mode of data collection - PAPI, CAPI, CATI, recently also CAWI -, questionnaires ...)
- EU-requirements can be supplemented to serve national purposes

### **Ex-ante output harmonization is reached by:**

- Definition of target concepts/variables to be measured
- Minimum requirements (survey design, sample representativeness / sample size, fieldwork, imputation, timeliness, calculation of weighting factors, quality reporting ...)
- Guidelines and explanatory notes (updated regularly)
- Standardized output (individual data)
- Monitoring by Eurostat

## 3. EU-LFS: design

**EU-LFS** is a **continuous sample survey** with evenly spread reference weeks

### Periodicity

- Quarterly and annual results plus ad-hoc modules

### Participating countries

- EU28, IS, NO, CH, MK, TR (further candidate countries in the pipeline)
- First data in database for 1983; from 2002 full coverage of EU28

### Reference population

- Population in private households
- People in collective households and institutions may also be covered, but are not included in all countries



## 3. EU-LFS: design

### Sample size

- Minimum precision criteria for key indicator (unemployment) + further requirements
- Quarterly sampling rate varies from 0.2% to around 3% across countries
- About 1.5 million people per quarter interviewed in the EU

-> EU-LFS is the main source for labour market analyses in Europe

EU-LFS delivers STOCK estimates for quarters and years. Countries use different rotation patterns, but the EU-LFS is originally not designed to provide panel information!

## 3. EU-LFS: design

Topics covered in the core LFS (repeated every quarter/year)

- Demographic background and household composition
- Labour status, employment characteristics of the main job, atypical work, hours worked, second job, previous work experience, search for employment, methods used to find work
- Self-declared main labour status (optional)
- Education and training
- Situation one year ago
- Income from the main job (deciles)
- Technical items related to the interview



## 3. EU-LFS: design

Topics covered in annual (AD HOC) modules (up to 11 additional variables per year, since 1999)

- Accidents and work and work-related health problems: 1999, 2007, 2013
- Entry of young people into the labour market: 2000, 2009
- Work organisation and working-time arrangements: 2001, 2004
- Employment of disabled people: 2002, 2011
- Lifelong learning: 2003
- Reconciliation between work and family life: 2005, 2010
- Transition from work to retirement: 2006, 2012
- Labour market situation of migrants and their immediate descendants: 2008, 2014

## 3. EU-LFS: design

### Structure of the data

- QUARTERLY data allowing derivation of ILO labour status and main results on education, occupation, economic activity, hours worked, full-time/part-time, temporary employment etc.
- YEARLY data extending the quarterly data by structural variables, for instance reasons (for full-time/part-time, job search etc.), income (deciles), atypical work, situation one year before survey, details on education etc. Yearly sample can be subsample of quarterly samples
- AD HOC modules should be surveyed for respondents in the yearly sample to allow exploiting the full wealth of information

YEARLY data includes information on QUARTERLY variables, AD HOC module data on both other groups of variables

## 3. EU-LFS: processing aspects

### Eurostat data validation

- Syntax: validity of codes, correct routing between questions/variables
- Logic: coherence between variables; plausibility of relationship between members of the same household
- Comparison with previous quarterly/yearly results for some 50 aggregated main figures, e.g. employment, unemployment, hours worked, ...
- NSIs are asked for explanations of detected irregularities/correction of errors and confirmation of 'main' results
- Currently no comparison with previous results at individual record level (the panel aspect...)
- Countries have access to Eurostat validation routines, allowing checking their data before transmission

Takes 1 to 14 days depending on the country

## 3. EU-LFS: dissemination aspects

### Availability of results

- QUARTERLY main indicators available on the Eurostat website on average 100 days after the reference quarter
- YEARLY main indicators available on the Eurostat website on average 100 days after the reference year
- AD HOC module results: separate processing; one-off exercises requiring special evaluation of each module; first results on the website: one to two years after the reference year

Standard dissemination to the general public is restricted to aggregated results (website, publications, tailor-made extractions), taking reliability and confidentiality constraints into account



