Reliability limits

EU - LFS publishing guidelines

EU labour force survey - data and publication

Eurostat implements basic guidelines in order to avoid the publication of figures which are statistically unreliable or which risk the identification of individual respondents. For this reason, there are two types of restrictions: a reliability restriction and a confidentiality restriction.

Regarding confidentiality restrictions, Eurostat does not disseminate EU-LFS estimates based on 3 or less reporting units. As an indicative rule of thumb, this typically corresponds to population estimates of some 200-400 persons or less. This restriction is mainly relevant for EU-LFS data tailored for specific requests. In those cases, the user will receive a data file with the corresponding entry flagged 'c' and the value blanked. These entries will still be visible and thus indicate that some values below confidentiality limits have been removed.

Regarding reliability restrictions, Eurostat flags estimates below certain limits as 'a' and 'b'. Those reliability limits depend on the sample size and design in the individual Member States. This applies to quarterly data, annual averages and ad hoc modules results. Figures flagged 'a' should not be published; by convention, a dot or full stop is used instead. Figures flagged 'b', whenever applicable, can be published with a warning concerning their limited reliability. By convention, they are published in brackets.

From 2006 onwards, the EU LFS can provide three types of results according to the sample used: quarterly data, annual average of quarterly data or yearly data. The latter corresponds to the best sample available for all variables for a given country and year. It corresponds either to one single quarter (generally quarter 2), the average of quarterly data or to a sub-sample distributed along the year (with sample size in general roughly equivalent to one reference quarter).

The reliability limits applicable HRST using EU-LFS are the yearly limits.

Reliability

EU LFS yearly limits - reliability limits

The EU Labour Force Survey, like all surveys, is based on a sample of the population. The results are therefore subject to the usual types of errors associated with sampling techniques. Based on the sample size and design in the various Member States, Eurostat implements basic guidelines intended to avoid the publication of figures which are statistically unreliable.

HRST data are extracted from the European Union Labour Force Survey (EU LFS). The estimated totals could therefore be subject to sampling errors, as well as a number of non-sampling errors, e.g. non-response, miscoding, etc. All estimated results conform to Eurostat guidelines on sample-size limitations and are not published if the degree of sampling error is likely to be high.

Figures below those in column A in the tables below are not published. Instead, a ":u" is used, which corresponds to 'not reliable'. When applicable, figures below those given in column B but above those in column A are printed with a warning concerning their reliability. These data are flagged with a "u", showing a lack of reliability due to a reduced sample size.

Because disaggregation of the data to regional level increases the likelihood that certain data fall into one or other of the categories listed in the table below, it may be that certain data are omitted at NUTS 2 level but are included at NUTS levels 0 or 1. Users should be aware that in such cases the total presented, for example at the NUTS 0 level, may equal more than the sum of its presented constituent parts (at NUTS 2 level).

Eurostat indicators on Human Resources in Science and Technology Annex 6 – Reliability limits

Table 1: Guidelines on minimum sample sizes for data reliability provided by the EU LFS unit (limits to be used for yearly data)

Country	2008		2009		2010		2011		2012		2013		2014	
	Limit_A	Limit_B												
EU-27/ EU-28	50000	50000	50000	50000	50000	50000	50000	50000	20000	40000	20000	40000	20000	40000
BE	2000	5000	2000	5000	2000	5000	2000	5000	2000	5000	2000	5000	2000	5000
BG	5300	12000	5300	12000	6200	14000	6200	14000	7000	16000	5600	12600	5600	12600
CZ	500	3000	500	3000	500	3000	900	6000	900	6000	1000	6000	1000	6000
DK	2000	4000	2000	4000	2000	4000	2000	4000	2000	4000	2000	4000	2000	4000
DE	50000	50000	50000	50000	50000	50000	50000	50000	5000	5000	5000	5000	5000	5000
EE	1275	2950	1350	3125	1325	3050	1100	2600	1100	2600	1100	2600	1100	2600
IE	1900	3100	1900	3100	1900	3100	1900	3100	1900	3100	1900	3100	1900	3100
EL	1300	3500	1300	3500	1300	3500	1300	3500	1300	3500	1300	3500	1300	3500
ES	2000	8000	2000	8000	2000	8000	2000	8000	2000	8000	2000	8000	2000	8000
FR	25000	50000	22000	44000	20000	40000	20000	40000	20000	40000	20000	40000	20000	40000
HR	1000	10000	1000	10000	1000	10000	1000	10000	1000	10000	1000	10000	1000	10000
IT	1500	2500	1500	2500	1500	2500	1500	2500	1500	2500	1500	2500	1500	2500
CY	500	1500	500	1500	500	1500	500	1500	500	1500	500	1500	500	1500
LV	1100	1800	1700	2700	2200	3600	1900	3100	1600	2600	1700	2700	1700	2700
LT	5900	22500	4500	8000	4500	8000	4500	8000	4500	8000	4500	8000	4500	8000
LU	500	1000	500	1000	500	1000	500	1000	500	1000	500	1000	500	1000
HU	2600	4800	2600	4800	2600	4800	2600	4800	2600	4800	2600	4800	2600	4800
MT	375	750	375	750	375	750	375	750	350	800	350	850	350	850
NL	1500	5000	1500	5000	1500	6500	1500	6500	1500	6500	1500	6500	1500	6500
AT	3000	6000	3000	6000	3000	6000	3000	6000	3000	6000	3000	6000	3000	6000
PL	5000	15000	5000	15000	5000	15000	5000	15000	5000	15000	5000	15000	5000	15000
PT	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500
RO	6500	11500	6500	11500	6500	11500	6500	11500	6500	11500	6500	11500	6500	11500
SI	500	4000	500	4000	500	4000	500	4000	500	4000	500	4000	500	4000
SK	2000	3000	2000	3000	2000	3000	2000	3000	2000	3000	2000	3000	2000	3000
FI	2000	4000	2000	4000	2000	4000	2000	4000	2000	4000	2000	4000	2000	4000
SE	2500	3500	2500	3500	1000	2000	1000	2000	1000	2000	1000	2000	1000	2000
UK	10000	19000	10000	19000	10000	19000	10000	19000	10000	19000	10000	19000	10000	19000
IS	500	500	500	500	500	500	500	500	500	500	500	500	500	500
NO	1500	5000	1500	5000	2000	5500	2000	5500	2000	5500	2000	5500	2000	5500
СН					1000	5000	1000	5000	1000	5000	1000	5000	1000	5000
MK	500	1000	500	1000	500	1100	500	1100	500	1100	500	1100	500	1100
TR	500	2500	500	2500	500	2500	500	2500	500	2500	500	2500	500	2500