HOUSEHOLD LABOUR FORCE SURVEY (LFS) 2021

QUALITY REPORT

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1. CONTACT

1.1. Contact organisation

National Institut of Statistics

1.2. Contact organisation unit

Demography and Social Statistics Department

1.5. Contact mail address

Institutul National de Statistica Bd Libertatii nr.16 sector 5, Bucuresti

2. STATISTICAL PRESENTATION

2.1. Coverage

The whole country is covered and only the private households are surveyed.

The target population for the survey was the population residing in private households. Thus, the survey covered persons with usual residence in Romania, for a period of at least 12 months, members of the households from the selected dwellings.

Household means the group of two or several persons who are usually residing together, providing themselves with food and other essentials for living and sharing income or household expenses with

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other household members. The person who does not belong to a household and who declares to live alone and manages the house by himself is considered as a single person household.

Persons living for 12 months or more in collective units (elderly, handicapped, workers hostels, sanatoria etc.) are not included in the survey.

2.2. Reference week

Reference period (which is the reference period for most of the questions) was the week, from Monday to Sunday, before the registration. Starting with 1996, the reference weeks are evenly spread throughout entire year.

2.3. Periodicity of the results

Starting with 1996, the household labour force survey is quarterly carried out, as a continuous research, thus allowing to get short-term data on the size and structure of labour force supply and to point out seasonal phenomena taking place on the labour market. The survey provides quarterly and annually (averages) results.

3. STATISTICAL PROCESSING

3.1. Sampling Plan

Because of the lack of appropriate registers (dwelling register, population register etc), the household surveys carried out by INS-Romania are based on the repeated use of a master sample, which involves further the use of multi-stage sampling designs.

LFS sampling design has been founded on a two-stage sampling technique.

The sampling plan is a two-stage probability sampling of clusters of housing units.

In the first stage, a stratified random sample of 792 areas, Primary Sampling Units (PSUs), was designed after the 2011 census, using as stratification criteria the residence area and county. This is the Multifunctional Sample of Territorial Areas, so called the master sample EMZOT.

In the second stage, 9504 clusters, composed of three housing units each, are systematically selected from the initial sample of PSUs. The final sample consists of 28 512 dwelling units. All households within each sampling unit are included.

The sample is built up based on the dwellings rotation proceeding ("rotational scheme 2-2-2"), having as basic principle the following technique: a dwelling is surveyed for two successive quarters, it is temporarily taken out from the survey in the next two quarters, it is introduced again in the survey in the next two quarters, then it is taken out for good from the survey. Therefore, a dwelling is administered for 6 quarters.

3.2. Base used for the sample

The master sample EMZOT was designed on the basis of the information provided by the Census of the Population and Dwellings from 2011, aiming to obtain a sampling reserve for the household surveys to be conducted in the inter-censual period.

EMZOT was created by including the 792 groups of census sections.

The 792 census sections composing EMZOT at the time being are the primary sampling units (PSU), being distributed on the two areas as follows:

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- 450 PSU in urban area;
- 342 PSU in rural area.

EMZOT is a stratified sample. Stratification criteria were county and urban/rural area, resulting 88 strata. In order to select UP, within every stratum, the balanced method was used, by SAS macro CUBE.

3.3. Sample unit

The primary sampling unit, corresponding to the selection of the master sample, has been a group of census sections.

The secondary (ultimate) sampling unit, corresponding to the selection of the survey sample, has been the cluster of 3 dwellings.

3.4. Overall sampling rate

The overall sampling rate, estimated as ratio between number of sampled dwellings, after the two sampling stages, and number of dwellings at country level, is about 1.53 %.

3.5. Size of the sample

Beginning with 2004 the size of the theoretical survey sample is 114048 dwellings annual.

According to the methodology adopted by Romanian INS for its household surveys, a dwelling may contain one or many households (still, not very frequent cases, usually a dwelling comprising only one household). Thus, in case of LFS, all the households belonging to the sampled dwellings, as well as all the persons of 15 years old and over, living in those households, are surveyed.

