

**Quality report of the European Union
Labour Force Survey
2010**

2012 edition

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1 Introduction

The present report is the Quality Report on the European Union Labour Force Survey (EU-LFS) for the year 2010.

The quality concept applied in this report is in conformity with the definition developed by the European Statistical System. In this definition quality consists of the following components: relevance, accuracy, timeliness and punctuality, accessibility and clarity, comparability and coherence. Each quality component consists also of several sub-components. Each of the quality components is explained shortly at the start of each section in the following report⁽¹⁾.

The individual country quality reports that were delivered to Eurostat during summer 2011 constitute the main source for the present report. Other sources that have been used or consulted are meta-data information collected by Eurostat, national quality reports from previous years, websites of the individual countries, the LFS datasets for 2010 and the documentation of the public free data set maintained by Eurostat.

The present quality report follows closely the standard Quality Report format that has been developed within Eurostat. In many instances, however, it is impossible to present the data exactly as prescribed by the standard Eurostat format, as this is geared to report homogeneous production processes within each country. This is not the case for the EU-LFS, which is the result of the collection of national data sets from NSIs. In some cases the information from the individual countries was not sufficient to provide an exact summary.

The quality reports provide also information on unemployment statistics at regional level, as the reporting of quality is a joint effort of the units within Eurostat dealing with labour force surveys and with regional employment and unemployment. The last chapter of the present report covers the regional aspects.

This quality report complements the methodological working paper describing the characteristics of the national surveys in the Member States, Candidate Countries and the EFTA countries, also available on the Eurostat website⁽²⁾.

Eurostat wishes to thank the many experts in the countries participating in the conduct of the EU-LFS, providing the data and descriptions as well as their support necessary for this report.

2 Overview of designs and methods of the EU-LFS in 2010

2.1 Coverage

This document covers all the thirty-three countries (participating countries) providing Eurostat with micro-data from their labour force surveys in 2010: the 27 Member States of the European Union, three EFTA countries (Iceland, which at the same time is a candidate country, Norway and Switzerland), and three candidate countries, i.e. Croatia, the former Yugoslav Republic of Macedonia⁽³⁾ and Turkey. All the territories of participating

⁽¹⁾ Most of the introductory texts shortly explaining each quality component are taken from the 'ESS Standard for Quality Reports', available at:

http://epp.eurostat.ec.europa.eu/portal/page/portal/ver-1/quality/documents/ESQR_FINAL.pdf.

⁽²⁾ Available at:

http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/publications/methods.

⁽³⁾ In some tables of this report the abbreviation MK is used for the former Yugoslav Republic of Macedonia. This is a provisional code which does not prejudice in any way the definitive nomenclature

countries are covered, except for Cyprus which only covers the areas under the control of the government of the Republic of Cyprus, and except for the French overseas departments (DOM)⁽⁴⁾.

The EU-LFS covers persons in private households. However, in several countries also members of collective households are sampled, either directly (register based sampling frames) or indirectly through their relationship with the sampled household.

In Eurostat datasets all age groups are represented for all participating countries, with the exception of Iceland, Norway, Sweden and Switzerland, which only provide data respectively for those aged 16-74, 15-74 (Norway and Sweden) and 15 and more.

2.2 Legal basis

The EU-LFS is regulated by several regulations of the Council and the European Parliament and of the Commission. The most important regulations are listed in table 2.1.

In addition to European regulations, many participating countries have their own national legislation for the conduct of a labour force survey. Information on the national laws or regulations is not collected for this report.

2.3 Compulsory participation

The participation in the EU-LFS is compulsory in fourteen participating countries (Belgium, Germany, Greece, Spain, France, Italy, Cyprus, Malta, Austria, Portugal, Slovakia, Norway, Switzerland, and Turkey), and voluntary in the other countries.

2.4 Reference week

The EU-LFS is designed as a continuous quarterly survey with interviews spread uniformly over all weeks of a quarter. Each reference week starts on Monday and ends on Sunday. The first week of a year or quarter is defined as the week that includes the first Thursday of the year or the quarter. All countries conduct the LFS as a continuous survey, except Turkey. Turkey, although producing quarterly results, only covers the first week of each month for the time being.

for this country, which will be agreed following the conclusions of negotiations currently taking place on this subject at the United Nations.

⁽⁴⁾ The French overseas departments (*Département d'outre-mer* - DOM) only have a partial coverage over time, as data collection only refers to quarter 2. In the present document only data for Metropolitan France are presented.

Table 2.1 Major regulations of the EU- LFS relating to 2010 data collection

General regulations	Comments
Council Regulation (EC) No 577/98 of 9 March 1998 on the organisation of a labour force sample survey in the Community (OJ No L 77/3).	This is the main regulation with provisions on design, survey characteristics and decision making processes.
Regulation (EC) No 1991/2002 of the European Parliament and of the Council of 8 October 2002 amending Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community (OJ No L 308/1).	This regulation puts a time limit on the adoption of the continuous LFS.
Regulation (EC) No 2257/2003 of the European Parliament and of the Council of 25 November 2003 amending Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community to adapt the list of survey characteristics (OJ No L 336/6).	This regulation introduces 6 new variables and allows the wave approach for structural variables.
Regulation (EC) No 1372/2007 of the European Parliament and of the Council of 23 October 2007 amending Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community (OJ No L 315/42).	This regulation changes the status of the survey characteristic 'income' from optional to mandatory.
Implementation regulations	Comments
Commission Regulation (EC) No 1897/2000 of 7 September 2000 implementing Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community concerning the operational definition of unemployment (OJ No L 228/18).	Also contains the 12 principles for constructing the questionnaire
Commission Regulation (EC) No 365/2008 of 23 April 2008 adopting the programme of ad hoc modules, covering the years 2010, 2011 and 2012, for the labour force sample survey provided for by Council Regulation (EC) No 577/98 (OJ No L 112/22).	Programme for the ad hoc modules 2010 to 2012
Commission Regulation (EC) No 377/2008 of 25 April 2008 implementing Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community as regards the codification to be used for data transmission from 2009 onwards, the use of a sub-sample for the collection of data on structural variables and the definition of the reference quarters (OJ No L 114/57).	Codification 2009, including the compulsory survey characteristic 'income' and the general definition of reference quarters

2.5 Periodicity of the results

All participating countries in the EU-LFS in 2010 produce quarterly estimates. Switzerland was the last country that changed to a quarterly survey in 2010.

2.6 Sampling designs

The sampling designs in the EU-LFS are very varied. Most NSIs use some kind of multi-staged stratified random sample design, especially those that do not have central population registers available.

Bases used for the sample

Population registers and the latest Population Census or list of addresses used in that Census are the two main sources for the sampling frame. Other sources include lists of addresses from, e.g., the Postal Authorities or Utility databases. Belgium, Estonia, Italy, Lithuania, Luxembourg, Austria, Norway, Finland, Sweden, Iceland, and Slovenia use the Population Registers as the sole basis while the Netherlands complete this information with postal data, Denmark with other registers, Latvia and Spain with Census information. Germany grounds the sample frame on the 1987 Census in the western part⁽⁵⁾ and on the

⁽⁵⁾ The continuous population updating procedure which updates last German census in 1987 in the western part and the Central Population Register in the east by using statistics on births, deaths and migration provides population figures used for calibration. These old updated bases which are used also as sample frame for dwellings not built after 1987 and 1981 respectively may lead to some bias in LFS results.

Central Population Register, based on the 1981 Census, in the east, both updated by the Register of new dwellings.

Sampling stages and primary sampling units (PSU)

Denmark, Germany, Luxembourg, Malta, Austria, Slovenia, Finland, Sweden, the United Kingdom, Iceland, Estonia, Lithuania and Norway use a single stage sampling or single stage cluster sampling design. All other countries use a two or three stage sampling design, usually selecting municipalities, administrative districts or census enumeration areas in the first stage⁽⁶⁾.

Ultimate sampling units

Three types of ultimate sampling units are employed: 1) households, 2) dwellings/addresses and 3) persons. Germany, France, Ireland, Portugal and Romania sample clusters of dwelling units. In samples of dwellings or addresses, usually all persons and thus all households residing within the dwelling/address are interviewed. When persons constitute the primary sampling units, the selected persons either constitute the final sample (Finland, Sweden, Denmark and Switzerland) or the sampled persons lead to a final sample comprised of the sampling units and their household members (Estonia, Lithuania, Norway and Slovenia).

Overall sampling rate

The theoretical sampling rate per quarter (ultimate sampling units) of the EU-LFS is 0.43 % (EU-27: 0.44 %). Luxembourg and Ireland have by far the highest sampling rate per quarter (3.0 %), followed by Malta (2.25 %) and Iceland (1.9 %) while most other participating countries have sampling rates of 1 % or less. On average, the achieved quarterly sample in 2010 in all participating countries was 1.848 million individuals (EU-27: 1.637 million), of which 1.432 million were in the age group 15-74 years (EU-27: 1.269 million). The achieved sample in the EU-LFS is thus approximately 0.32 % of the total population.

Stratification

All countries, except Lithuania, Luxembourg, Malta and Iceland, stratify the sample frame prior to the sampling. All countries but Denmark use the region, either at NUTS 2, NUTS 3, NUTS 4 level or nationally defined areas, as stratification variable. The degree of urbanization is also a common stratification variable (France, Spain, Ireland, Cyprus, Latvia, Poland, Slovenia, Bulgaria and Romania). Other stratification variables include for example register status of individuals in employment/unemployment registers (Denmark), population of town/community (Greece), and auxiliary information about the characteristics (size, type) of the primary sampling units (Spain, France, Italy, Hungary).

2.7 Rotation schemes

All participating countries except Belgium and Luxembourg use a rotating panel design for the samples. The number of panels (waves) ranges from two to eight. All panel designs foresee an overlap between one quarter and the successive one, except for Germany, which only has a year-to-year overlap. The most common panel design with a quarterly overlap in 2010, adopted by 13 participating countries, is 2-(2)-2, where sampled units are interviewed for two consecutive quarters, then stay out of the sample for the next two quarters and are included again two more times afterwards. Other widespread rotation patterns, each used by six countries, are in for 5 and in for 6 waves, where each panel is

⁽⁶⁾ Ireland is a special case, using a two-stage cluster design (see EU-LFS quality report 2009).

interviewed consecutively for five or six quarters before permanently leaving the sample. Three other rotation schemes are used by one or maximum two countries.

Depending on the national priorities with regard to the desired precision of change estimates, levels or annual averages, the number of waves and skip patterns lead to different outcomes of overlaps between two successive quarters or between the same quarters in two successive years. All panel designs with a quarter-to-quarter overlap foresee an overlap of 50 % or more⁽⁷⁾ of the sample between two successive quarters. There is less emphasis on overlap between corresponding quarters in two successive years. Two countries, Belgium and Luxembourg, have no overlap; six countries have an overlap of 20 % while most other countries have an overlap ranging from 33 % to 50 %. Germany has 75 % overlap with the previous year.

2.8 Calculation of the weighting factors

Council Regulation (EC) No 577/98 on the EU-LFS stipulates that weighting factors should take into account 'in particular the probability of selection and external data relating to the distribution of the population being surveyed, by sex, age (five-year age groups) and region (NUTS 2 level), where such external data are held to be sufficiently reliable by the Member States concerned' (Article 3(5)).

The methods of calculating the weights differ considerably between countries. Two main methods are used, depending on the detail of the external information and whether or not this external information can be cross-tabulated: 1) inverse of the selection probabilities adjusted a posteriori to the population's distribution by sex, age groups and other external (administrative) sources, and 2) different variations of adjusting to marginal totals, including generalized calibration and generalized regression. Most of the countries adjust for non-response either directly in the weighting process or in a preliminary step before adjusting the weights to external sources.

Due to the complexity and number of factors taken into account in some of the weighting calculations, the requirement of the Regulation to use five-year age groups is not implemented in all countries. Almost all countries adjust the weighting factors to regional levels. These regions may, however, not necessarily correspond to the NUTS 2 regional classification.

All countries with the exception of Croatia use data on sex in the weighting process. Croatia does not either use age in calculating the weighting factors while six countries (Bulgaria, Germany, Greece, Hungary, Malta, and Slovenia)⁽⁸⁾ use broader age groups than five-year ones. All countries that have NUTS 2 regions defined use at least NUTS 2 regions for calculating the weights, but twenty-one countries (Bulgaria, the Czech Republic, Germany, Croatia, Estonia, Greece, Spain, Ireland, former Yugoslav Republic of Macedonia, Italy, Hungary, Latvia, Lithuania, Malta, Slovakia, Slovenia, Portugal, Finland, Sweden, Switzerland, and Norway) use a more detailed regional classification (NUTS 3 or LAU1; groups of NUTS 3).

Denmark, Finland, Sweden and Norway use register statistics on employment/unemployment directly for weighting. In other countries, different external distributions or

⁽⁷⁾ These percentages are only theoretical; the actual overlaps are lower due to non-response and panel attrition.

⁽⁸⁾ Luxembourg, Poland, and Turkey use the five-year age groups up until the 60-64 years old.

sources are frequently used both for weighting and stratification, such as urban/rural distinction, nationality, ethnicity, and size classes of regions or local areas.

Eighteen countries, namely Belgium, Bulgaria, Denmark, Germany, Estonia, Ireland, Latvia, Malta, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom, Iceland, Norway and Switzerland, gross the sample to the total population, i.e. including people living in institutional households, although some of them do not (Belgium, Ireland, Latvia, Malta, Slovenia and Switzerland) or only partially (Bulgaria, Portugal, Romania, Slovakia) cover the institutional population in data collection.

2.9 Data collection methods

Four modes of data collection exist for the EU-LFS: personal visits, telephone interviews, web interviews and self-administered questionnaires. Sixteen countries conduct the first wave always or mainly via personal visit, while subsequent waves are interviewed with telephone, if available. Germany collects data mainly with face-to-face interviews (using CAPI); persons not available for the interviewer or refusing oral interviews are in a few cases interviewed by telephone or more frequently fill in self-administered postal questionnaires. Denmark collects data for the core-LFS with telephone interviews (CATI), but for the household subsample computer assisted web interviews (CAWI) are used. Belgium conducts the interviews by means of face-to-face, but in households of retired persons, interviews can be conducted by telephone. Six countries (Luxembourg, Finland, Sweden, Iceland, Norway and Switzerland) rely solely on telephone interviews. Due to budget constraints, Italy has partially changed the mode in 2010, adopting telephone interviews (CATI) also for the first interview, if phone number is available on white pages; personal interviews (CAPI) are carried out in households of foreign people and in households with no telephone (or whose phone number is not available). Eight countries (Bulgaria, Estonia, Ireland, Portugal, Romania, Croatia, the former Yugoslav Republic of Macedonia and Turkey) collect data using only face-to-face interviews.

Many countries conduct the interview only with computerized questionnaires. Five (Belgium, Malta, Germany, Estonia and Poland) use both computerized and paper questionnaires and seven countries (Bulgaria, Greece, Hungary, Romania, Slovakia, Croatia, former Yugoslav Republic of Macedonia) rely solely on paper questionnaires.

2.10 Use of subsamples to survey structural variables

In 2010, nine countries (Bulgaria, Germany, Spain, France, the Netherlands, Finland, the United Kingdom, Norway and Switzerland) use a subsample to survey all or some of the thirty-nine structural variables, taking advantage of this possibility offered by Regulation (EC) No 2257/2003. The subsample coincides with one rotation panel in total sample, except for France, Norway, which use both the first and the last survey waves, and Switzerland, which uses the first and the penultimate wave. For Germany the subsample is randomly selected and presents 10 % of the total yearly sample.

Regulation (EC) No 377/2008 stipulates that the estimates produced from the yearly subsample should be consistent with those obtained as annual averages of the full quarterly samples, at least as regards the ILO labour force status broken down by sex and 10-year age groups. This requirement aims at ensuring the consistency of the main indicators (e.g. the employment or the unemployment rates) and their break-downs produced from the two different databases. In 2010, such consistency is ensured by all countries with small deviations for France and the Netherlands.

2.11 Burden of the EU-LFS

Twenty-nine countries gave some information on how long the interview lasted per person or household. The overall time to collect the information for the household was on average about 31 minutes for the first wave and around 23 minutes for the following waves (information from 18 countries). The interview of single persons in the first wave lasted on average approximately 13 minutes, while subsequent waves took on average around 10 minutes (information from 14 countries).

3 Relevance

Relevance is the degree to which statistics meet current and potential user needs. It depends on whether all statistics that are needed are produced and the extent to which concepts used (definitions, classifications etc.) reflect user needs. It can be assessed by analyzing the different users, who they are, what needs they have, whether they are satisfied etc.

Most EU statistics are compiled according to regulations containing a defined list of variables, which reflect in particular the most relevant institutional users' needs. Examining the completeness of the statistics measured against the relevant regulation is therefore a way to assess the actual relevance of those statistics.

3.1 The users

Eurostat does not carry out regular satisfaction surveys targeted only at users of labour markets statistics. In 2011 Eurostat carried out a LFS Rolling Review through its Quality Assurance Framework which included a user survey. Most users stressed the importance of the EU-LFS results. The results were acknowledged as essential both for the European Commission and its agencies and for international organisations. The data are equally important or even essential for most users from universities, research institutes and businesses⁽⁹⁾.

The main institutional users are known to the unit F3 Labour Market (see Table 3.1). Many of them are frequently consulted on various aspects of development and dissemination of labour force statistics.