## 4. Microdata access

Regulation (EC) No 223/2009 ('**Statistical Law**') of the European Parliament and of the Council on European Statistics (like EU-LFS, EU-SILC):

- **general guidelines** for receiving, processing and disseminating confidential data obtained for European statistics, including also the **access for scientific purposes**
- access to microdata may be granted to **researchers carrying out statistical analyses** for scientific purposes

Commission Regulation (EU) No 557/2013 defines the details how this should be implemented in practice

EU-LFS (and other Eurostat) anonymised microdata are available **free of charge**

## 4. Microdata access

### 1. Recognition of research entity (user):

- Application form, confidentiality undertaking and terms of use to be signed by the head of research entity
- Assessment by Eurostat
- Recognised research entities listed on Eurostat website

### 2. Research project proposal:

- Application form and confidentiality declaration to be signed by researchers getting access to confidential data
- Consultation of the national authorities in Member States

Details on conditions of microdata access can be found on the Eurostat website at:  
<http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/introduction>

## 4. Microdata access

EU-LFS: currently distribution of DVDs with one common standard anonymisation

Recent discussions between Eurostat and Member States on the way forward focus on de-centralised access also for EU microdata:

- Network of safe centres run by National Statistical Institutes
- Analysis of synergies with data archives (CESSDA)
- Remote access as part of the medium term strategy

Target: access to non-anonymised data (secure use files) with output checking

- Availability (technical, financial, resource issues still to be solved) ???

Creation of public use files (fully anonymised records, neither direct nor indirect identification) also under discussion

## 5. EU-LFS anonymised datasets

### Anonymisation of data for year N

- Year N+1 for quarterly and yearly data
- Year N+2 for ad hoc module data

-> Release of year N+1 contains core data until N and ad hoc module data until N-1

- One release (DVD) per year; one common aggregation/anonymisation procedure
- Latest available data for a given quarter or year are anonymised and disseminated, including all revisions for previous years Eurostat received since the last release

Current country coverage: EU28, IS, NO, CH





## 5. EU-LFS anonymised datasets

### General aggregation and anonymisation criteria

Agreed between Eurostat and the NSIs of the Member States and endorsed by the Working Group on Statistical Confidentiality, the most important ones being:

- Age (5-year groups)
- Nationality / Country of Birth (up to 15 categories)
- NACE (1-digit level)
- ISCO (3-digit level)
- INCOME (from 2009, as deciles only)
- No tracking of persons across datasets / time possible

## 5. EU-LFS anonymised datasets

### Data provided (by country)

- Quarterly datasets for all available quarters, containing quarterly variables only
- Yearly datasets based on one spring quarter until 2004 (for comparability reasons), from 2005 either based on average of four quarters or specific yearly subsamples, containing all core LFS variables
- Special household datasets for some Nordic countries
- Ad hoc module datasets for the year 1999 and from 2002 onwards
- Some restrictions: DE from 2002, MT from 2009...

Several variables and variable definitions changed in the past. To facilitate comparisons over time, they are recoded to the current structure as far as possible

Cp. for anonymised LFS data the information available at

<http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/lfs>



## 5. EU-LFS anonymised datasets

### Project proposals

More than 100 requests in the course of last year. Popular topics:

- Skills/education/qualification (supply/demand, mismatches etc.)
- Crisis impact (employment/unemployment, youth)
- Migration/labour mobility
- Structural changes on the labour market
- Older workers (incl. active aging, retirement)
- Gender comparisons (incl. family issues)
- Regional comparisons

Plus all kinds of combinations of them.

Difficult: wages, transitions,...



# EU-LFS: further information

General background information can be found in the EU-LFS dedicated section on the Eurostat website:

[http://epp.eurostat.ec.europa.eu/portal/page/portal/employment\\_unemployment\\_lfs/introduction](http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/introduction)

And on the Statistics Explained pages related to the EU-LFS:

[http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/EU\\_labour\\_force\\_survey](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/EU_labour_force_survey)