In these conditions, the size of the household sample, as well as the size of persons sample, are random variables, depending on the sampled dwellings.

3.6. Stratification

Stratification concerns only the first stage sampling. There are 88 strata; the criteria used being the area (urban or rural) and the county (NUTS-3 level) where a certain PSU is located.

3.7. Brief description of the method of calculating the weights

The final weights, used to obtain estimates at household level and person level, as well, are obtained following, basically, a 3-step procedure.

The first step assigns the inverse of the selection probabilities to each sampled dwelling unit.

The second step adjusts for non-response, categorising the responding dwelling units by the following characteristics: county and urban/rural residency.

The third and final steps consists of calibrating the secondary weights to the best latest available population totals for every 8 regions (NUTS-2 level) by urban-rural area, gender, 14 age groups and the households totals, using the SAS macro Calmar. In the calculation of weighting factors the totals known at population level from current demographic statistics. Calibration of weights was

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performed in 2021 using the resident population (comparable with the 2011 Census results) at the 1st of January and 1st of July.

At the end of this step, the final weights, which are different from household to household, are obtained and all the persons belonging to a certain household get the weight of that household.

3.8. Data collection methods

The data are collected only by face-to-face interviews (CAPI). Data are collected with identical questionnaires through the whole year.

| Final sampling unit collected by interviewing technique (%) | | | | | |
|---|---|---|---|---|--|
| CAPI CATI PAPI CAWI POSTAL - OTHER | | | | | |
| 100% | 0 | 0 | 0 | 0 | |

3.9. Number of field staff

National Institute of Statistics has the co-ordinating role and the 42 territorial divisions, proportional dimensioned with the region size, provide a good organisation and supervising of collection, processing and analysis activities.

At the level of each territorial divisions, the staff involved in survey realisation is structured on three levels:

- interviewers approximately 792 persons;
- supervisors
- survey responsible approximately 47 persons (41 territorial divisions + 6 districts of Bucharest).

Supervisors (1 per 4-5) are controlling and guiding interviewers activity, are verifying questionnaires fulfilled by interviewers, coding variables to be coded from individual questionnaires and solving the errors occurred during the data entry.

Survey responsible persons (one for each county) co-ordinates entire activity carried out in the county, insuring the control and checking, validation and data transmission to INS.

4. QUALITY MANAGEMENT

NA.

5. RELEVANCE

5.1. Relevance - User Needs

Assessment of the relevance of the main LFS statistics at national level (e.g. for policy makers, other stakeholders, media and academic research):

In Romania, official statistics is under the responsibility of National Institute for Statistics. In order to ensure the objectivity, transparent and scientific, character of the methodologies, indicators and

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classifications used in statistics, and to ensure that statistical programme cover all user requirements, the National Statistica Council was established.

The representatives of the Council meet quarterly or more frequent when is necessary in working groups by statistical fields. During these meetings National Institute for Statistics is receiving a strong feed-back from the users in terms of the results already disseminated (including the level of details, breakdowns etc.) and the requests for further needed information to be included in next statistical inquiries.

5.2. Relevance - User Satisfaction

[not requested for the LFS quality report]

5.3. Completeness

| NUTS level of detail | | | | | |
|--|---|--|---|--|--|
| Regional level of an individual record (person) in the national data set | Lowest regional level of the results published by NSI | Lowest regional level of the results delivered to researchers by NSI | Brief description of the method which is used to produce NUTS-3 unemployment and labour force data sent to Eurostat? | | |
| NUTS3 | NUTS2 | usually NUTS2 | 3-year average from the LFS dataset is the method used to produce NUTS-3 unemployment and labour force data sent to Eurostat (to Unit of regional statistics) | | |

5.3.1. Data completeness - rate

Assessment of errors (bias) in the registration of unemployment: Only for those countries using registered unemployment to produce NUTS-3 level data on unemployment or labour force.