For major topics of interest, the instrument of ad hoc modules has proven to be useful and flexible in addition to the standard EU-LFS. Some users, however, seek for more timely data release, at least of a few main indicators. The introduction in 2010 of a release calendar for the main indicators produced by the EU-LFS, even with conservative delays, has been favorably received by users.

⁽⁹⁾ http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/evaluation/domain_specific_results

Table 3.1 Classification and description of users

User	Description of user	Needs in term of concepts/statistics
DG Employment	The policy arm of the Commission regarding the labour market	Measurement and monitoring of policy agenda, especially the Lisbon and Stockholm targets and the European Strategy for Jobs and Growth (Europe 2020)
Other Directorates of the Commission	Policy setting	Various, especially in the domains of economic, education and social policy
ECB	The European Central Bank	Short term statistics relating to Euro area
OECD	Organisation for Economic Co-operation and Development	Varied, detailed tabulations from EU-LFS data
ESTAT - Unit E4	Regional statistics and geographical information	Detailed regional statistics, structural funds
ESTAT - Unit C2	National accounts - production	Estimates of amount and quality of labour input, using both the national and domestic concept
ESTAT - Unit F5	Education, science and culture statistics	Estimates on current education and education levels, higher education and research
Other registered users of the web-data	Including NSIs, international organisations	International comparison of main indicators
Researchers	Research institutions (universities, etc.)	EU-LFS microdata
The public	Researchers, news agencies and other	Varied, mainly intra EU comparisons

3.2 Completeness

Since 2005, all Member States of the EU conduct a continuous survey and provide quarterly results. In 2010 Switzerland was the last participating country which moved to a continuous survey. Thus, since 2010 all ESS countries provide quarterly and annual data.

Even if otherwise adhering to the EU-regulations on the EU-LFS, countries do not always provide data for all the variables. The reason can be for example the (temporary) inability to implement the variable in the national questionnaire.

A special case is the coverage of the household variables by the countries sampling individuals, i.e. the Nordic countries and Switzerland. In 2010 no coverage of such variables was undertaken by Iceland and Switzerland (derogation), while Denmark, Finland and Sweden covered them in special household datasets. Norway only covered household information on the family members of working age, but provided no information on other possible members of the household (i.e. children under the age of 15).

A country by country and variable by variable analysis of the situation is provided in the Annex. Tables 3.2 and 3.3 summarize the completeness of data.

Table 3.2 Completeness of the EU-LFS variables, 2010

Number of compulsory variables with 100 % item non-response ⁽¹⁾	Number of participating countries	Of which: EU-27 Member States
0	14	14
1-4	13	12
5-9	4	1
10+	2	0
Total	33	27

(¹) Not including variables that are empty because the filtering variable excluded any response.

Table 3.3 Compulsory EU-LFS variables having one or more country returning 100 % non-response or constant value⁽¹⁾, 2010

Column number ⁽²⁾	Brief description	Number of countries	Of which: EU-27
Col_001/2	Sequence number in the household	3	1
Col_003	Relationship to reference person in the household	2	0
Col_004/5	Sequence number of spouse or cohabiting partner	3	1
Col_006/7	Sequence number of father	3	1
Col_008/9	Sequence number of mother	3	1
Col_015	Date of birth in relation to the end of reference period	1	0
Col_017/18	Nationality	1	0
Col_019/20	Years of residence in this Member State	1	0
Col_028	Continuing receipt of the wage or salary	1	1
Col_029/31	Economic activity of the local unit	1	0
Col_039/40	Country of place of work	5	2
Col_043/46	Year in which person started working for this employer or as self-employed	1	0
Col_055	Contract with a temporary employment agency	3	1
Col_056	Shift work	1	0
Col_057	Evening work	2	1
Col_058	Night work	1	0
Col_059	Saturday work	1	0
Col_060	Sunday work	1	0
Col_067/68	Unpaid overtime in the reference week in the main job	1	0
Col_073/74	Number of hours that the person would like to work in total	2	0
Col_075	Working at home	1	0
Col_080/81	Economic activity of the local unit (in the second job)	1	0
Col_085/88	Year in which person last worked	1	0
Col_093	Professional status in last job	1	1
Col_094/95	Economic activity of the local unit in which person last worked	2	0
Col_096/98	Occupation of last job	1	1
Col_101	Type of employment sought	4	1
Col_102	Duration of search for employment	4	1
Col_103	Contacted public employment to find work	2	1
Col_104	Contacted private employment agency to find work	3	1
Col_105	Applied to employers directly	2	1
Col_106	Asked friends, relatives, trade unions etc.	2	1
Col_107	Inserted or answered advertisements in newspapers or journals	2	1
Col_108	Studied advertisements in newspapers or journals	3	1
Col_109	Took a test, interview or examination	3	2
Col_110	Looked for land, premises or equipment	2	1
Col_111	Looked for permits, licenses, financial resources	4	2
Col_112	Awaiting the results of an application for a job	7	6
Col_113	Waiting for a call from a public employment office	8	6
Col_114	Awaiting the results of a competition for recruitment to the public sector	14	9
Col_115	Other method used	8	7
Col_117	Availability to start working within two weeks	1	0
Col_118	Reasons for not being available to start working within 2 weeks	5	2
Col_119	Situation immediately before person started to seek employment (or was waiting for new job to start)	3	2
Col_120	Need for care facilities	1	0
Col_121	Registration at a public employment office	4	2
Col_132	Purpose of the most recent taught-learning activity	1	1
Col_133/135	Field of the most recent taught-learning activity	1	1

Column number ⁽²⁾	Brief description	Number of countries	Of which: EU-27
Col_142/145	Year when highest level of education or training was successfully completed	1	0
Col_146	Situation with regard to activity one year before survey	1	1
Col_148/149	Economic activity of the local unit in which person was working one year before survey	1	0
Col_150/151	Country of residence one year before survey	2	0
Col_152/153	Region of residence (within Member State) one year before survey	1	0
Col_154/155	Monthly (take-home) pay from main job	12	9
Col_168	Degree of urbanisation	3	0
Col_169/174	Serial number of household	1	1
Col_195	Sequence number of the survey wave	5	3

(¹) Excluding variables which are constant by default such as country, reference year, region (if NUTS 2 is the whole country)

(²) According to the Commission Regulation No. 377/2008.

4 Accuracy

The accuracy of statistical outputs in the general statistical sense is the degree of closeness of estimates to the true values. Statistics can be different from the true values because of random variability (the statistics change from implementation to implementation of the survey due to random effects) and/or bias (the average of the possible values of the statistics from implementation to implementation is not equal to the true value due to systematic effects).

Several types of error, stemming from all survey processes, contribute to the error of the statistics (their bias and variability). A certain typology of errors is widely adopted in statistics. **Sampling errors** affect only sample surveys; they are due to the fact that only a subset of the population, usually randomly selected, is surveyed. **Non-sampling errors** affect sample surveys and complete enumerations alike and comprise: 1. Coverage errors; 2. Measurement errors; 3. Processing errors; 4. Non-response errors; and 5. Model assumption errors.

4.1 Sampling errors

Sampling errors affect only sample surveys and arise from the fact that not all units of the frame population are surveyed. The *frame* is a device that permits access to population units, such as a list of households with addresses. *Frame population* is the set of population units which can be accessed through the frame and the survey's conclusions apply to this population.

Official surveys, like the EU-LFS, use probability sampling. This makes it possible to quantify the sampling errors and can be expressed in terms of confidence intervals. Table 4.1 provides the estimates and 95 % confidence limits for the 2nd quarter 2010 reached for the five main indicators. For example, interval 216,164 – 217,222 covers the true value of employed persons on aggregated EU27 level with a 95 % probability. The table 4.2 provides estimates and confidence limits for the annual averages for 2010.

Table 4.1 Confidence limits⁽¹⁾, 2nd quarter 2010

	Number of employed (x1000)	Number of part-time employed (x1000)	Number of unemployed (x1000)	Rate of unemployment (%)	Average number of hours actually worked ⁽²⁾ (Hrs.)
EU-27	216,693 ±529	41,949 ±286	22,718 ±231	9.5 ±0.1	37.2 ±0.0
EU-25	204,133 ±417	40,745 ±254	21,679 ±219	9.6 ±0.1	37.0 ±0.0
EU-15	172,824 ±398	38,363 ±245	17,998 ±205	9.4 ±0.1	36.4 ±0.1
EA-16	140 555 ±368	28 947 ±214	15 416 ±190	9.9 ±0.2	36.8 ±0.1
EA-12	136,722 ±366	28,683 ±213	14,915 ±189	9.8 ±0.2	36.7 ±0.1
EEA	219,370 ±529	42,707 ±286	22,834 ±231	9.4 ±0.1	37.2 ±0.0
BE	4 443 ±70	1 087 ±47	391 ±38	8.1 ±0.8	36.8 ±0.4
BG	3 072 ±78	74 ±10	342 ±25	10.0 ±0.7	40.6 ±0.2
CZ	4 881 ±46	292 ±15	374 ±18	7.1 ±0.4	41.4 ±0.1
DK	2 714 ±21	731 ±23	220 ±14	7.5 ±0.5	34.8 ±0.3
DE	38,602 ±227	10,193 ±120	2 919 ±86	7.0 ±0.2	35.6 ±0.1
EE	559 ±21	65 ± 9	128 ±14	18.6 ±1.9	38.3 ±0.6
IE	1 859 ±26	410 ±11	294 ±11	13.6 ±0.5	35.4 ±0.6
EL	4 427 ±87	282 ±17	594 ±26	11.8 ±0.5	41.6 ±0.2
ES	18,477 ±145	2,499 ± 64	4,645 ±100	20.1 ±0.4	38.5 ±0.2
FR	25,760 ±157	4,614 ±117	2,537 ± 96	9.0 ±0.3	36.7 ±0.2
IT	23,007 ±126	3,467 ± 82	2,093 ± 71	8.3 ±0.3	37.6 ±0.1
CY	388 ± 9	35 ± 3	26 ± 3	6.4 ±0.7	39.2 ±0.3
LV	936 ±22	87 ±11	225 ±19	19.4 ±1.4	38.8 ±0.6
LT	1 328 ±39	109 ±11	297 ±20	18.3 ±1.1	39.3 ±0.3
LU	219 ± 8	40 ± 4	9 ± 2	4.1 ±0.9	38.3 ±0.7
HU	3 779 ±32	213 ±13	473 ±20	11.1 ±0.5	39.8 ±0.1
MT	164 ± 5	20 ± 2	12 ± 2	6.8 ±1.0	38.8 ±0.5
NL	8 371 ±47	4 109 ±45	393 ±16	4.5 ±0.2	31.1 ±0.2
AT	4 081 ±46	1 038 ±28	187 ±14	4.4 ±0.3	36.6 ±0.3
PL	15,994 ± 94	1,352 ± 58	1,682 ± 63	9.5 ±0.4	40.3 ±0.2
PT	4,992 ± 59	587 ± 35	590 ± 35	10.6 ±0.6	38.9 ±0.3
RO	9,488 ±316	1,130 ±130	697 ± 68	6.8 ±0.6	40.1 ±0.3
SI	968 ±21	112 ± 8	74 ± 7	7.1 ±0.7	38.7 ±0.3
SK	2 313 ±23	97 ± 9	388 ±20	14.4 ±1.1	40.2 ±0.2
FI	2 485 ±18	358 ±13	263 ±11	9.6 ±0.4	36.7 ±0.2
SE	4 555 ±20	1 208 ±21	468 ±13	9.3 ±0.3	36.1 ±0.1
UK	28,833 ±153	7,741 ±117	2,395 ± 77	7.7 ±0.2	35.5 ±0.1
IS	168 ± 3	32 ± 2	16 ± 2	8.8 ±1.1	40.2 ±0.7
NO	2 509 ±20	726 ±18	100 ± 9	3.8 ±0.3	33.8 ±0.3
CH	4 282 ±53	1 513 ±38	190 ±16	4.3 ±0.4	37.0 ±0.2
HR	1,533 ± 81	150 ± 26	216 ± 23	12.4 ±1.3	39.5 ±0.5
MK	627 ± 33	36 ± 5	296 ± 26	32.1 ±2.2	42.2 ±0.7
TR	23,055 ± 90	2,601 ±127	2,527 ± 94	9.9 ±0.4	48.9 ±0.3

(¹) The confidence limits at 95 % level of significance. (²) By people who worked at least one hour in the reference week.

Note: Confidence limits for the EU aggregates are Eurostat's own estimates.

Source: EU-LFS Standard Quality Report

Table 4.2 Confidence limits⁽¹⁾, annual average 2010

	Number of employed (x1000)	Number of part-time employed (x1000)	Number of unemployed (x1000)	Rate of unemployment (%)	Average number of hours actually worked ⁽²⁾ (Hrs.)
EU-27	216,398 ±512	41,600 ±377	22,906 ±195	9.6 ±0.10	37.2 ±0.06
EU-25	204,106 ±484	40,514 ±372	21,832 ±191	9.7 ±0.10	37.1 ±0.06
EU-15	138,112 ±222	28,650 ±144	15,187 ±115	9.9 ±0.12	36.8 ±0.05
EA-16	140,430 ±223	28,742 ±144	15,576 ±116	10.0 ±0.11	36.8 ±0.04
EA-12	136,597 ±221	28,484 ±144	15,074 ±115	9.9 ±0.12	36.8 ±0.05
EEA	219,065 ±512	42,348 ±377	23,010 ±195	9.5 ±0.10	37.2 ±0.06
BE	4 489 ±33	1 079 ±23	406 ±18	8.3 ±0.4	37.3 ±0.2
BG	3 053 ±57	72 ± 6	348 ±19	10.2 ±0.5	40.6 ±0.1
CZ	4 885 ±36	289 ±13	384 ±14	7.3 ±0.4	40.7 ±0.1
DK	2 706 ±15	711 ±15	218 ± 9	7.5 ±0.3	35.2 ±0.2
DE	38,738 ±104	10 144 ±63	2 946 ±42	7.1 ±0.1	35.9 ±0.1
EE	571 ±15	63 ± 6	116 ± 8	16.9 ±1.0	38.9 ±0.3
IE	1 848 ±17	415 ±17	291 ±10	13.6 ±0.2	35.3 ±0.1
EL	4 389 ±76	282 ±15	629 ±23	12.5 ±0.4	41.3 ±0.2
ES	18,456 ±105	2 449 ±55	4 632 ±77	20.1 ±0.3	38.0 ±0.1
FR	25 692 ±80	4 582 ±83	2 653 ±42	9.4 ±0.2	37.1 ±0.1
IT	22 872 ±85	3 437 ±53	2 102 ±42	8.4 ±0.2	37.5 ±0.1
CY	385 ± 7	36 ± 3	25 ± 2	6.2 ±0.5	39.2 ±0.3
LV	941 ±11	91 ± 3	216 ±11	18.7 ±0.9	39.0 ±0.2
LT	1 344 ±41	109 ±12	291 ±21	17.8 ±1.1	39.2 ±0.3
LU	221 ± 4	39 ± 2	10 ± 1	4.4 ±0.5	38.0 ±0.4
HU	3 781 ±25	220 ±10	475 ±16	11.2 ±0.4	39.8 ±0.1
MT	164 ± 2	20 ± 1	12 ± 1	6.9 ±0.5	38.7 ±0.2
NL	8 370 ±46	4 090 ±35	390 ±11	4.5 ±0.1	32.0 ±0.2
AT	4 096 ±39	1 030 ±22	188 ± 9	4.4 ±0.2	37.0 ±0.3
PL	15 961 ±72	1 331 ±36	1 699 ±37	9.6 ±0.2	40.4 ±0.1
PT	4 978 ±50	578 ±30	603 ±28	10.8 ±0.5	38.7 ±0.3
RO	9,239 ±158	1 013 ±58	725 ±32	7.3 ±0.5	39.6 ±0.2
SI	966 ±15	110 ± 5	75 ± 5	7.2 ±0.5	39.1 ±0.2
SK	2 317 ±17	91 ± 6	389 ±12	14.4 ±0.6	39.6 ±0.2
FI	2 447 ±13	358 ± 9	224 ± 6	8.4 ±0.2	36.8 ±0.1
SE	4 546 ±17	1 201 ±18	417 ± 8	8.4 ±0.2	36.4 ±0.1
UK	28,942 ±418	7,759 ±340	2,440 ±143	7.8 ±0.4	35.6 ±0.3
IS	166 ± 2	38 ± 1	14 ± 1	7.6 ±0.5	39.5 ±0.3
NO	2 501 ±18	710 ±17	91 ± 8	3.5 ±0.3	34.4 ±0.2
CH	4 281 ±53	1 503 ±38	204 ±17	4.5 ±0.4	37.3 ±0.2
HR	1 541 ±57	149 ±18	206 ±15	11.8 ±0.8	39.4 ±0.3
MK	638 ±29	38 ± 3	300 ±19	32.0 ±1.6	41.7 ±0.5
TR	22,593 ±195	2 641 ±96	2 696 ±79	10.7 ±0.3	47.7 ±0.2

(¹) The confidence limits at 95 % level of significance. (²) By people who worked at least one hour in the reference week.

Note: Confidence limits for the EU aggregates are Eurostat's own approximation.

Source: EU-LFS Standard Quality Report

4.2 Non-sampling errors

Coverage errors

Coverage errors (or frame errors) are due to divergences between the target population and the frame population. Possible divergence types are undercoverage (i.e. the frame population does not include all units of the target population), overcoverage (i.e. the frame population includes units which do not belong to the target population) and misclassification (i.e. units in the frame population which belong to the target population but are wrongly classified). Table 4.3 summarizes the information on the coverage errors given by the participating countries.

Table 4.3 Frame quality, coverage rates and methodological notes

	Under-coverage	Over-coverage	Misclassification	Comments
BE	< 0,5 %	→0	→0	<i>Undercoverage:</i> Households, all members of which are 76 years or older, and collective households (about 0.15 % of all households) are excluded before draw. Delay between draw of household (from NPR, kept up to date 'permanently') and fieldwork: between 2 and 6 months.
BG		8 %		<i>Overcoverage:</i> The sample is planned and formed on lists of households obtained from March 2001 Population Census. During the survey field work problems are found on: - Non-occupied houses or houses used for other purposes - One household (according to the Census list) divided into two or more separate households or the opposite.
CZ				<i>Undercoverage:</i> Households are selected once a year from the Register of Census Areas. Due to differences in time span there is not the current information about addresses or flats. The sampling frame contains only private households. Persons living in institutional households are not covered. <i>Overcoverage:</i> Not existing or not inhabited flats remain in the Register of Census Areas.
DK	→0	→0	→0	<i>Undercoverage:</i> Statistics Denmark applies registers that are expected to have full coverage. In the Danish LFS the main sampling frame is the Population Register supplemented with the Unemployment Register for stratification purposes. The Population Register covers all registered residents in Denmark, and the register is currently updated on a quarterly basis. In terms of both coverage and updating, as such, this is a high quality sampling frame. After selection the monthly LFS sub-samples are compared with the most updated Population register in order to both verify active status (alive and resident) and to add updated information on dwelling address. The Law of the Central Population Register gives everybody the right to refuse participation in statistical and scientific surveys. Residents who have used this right are guaranteed that they will not be contacted in relation to surveys; therefore people with this marking in the register are marked as non-response and not contacted. Although this share of the population is no longer rising, the problem remains relevant. It is particularly acute in the part of the population that moves often. This has been analyzed by Statistics Denmark in a paper. The revised weighting scheme in use since 2007 tries to mitigate this problem. <i>Overcoverage:</i> See above
DE				<i>Undercoverage:</i> Homeless people and other people without registered residence (e.g. people living in huts, caravans) are out of the frame. Apart from that German LFS is an area sample. All inhabited dwellings belong to the frame. Thus, changes of the population (e.g. by immigration, emigration) are included in the frame automatically. Main problem: The basis (census 1987) annually updated by the register of new dwellings is very old. The census 2011 will give the German LFS a better frame quality.
EE				<i>Undercoverage:</i> In 2010 7315 households of 12038 households sampled for the survey, were interviewed. Among the households not interviewed, in 197 cases (1.6 % of total number of sampled households) the reason was an error or inaccuracy of the frame (person emigrated or left the county, person deceased, wrong address, etc.) By counties the share of frame errors varied from 0.9 % to 2.7 %.

	Under-coverage	Over-coverage	Misclassification	Comments
IE				<i>Undercoverage:</i> Our frame is the Census of population and as such we have no quality concerns regarding our frame.
EL	About 1 %	8.2 %		<i>Undercoverage:</i> Population living in collective households or in dwellings outside the borders of built areas is not covered. Frames are compiled at census, and sampling rates are based at census population. Frames are updated at the first time when the primary sampling units are selected but not at subsequent waves. <i>Overcoverage:</i> The sample in Greek LFS is a sample of dwellings. The percentage of over-coverage is computed as the percentage of dwellings that are either used as 'secondary residence' of the household or they are used solely for business purposes (e.g. a doctor's office)
ES	2 %	19.5 %	NA	<i>Undercoverage:</i> Percentage calculated as 'omitted' dwellings detected in the 'quality control survey'. Measures of impact not available. <i>Overcoverage:</i> The touristic areas are more prone to higher rates. <i>Misclassification:</i> The dwelling cannot be 'wrong classified' and within the target population, at the same time.
FR				<i>Undercoverage:</i> New dwellings seem to be underrepresented in the old sample (RP). The new sample (TH) does not cover very new buildings (less than 2 years old); yet this is taken into account in the weighting since the calibration method uses the number of new dwellings.
IT	-	1.8 %	1.6 %	<i>Undercoverage:</i> Households are selected once a year from the municipalities' registry offices; they cover the whole reference population. The data might contain errors as for information such as addresses (due for instance to recent change of the address), wrong inclusions (recent emigration) and missed inclusions (recent immigration). As for the survey's management strategies, Istat requires that each non-responding household be replaced with a household having similar characteristics of the first one, in order to maintain as much as possible the sample representativeness and to minimise the impact of unit non-response. Up to 3 replacements are admitted.
CY	2 %			<i>Undercoverage:</i> In the first stage of the sample design a number of primary sampling units (PSUs) were drawn in 2005 from the Census of Population frame of 2001. In a post enumeration survey conducted after the census an undercoverage of 2.0 % was estimated. The selected PSUs were again enumerated completely in 2005. In the 2nd stage of the sample design a number of households were selected from the updated PSUs. Updating to include newly constructed dwellings is carried out on an annual basis. Although the selected PSUs are completely updated annually, the original selection of PSUs was based on the distribution of households as enumerated in the 2001 Census. This assumes that the development of the selected PSUs was the same as in the rest of the areas which were not selected and this might not be completely true. <i>Overcoverage:</i> The sample size per year is approximately 18 400 dwelling units containing approximately 3400 households per quarter. The difference is empty houses.
LV		6 %		<i>Undercoverage:</i> The shortcoming is that the number of households in counting areas has not been updated from year 2000. In general the list of counting areas covers all territory of Latvia, but there could be some territories not covered by the list. It is due to active building of new dwellings in previously unoccupied areas during the last years. <i>Overcoverage:</i> Overall in the year 6.09 % of overcoverage from sample. Main reason of it are, rarely updated register were can be old information. Also other reasons will be checked.
LT				<i>Undercoverage:</i> In 2010 30 782 households were sampled for the survey. About 25 572 households were interviewed. Among not interviewed households, in 2794 cases (9 % of total number of sampled households) the reason was an error or inaccuracy of the frame (person deceased, wrong address, the building was knock down, etc.). One of the problems is that some persons don't live in Lithuania for a long time and still are in the Residents' (Population) register. Also young move across the country without declaration of their living place.
LU				<i>Undercoverage:</i> Households with no telephone will not be in the frame.
HU				<i>Undercoverage:</i> Hard-to-access groups are characterized either by extremely bad traffic conditions to get to their place or by collective reluctance -- usually within a small community -- towards being interviewed. Though the effect of these factors cannot be estimated, it is supposed to be not significant.

	Under-coverage	Over-coverage	Misclassification	Comments
MT				<i>Undercoverage:</i> The sampling frame being used covers private households. Hence persons living in institutional households are not being covered. Since the 2005 Census is being used as a sampling frame, households created after 2005 are not represented. All regions may be affected as changes are homogeneous across Malta and Gozo. <i>Overcoverage:</i> There is over-representation for households created prior to 2005 and for households which were present in 2005 and no longer exist after 2005.
NL	-	-	-	-
AT	-	-	-	<i>Undercoverage:</i> From 2004 onwards the sample for the Austrian LFS is drawn from the Austrian Register of Residents. This register was set up in 2002; still the composition of the households is not always recorded correctly. However as we are sampling households not persons this does not cause serious problems for the results of the survey. The sample is drawn three months before the start of the quarter. This results in a time lag of three to six months. Therefore dwellings where persons moved in after the due date for the survey are not covered. This results in undercoverage of recent migrants.
PL	-	-	-	-
PT	-	18.6 %	-	<i>Undercoverage:</i> The sampling frame doesn't cover the individuals living in collective dwellings. This population represents less than approximately 1 %. <i>Overcoverage:</i> From the first quarter of 2008 onward there are slight differences in the calculation of the over-coverage rate. The situations where the dwellings are unallocated or used for other purposes other than residence are identified and now excluded from the non-respondents and considered as overcoverage.
RO	2.1 %	Q1: 2.3 % Q2: 2.4 % Q3: 2.4 % Q4: 2.3 %	-	<i>Undercoverage:</i> Due to the lack of appropriate information, the new dwellings, built after 2002 Census of the Population and Dwellings, that could possibly constitute a sampling frame of the new dwellings, have not been taken into account. Thus, an updates has been done for the PSU included in EMZOT, on the basis of a micro-census type survey (2006). The micro-census has aimed in particular the updating of the addresses of the dwellings. Under-coverage rate was estimated as the ratio between number of new permanent dwellings, built in the period end of 2002 year (the year of the census)- end of 2009 year (Source: Romanian Statistical Yearbook, 2010), and number of dwellings at the end of 2009 year (Source: Romanian Statistical Yearbook, 2010). Thus, it was assumed that the proportion of the new dwellings in total dwellings should be the same in the master sample. <i>Overcoverage:</i> Overcoverage rates were estimated on the basis of the survey samples, as ratio between number of not-eligible dwellings and number of sampled dwellings.
SI	→0	→0	→0	<i>Undercoverage:</i> Register of private households would be better sampling frame, but we do not have it and we adjust data for unequal probability of selection of households. <i>Overcoverage:</i> Data is weighted to total population, because there are no reliable data about collective household's population.
SK				<i>Undercoverage:</i> The LFS sample is based on a Population Census conducted once every ten years (last time in 2001). There is the lack of information on new statistical units during a rather long period. Errors as for information on addresses of dwellings; missing coverage of collective households, persons living in convents, partially student halls of residence (although they are surveyed via other members of the households), members of the Slovak embassies and institutions abroad. Under-coverage comprises people born abroad and living in collective houses. <i>Overcoverage:</i> Mainly young residents working temporarily abroad can stay to live there. <i>Misclassification:</i> Misclassification by incorrect identification is negligible
FI	→0	1.4 %		<i>Undercoverage:</i> The sampling frame used is the total population database maintained by Statistics Finland. It is based on the Population Information System of The Population Register Centre and updated regularly. Undercoverage fairly small (no large-scale immigration). <i>Overcoverage:</i> Mostly emigration in wave 1, deaths and emigration for later waves.
SE	1 %	0.2 %	-	<i>Undercoverage:</i> The LFS sample is drawn once a year and the sampled persons are interviewed eight times during a two year period. No additional sample selection is made in order to update the sample with immigrants during this two-year period. The average time span between sample selection and the reference week is about 19 months, which means an under-coverage of about 50000 persons or 1 % of the population. This under-coverage is judged to have marginal effects on the LFS-estimates. <i>Overcoverage:</i> There is a certain over coverage in

	Under-coverage	Over-coverage	Misclassification	Comments
				RTB and consequently in the sampling frame. The over coverage consists of people born abroad who left Sweden without reporting this to the Swedish authorities. When these persons are included in the sample there are no information that they have moved out from Sweden. They cannot be reached for interview and will be classified as non-response. According to evaluation-studies made this over-coverage is mainly concentrated to non-Nordic immigrants and is of a magnitude of 25,000-50,000 persons in the total population (0.2 %).
UK	Approx. 1.5 %			<i>Undercoverage:</i> The LFS coverage omits communal establishments, excepting NHS housing and students in halls of residence. Members of the armed forces are only included if they live in private accommodation. The LFS, by not sampling from communal establishments, excludes approximately 1.5 % of the total GB population.
IS	→0	→0	→0	No significant problems
NO	10 %	-	20 %	<i>Undercoverage:</i> Do not include those 75 years and older. Imputes as outside the labour force. Number of persons employed about 0.25 per cent too low. <i>Misclassification:</i> Using family as a proxy for household at the moment
CH				<i>Undercoverage:</i> Undercoverage of household without a fix phone number. <i>Overcoverage:</i> Overcoverage of persons having a second residence with a fix phone number.
HR	-	-	-	<i>Undercoverage:</i> Starting from the first half-year 2002, the sample frame for the LFS is based on the Census 2001 data. This sample frame includes addresses of private households on the whole territory of Croatia; hence the LFS results relate to the whole country. As the Census database was not updated since 2001, it is becoming obsolete, and some problems regarding migration and/or newly built dwellings can be foreseen for the coming years.
MK		Q1: 7.0 % Q2: 7.0 % Q3: 7.1 %; Q4: 8.6 %		<i>Overcoverage:</i> Over-coverage rates were estimated on the basis of the survey samples, as ratio between number of not-eligible dwellings and number of sampled dwellings.
TR	-	0.9 %	-	<i>Undercoverage:</i> Together with the establishment of National Address Database, frame errors are minimised since the database is regularly being updated and during the sample selection current database is taken for each quarter. <i>Overcoverage:</i> In the survey, over-coverage was determined due the reason that some addresses were miscoded in the database or the types were changed later on. Such non-eligible addresses (establishments, warehouses, parcels, etc.) were found during the field application of the survey and included in the calculation of the overcoverage ratio.

Note: *Hyphen (-)* indicates that information is not provided. *Blank* indicates that information is not available to NSI.
Source: EU-LFS Standard Quality Report

Measurement errors

Measurement errors are errors that occur during data collection and cause the recorded values of variables to be different from the true ones. Their causes are commonly categorized as:

- *Survey instrument:* the form, questionnaire or measuring device used for data collection may lead to the recording of wrong values.
- *Respondent:* respondents may, consciously or unconsciously, give erroneous information.
- *Interviewer:* interviewers may influence the answers given by respondents.

No regular estimates of these errors are available. However, the number of proxy interviews and statistics on the last updates of the questionnaire are all related to the error sources listed above (Table 4.4).

Table 4.4 Share of proxy interviews, number of interviews per interviewer and last update of the questionnaire

	% of proxy interviews (unweighted) ⁽¹⁾	Date of last update of the questionnaire	Date of the last pilot survey in order to test the questionnaire	Number of respondents to the pilot survey
EU-27	31.0	-	-	-
BE	16.5	November 2009 (reference year 2010)	In Q3 2006, a CAPI questionnaire was tested	Around 1000
BG	35.5	Q1 2010	2007	Around 1060
CZ	46.7	December 2009	2001	891
DK	25.6	September 2010 (for Q4 2010).	Q4 2006	1000
DE	3.6	Yearly	No pilot surveys, only yearly conducted cognitive pretests	N.A.
EE	29.4	January 2010	July-September 2009	339
IE	48.0	September 2010 (for Q4 2010)	-	-
EL	42.3	January 2009	No pilot survey	N.A.
ES ²	53.0	June 2005	2004	3500 households were interviewed. Two models for Characteristics of Main Employment and three models for Search of Employment were tested.
FR	30.5	Q1 2010	2005	Around 250
IT ⁽²⁾	14.6	January 2010 (for Q1, Q3 and Q4); April 2010 (for AHM in Q2)	November 2009	1010 households
CY	32.1	September 2007	October 2007	30
LV	41.7	2010	May 2005 testing of CAPI	
LT	34.8	May 2010	April 2010	35
LU	37.5	Yearly		
HU	44.3	August 2008	October 2008	Around 300
MT	47.7	End of 2009	No pilot survey	N.A.
NL	48.7	-	-	-
AT	25.1	Q1 2010	Test of changes in the questions on hours worked finalized in Nov. 2008	151 persons
PL	37.4	Q1 2010	No pilot survey	N.A.
PT	48.6	2006	No pilot survey	N.A.
RO	27.9	August 2009	-	-
SI	57.2	January 2010	No pilot survey	N.A.
SK	35.4	July 2005	1992	
FI	4.0	January 2010	-	-
SE	3.0	January 2010	March and June 2004.	1400
UK ⁽²⁾	34.3	January 2010	August 2009	800 households sampled for the Dress Rehearsal. Achieved sample 528.
IS ⁽²⁾	2.6	-	November and December 2002	-
NO	14.9	Q1 2006	No pilot survey	N.A.
CH	2.0	March 2010	December 2009	Around 100
HR	43.5	2010	No pilot survey	N.A.
MK	44.5	2010	No pilot survey	N.A.
TR	46.6	July 2005	2003	Around 100 households

(¹) 15-74 years respondents; (²) 16-74 years respondents Notes: N.A. indicates that the item is not applicable. Hyphen (-) indicates that information is not provided. Blank indicates that information is not available to NSI
Source: EU-LFS Standard Quality Report

Processing errors

Between data collection and the beginning of statistical analysis for the production of statistics, data must undergo a certain processing: coding, data entry, data editing, imputation, etc. Errors introduced at these stages are called *processing errors*.

No estimates can be produced indicating the rate of processing errors in the EU-LFS.

Non-response errors

Non-response is the failure of a survey to collect data on all survey variables, from all the population units designated for data collection in a sample or complete enumeration. The difference between the statistics computed from the collected data and those that would be computed if there were no missing values is the *non-response error*.

Tables 4.5, 4.6 and 4.7 do show non-response rates, but they are not fully comparable. Most of the countries calculate non-response on the basis of the household unit, except Denmark, Finland, Sweden, Iceland, Norway and Switzerland, which calculate non-response on person basis. The treatment of non-response in the follow-up waves is also different between countries. Some participating countries do not take previous non-response into account when calculating the non-response in later waves, whereas others do. Thus the former countries may show lower non-response rates on the average than the latter.