NA

6. ACCURACY AND RELIABILITY

6.1. Accuracy – overall

[not requested for the LFS quality report]

6.2. Sampling error

Publication thresholds

| Amnual actimates | | Annual estimates - wave approach | | |
|---|--|---|--|--|
| Annual estimates | | (if different from full sample thresholds) | | |
| Limit below which figures cannot be published | Limit below which figures must be published with warning | Limit below which figures cannot be published | Limit below which figures must be published with warning | |
| 6500 | 6500 – 11499 | NA | NA | |

6.2.1. Sampling error - indicators

| Coefficient of variation (CV) Annual estimates Sampling error - indicators - Coefficient of variation (CV), Standard Error (SE) and Confidence Interval (CI) | | | | | |
|---|--|-----------|-------------|--|--|
| | Employment rate Unemployment-to-population Youth unemployment rate as a percentage of labour force | | | | |
| | Age group: 15 -74 Age group: 15 -74 Age group: 15 -24 | | | | |
| CV | 0.68 | 4.90 | 6.18 | | |
| SE | 0.36 | 0.15 | 1.30 | | |
| CI(**) | 52.49-53.91 | 2.85-3.45 | 18.48-23.58 | | |

Description of the assumption underlying the denominator for the calculation of the CV for the employment rate:

Reference on software used: SAS

• Reference on method of estimation: Taylor expansion method

| Unemployment-to-population ratio 15-74 (NUTS 2 regions) | | | | |
|---|-------|------|-----------|--|
| NUTS2 region | CV | SE | CI(**) | |
| RO11 | 14.17 | 0.26 | 1.31-2.33 | |
| RO12 | 12.21 | 0.34 | 2.13-3.47 | |
| RO21 | 15.94 | 0.62 | 2.67-5.11 | |
| RO22 | 14.75 | 0.46 | 2.24-4.06 | |
| RO31 | 9.45 | 0.40 | 3.46-5.02 | |
| RO32 | 13.93 | 0.32 | 1.69-2.97 | |
| RO41 | 13.85 | 0.67 | 3.51-6.13 | |
| RO42 | 15.06 | 0.28 | 1.29-2.37 | |

^(*) The coefficient of variation for actual hours worked should be calculated for the sum of actual hours worked in 1st and 2nd jobs, and restricted to those who actually worked 1 hour or more in the reference week.

6.3. Non-sampling error

[not requested for the LFS quality report]

6.3.1. Coverage error

| Frame quality (under-coverage, over-coverage and misclassifications(b)) | | | | | | |
|---|--------------------|----------------------------|---|----------------------------------|----------------------------------|---------------------------------|
| Under- | Over | | Comments: specification and im- | pact on estimates ^(a) | | |
| coverage rate (%) | coverage | Misclassification rate (%) | Undercoverage | Overcoverage | Misclassification ^(b) | Reference on frame errors |
| 4.3 | T1=3.45 T2=2.99 | | Due to the lack of appropriate information, the new dwellings, built after 2011 Census of the | were estimated on | NA | NA |

^(**) The value is based on a CI of 95%. For the rates the CI should be given with 2 decimals.

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| T3=2.89 | Population and Dwellings, that survey samples, as |
|---------|---|
| | could possibly constitute aratio between |
| T4=2.91 | sampling frame of the new number of not- |
| | dwellings, have not been taken eligible dwellings |
| | into account. Thus, an up and number of |
| | dates(of the addresses of sampled dwellings. |
| | dwellings) will be envisaged for |
| | the PSU included in EMZOT. |
| | Under-coverage rate was |
| | estimated as the ratio between |
| | number of new permanent |
| | dwellings, built in the period |
| | end of 2011 year (the year of |
| | the last census)- end of 2020 |
| | year (Source: Romanian |
| | Statistical Yearbook, 2021), |
| | and number of dwellings at the |
| | end of 2020 year (Source: |
| | Romanian Statistical Yearbook, |
| | 2021). Thus, it was assumed |
| | that the proportion of the new |
| | dwellings in total dwellings |
| | should be the same in the |
| | master sample. |

⁽a) Mention specifically which regions / population groups are not suitably represented in the sample.