Table 4.5 Rates of non-response by wave. Annual average 2010

	Waves							
	1	2	3	4	5	6	7	8
BE	27.9							
BG	25.6	17.8	15.5	12.9				
CZ	22.4	18.9	17.8	18.3	18.8			
DK	46.7	47.0	48.6	48.9				
DE ⁽¹⁾	-	-	-	-				
EE	45.6	39.8	36.8	33.0				
IE	22.6	19.7	18.7	18.9	20.0			
EL	15.5	14.7	14.2	13.7	13.7	13.6		
ES	16.2	12.5	12.3	12.6	12.7	12.5		
FR	19.9	18.8	17.5	16.7	16.9	13.9		
IT	25.5	7.2	7.5	5.4				
CY	3.1	3.5	3.5	3.6	3.3	3.2		
LV	34.2	26.9	25.4	24.9				
LT	23.0	16.9	14.6	13.0				
LU	68.6							
HU	30.6	22.8	14.6	11.2	8.9	7.6		
MT	19.1	27.4	26.8	25.5				
NL	48.9	17.7	8.6	5.6	5.3			
AT	5.7	7.5	7.3	7.2	7.2			
PL	30.1	25.9	24.6	23.2				
PT	22.5	16.5	15.6	14.8	13.9	13.1		
RO	7.6	6.1	4.9	4.4				
SI ⁽²⁾	31.9	20.6	14.5	12.3	8.6			
SK	12.3	-	-	-	-			
FI	22.7	21.8	21.7	21.8	21.7			
SE	28.2	24.5	23.9	24.0	23.7	23.5	23.0	19.9
UK	35.9	40.4	42.1	44.4	44.2			
IS	-	-	-	-	-			
NO	19.7	16.4	15.3	14.2	14.0	13.1	13.2	12.9
CH	32.1	7.6	11.8	6.6				

	Waves							
	1	2	3	4	5	6	7	8
HR	-	-	-	-				
MK	16.0	14.7	14.8	14.6				
TR	14.1	12.0	13.4	12.7				

(¹) Survey waves are on annual basis. (²) Conditional non-response in waves 2-5. The non-respondents from previous waves are excluded from the sample in subsequent waves (waves 2-5)

Note: *Hyphen (-)* indicates that information is not provided.

Source: EU-LFS Standard Quality Report

Table 4.6 Rates of non-response by survey mode. Annual average 2010

	Survey modes			
	CAPI	CATI	PAPI	POSTAL
BE	-		-	
BG			18.0	
CZ	19.2			
DK		48.1		
DE	-	-		-
EE	39.2			
IE	18.8			
EL			-	
ES	25.6	8.0		
FR	-	-		
IT	17.9	6.6		
CY	3.1	3.4		
LV	40.4	13.2		
LT	-	-		
LU		68.6		
HU		-	-	
MT		26.6	19.1	
NL(¹)	44.5	14.8		
AT	-	-		
PL	-	-	-	
PT	16.1			
RO			5.8	
SI	29.4	15.1		
SK			6.8	
FI		22.0		
SE		23.8		
UK	-	-		
IS		-		
NO		14.9		
CH		17.1		
HR			22.5	
MK			13.1	
TR	13.0			

Note: *Hyphen (-)* indicates that information is not provided. *Blank* indicates that that survey mod is not in use in that country.

(¹) Households in the first wave, thereafter persons

Source: EU-LFS Standard Quality Report

Table 4.7 Total and reason-specific non-response rates. Annual average 2010 (%)

	Non response rate	Refusals	Non-contacts	Other reasons
BE	27.9	3.3	10.5	14.2
BG	18.0	4.6	12.3	1.0
CZ	19.2	14.5	4.7	0.1
DK	48.1	26.4	9.5	12.2
DE	2.5	-	-	-
EE	39.2	15.0	22.7	1.5
IE	18.8	4.4	4.8	9.6
EL	14.2	3.8	2.3	8.1
ES ⁽¹⁾	16.2	6.4	9.8	0.0
FR	17.4	4.5	8.7	4.1
IT	12.3	4.1	6.2	2.0
CY	3.4	2.6	0.5	0.3
LV	32.9	12.8	16.3	3.9
LT	16.3	3.8	4.1	8.3
LU	68.6	38.2	30.1	0.3
HU	15.9	5.2	9.7	1.1
MT	24.6	2.9	21.8	0.0
NL	20.6	8.4	6.9	5.3
AT	7.4	0.4	7.0	0.0
PL	27.1	16.1	8.3	2.7
PT	16.1	4.0	9.2	2.9
RO	5.8	1.3	1.9	2.6
SI	20.3	12.7	2.0	5.6
SK	6.8	4.8	0.5	1.5
FI	22.0	14.2	7.3	0.5
SE	23.8	10.8	12.1	0.8
UK	41.4	33.5	7.9	0.0
IS	17.4	6.6	8.8	2.0
NO	15.0	2.5	-	-
CH	17.1	2.4	6.9	7.9
HR	22.5	11.9	2.3	8.4
MK	13.1	6.0	5.3	1.7
TR	13.0	0.2	8.1	4.8

Note: *Hyphen (-)* indicates that information is not provided. ⁽¹⁾ Rates are calculated for the first interview.

Source: EU-LFS Standard Quality Report

5 Timeliness and punctuality

The *timeliness* of statistical outputs is the length of time between the event or phenomenon they describe and their availability.

Punctuality is the time lag between the release date of data and the target date on which they were scheduled for release as announced in an official release calendar, laid down by Regulations or previously agreed among partners.

According to Council Regulation (EC) No 577/98 data shall be delivered to Eurostat within twelve weeks from the end of a reference quarter. Table 5.1 shows that data are transmitted to Eurostat for most countries in the third month after the end of the quarter. First national releases of data in the majority of the participating countries are in the first two months after the end of the quarter.

In 2010 a release calendar for the EU-LFS main indicators was introduced, foreseeing the release of the main indicators four weeks after the data delivery deadline. In addition Eurostat continually updates the Eurostat online database with new data after final data processing in Eurostat. Timeliness and punctuality of the transmission to Eurostat and

Eurostat's dissemination of the national data have further improved in 2010.

Table 5.1 First release nationally, transmission to Eurostat and Eurostat's dissemination of LFS data by number of calendar days from the end of the reference period 2010 – quarterly LFS data (results)

Number of calendar days from end of reference period	Number of countries			
	2009 ⁽¹⁾	2010		
	All	All	EU-27	Euro area
First release nationally				
<31	4	4	4	2
31-60	8	10	8	3
61-90	9	8	7	5
91+	7	6	3	2
Annual only or no publication ⁽²⁾	2	2	2	2
Not known	2	3	3	2
Total	32	33	27	16
<i>Average number of calendar days</i>	69	68	64	70
Transmission to Eurostat				
<31	1	1	1	1
31-60	1	7	5	2
61-90	26	23	21	13
91+	4	2	0	0
Total	32	33	27	16
<i>Average number of calendar days</i>	81	72	68	68
Eurostat's dissemination of national data (web site)				
<31	0	0	0	0
31-60	1	5	4	2
61-90	19	22	20	11
91+	12	6	3	3
Total	32	33	27	16
<i>Average number of calendar days</i>	92	82	80	82

(¹) I.e. not incl. Switzerland in 2009. (²) Luxembourg and Germany
Source: EU-LFS Standard Quality Report

6 Accessibility and clarity

Accessibility and clarity refer to the simplicity and ease with which users can access statistics, with the appropriate user information and assistance: a global context which finally enables them to make optimum use of the statistics.

In 2010 Eurostat published quarterly and annual results as well as an analysis of new indicators to supplement the unemployment rate in its series *Statistics in Focus*.

Eurostat also publishes annually a compendium describing the main characteristics of the national surveys.

The Eurostat public website is free of charge and includes main indicators, derived from the Labour Force Survey, as well as detailed, constantly updated main results from the EU-LFS. All data on the website are supplemented by meta-data in Euro SDMX Metadata Structure (ESMS), giving basic information on the background and a summary of the methodology. More detailed information can be found at the dedicated EU-LFS web page (http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/introduction).

Through direct queries, customized tabulations of EU-LFS results are available to users in electronic format. Eurostat extracts around 1500 direct queries each year. These data are also produced free of charge.

Since 2011 researchers can get anonymised datasets containing microdata free of charge if certain conditions are fulfilled. Data from all Member States and from Iceland, Norway and Switzerland are available in this format.

7 Comparability

Comparability refers to statistical outputs comprising the same data items (say employment data) but for different reference periods, regions or domains, where the aim is to combine them to make comparisons over time, or across regions, or across domains. It can be said that it is the extent to which differences between statistics are attributed to differences between the true values of the statistical characteristics.

7.1 Comparability over time

Table 7.1 summarizes the situation as regards the availability of quarterly microdata and the uniform spreading of the sample over the whole year.

Table 7.1 Availability of micro-data from the EU-LFS⁽¹⁾

	Quarter 2 micro-data from:	Quarterly micro-data from:	Sample evenly spread over reference weeks from:	Remarks
BE	1983	1999	1999	1983-1998: one week in the second quarter 2000-2002: one week per quarter
BG	2000	2000	2003	2003-2007: uniformly spread over the first 12 weeks of each quarter 2008+: uniformly spread over all the 13 weeks of each quarter
CZ	1997	1998	1997	1997: seasonal quarters 2 and 4
DK	1983	1999	1994	1992-1993: more than one week spread unevenly over 1st and 2nd quarter
DE	1983	2005	2005	1983-2004: one week in the 2nd quarter
EE	1997	2000	2000	1997-1999: all weeks in 2nd quarter not uniformly spread
EL	1983	1998	1996	1992-1995: all weeks in 2nd quarter not uniformly spread
ES	1986	1996	1999	1996-1998: evenly spread with the exception of 4 weeks in August (not surveyed due to interviewers' holidays)
FR	1983	2003	2003	1983-2002: survey conducted in the first quarter of the year 1992-2002: more than one week, but not uniformly spread in one quarter
IE	1983	1999	1998	1992-1997: more than one week, but not uniformly spread in one quarter 1999: quarterly data from 2 nd q onwards. 1998-2008: seasonal quarters
IT	1983	1997	2004	1983-2003: one week per quarter 1997: quarterly data from 2 nd q onwards.
CY	1999	2004	1999	2004: quarterly data from 2 nd q onwards.
LV	1998	2002	2002	1998-2001: all weeks in 2nd and 4th quarter not uniformly spread (semi-annual results)
LT	1998	2002	2002	1998-2001: one week in 2nd and 4th quarter each (semi-annual results) 2002q1-q2: one week per quarter, after that uniformly spread
LU	1983	2007	2003	1983-2002: one week per quarter 2003-2006: all weeks of the year, but not uniformly spread, quarterly breakdowns not available.

	Quarter 2 micro-data from:	Quarterly micro-data from:	Sample evenly spread over reference weeks from:	Remarks
HU	1996	1999	2003	1999-2002: one week per month 2003-2005: 3 weeks per month not uniformly spread 2006+: all weeks surveyed, nearly uniformly spread
MT	2000	2002	2004	2000-2003: one week per quarter
NL	1987	2000	2000	1987-1999: 1st to 22nd/23rd week surveyed, not uniformly spread 2000+: all weeks surveyed, not uniformly spread
AT	1995	1999	2004	1995-2003: more than one week at the end of the quarter, not uniformly spread
PL	1997	2000	2000	
PT	1986	1996	1998	1986-1991: one week in 1 st and 2 nd quarter. 1996: quarterly data from 2 nd q onwards. 1992-1997: more than one week per quarter, not uniformly spread
RO	1997	1999	1998	1998-2004: most or all weeks of the quarter, not evenly spread 2005: uniformly spread over any 12 weeks of each quarter 2006+: uniformly spread over all weeks of each quarter
SI	1996	1999	2002	1996-2005: all or most weeks surveyed, not uniformly spread. From 1996 to 2001, in the Eurostat files all records of a quarter attributed to a single week 2006+: all weeks surveyed, nearly uniformly spread
SK	1998	1998	1998	1998-1999: seasonal quarters
FI	1995	1998	2000	1995-1998: 'spring data' = March, April, and May; one reference week per month 1998-1999: quarterly data one reference week per month 2000+: quarterly data. Continuous survey. Evenly spread over the weeks of the month, months of each quarter have 4-4-5 weeks
SE	1995	2001	1999	1995-1998: uniformly spread over 4 weeks of the second quarter (weeks 14 to 17)
UK	1983	1999	1992	1992-2006: seasonal quarters 1999: quarterly data from 2 nd q onwards.
IS	1995	2003	2003	1995-2002: one week per quarter
NO	1995	2000	1996	1995: one week per month
CH	1996	2010	2010	1995-2009: an annual survey was carried out in the 2 nd q; all or most weeks surveyed, not uniformly spread
HR	2002	2007	2007	2002-2006: half-year results; one reference week per month
MK	-	2006	2006	
TR	-	2006	-	only one week per month covered

(¹) The table reflects the actual data availability in the databases of Eurostat in July 2011. National surveys may, e.g., have started producing quarterly results while only spring results were delivered to Eurostat.

Source: EU-LFS Standard Quality Report

Every year, a certain number of changes are introduced in some national LFSs, to take into account changes introduced at European level, to better align the national surveys to the already existing EU regulations or methodological guidelines, or to take into consideration national needs. These changes can concern the conceptual level (i.e. concepts and definitions used by the LFS, the survey coverage, i.e. the target population, the legislation, the classifications used, the geographical boundaries) or the measurement level (i.e. the sampling frame, the sample design, the rotation pattern, the questionnaire, the instructions to interviewers, the survey modes, the weighting scheme, the use of auxiliary information).

Table 7.2 reports the changes to the national labour force surveys introduced in 2010 by the participating countries. Such changes normally may introduce some discontinuity in the time-series.

Table 7.2 Improvements or changes compared to previous year

Change		Impact of the changes on the statistics
Changes to sampling frame, sample design or target population		
DK	No more CAPI interviews - extra work on getting telephone interviews from specific groups instead. Extra module for the Danish institute of welfare research on the employment of disabled people.	
ES	In 2010 the additional sample in Galicia covered all the quarters.	
NL	The 1st wave changed from only CAPI to CAPI+CATI (CATI is used for households with a land-line).	
PL	Since the first quarter of 2010, the LFS sample has been doubled (currently it comprises 54700 dwellings), due to harmonization with the requirements of the random sample representativeness included in Art 3.2 Council Regulation No. 577/98	
SI	According to the revised methodological explications, the definition on farmers was applied.	
CH	Until 2009: quarterly survey, conducted during the 2nd quarter only; from 2010: continuous survey.	
TR	National Address Database is fully used from 2010.	
Changes to questionnaire or national explanatory notes		
BE	The questions concerning variables EDUCLEVEL and HATLEVEL are split up in different parts. It starts with the general level (primary, secondary and tertiary education) and thereafter details are asked in a separate question. Also the answer category 'other, description' was added. Moreover, the answer categories in the French questionnaire for hatlevel of 'bachelier académique (haute école)' et 'bachelier académique (universitaire)' were modified in 'bachelier de type long dans une Haute Ecole' et 'bachelier de type long à l'université'. It is believed that the change of the wording in the French version of the questionnaire has caused an effect on the results.	Compared to 2009 and for the Brussels and Walloon region, there is a high increase of the number of persons with a non-university education of short type (+ 30/40 %) and a big drop of the number of persons with of non-university education of long type (- 30/40 %).
BG	The core NEEDCARE questions (3 in Bulgarian LFS) were excluded from the main LFS questionnaire and merged with the IMPFASIL questions in the ad hoc module. Due to this compromise the scope of the core NEEDCARE is limited and spread out only to the ad hoc module target population (aged 15 - 64). However this did not influence considerably on the NEEDCARE series since very small number of respondents aged 65 and over was dropped from NEEDCARE.	
LV	Improvement of wording of some questions.	
LT	Few questions wording and order in the questionnaire were changed according to Eurostat recommendations.	
NL	Due to the introduction of CATI interviewing in the first wave, the length of this questionnaire had to be reduced as not to find too many people unwilling to stay so long on the telephone taking the interview. As a consequence, the questions are divided differently over the 5 waves. Every wave contains the questions where the monthly and quarterly data are derived from. In addition, the first wave contains questions for deriving, the ISCED, ISCO and NACE codes. In the second wave the yearly variables and variables for the lfs ad hoc module are located. In the third wave in particular questions for national purposes are added.	
PL	Since the first quarter of 2010, variables EDUCSTAT, COURATT, HATFIELD, HATYEAR cover also people aged 65 years and more (in accordance with the obligatory COMMISSION REGULATION (EC) No 377/2008).	
UK	Slight change to HATLEVEL to include changes in education variables and now includes the new diploma qualification; amendment to FTPTREAS to improve the coding.	
CH	New question and variables (REGIONW, WAYFOUN, HWOVERP, HWOVERPU, MAINSTAT, COURLEN, COURPURP, WSTAT1Y, STAPRO1Y, NACE1Y2D, REGION1Y); new response items in the related items (FTP TREAS, TEMP REAS, EAV REAS, SEEK REAS, AVA REAS)	
HR	Variable HATLEVEL was changed in 2010 (new answer options added in the national questionnaire).	
MK	Several questions to improve the data were added and more; a specific question for the identification of persons having a minor job was introduced in the questionnaire.	

	Change	Impact of the changes on the statistics
Changes to weighting schemes		
LT	The auxiliary information (population data) used for weights adjustment was renewed. The population data at the beginning of the 2010 was used for calculation of first and second quarter weights. Population data at the 1 July 2010 was used for third and fourth quarter.	
LV	New PSU (Primary Sampling Units) are used for 1st wave. New weighting procedure is used, from Q1 2010 ensuring coherence between household and individual estimates. Number of persons aged 0-14 years is estimation from LFS.	
NL	Auxiliary information such as register data on income and registered unemployment, but also the estimates of the monthly unemployment using a Structural Time Series Model (STM) are included in order to have consistent monthly and quarterly estimates used in the weighting scheme. Use of auxiliary information in the weighting scheme was already applied to the national data on labour statistics. From 2010 it is applied to the dataset for Eurostat as well with the advantage that the figures published by Eurostat and Statistics Netherlands are similar.	
Other changes		
BE	Interviewers don't code NACE and profession anymore. They must give a detailed description and experts do the codification	
MT	Coding of the economic activity was done with Nace Rev 1.1 and converted to Rev 2	
NL	We anticipated deriving the input for the classification with a new coding system in the LFS survey as to meet the requirements of the ISCO-08 classification. However, due to the delay in the implementation, this has not happened yet and will probably be effectuated from 2012 onwards. In the meantime Statistics Netherlands applies a convertibility scheme (ISCO-93 to ISCO-08) which enables us to categorize almost all categories at 4-digit level. Few however can only be categorized at 2-digit level. For the unemployment figures, real monthly figures are provided compared to the 3-months moving average before. This is possible by applying the STM (Structural Time Series Model).	
LV	Improvement of instruction for interviewers	
PL	Improved precision of the quarterly and annual averages in all NUTS2 regions	
CH	From 2010 the participation in the survey is compulsory (before voluntary) and the national results are published quarterly (before annual).	
MK	More explanations for the interviewers in the instructions for the interviewers are added.	
TR	'Resident population' definition is harmonized in line with Eurostat recommendation and 12 month-criterion has started to be used.	

Source: EU-LFS Standard Quality Report

7.2 Comparability over space

A common framework regulation⁽¹⁰⁾, common variable definition⁽¹¹⁾, common explanatory notes⁽¹²⁾ and common regulation⁽¹³⁾ regarding the definition of unemployment and the twelve principles of questionnaire construction go a long way to ensure comparability of the statistics between the participating countries. This is, however, mainly true for the main characteristics, employment and unemployment where particular definitions and sequence of questions are part of the EU legislation. For other variables, each country has the responsibility to ensure that the national survey provides data that are compatible with the EU definitions and of the same quality.

⁽¹⁰⁾ Council Regulation (EC) No 577/98.

⁽¹¹⁾ Commission Regulation (EC) No 377/2008.

⁽¹²⁾ EU Labour Force Survey Explanatory Notes, available at:

http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/publications/methods

⁽¹³⁾ Commission Regulation (EC) No 1897/2000.

As most of the variables are defined in accordance with recommendations of the International Labour Organisation (ILO) and other international organizations, the main statistics from the EU-LFS are directly comparable to those of other industrialized countries, especially those of the other members of the OECD.

Over the last years, Eurostat has commissioned several reports to examine the degree to which the participating countries adhere to the common set of definitions. The most recent study of this kind was carried out on the 2008 questionnaires. As a general conclusion it emerges that, in spite of the progress regarding the adherence to the EU regulations, principles and guidelines (i.e. the explanatory notes), the national questionnaires still largely differ even in the collection of key variables such as WSTATOR (*Labour status in the reference week*). Hence, even if labour market statistics are subject to quite comprehensive international definitions, principles and guidelines, which make it one of the most harmonised statistical domains not only in Europe but worldwide, there is still room for further improvement of cross-country comparability⁽¹⁴⁾.

This applies also to the variable INCDECIL on income deciles, which was introduced as mandatory in 2009. At present, the comparability of this variable is still low, which is due to several elements: some countries ask information on monthly pay directly to the interviewees, while others retrieve it from national registers. Some countries ask the exact amounts while other ones collect the information in earning bands. Some countries define the deciles based on external sources, while others do it on the basis of the collected data. Some countries collect net, others gross income. Finally, the treatment of bonuses, allowances and fringe benefits is likely not fully homogeneous across countries. Work is on-going to reduce these disparities and improve the comparability of the variable. The dissemination of INCDECIL is pending on a quality assessment of the results by Eurostat.

8 Coherence

The coherence of two or more statistical outputs refers to the degree to which the statistical processes by which they were generated used the same concepts - classifications, definitions, and target populations – and harmonized methods. Coherent statistical outputs have the potential to be validly combined and used jointly. It is, however, generally easier to show cases of incoherence than to prove coherence. The following sections assess coherence with similar data from two other sources, the population statistics and the employment data from national accounts. Other comparisons are possible, such as with employment data from the Structural Business Statistics and the Labour Cost Survey.

8.1 Coherence with population statistics

The coherence with population statistics is of importance for the users, as often the most recent population estimates are available from the EU-LFS statistics. These two statistics are, however, not fully comparable.

Differences that need to be considered are:

- The EU-LFS statistics cover only the population in private households, while population statistics cover the whole population, including those living in collective households (e.g. conscripts).

⁽¹⁴⁾ A Task Force coordinated by Eurostat is currently working to identify shortcomings and propose possible improvements for the cross-country comparability of the national Labour Force Surveys in the EU.

- Sometimes the rules for defining the usual resident population differ in the LFS from the rules in population statistics.
- Population statistics usually refer to particular dates, e.g. 1st January or mid-year for population level and characteristics. The EU-LFS statistics generally refer to the average quarterly or annual situation.

Table 8.1 Coherence with population statistics 2010

	Population 15-64 1/1/2010			LFS annual average 15-64 2010			Relative difference [(L-P)/P*100]		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
EU-27	334,499.6	167,444.8	167,054.7	331,176.6	165,219.6	165,957.0	-1.0	-1.3	-0.7
BE	7,147.5	3,591.6	3,556.0	7,176.8	3,607.0	3,569.8	0.4	0.4	0.4
BG	5,211.6	2,593.1	2,618.5	5,046.2	2,507.7	2,538.4	-3.2	-3.3	-3.1
CZ	7,413.6	3,749.6	3,664.0	7,399.5	3,743.5	3,656.0	-0.2	-0.2	-0.2
DK	3,630.6	1,830.5	1,800.1	3,618.6	1,823.4	1,795.2	-0.3	-0.4	-0.3
DE	53,877.9	27,249.4	26,628.5	53,546.3	26,942.8	26,603.6	-0.6	-1.1	-0.1
EE	908.5	437.7	470.8	904.3	433.9	470.4	-0.5	-0.9	-0.1
IE	3,008.3	1,500.3	1,508.0	3,001.8	1,494.9	1,506.9	-0.2	-0.4	-0.1
EL	7,539.6	3,816.4	3,723.2	7,231.2	3,623.2	3,608.0	-4.1	-5.1	-3.1
ES	31,371.2	15,845.3	15,525.9	31,260.7	15,777.7	15,483.0	-0.4	-0.4	-0.3
FR ^(*)	40,706.4	20,149.6	20,556.8	39,995.8	19,668.3	20,327.5	-1.7	-2.4	-1.1
IT	39,655.9	19,789.2	19,866.7	39,545.8	19,719.0	19,826.7	-0.3	-0.4	-0.2
CY	562.7	280.7	282.0	534.3	262.8	271.5	-5.0	-6.4	-3.7
LV	1,549.0	752.2	796.8	1,549.0	752.2	796.8	0.0	0.0	0.0
LT	2,295.3	1,111.3	1,184.0	2,282.5	1,105.0	1,177.6	-0.6	-0.6	-0.5
LU	342.9	173.9	169.1	335.2	169.0	166.3	-2.2	-2.8	-1.6
HU	6,874.0	3,390.9	3,483.1	6,769.3	3,321.3	3,447.9	-1.5	-2.1	-1.0
MT	288.5	147.0	141.5	288.7	147.0	141.7	0.1	0.0	0.1
NL	11,123.8	5,604.5	5,519.2	11,017.4	5,532.6	5,484.7	-1.0	-1.3	-0.6
AT	5,654.5	2,829.2	2,825.3	5,606.1	2,788.7	2,817.5	-0.9	-1.4	-0.3
PL	27,223.1	13,516.3	13,706.8	26,527.0	13,103.2	13,423.8	-2.6	-3.1	-2.1
PT	7,119.9	3,526.1	3,593.9	7,113.7	3,522.0	3,591.7	-0.1	-0.1	-0.1
RO	15,003.7	7,483.7	7,520.0	14,999.4	7,481.2	7,518.2	0.0	0.0	0.0
SI	1,421.4	733.0	688.4	1,422.3	731.5	690.7	0.1	-0.2	0.3
SK	3,928.5	1,962.3	1,966.2	3,926.2	1,960.5	1,965.7	-0.1	-0.1	0.0
FI	3,552.7	1,795.9	1,756.8	3,536.5	1,779.0	1,757.5	-0.5	-0.9	0.0
SE	6,100.5	3,099.8	3,000.7	6,101.4	3,099.2	3,002.3	0.0	0.0	0.1
UK	40,988.2	20,485.9	20,502.3	40,440.6	20,123.0	20,317.6	-1.3	-1.8	-0.9
IS	213.1	108.5	104.5	203.1	102.7	100.4	-4.7	-5.4	-3.9
NO	3,217.8	1,641.8	1,576.0	3,229.0	1,646.7	1,582.3	0.3	0.3	0.4
CH	5,295.9	2,663.7	2,632.2	5,290.7	2,662.8	2,627.9	-0.1	0.0	-0.2
HR	2,972.3	1,484.2	1,488.1	2,757.3	1,351.9	1,405.4	-7.2	-8.9	-5.6
MK	1,450.2	734.6	715.6	1,447.9	733.4	714.5	-0.2	-0.2	-0.2
TR	48,618.6	24,557.8	24,060.8	47,532.5	23,620.1	23,912.4	-2.2	-3.8	-0.6

(^{*)} Not including the overseas departments of France.

Source: Eurostat (online data codes: [demo_pjan](#) and [lfsa_pganws](#)), 1 June 2012 (extracted).

Moreover, most of the participating countries carried out a population census in the 2001 round. New censuses often result in new weights, new sample frames or new sample designs. By 2004 all of the participating countries had revised the weights to reflect new population estimates. Re-weighting of previous data series have, however, not always been

implemented. Most countries conducted a new population census in 2011. The results of the 2011 census will lead to a retrospective revision of the weights in some countries.

8.2 Coherence with other employment estimates

Coherence of employment for LFS and National Accounts

Key concepts used in National Accounts, such as domestic employment, have no correspondence in the EU-LFS, which uses instead number of persons employed based on residency within the national border (national employment). There are also differences in coverage, where the EU-LFS covers the age groups 15 and older in private households only, while the national accounts cover all persons regardless of age or type of residence. In addition, the EU-LFS doesn't consider conscripts and unpaid trainees as employed whereas these are explicitly or implicitly accounted for in the National Accounts. The reference period for the measurement could also contribute to some differences. The LFS represent one average week in the year with all the weeks of the year measured. When the National Accounts data are derived from administrative sources or establishment surveys the reference period is usually different, the month, the whole year or a single day within the year or month.

As expected, the employment estimates based on the LFS data usually lie somewhat below the estimates of employment as estimated by National Accounts. This emerges from table 8.2, where the data are grouped on the basis of the importance of the LFS in the production of the National accounts data. For three countries, however, the opposite is true.

Admittedly the coverage, measurement and conceptual differences mentioned above only account for a relatively small part of the difference between the two estimates. As a rule of thumb, relative differences higher than 1.5 % need to be explained by other reasons. This would concern thirteen participating countries as shown in table 8.2. Germany, France and Italy are responsible for the bulk of the absolute difference between the National Accounts employment estimates and the LFS employment, while in relative terms Greece, France, Italy, and the former Yugoslav Republic of Macedonia show the highest discrepancies, with a distance of more than 5 %⁽¹⁵⁾.

When comparing data from LFS and National Account, users are also interested in whether the two sources show the same trend or not, i.e. change from one period to another. Table 8.2 also compares the data on employment growth in 2010. The results show that both sources are broadly comparable as regards the direction of the employment growth for the EU-27 and that the differences are mostly marked in the size of the growth figures.

The reasons for the disparities, either in levels or in the direction of the employment growth are not fully known. In general, the actual sources of incoherence are quite diverse across countries. The issue of incoherence between the LFS and National Accounts employment estimates has been addressed by a Eurostat-coordinated Task Force on the Quality of the Labour Force Survey. By the use of reconciliation tables, a range of potential sources of incoherence on the LFS side was identified, either related to a biased measurement of specific areas of employment, such as marginal employment, employment in black labour activities, employment in private households, illegal immigrants, or emerging from data collection, as in the case of non-response and proxy interviews. In addition, it can be pointed out that LFS estimates are subject to sampling error, both with regard to levels and changes between periods (cf. tables 4.1 and 4.2). When changes

⁽¹⁵⁾ Data for Bulgaria, which usually shows also a relative large gap between LFS and NA data, are not available for 2010; no data is available for Turkey.

between periods are small, this may result in diverging trends between the National Accounts' and the LFS' figures, just because for the LFS the changes are within the margin of error. As regards National Accounts, some indicative reasons for incoherence can be mentioned: National Accounts may use sources different than LFS (or LFS combined with other sources) to estimate employment; National Accounts may introduce adjustments to reach consistency between the employment reported by its sources and other related variables, like salaries or production; the national accounts approach, by comparing and combining different sources, is also more prone than LFS to identify and address underreporting or systematic biases.

All in all, national accounts are judged more suitable to measure employment levels, employment growth and industry breakdowns. LFS is more adequate to measure participation in the labour market (i.e. employment rates, activity rates, etc.), or to analyse the situation of specific socio-economic groups of the population (e.g. by age, gender or educational level).

Coherence of employment for LFS and Business Statistics

Business statistics, whether structural business statistics (SBS) or short-term business statistics (STS), are focused on production-related variables like output, turnover or value added, but they also produce some estimates of employment. These estimates may be and frequently are different from LFS. The main reasons for the differences are:

- *Different scope*: business surveys gather information on production units operating in the territory whereas LFS gathers information on people living in the country. Cross-border workers, or seasonal workers, are correspondingly recorded in different countries.
- *Different coverage*: the LFS does not collect information for people living in collective households (business statistics do not exclude the information). The LFS covers all economic activities and all firm sizes, whereas business statistics typically do not gather information on agriculture, Government or some service activities. In addition, business registers used to compile business statistics may not include small enterprises below a certain threshold or may leave out employment not included in the payroll or in the accounting books such as family workers.
- *Different units*: business surveys estimate the number of jobs whereas LFS counts jobholders. Business surveys rarely have access to jobholders' features like age, gender, etc. for which LFS is the only source.

Table 8.2 Employment (national concept) 2010 in two different datasets on the Eurostat website. Levels and growth rates

	2010 levels				2009-2010 growth rates		
	Labour force survey ⁽¹⁾ (x1000)	National accounts ⁽²⁾ (x1000)	LFS-NA (x1000)	(LFS-NA)/NA *100 (%)	Labour force survey ⁽¹⁾ (%)	National accounts ⁽²⁾ (%)	LFS-NA p.p.
1 Countries using LFS as their only source for employment in national accounts. LFS is only adjusted for conceptual alignment to ESA95							
EE	570.9	573.2	-2.3	-0.4	-4.2	-4.1	-0.1
IE	1,847.8	1,848.0	-0.2	0.0	-4.2	-4.2	0.0
CY	385.1	393.8	-8.7	-2.2	1.0	0.0	1.0
LT	1,343.7	1,343.8	-0.1	0.0	-5.1	-5.2	0.1
HU	3,781.2	3,781.2	0.0	0.0	0.0	0.0	0.0
UK	28,941.5	29,035.0	-93.5	-0.3	0.1	0.3	-0.2
PL	15,960.5	15,961.0	-0.5	0.0	0.6	0.6	0.0
2 Countries using mainly LFS, but replacing it in a few industries (or labour status), on a case-by-case basis							
BG	3,052.8	-	-	-	-6.2	-	-
EL	4,388.6	4,743.4	-354.8	-7.5	-2.7	-1.9	-0.8
LV	940.9	943.3	-2.4	-0.3	-4.3	-4.4	0.1
RO	9,239.4	9,488.0	-248.6	-2.6	0.0	-0.3	0.3
3 Countries not using LFS, or making minimal use of it							
BE	4,488.7	4,571.0	-82.3	-1.8	1.5	0.8	0.7
CZ	4,885.2	4,987.0	-101.8	-2.0	-1.0	-0.9	-0.1
FR ⁽³⁾	25,692.3	27,185.6	-1,493.3	-5.5	0.2	1.0	-0.8
LU	220.8	219.9	0.9	0.4	1.7	1.7	0.0
SI	966.0	966.7	-0.7	-0.1	-1.5	-1.7	0.2
IS	165.8	167.3	-1.5	-0.9	-0.2	-0.3	0.1
4 Countries combining sources for labour supply and demand, LFS being one source among others. This group is rather heterogeneous and can be sub-divided as follows:							
4a Countries giving precedence to labour supply sources (i.e. LFS)							
ES	18,456.5	18,777.9	-321.4	-1.7	-2.3	-2.6	0.3
IT	22,872.3	24,454.9	-1,582.6	-6.5	-0.7	-0.7	0.0
PT	4,978.2	4,978.2	0.0	0.0	-1.5	-1.5	0.0
SK	2,317.5	2,317.5	0.0	0.0	-2.1	-2.0	-0.1
FI	2,447.5	2,454.9	-7.4	-0.3	-0.4	-1.2	0.8
SE	4,545.8	4,524.6	21.2	0.5	1.0	1.1	-0.1
NO	2,500.8	2,600.0	-99.2	-3.8	0.1	-0.1	0.2
CH	4,280.5	4,280.5	0.0	0.0	0.3	0.3	0.0
HR	1,541.2	-	-	-	-4.0	-	-
4b Countries not giving precedence to any labour side							
DE	38,737.8	40,506.0	-1,768.2	-4.4	0.7	0.5	0.2
AT	4,096.3	-	-	-	0.5	-	-
4c Countries giving precedence to labour demand sources (i.e. employment registers and/or enterprise surveys)							
DK	2,706.1	2,737.0	-30.9	-1.1	-2.3	-2.0	-0.3
MT	164.2	166.9	-2.7	-1.6	2.1	2.3	-0.2
NL	8,370.2	8,514.5	-144.3	-1.7	-2.6	-0.3	-2.3
MK	637.8	559.3	78.5	14.0	1.3	1.5	-0.2

⁽¹⁾ Source: Eurostat Labour Force Survey, Annual averages (online data code: [lfsi_emp_a](#)). Extraction from 4 June 2012

⁽²⁾ Source: Eurostat National Accounts, national concept (online data code: [nama_aux_pem](#)). Extraction from 4 June 2012

⁽³⁾ The National Accounts estimates include the French overseas departments (DOM), which are not covered by the LFS.