6.3.1.1. Over-coverage – rate

[Over-coverage rate, please see concept 6.3.1 Coverage error in the LFS quality report]

6.3.1.2. Common units - proportion

[not requested for the LFS quality report]

6.3.2. Measurement error

| Errors due to the medium (questionnaire) | | | | | |
|---|--|---------------|--|--|--|
| Was the questionnaire updated for the 2021 LFS operation? (Y/N) | | questionnaire | If the questionnaire has been tested, which kind of tests has been applied (pilot, cognitive, internal check)? | | |
| 2020 | Questionnaire was redesigned to be in line with the new regulation and explanatory notes (model questionnaire) | у | Informal check and field test on a small number of questionnaires | | |

| Main methods of reducing measurement errors | | | | |
|---|--|--|--|--|
| Error source | | | | |
| Respondent | Letter introducing the survey (Y/N) Phone call for booking or introducing the survey (Y/N) | | | |
| | Y N | | | |

⁽b) Misclassification refers to statistical units having an erroneous classification where both the wrong and the correct one are within the target population.

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| Interviewer | Periodical training (at least 1 time per year) (Y/N) | Feedbacks from interviewer (reports, debriefings, etc.) (Y/N) | | |
|---------------|--|---|--|--|
| | Y | Y (for the electronic questionna | ire) | |
| | | Monitoring directly listening interviews, (Y/N) | Monitoring remotely through performance indicators (Y/N) | |
| | Y | N | Y | |
| Questionnaire | Questionnaire in several languages (Y/N) | On-line checks (for computer a | ssisted interviews) (Y/N) | |
| | N | Y | | |
| Other | 1 | · | | |
| Comments | | | | |

6.3.3. Non response error

[not requested for the LFS quality report]

6.3.3.1. Unit non-response - rate

| Methods used for adjustments for statistical unit non-response | | | | |
|--|---|--|--|--|
| via weights | Variables used for non-response adjustment | Description of method | | |
| | County (NUTS 3 level) and area of residence (U/R) | As it was already mentioned in previous item regarding the computation of the weights, in order to contra balance the non-respondent households, it is proceed at a reweighting, by adjusting the weights of the respondent households with the inverse of the response rate. The non-response are not globally adjusted, at the entire sample level, but separately, on groups of households, groups generated by the intersection of the variables considered as explicative variables of the non response: county (NUTS 3 level) and area of residence (urban \ rural). This correspond to the so-called 'response-homogenous groups' method, which assumes that in a certain group all the units have the same probability. In order to minimize the effects induced by the presence of non-response another adjustment is done: re-weighting by calibration of the weights. | | |

| Substitution of non-responding units (Y/N) | Substitution rate | Criteria for substitution |
|--|-------------------|---------------------------|
| N | NA | NA |

| Other methods (Y/N) | Description of method |
|---------------------|-----------------------|
| N | NA |

Calculation of non-response. Annual average

Is the non-response on household level or person level? (H/P) - H

| Rates of 1 | Rates of non-response by survey mode. Annual average | | | | | | |
|------------|--|------|------|--------|--|--|--|
| Survey | | | | | | | |
| CAPI | CATI | PAPI | CAWI | POSTAL | | | |
| 14.10 | NA | NA | NA | NA | | | |

| Non-response rates by survey mode. Annual average (% of the theoretical yearly sample by survey mode) | | | | | |
|---|---------------------|--|--|--|--|
| | Non-response rate | | | | |
| Quarter | Total (%) of which: | | | | |