Hyphen (-) indicates that information is not available

9 Regional labour market statistics⁽¹⁶⁾

9.1 Introduction

The EU-LFS is designed to give accurate quarterly information at national level and accurate annual information at NUTS 2 regional level. Microdata including the NUTS 2 level codes are provided by all the participating countries with a good degree of geographical comparability, which allows the production and dissemination of a wide set of comparable indicators. Eight countries, namely Estonia, Cyprus, Luxembourg, Malta, Latvia, Lithuania, Iceland and the former Yugoslav Republic of Macedonia comprise a single NUTS 2 region, i.e. the national result is also the NUTS 2 result (as well as the NUTS 1 result).

For the purposes of regional statistics as well as for monitoring the progress towards regional cohesion, data at NUTS 3 level are also needed. At present the transmission of data at NUTS 3 level has no legal basis and the figures are provided by the participating countries on a voluntary basis and with the purpose of deriving other regional aggregations. Therefore, available NUTS 3 data is currently only used for publication at a more aggregated level. For example, unemployment and employment figures are disseminated for rural, intermediate and urban areas as well as metropolitan regions, which are based on data of groups of NUTS 3 regions.⁽¹⁷⁾

The compilation of NUTS 2 figures is well specified in the EU-LFS. As this is not the case for the NUTS 3, the sources and compilation methods for this dataset need to be described in detail.

9.2 Sources for NUTS 3 level labour market statistics

Traditionally, NUTS 3 level data were sent to Eurostat in the form of tables computed directly by the countries. In recent years Eurostat has encouraged the participating countries to provide NUTS 3 codes in the LFS microdata, thus giving a clear indication about the LFS being the preferred source.

At present, eighteen Member States (Austria, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, the Netherlands, Slovakia, Spain, Sweden and the United Kingdom) send the NUTS 3 codes in the LFS microdata. Fifteen of these countries, namely, Austria, Bulgaria, Czech Republic, Estonia, France, Hungary, Ireland, Italy, Latvia, Lithuania, the Netherlands, Slovakia, Spain, Sweden and the United Kingdom, also transmit tabulated results. Four countries, Germany, Poland, Romania and Slovenia, only transmit tabulated results. For most countries the only source is the LFS, and the aggregated tables are based on the LFS results. For Austria, Denmark, France, Germany, and the Netherlands, instead, the tables are based on other reliable sources (registers, small area estimation, etc.) or a combination of LFS and other sources. For two Member States, Cyprus and Luxembourg, the NUTS 3 level does not differ from the NUTS 1 and the NUTS 2 level. In 2010, for Belgium, Malta

⁽¹⁶⁾ The chapter 9 was jointly written by Unit F3 and E4.

⁽¹⁷⁾ For a detailed description of this regional typology, see:

http://epp.eurostat.ec.europa.eu/portal/page/portal/rural_development/methodology

and Portugal as well as for the EFTA and Candidate countries, no NUTS 3 data were available.

9.3 Coefficient of variation for NUTS 2 and NUTS 3 regions for the unemployment rate

The coefficients of variation for each NUTS 2 and NUTS 3 region for both, the employment and unemployment rate are provided to Eurostat directly by the participating countries. This report focuses on the coefficients of variation for the unemployment rate, which provide information about the accuracy of the most prominent labour market indicator at regional level.

Table 9.1 presents a summary of the coefficients of variation for the unemployment rate, for countries sending NUTS 3 level data, reporting the lowest and the highest values for a NUTS 2 and NUTS 3 region in each country.

Table 9.1 Coefficient of variation (CV) for the unemployment rate, 2010

	CV of regional (NUTS 2) annual aggregates (%)		CV of regional (NUTS 3) annual aggregates (%)	
	Lowest	Highest	Lowest	Highest
BE	5.5	8.9	N.A.	N.A.
BG	4.6	6.8	5.7	26.9
CZ	-	-	-	-
DK	3.0	5.2	N.A.	N.A.
DE	2.7	12.8	N.A.	N.A.
EE	N.A.	N.A.	5.7	9.6
IE	2.7	3.4	4.0	7.5
EL	3.0	14.0	3.0	32.6
ES	1.8	16.1	2.9	16.1
FR	-	-	N.A.	N.A.
IT	2.9	9.8	4.2	21.8
CY	N.A.	N.A.	N.A.	N.A.
LV	N.A.	N.A.	3.5	13.2
LT	N.A.	N.A.	6.6	22.4
LU	N.A.	N.A.	N.A.	N.A.
HU	3.5	6.0	4.4	11.8
MT	N.A.	N.A.	N.A.	N.A.
NL	3.6	13.2	6.4	47.9
AT	5.0	7.7	N.A.	N.A.
PL	3.6	5.3	5.6	14.4
PT	3.7	11.2	N.A.	N.A.
RO	7.0	13.7	N.A.	N.A.
SI	4.5	4.8	6.5	27.1
SK	1.8	6.1	2.4	5.1
FI	2.4	20.4	3.5	20.4
SE	2.5	4.0	2.5	12.4
UK	4.3	18.2	-	-
IS	N.A.	N.A.	N.A.	N.A.
NO	-	-	N.A.	N.A.
CH	-	-	N.A.	N.A.
HR	5.0	6.7	N.A.	N.A.
MK	N.A.	N.A.	N.A.	N.A.
TR	2.7	13.4	N.A.	N.A.

Note: N.A. indicates that CV at the regional level is not applicable, either because the regional level does not differ from the higher NUTS level, the country does not deliver NUTS 3 level employment and unemployment data, or the source is not the LFS. Hyphen (-) indicates that no information on the regional CV is supplied. *Source:* EU-LFS Standard Quality Report

The EU-LFS is designed to provide reliable estimates on the NUTS 2 level of aggregation, provided that the population of the region in question exceeds 300,000 inhabitants. The coefficients of variation given in table 9.1 are nevertheless provided for regions which have a small population and hence a small sample size. In the EU-27 in 2010, 13 out of 271 NUTS 2 regions have a population below 300,000 inhabitants. This will tend to inflate the CVs and the range of CVs.

As expected, the CVs for the NUTS 3 regions are higher and have a wider range than for the NUTS 2 ones. Of the fifteen countries providing CVs on NUTS 3 level, seven have CVs up to 15 % and four more have CVs up to 25 % while another four countries have regional CVs of over 25 %.

9.4 Current developments

Given the growing demand for comparable regional data, Eurostat started encouraging countries to provide NUTS 3 codes in LFS microdata. The number of countries providing this information is increasing year after year. Although some countries do not transmit NUTS 3 codes yet, efforts will continue in order to obtain coverage as wide as possible. The idea is that in the future only countries using sources different from the LFS deliver aggregated tables. However, due to non-sampling errors and the combined use of LFS data with the information from registers, it is currently very difficult to assess the accuracy of NUTS 3 level labour market data according to scientific standards.

In order to address the issues concerning NUTS 3 data, Eurostat has initiated a project to assess the quality and future use of labour market data at NUTS 3 level. The objective is to analyse the different sources, the compilation, the dissemination and the validation of this data. Based on the results of the project, Eurostat will make a proposal on how to proceed with the compilation and possible publication of the NUTS 3 labour market data in the future.

Annex: Item non-response compared to the variables defined by the Commission Regulation (EC) No 377/2008 and clarifications provided by Member States

Quarterly data 2010

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non-available statistics and prospects for future solutions
BE	compulsory	Col_073/74	HWWISH	90.3	91.6	92.2	91.5	HWWISH is only asked to persons who declared to wish to work more.
		Col_116	WANTWORK	43.8	43.2	42.2	44.2	We don't ask WANTWORK to all persons with SEEKWORK =3. We have no info about WANTWORK for persons with statbit=2 & SEEKWORK=3 neither for persons with SEEKWORK = 3 but who are (early) retired. 99 % or more of the item non-response concerns (early) retired persons. We can consider them as not willing to work anymore since they don't seek work.
		Col_195	INTWAVE	C	C	C	C	One wave in 2010
BG	compulsory	Col_054	TEMPDUR	42.9	38.0	36.1	41.6	Respondents meet difficulties to answer the question. About a third of non-responded persons were working without a labour contract.
		Col_082/83	HWACTUA2	15.5	16.5	20.0	17.9	Respondents meet difficulties to answer the question, especially self-employed. More than a half of non-responded persons were self-employed on the second job.
		Col_115 - Employed	METHODM	C	C	C	C	Only methods corresponding to variables METHODODA to METHODDI are considered as active methods.
		Col_115 - Not employed	METHODM	C	C	C	C	Only methods corresponding to variables METHODODA to METHODDI are considered as active methods.
CZ	compulsory	Col_123	EDUCSTAT	14.7	14.8	14.9	15.0	Only persons aged 15-69
DK	compulsory	Col_023	PROXY	10.8	10.7	10.7	10.8	In the Danish LFS the variable covers only population 15-74.
		Col_047/48	MSTARTWK	.	13.22	18.2	23.59	
		Col_084	EXISTPR	24.58	25.95	27.95	27.48	In the Danish LFS the variable covers only population 15-74.
		Col_123	EDUCSTAT	10.8	10.7	10.7	10.8	In the Danish LFS the variable covers only population 15-74.
		Col_162/163	INTWEEK	30.0	29.6	29.7	29.8	In the Danish LFS the variable covers only population 15-74.
		Col_169/174	HHNUM	.	100.0	100.0	100.0	Problem with national programming. Will be fixed in the future.
DE	compulsory	Col_195	INTWAVE	100.0	100.0	100.0	100.0	This variable is not filled because there are no intra-annual waves in the German LFS.
	optional	Col_021/22_	COUNTRYB	100.0	100.0	100.0	100.0	This variable is not filled in 2010 for legal reasons.
EE	compulsory	Col_115 - Employed	METHODM	C	C	C	C	Due to small absolute numbers very few cases, if any.
		Col_115 - Not employed	METHODM	C	C	C	C	Due to small absolute numbers very few cases, if any.

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non-available statistics and prospects for future solutions
IE	compulsory	Col_065/66	HWOVERP	.	.	13.4	11.0	
		Col_067/68	HWOVERPU	.	.	13.4	11.0	
		Col_085/88	YEARPR	14.1	12.2	11.1	10.9	
		Col_102 - Employed	SEEKDUR	.	.	13.4	11.0	
		Col_115 - Employed	METHODM	C	C	C	C	
		Col_115 - Not employed	METHODM	C	C	C	C	
EL	compulsory	Col_039/40	COUNTRYW	C	C	C	C	It is quite rare the incidence of persons residing in Greece and working abroad. Usually there is a labour force inflow from bordering countries.
ES	compulsory	Col_054	TEMPDUR	14.6	14.5	14.2	15.1	Respondent 'don't know'
		Col_073/74	HWWISH	84.9	84.3	85.0	84.2	Most of the blanks come from people that don't wish to work more/less hours (perhaps the filter for this variable should be changed or add proper categories). Other option is to code the number of hours HWWISH from HWUSUAL.
		Col_115 - Employed	METHODM	C	C	C	C	No 'other' active method in the survey
		Col_115 - Not employed	METHODM	C	C	C	C	No 'other' active method in the survey
		Col_124	EDUCLEVL	15.5	15.9	17.7	20.4	People aged 15.
		Col_129/131	COURLEN	30.4	31.6	41.0	32.7	People aged 15 plus 'don't know' number of hours
FR	compulsory	Col_028	SIGNISAL	C	C	C	C	The question is not included in the questionnaire. It could be included in the new questionnaire in 2013, depending on the conclusions of the task force working on the definition of employment.
		Col_54	TEMPDUR	13.0	12.5	11.5	12.5	This question is not asked for all types of temporary work, this will be corrected in the new questionnaire in 2013.
		Col_65/66	HWOVERP	17.0	17.2	13.6	17.2	Some people who do not declare any contractual time are not asked about their overpaid hours; this will be corrected in the new questionnaire in 2013.
		Col_67/68	HWOVERPU	17.0	17.2	13.6	17.2	Some people who do not declare any contractual time are not asked about their overpaid hours; this will be corrected in the new questionnaire in 2013.
		Col_73/74	HWWISH	16.1	16.4	16.9	16.4	We impute non-response when there is incoherence; for instance when the interviewee declares that he wants to work more and then the number of hours he wished is inferior to the usual number of hours worked.
		Col_112 - Employed	METHODJ	C	C	C	C	The question is not asked yet; it will be included in the new questionnaire in 2013
		Col_112 - Not employed	METHODJ	C	C	C	C	The question is not asked yet; it will be included in the new questionnaire in 2013
		Col_113 - Employed	METHODK	C	C	C	C	The question is not asked yet; it will be included in the new questionnaire in 2013

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_113 - Not employed	METHODK	C	C	C	C	The question is not asked yet; it will be included in the new questionnaire in 2013
		Col_114 - Employed	METHODL	C	C	C	C	The question is not asked yet; it will be included in the new questionnaire in 2013
		Col_114 - Not employed	METHODL	C	C	C	C	The question is not asked yet; it will be included in the new questionnaire in 2013
		Col_116	WANTWORK	33.4	32.7	32.9	31.4	The question is not asked for people between 65 and 75; it will be included for them in the new questionnaire in 2013.
		Col_162/163	INTWEEK	10.5	10.2	10.5	10.0	For households where all persons are aged 65 or more and are inactive, the variables are imputed for waves 2 et 5; thus we do not have any interview weeks for them.
IT	compulsory	Col_073/74	HWWISH	.	.	16.7	.	Questions on WISHMORE-HWWISH are referred to the wish of working more than the actual number of hours. Most of the item non-responses are due to persons that did not want to work at all in the reference week (code '0' is not available)
		Col_101 - Employed	SEEKTYPE	20.2	19.7	22.7	20.3	Item non-responses are due to persons that do not have preferences about an employment as self-employed or employee
		Col_101 - Not employed	SEEKTYPE	20.7	22.8	23.3	24.3	Item non-responses are due to persons that do not have preferences about an employment as self-employed or employee
CY	compulsory	Col_039/40	COUNTRYW	C	C	C	C	Country is always CY
		Col_041/42	REGIONW	C	C	C	C	NUTS 2 is the whole of CY
		Col_111 - Employed	METHODI	C	C	C	C	Rare method to use for searching
LV	compulsory	Col_084	EXISTPR	12.3	13.2	13.8	16.8	There aren't interviewed persons aged 75 or more included in filter (col.24-5).
LT	compulsory	Col_101 - Employed	SEEKTYPE	3.7	.	17.9	.	Statistics is available. Some respondents do not know what they want and they are ready to do any type of the work found.
		Col_114	METHODL_E employed	C	C	C	.	This method used to find work is not very popular among employed respondents. In few quarters none of respondents indicated it, so all records had value 0 – 'No'.
LU	compulsory	Col_80/81	NACE2J2D	.	12.1	.	.	We have not many observations of persons with second jobs.
		Col_89/90	MONTHPR	.	13.4	.	.	
		Col_101 - Employed	SEEKTYPE	100.0	100.0	100.0	100.0	
		Col_101 - Not employed	SEEKTYPE	.	.	12.5	.	
		Col_102 - Employed	SEEKDUR	100.0	100.0	100.0	100.0	
		Col_103 – Employed	METHODA	C	C	C	C	
		Col_104 - Employed	METHODB	C	C	C	C	

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_105 - Employed	METHODC	C	C	C	C	
		Col_106 - Employed	METHODD	C	C	C	C	
		Col_107 - Employed	METHODE	C	C	C	C	
		Col_108 - Employed	METHODF	C	C	C	C	
		Col_109 - Employed	METHODG	C	C	C	C	
		Col_110 - Employed	METHODH	C	C	C	C	
		Col_111 - Employed	METHODI	C	C	C	C	
		Col_112 - Employed	METHODJ	C	C	C	C	
		Col_113 - Employed	METHODK	C	C	C	C	
		Col_114 - Employed	METHODL	C	C	C	C	
		Col_115 - Employed	METHODM	C	C	C	C	
		Col_195	INTWAVE	C	C	C	C	Only 1 wave in 2010
HU	compulsory	Col_047/48	MSTARTWK	.	12.3	18.1	23.4	EU Filter: REFYEAR – YSTARTWK<=2 HUFILTER: SUM (REFYEAR– YSTARTWK<2) or (SUM(REFYEAR– YSTARTWK=2) and (REFMONTH<=MSTARTWK))
		Col_084	EXISTPR	15.8	16.0	16.2	16.2	EU Filter: WSTATOR 3-5. HU Questionnaire: Persons on lay-off are not asked about existence of previous employment experience. Number of persons on lay-off is much lower, then in EU-calculation.
		Col_089/90	MONTHPR	.	.	16.5	21.3	EU Filter: REFYEAR – YEARPR<=2 HU Questionnaire: Q1: When did you last have a regular job/business? Year to be given by respondent. Q2: If the last job/business terminated not more than two years ago from the end of last week, then in which month? Month to be given by respondent
MT	compulsory	Col_054	TEMPDUR	16.7	26.1	20.4	10.9	
		Col_112 - Employed	METHODJ	C	C	C	C	Not included in the questionnaire
		Col_112 - Not employed	METHODJ	C	C	C	C	Not included in the questionnaire
		Col_113 - Employed	METHODK	C	C	C	C	Not included in the questionnaire
		Col_113 - Not employed	METHODK	C	C	C	C	Not included in the questionnaire
		Col_114 - Employed	METHODL	C	C	C	C	Not included in the questionnaire
		Col_114 - Not employed	METHODL	C	C	C	C	Not included in the questionnaire
NL	compulsory	Col_54	TEMPDUR	70.0	69.8	69.6	72.5	
		Col_80/81	NACE2J2D	15.2	14.9	16.4	16.1	
		Col_112 – Employed	METHODJ	C	C	C	C	

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_112 - Not employed	METHODJ	C	C	C	C	
		Col_114 - Employed	METHODL	C	C	C	C	
		Col_114 - Not employed	METHODL	C	C	C	C	
		Col_129/131	COURLEN	.	11.1	15.3	16.3	
PT	compulsory	Col_54	TEMPDUR	42.3	40.8	41.7	43.0	We confirm these levels of non-response. By mistake, in the microdata sent to Eurostat before 2006, the national non responses were included in the item 'more than 3 years' (cód. 8). From 2006 onwards, they were included in the item «no answer».
		Col_101 - Employed	SEEKTYPE	25.7	28.9	23.5	30.0	The Portuguese questionnaire does not allow collecting this information for all individuals (e.g. those who were not seeking but wanted a job).
		Col_102 - Employed	SEEKDUR	30.7	33.7	28.7	35.3	
		Col_112 - Not employed	METHODJ	C	C	C	C	
		Col_113 - Not employed	METHODK	C	C	C	C	The Portuguese questionnaire does not allow collecting this information for all individuals (e.g. those who were seeking a job).
		Col_114 - Not employed	METHODL	C	C	C	C	
		Col_115 - Not employed	METHODM	C	C	C	C	
RO	compulsory	Col_069/70	HOURREAS	18.2	.	.	.	The source of this high non-response is an error in the transcodification program. This issue will be corrected starting with the second quarter of 2010.
SI	compulsory	Col_041/42	REGIONW	C	C	C	C	
		Col_065/66	HWOVERP	87.3	88.2	89.7	85.5	
		Col_067/68	HWOVERPU	92.9	93.2	93.8	91.5	
		Col_073/74	HWWISH	80.2	81.6	81.9	82.3	
		Col_114 - Employed	METHODL	C	C	C	C	
		Col_114 - Not employed	METHODL	C	C	C	C	
		Col_124	EDUCLEVL	.	.	28.1	.	
SK	compulsory	Col_54	TEMPDUR	19.5	31.8	30.3	26.7	Given values do not correspond to delivered data.
		Col_101 - Employed	SEEKTYPE	10.6	.	10.3	.	Missing of appropriate code for those who are looking for any job (no preference between self-employed, employees) causes higher value of the non-response rate.
		Col_101 - Not employed	SEEKTYPE	12.8	14.2	14.2	14.5	Missing of appropriate code for those who are looking for any job (no preference between self-employed, employees) causes higher value of the non-response rate.
		Col_115 - Employed	METHODM	C	C	C	C	Methods used in job seeking have the same question 'State all methods you used during the last 4 weeks to find work'

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non-available statistics and prospects for future solutions
FI	compulsory	Col_102 - Employed	SEEKDUR	.	.	.	10.1	
		Col_112 - Employed	METHODJ	C	C	.	C	Passive job search methods are asked only if none of the active methods has been used.
		Col_113 - Employed	METHODK	C	C	.	C	Passive job search methods are asked only if none of the active methods has been used.
		Col_114 - Employed	METHODL	C	C	C	C	NA
		Col_114 Not employed	METHODL	C	C	C	C	NA
SE	compulsory	Col_001/2	HHSEQNUM	C	C	C	C	The household supplement for the Swedish LFS is added to the 8th rotation where all household members are included in the sample. Persons aged 15-74 years of age are interviewed with regard to the labour market. Data for 2010 has been delivered to Eurostat for evaluation
		Col_054	TEMPDUR	15.2	12.4	12.1	13.2	Respondents do not always remember start and end of work
		Col_102 - Not employed	SEEKDUR	17.9	29.3	12.9	14.6	High item non response. People tend to forget how long they have been looking for work.
UK	compulsory	Col_054	TEMPDUR	43.7	48.9	47.3	48.6	There is a high-level of non-response due to a relatively small proportion of the employed sample working in a temporary job in the reference week.
		Col_065/66	HWOVERP	90.2	90.0	90.3	90.0	There is a high level of non-response due to a relatively small proportion of the employed sample working overtime in the reference week
		Col_067/68	HWOVERPU	84.6	83.7	85.2	84.6	There is a high level of non-response due to a relatively small proportion of the employed sample working overtime in the reference week
		Col_073/74	HWWISH	89.2	89.4	88.6	89.6	This variable is only computed for those who wish to work more hours. The high level of non-response is due to only 4 % of the sample wishing to work more hours
		Col_109 - Employed	METHODG	C	C	C	C	The UK-LFS does not collect information on whether respondents took a test, interview or examination. Only 'no' responses can be computed.
		Col_109 - Not employed	METHODG	C	C	C	C	The UK-LFS does not collect information on whether respondents took a test, interview or examination. Only 'no' responses can be computed.
		Col_113 - Employed	METHODK	C	C	C	C	The UK-LFS does not collect information on whether respondents are waiting for a call from a public employment office
		Col_113 - Not employed	METHODK	C	C	C	C	The UK-LFS does not collect information on whether respondents are waiting for a call from a public employment office

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_114 - Employed	METHODL	C	C	C	C	The UK-LFS does not collect information on whether respondents are awaiting results of a competition for recruitment to the public sector
		Col_114 - Not employed	METHODL	C	C	C	C	The UK-LFS does not collect information on whether respondents are awaiting results of a competition for recruitment to the public sector
		Col_124	EDUCLEVL	.	.	13.2	.	According to our datasets, the level of non-response was not significantly higher in JS06 than in other quarters
		Col_129/131	COURLEN	78.2	78.9	79.3	77.2	The high level of non-response is due to the fact that not all people who have completed a course in the last 4 weeks are asked how many hours of instruction that have attended in total
		Col_137/138	HATLEVEL	17.2	17.4	17.4	17.3	The highest level of qualification is not asked of women aged 60-99 who are not working. Men aged 65-99 who are not working are also not asked to give their highest level of qualification. These cases appear as blanks rather than non-applicable
IS	compulsory	Col_001/2	HHSEQNUM	C	C	C	C	
		Col_025/26	YEARESID	.	.	100.0	100.0	
		Col_039/40	COUNTRYW	C	C	C	C	
		Col_041/42	REGIONW	C	C	C	C	
		Col_065/66	TEMPDUR	.	.	.	13.6	
			HWOVERP	70.2	73.7	74.8	73.1	
		Col_067/68	HWOVERPU	69.9	73.5	74.3	72.8	
		Col_069/70	HOURREAS	14.1	12.7	14.6	14.4	
		Col_073/74	HWWISH	100.0	100.0	99.9	100.0	
		Col_101 - Employed	SEEKTYPE	100.0	100.0	100.0	100.0	
		Col_101 – Not employed	SEEKTYPE	.	18.1	.	.	
		Col_102 - Employed	SEEKDUR	100.0	100.0	100.0	100.0	
		Col_102 - Not employed	SEEKDUR	.	18.1	.	.	
		Col_103 - Employed	METHODA	C	C	C	C	
		Col_104 - Employed	METHODB	C	C	C	C	
		Col_105 - Employed	METHODC	C	C	C	C	
		Col_106 - Employed	METHODD	C	C	C	C	
		Col_107 - Employed	METHODE	C	C	C	C	
		Col_108 - Employed	METHODF	C	C	C	C	
		Col_109 – Employed	METHODG	C	C	C	C	
		Col_109 - Not employed	METHODG	C	C	C	C	
		Col_110 - Employed	METHODH	C	C	C	C	

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_111 - Employed	METHODI	C	C	C	C	
		Col_112 - Employed	METHODJ	C	C	C	C	
		Col_113 - Employed	METHODK	C	C	C	C	
		Col_113 - Not employed	METHODK	C	C	C	C	
		Col_114 - Employed	METHODL	C	C	C	C	
		Col_114 - Not employed	METHODL	C	C	C	C	
		Col_115 - Employed	METHODM	C	C	C	C	
		Col_116	WANTWORK	22.7	29.0	27.7	22.5	
		Col_117 - Employed	AVAILBLE	C	C	C	C	
		Col_124	EDUCLEVL	.	.	11.5	.	
		Col_168	DEGURBA	100.0	.	.	.	
NO	compulsory	Col_039/40	COUNTRYW	C	C	C	C	Will be delivered from 2011
		Col_047/48	MSTARTWK	28.9	33.8	36.7	39.2	High rate of non-response
		Col_054	TEMPDUR	51.0	48.1	44.8	50.2	Persons working in temporary staff recruitment agencies do not have any stop date
		Col_071	WISHMORE	12.4	12.5	12.9	12.8	Due to proxy
		Col_076	LOOKOJ	11.6	11.5	12.1	12.0	Due to proxy
		Col_082/83	HWACTUA2	10.3	10.2	.	10.1	High rate of non-response
		Col_89/90	MONTHPR	15.4	31.3	46.3	49.4	Looks like an error in our programme
		Col_114 - Employed	METHODL	C	C	C	C	Not an option in Norway
		Col_114 - Not employed	METHODL	C	C	C	C	Not an option in Norway
		Col_162/163	INTWEEK	.	10.6	.	.	Due to technical reasons
		Col_168	DEGURBA	.	100.0	.	.	
CH	compulsory	Col_001/2	HHSEQNUM	C	C	C	C	In Switzerland (see derogation in annex II) only one person per household is interviewed. For this person HHSEQNUM automatically equals 1.
		Col_43/46	YSTARTWK	.	.	.	100.0	Problem is known, no change for the moment, questionnaire will be changed.
		Col_80/81	NACE2J2D	15.0	13.9	13.5	13.0	
		Col_85/88	YEARPR	.	.	.	100.0	Problem is known, no change for the moment, questionnaire will be changed.
		Col_102 - Employed	SEEKDUR	.	.	.	100.0	Problem is known, no change for the moment, questionnaire will be changed.
		Col_102 – Not employed	SEEKDUR	.	.	.	16.5	Problem is known, no change for the moment, questionnaire will be changed.
		Col_114 - Employed	METHODL	C	C	C	C	Not relevant for Switzerland
		Col_114 – Not employed	METHODL	C	C	C	C	Not relevant for Switzerland
HR	compulsory	Col_15	DATEBIR	C	C	C	C	
		Col_47/48	MSTARTWK	.	.	.	11.1	
		Col_65/66	HWOVERP	97.7	97.1	96.9	97.7	

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_73/74	HWWISH	93.9	93.2	92.9	93.0	
		Col_89/90	MONTHPR	.	.	10.7	.	
		Col_101 - Employed	SEEKTYPE	100.0	100.0	100.0	100.0	
		Col_101 - Not employed	SEEKTYPE	100.0	100.0	100.0	100.0	
		Col_195	INTWAVE	C	C	C	.	
MK	compulsory	Col_19/20	YEARESID	21.4	21.1	20.3	20.1	For this variable we collect the information for persons not born in the country
		Col_29/31	NACE3D	100.0	100.0	100.0	100.0	Data will be provided according Nace Rev.2-2011
		Col_80/81	NACE2J2D	100.0	100.0	100.0	100.0	Data will be provided according Nace Rev.2-2011
		Col_101 - Employed	SEEKTYPE	100.0	100.0	100.0	100.0	
		Col_102 - Employed	SEEKDUR	100.0	100.0	100.0	100.0	
		Col_114 - Employed	METHODL	C	C	C	C	Awaiting the results of a competition for recruitment to the public sector. We plan to introduce this variable in the future.
		Col_114 – Not employed	METHODL	C	C	C	C	Awaiting the results of a competition for recruitment to the public sector. We plan to introduce this variable in the future.
		Col_168	DEGURBA	C	100.0	C	100.0	Degree of urbanization. We plan to introduce this variable in the future.
	optional	Col_021/22_	COUNTRYB	85.0	84.0	83.6	84.2	For this variable we collect the information for persons 15-79; for other persons we didn't have information. In the future we plan to improve this.
TR	compulsory	Col_017/18	NATIONAL	100.0	100.0	100.0	100.0	According to the 2010 Address Based Population Registration System; 99.7 % of population has Turkish Nationality. So, it is not easy to cover non-nationals with a sample survey.
		Col_039/40	COUNTRYW	C	C	C	C	There are very few people who are working abroad and at the same time considered as household member since Turkey is a very broad country. This may only occur in border cities, but not common. So, this variable is not asked.
		Col_067/68	HWOVERPU	100.0	100.0	100.0	100.0	Only total overtime is asked in the questionnaire (paid + unpaid). Since it is not possible to distinguish paid and unpaid overtime. Total overtime is given in HWOVERP and this variable is coded as blank.
		Col_073/74	HWWISH	100.0	100.0	100.0	100.0	This variable was dropped out from the questionnaire in 2009 since it was observed that, results were not reliable. Respondents replied this question as they understand (some give the hours that would

	Variable status	Column	Identifier	Q1	Q2	Q3	Q4	Short comments on reasons for non-available statistics and prospects for future solutions
								like to work in total while others only give the additional hours).
		Col_104 - Employed	METHODB	C	C	C	C	For employed people all the methods are not asked in same detail, some of them are grouped looking at the frequency (for example, Public Employment Office and Private Employment Offices are combined in one code). So, while constituting the METHOD variables, there are some blank codes for employed people.
		Col_108 - Employed	METHODF	C	C	C	C	
		Col_111 - Employed	METHODI	C	C	C	C	
		Col_113 - Employed	METHODK	C	C	C	C	
		Col_114 - Employed	METHODL	C	C	C	C	
		Col_168	DEGURBA	100.0	100.0	100.0	100.0	For the moment there is not an external source to be used for this variable.
	optional	Col_021/22_	COUNTRYB	65.4	65.4	65.4	65.4	

Note: 'C' All records have the same value

Source: Joint Standard Quality Report for Labour Force Survey and Regional Labour Market Statistics – Annual quality reports 2010

Annual data 2010

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
BE	compulsory	Col_118 - Employed	AVAIREAS	90.1	Employed persons who don't wish to change work are not asked if they are available. For these persons we don't know if they are available. We can suppose that they are not available for other reasons.
		Col_118 - Not employed	AVAIREAS	92.0	(Early) retired persons are asked if they are searching a job. If not, they are not asked if they want a job. So we don't know for these persons if they are available.
BG	compulsory	Col_53	TEMPREAS	11.3	Additional response category 'Other' exists to the corresponding question in the national LFS questionnaire, which is transcoded to 'Blank' in TEMPREAS. The necessary change is made in 2011 questionnaire
		Col_55	TEMPAGCY	C	No many temporary employed agencies
		Col_118 - Employed	AVAIREAS	34.2	This figure refers to only few cases in the file. Persons employed but temporary absent from work (e.g. on parental leave) - cases with SIGNISAL=3, were not asked this question due to the limitation of paper questionnaire. The future decision will depend on the existence of variable SIGNISAL.
	optional	Col_136	COURWORH	100.0	This variable is not available in BG LFS.
CZ	compulsory	Col_154/155	INCDECIL	100.0	We will send dataset with this variable during this year (imputation).
	optional	Col_125/127	EDUCFILD	100.0	Czech LFS does not survey this variable
		Col_132	COURPURP	100.0	Czech LFS does not survey this variable
		Col_133/134	COURFILD	100.0	Czech LFS does not survey this variable
		Col_136	COURWORH	100.0	Czech LFS does not survey this variable
DK	compulsory	Col_142/145	HATYEAR	18.4	Under-coverage of register. Special issues concern Q1, where the register had further problems.
		Col_146	WSTAT1Y	10.8	In the Danish LFS the variable covers only population 15-74.
		Col_154/155	INCDECIL	100.0	Will be delivered 21 months later