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| | | Refusals (%) | Non-contacts (including people who migrated (or moved) internally or abroad) (%) |
|--------|-------|--------------|--|
| 1 | 15.73 | 3.28 | 9.29 |
| 2 | 13.54 | 3.33 | 7.35 |
| 3 | 14.02 | 3.39 | 7.55 |
| 4 | 13.10 | 3.41 | 6.76 |
| Annual | 14.10 | 3.35 | 7.74 |

| Units who refused to participate in the survey | | | | | |
|--|---------------|---------------|---------------|---------------|--|
| Subsample | Quarter1_2021 | Quarter2_2021 | Quarter3_2021 | Quarter4_2021 | |
| Subsample_Q4_2019 | 210 | | | | |
| Subsample_Q1_2020 | 231 | 224 | | | |
| Subsample_Q2_2020 | | 250 | 253 | | |
| Subsample_Q3_2020 | | | 216 | 218 | |
| Subsample_Q4_2020 | 240 | | | 202 | |
| Subsample_Q1_2021 | 237 | 207 | | | |
| Subsample_Q2_2021 | | 212 | 214 | | |
| Subsample_Q3_2021 | | | 209 | 218 | |
| Subsample_Q4_2021 | | | | 210 | |
| Total in absolute numbers | 918 | 893 | 892 | 848 | |
| Total in % of theoretical quarterly sample | 3.22 | 3.13 | 3.13 | 2.97 | |

| Units who were not contacted | | | | | |
|------------------------------|---------------|---------------|---------------|---------------|--|
| Subsample | Quarter1_2021 | Quarter2_2021 | Quarter3_2021 | Quarter4_2021 | |
| Subsample_Q4_2019 | 412 | | | | |
| Subsample_Q1_2020 | 481 | 444 | | | |
| Subsample_Q2_2020 | | 584 | 531 | | |

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| Subsample_Q3_2020 | | | 501 | 408 |
|--|------|------|------|------|
| Subsample_Q4_2020 | 509 | | | 434 |
| Subsample_Q1_2021 | 540 | 444 | | |
| Subsample_Q2_2021 | | 635 | 512 | |
| Subsample_Q3_2021 | | | 636 | 474 |
| Subsample_Q4_2021 | | | | 648 |
| Total in absolute numbers | 1942 | 2107 | 2180 | 1964 |
| Total in % of theoretical quarterly sample | 5.23 | 7.39 | 7.65 | 6.89 |

| Non-response rates. Annual averages (% of the theoretical yearly sample) | | | | |
|--|-----------------------|--|--|--|
| NUTS-2 region | Non response rate (%) | | | |
| RO11-Nord-Vest | 12.60 | | | |
| RO12-Centru | 12.95 | | | |
| RO21-Nord-Est | 10.03 | | | |
| RO22-Sud-Est | 17.83 | | | |
| RO31-Sud - Muntenia | 8.65 | | | |
| RO32-Bucuresti - Ilfov | 39.37 | | | |
| RO41-Sud-Vest -Oltenia | 2.75 | | | |

6.3.3.2. Item non-response - rate

| Item non-respon | ıse - Qua | arterly da | ata (Com | npared to | the var | iables de | efined by the Commission Regulation) |
|---------------------------------------|-----------|------------|--------------|--------------|--------------|--------------|---|
| Variable status Compulsory / optional | Column | Identifier | Quarter 1 | Quarter 2 | Quarter 3 | Quarter 4 | Short comments on reasons for non-available statistics and prospects for future solutions |
| NA | NA | NA | NA | NA | NA | NA | NA |

| Item non-res | Item non-response - Annual data (Compared to the variables defined by the Commission Regulation) | | | | | | |
|--------------|--|------------|------|--|--|--|--|
| Variable | Column | Identifier | | Short comments on reasons for non-available statistics and prospects for | | | |
| status | year | | year | future solutions | | | |
| NA | NA | NA | NA | NA | | | |

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| Methods used for editing and imputation of statistical item non-response | | | | |
|--|--|--|--|--|
| Do you apply some data editing procedure to detect and correct | Overall editing rate (Units with at least one item changed | | | |
| errors? (Y/N) | / Total Units) | | | |
| Y | 3.4% | | | |

| Are all or part of the variables with item non response imputed? (Y/N) | e n Overall imputation rate (Units with at least one item imputed / Total Units) | | | | | |
|--|---|---|--|--|--|--|
| Y | 11% | | | | | |
| Main variables | Imputation rate | Describe method used, mentioning which auxiliary information or stratification is used | | | | |
| INCGROSS | 11% | The procedure is using Hot-Deck method, missing items being taken from a donor record. The dentification of the donor record is made on the basis of the sample of respondents, taking into account a set of variables well correlated with the variable to be imputed. | | | | |