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
	optional	Col_132	COURPURP	100.0	Not compulsory
		Col_133/134	COURFILD	100.0	Not compulsory
		Col_136	COURWORH	100.0	Not compulsory
DE	compulsory	Col_036	SUPVISOR	22.0	
		Col_049	WAYJFOUN	62.0	
		Col_053	TEMPREAS	31.4	
		Col_055	TEMPAGCY	20.8	
		Col_120	NEEDCARE	22.0	
		Col_142/145	HATYEAR	62.0	
	optional	Col_122	MAINSTAT	100.0	
		Col_125/127	EDUCFILD	100.0	
		Col_136	COURWORH	100.0	
EE	compulsory	Col_53	TEMPREAS	17.9	In the Eurostat's study on 'Analysis of questionnaires, explanatory notes and transcoding programmes for the national Labour Force Surveys', it was pointed out that in the Estonian transcoding program, the EU-LFS option 3 (Person did not want a permanent job) of the variable TEMPREAS includes persons having 'no preference' (D15=3) between both categories 'Did not want permanent job' and 'Wanted permanent job, but have not found'. To correct it, persons having 'no preference' (D15=3) are coded as 'blank' since 2010.
IE	compulsory	Col_049	WAYJFOUN	21.9	
		Col_051	FTPTEAS	44.9	
		Col_053	TEMPREAS	53.7	
		Col_056	SHIFTWK	69.6	Variable not carried forward correctly can be rectified.
		Col_057	EVENWK	70.1	Variable not carried forward correctly can be rectified.
		Col_058	NIGHTWK	70.1	Variable not carried forward correctly can be rectified.
		Col_059	SATWK	70.1	Variable not carried forward correctly can be rectified.
		Col_060	SUNWK	70.1	Variable not carried forward correctly can be rectified.
		Col_075	HOMEWK	70.1	Variable not carried forward correctly can be rectified.
		Col_093	STAPROPR	100.0	This variable is not collected

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_100	SEEKREAS	99.2	
		Col_118 - Employed	AVAIREAS	100.0	
		Col_119	PRESEEK	100.0	This variable is not collected
		Col_120	NEEDCARE	54.9	
		Col_121	REGISTER	100.0	This variable is not collected
		Col_142/145	HATYEAR	48.6	
		Col_146	WSTAT1Y	100.0	This variable is not collected
		Col_150/151	COUNTR1Y	19.3	
		Col_152/153	REGION1Y	19.3	
		Col_154/155	INCDECIL	100.0	Due to the QNHS being a voluntary survey in Ireland, the non-response rate for this variable is high
	optional	Col_125/127	EDUCFILD	13.4	
		Col_132	COURPURP	43.5	
		Col_133/134	COURFILD	100	This variable is not collected
		Col_136	COURWORH	16.6	
EL	compulsory	Col_053	TEMPREAS	14.9	In the Greek Questionnaire there is the (residual) answer category 'Did not specify the reason' (which is converted in 'No answer'). It should be tested if the exclusion of this answer category would reduce the non-response in this variable
		Col_118 - Employed	AVAIREAS	10.9	In the Greek Questionnaire there is the (residual) answer category 'Did not specify the reason' (which is converted in 'No answer'). It should be tested if the exclusion of this answer category would reduce the non-response in this variable
		Col_154/155	INCDECIL	14.8	Sensitive question, people avoid to give an exact answer about their income
ES	compulsory	Col_053	TEMPREAS	10.1	In nearly all the cases the respondent declared 'other reasons' different from codes 1-4. In some other cases they declared 'don't know'

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_118 - Employed	AVAIREAS	10.6	In these cases the respondent declared not knowing if was or not available to start working within two weeks and because of that he/she didn't answered the reasons for not being available to start working within 2 weeks. The question is that all these records suffered and imputation in the editing and imputation process and because of that they fulfill the filter to v53 but they don't have any answer.
		Col_154/155	INCDECIL	100.0	It will be provided from registers in due time.
	optional	Col_132	COURPURP	12.51	People aged 15.
		Col_133/134	COURFILD	12.51	People aged 15.
		Col_136	COURWORH	100	Not provided
FR	compulsory	Col_49	WAYJFOUN	35.0	It seems that the non-response may be due to the way we compute 'has started the job in the last twelve months'. Could you send the filter you use?
		Col_96/98	ISCOPR3D	100.0	Unfortunately, we did not have prepared the codification of this variable in ISCO 2008. It should be done next year.
		Col_100	SEEKREAS	46.4	The question is not included in the questionnaire for all inactive people. It will be included in the new questionnaire in 2013.
		Col_118	AVAIREAS_Employed	80.4	For people who want to work more, we do not ask why they are not available; this question will be added to the new questionnaire in 2013.
		Col_119	PRESEEK	100.0	This is a mistake which will be corrected for the next files.
	optional	Col_125/127	EDUCFILD	33.0	This is a mistake which will be corrected for the next files.
IT	compulsory	Col_150/151	COUNTR1Y	12.8	Item non-response are due to people aged less than 15 years old, for which this information is not collected in the national questionnaire
		Col_152/153	REGION1Y	12.8	Item non-response are due to people aged less than 15 years old, for which this information is not collected in the national questionnaire

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
LT	compulsory	Col_154/155	INCDECIL	29.5	Some respondents do not want to tell their monthly wage (salary). From IV quarter 2010 the Social Insurance Fund Board data is used for imputation of wage (salary) from the main job for respondents who didn't answer this question.
LU	compulsory	Col_53	TEMPREAS	12.4	
		Col_118 - Employed	AVAIREAS	99.0	
		Col_118 – Not employed	AVAIREAS	18.7	
		Col_154/155	INCDECIL	10.8	
HU	compulsory	Col_154/155	INCDECIL	100	According to the Regulation (EC) No 1372/2007 of the European Parliament and the Council of 23 October 2007 amending Council regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community transmission of the results – where administrative data are used to supply data corresponding to the survey characteristic wages from the main job, – may be forwarded to Eurostat within twenty-one months of the end of the reference period'.
MT	compulsory	Col_118 - Employed	AVAIREAS	85.9	Values were left empty due to routing of the questionnaire
		Col_154/155	INCDECIL	100.0	Exact values for income are available in 2009, but INDECIL was left empty due to change in the format of data transmission
	optional	Col_125/127	EDUCFILED	100.0	Not included in the questionnaire
		Col_132	COURPURP	100.0	Not included in the questionnaire
		Col_133/134	COURFILED	100.0	Not included in the questionnaire
		Col_136	COURWORH	100.0	Not included in the questionnaire
	NL	compulsory	Col_51	FTP TREAS	10.9
Col_53			TEMPREAS	29.3	
Col_93			STAPROPR	62.4	
Col_94/95			NACEPR2D	66.7	
Col_96/98			ISCOPR3D	73.7	
Col_118 - Not employed			AVAIREAS	29.3	
Col_119			PRESEEK	62.7	
Col_142/145			HATYEAR	18.7	
Col_148/149			NACE1Y2D	11.1	

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
AT	compulsory	Col_118 - Employed	AVAIREAS	C	Employed who want to work more hours (wishmore=1, mainly in the present job) automatically are coded '6'/Other reasons. From the first quarter of 2011 onwards this filter has been changed according to the regulation.
		Col_121	REGISTER	100.0	The data will be delivered to Eurostat in summer 2011. From the first quarter 2009 onwards these data are obtained from an administrative source.
		Col_154/155	INCDECIL	100.0	The data will be delivered in time (administrative source).
PL	compulsory	Col_154/155	INCDECIL	17.3	A high non-response item is caused by a delicate character of the question
PT	compulsory	Col_057	EVENWK	100.0	This variable does not exist in our national questionnaire. It's not applied to the national reality.
		Col_118 - Employed	AVAIREAS	94.8	Due to a mistake in the conversion conditions of col_117. Situation to be corrected
		Col_154/155	INCDECIL	33.3	Corresponds to non-response of the employees who did not give an answer to the income variable.
	optional	Col_125/127	EDUCFILD	100.0	The optional variables of the Commission regulation (EC) n° 2104/2002 of 28 November 2002 were not included in our national questionnaire. The reasons for that option can be summarized as follows: 1) safeguarding the levels of participation and contribution of the respondents not increasing the burden on the same ones; 2) keeping the quality of answers of the compulsory variables.
		Col_133/134	COURFILD	100.0	
		Col_136	COURWORH	100.0	
SI	compulsory	Col_016	MARSTAT	12.9	
		Col_049	WAYJFOUN	29.8	
		Col_118 - Employed	AVAIREAS	100.0	
		Col_154/155	INCDECIL	100.0	
	optional	Col_125/127	EDUCFILD	100.0	
		Col_133/134	COURFILD	100.0	
SK	compulsory	Col_53	TEMPREAS	27.7	M? Given value does not correspond to delivered data
		Col_154/155	INCDECIL	25.4	Item was evaluated, very sensitive variable

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
FI	compulsory	Col_118 - Employed	AVAIREAS	10.5	Because of the small number of employed persons in the target group of variable AVAIREAS, we don't consider it as a reliable indicator for employed. The total amount of employed persons in the sample with AVAILBLE=2 is 76, which is 0.6 per cent of all employed persons in the sample. Of these 76 persons 8 persons were given code '2' in variable AVAILBLE although they couldn't tell if they were able to start to work immediately (within 2 weeks) or not. Therefore they were not asked about the reasons for not being available to start working within two weeks and got AVAIREAS=blank.
		Col_142/145	HATYEAR	11.3	0
		Col_146	WSTAT1Y	16.4	The target group for variable WSTAT1Y is: HHLINK=1 and AGE=15-74 and INTWAVE=5. This group has weight COEFFY. For this group non-response rate is 4.4. Persons 75 or older have not been interviewed, neither household panel.
		Col_150/151	COUNTR1Y	40.3	The target group for variable COUNTR1Y is: HHLINK=1 and age=15-74 and INTWAVE=5. This group has weight COEFFY. For this group non-response rate is 6.0. Persons 75 or older have not been interviewed, neither household panel.
		Col_152/153	REGION1Y	40.3	The target group for variable REGION1Y is: HHLINK=1 and age=15-74 and INTWAVE=5. This group has weight COEFFY. For this group non-response rate is 6.0. Persons 75 or older have not been interviewed, neither household panel.
		Col_154/155	INCDECIL	10.3	0
	optional	Col_125/127	EDUCFILD	78.2	Optional variable.
		Col_133/135	COURFILD	100.0	Optional variable.

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions	
SE	compulsory	Col_4/5	HHSPOU	C	Data for 2010 has been delivered to Eurostat for evaluation	
		Col_6/7	HHFATH	C	Data for 2010 has been delivered to Eurostat for evaluation	
		Col_8/9	HHMOTH	C	Data for 2010 has been delivered to Eurostat for evaluation	
		Col_118 - Employed	AVAIREAS	16.7	The variable have been adjusted 2010	
		Col_121	REGISTER	19.7	The high non-response is due to employed who doesn't look for another job.	
		Col_142/145	HATYEAR	27.4	Register variable. Register quality	
		Col_146	WSTAT1Y	47.1	A new solution of collecting the data was used during 2007. Some smaller improvements have been done since then.	
		Col_154/155	INCDECIL	100.0	Register variable.	
	optional	Col_125/127	EDUCFILD	100.0	Optional. Will not be collected	
		Col_132	COURPURP	100.0	Optional. Will not be collected	
		Col_133/134	COURFILD	100.0	Optional. Will not be collected	
		Col_136	COURWORH	100.0	Optional. Will not be collected	
	UK	compulsory	Col_051	FTP TREAS	50.2	
			Col_053	TEMPREAS	31.6	
Col_055			TEMPAGCY	99.5		
Col_059			SATWK	10.3		
Col_060			SUNWK	10.3		
Col_118 - Employed			AVAIREAS	66.7		
Col_118 - Not employed			AVAIREAS	36.7		
Col_120			NEEDCARE	37.5		
Col_142/145			HATYEAR	24.3		
Col_154/155			INCDECIL	100		
optional		Col_122	MAINSTAT	15		
		Col_125/127	EDUCFILD	81.3		
		Col_132	COURPURP	87.3		
		Col_136	COURWORH	50.2		

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
IS	compulsory	Col_3	HHLINK	C	
		Col_4/5	HHSPOU	C	
		Col_6/7	HHFATH	C	
		Col_8/9	HHMOTH	C	
		Col_53	TEMPREAS	35.2	
		Col_55	TEMPAGCY	C	
		Col_75	HOMEWK	10.4	
		Col_93	STAPROPR	66.8	
		Col_100	SEEKREAS	26.0	
		Col_118 – Employed	AVAIRESAS	100.0	
		Col_118 – Not employed	AVAIRESAS	79.6	
		Col_121	REGISTER	70.1	
		Col_147	STAPRO1Y	10.8	
		Col_150/151	COUNTR1Y	100.0	
		Col_152/153	REGION1Y	100.0	
	Col_154/155	INCDECIL	100.0		
optional	Col_125/127	EDUCFILD	C		
	Col_133/135	COURFILD	100.0		
NO	compulsory	Col_049	WAYJFOUN	29.1	
		Col_051	FTP TREAS	24.3	
		Col_053	TEMPREAS	15.8	
		Col_94/95	NACEPR2D	100.0	
		Col_096/98	ISCOPR3D	50.9	
		Col_100	SEEKREAS	24.0	
		Col_118 - Employed	AVAIRESAS	22.7	
		Col_119	PRESEEK	19.5	
		Col_121	REGISTER	100.0	Will be delivered from 2011
		Col_142/145	HATYEAR	100.0	Will be delivered from 2011
		Col_150/151	COUNTR1Y	100.0	Will be delivered from 2011
		Col_152/153	REGION1Y	100.0	Will be delivered from 2011
		Col_154/155	INCDECIL	100.0	Will be delivered from 2011
	optional	Col_122	MAINSTAT	100.0	
		Col_125/127	EDUCFILD	100.0	
		Col_132	COURPURP	100.0	
Col_133/134		COURFILD	100.0		
Col_136		COURWORH	100.0		
CH	compulsory	Col_003	HHLINK	100.0	In Switzerland (see derogation in annex II) only one person per household is interviewed. So this person is automatically the reference person.
		Col_004/5	HHSPOU	100.0	Not possible to fill in this variable because only one person per household is interviewed in Switzerland.

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_006/7	HHFATH	100.0	Not possible to fill in this variable because only one person per household is interviewed in Switzerland.
		Col_008/9	HHMOTH	100.0	Not possible to fill in this variable because only one person per household is interviewed in Switzerland.
		Col_049	WAYJFOUN	13.9	
		Col_053	TEMPREAS	29.5	
		Col_094/95	NACEPR2D	28.1	
		Col_118 - Employed	AVAIRES	C	
		Col_118 - Not employed	AVAIRES	85.7	
		Col_120	NEEDCARE	36.1	
		Col_139/141	HATFIELD	15.6	
		Col_142/145	HATYEAR	24.7	
		Col_146	WSTAT1Y	43.8	
	optional	Col_072	WAYMORE	34.8	
		Col_125/127	EDUCFILD	100.0	Not asked
		Col_132	COURPURP	35.5	
		Col_133/134	COURFILD	100.0	Not asked
		Col_136	COURWORH	100.0	Not asked
HR	compulsory	Col_49	WAYJFOUN	73.2	
		Col_118 - Employed	AVAIRES	85.1	
		Col_118 - Not employed	AVAIRES	85.5	
		Col_148/149	NACE1Y2D	75.2	
		Col_150/151	COUNTR1Y	12.4	
		Col_152/153	REGION1Y	12.4	
		Col_154/155	INCDECIL	21.0	
	optional	Col_133/134	COURFILD	100.0	
MK	compulsory	Col_16	MARSTAT	16.2	Marital status is the conjugal status of each individual in relation to the marriage laws of the country
		Col_56	SHIFTWK	68.4	All employee persons answered this variable
		Col_75	HOMEWK	100.0	This variable will be introduced next year.
		Col_94/95	NACEPR2D	100.0	Data will be provided according Nace Rev.2-2011
		Col_118 - Employed	AVAIRES	97.7	One part of employed who didn't seek for a job we miss to ask 'if they want to work' in the next year we will correct this.

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
		Col_118 – Not employed	AVAIREAS	93.2	Not employed who are: pensioners; disabled and persons who have already found a job didn't answer questions for this variable. In the future we will try to clear this.
		Col_119	PRESEEK	100.0	This variable is planned to be introduced in the future.
		Col_120	NEEDCARE	100.0	This variable is planned to be introduced in the future.
		Col_121	REGISTER	78.5	For this variable we didn't collect information for persons who are not registered in our employment agency because they can't apply for benefit.
		Col_148/149	NACE1Y2D	100.0	Data will be provided according Nace Rev.2-2011
		Col_150/151	COUNTR1Y	17.1	For this variable we collect the information for persons 15-79; for other persons we didn't have any information. In the future we plan to improve this.
		Col_152/153	REGION1Y	17.1	For this variable we collect the information for persons 15-79; for other persons we didn't have any information. In the future we plan to improve this.
		Col_154/155	INCDECIL	100.0	This variable will be introduced in the future
	optional	Col_122	MAINSTAT	100.0	The variable is optional but will be introduced in the future.
TR	compulsory	Col_055	TEMPAGCY	100.0	This variable is not asked since temporary working agencies are not common in Turkey for the moment.
		Col_056	SHIFTWK	100.0	Dropped in 2009 since they were found unsuitable for country situation.
		Col_057	EVENWK	100.0	
		Col_058	NIGHTWK	100.0	
		Col_059	SATWK	100.0	
		Col_060	SUNWK	100.0	
		Col_118 - Employed	AVAIREAS	C	This variable is not available for employed since 2009. It had been asked until 2009 and found unnecessary.
		Col_121	REGISTER	100.0	This question is not asked since the coverage of unemployment benefits is very limited in Turkey (around 10 % of registered unemployed are receiving unemployment benefit at the current situation).

	Variable status	Column	Identifier	2010	Short comments on reasons for non-available statistics and prospects for future solutions
	optional	Col_122	MAINSTAT	100.0	These optional variables are not asked for the moment since these are not critical at national level.
		Col_133/134	COURFILD	100.0	
		Col_136	COURWORH	100.0	

Note: 'C' All records have the same value

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