6.3.4. Processing error

[not requested for the LFS quality report]

6.3.4.1. Imputation – **rate**

[not requested for the LFS quality report]

6.3.5. Model assumption error

[not requested for the LFS quality report]

6.4. Seasonal adjustment

| | If Yes, is your adopted methodology | as software for conducting seasonal adjustment of official statistics. (ref. |
|--|-------------------------------------|--|
|--|-------------------------------------|--|

6.5. Data revision – policy

| Do you adopt a general data revision | |
|--------------------------------------|---|
| policy fully compliant with the ESS | Are you compliant with the ESS guidelines on revision policy for PEEIs? (ref. |
| Code of Practice principles? (in | http://ec.europa.eu/eurostat/documents/3859598/5935517/KS-RA-13-016- |
| particular see the 8th principle) | EN.PDF) (Y/N) |
| (Y/N) | |
| Y | Y |

6.6. Data revision – practice

[not requested for the LFS quality report]

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6.6.1. Data revision - average size

[not requested for the LFS quality report]

7. TIMELINESS AND PUNCTUALITY

| _ | Quarterly LFS data Reference period, transmission date and coverage | | | | | | |
|---------|---|---|------------------|--|--|--|--|
| | Main dates in the national pro | oduction process | | | | | |
| Quarter | Date of data collection | Date of end of the quality check for statistics requested | Date of national | | | | |
| | beginning | by Eurostat | publication* | | | | |
| 1 | 11.01.2021 | 14/06/2021 | 18.06.2021 | | | | |
| 2 | 12.04.2021 | 13/09/2021 | 17.09.2021 | | | | |
| 3 | 12.07.2021 | 13/12/2021 | 17.12.2021 | | | | |
| 4 | 11.10.2021 | 14/03/2022 | 18.03.2022 | | | | |

^{*}press release

7.1.1. Time lag - first result

[not requested for the LFS quality report]

7.1.2. Time lag - final result

[not requested for the LFS quality report]

8. COHERENCE AND COMPARABILITY

8.1. Comparability - geographical

| Divergence of national concepts from European concepts | | | | |
|--|---|----|--|--|
| (European concept or National proxy concept used) List all concepts where any divergences can be found | | | | |
| Is there a divergence between the national and European concepts for the following characteristics? | N | NA | | |
| Definition of resident population (*) | N | NA | | |
| Identification of the main job (*) | N | NA | | |
| Employment | N | NA | | |
| Unemployment | N | NA | | |

8.1.1. Asymmetry for mirror flow statistics - coefficient

[not requested for the LFS quality report]

8.2. Comparability - over time

Changes at CONCEPT level introduced during the reference year and affecting comparability with previous reference periods (including breaks in series)

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| Changes in | (Y/N) | Description of the impact of the changes | Statistics also revised backwards (if Y: year / N) | Variables affected | Break in series to be flagged (if Y: year and quarter/N) |
|-----------------------------------|-------|---|--|----------------------------------|---|
| concepts and definition | Y | The entry into force of the new framework regulation IESS and the set of delegated or implementing regulations issued in its application bring several important methodological changes aimed at improving the comparability of results between EU Member States (a new operational definition of employment, change in the method of data collection, a standardized questionnaire used to collect data, etc.). For the Romanian Labor Force Survey, the most relevant change concerns the exclusion from employment of persons producing agricultural goods intended exclusively or mainly for self-consumption, this generating a noticeable impact on the survey estimates, especially in the sense of: a) reduction of the number of employed and active population (as well as employment and activity rates) b) increase in the unemployment rate (especially due to the decrease in the active population which is the denominator of the indicator) and making unfeasible the direct comparison of data published from the first quarter of 2021 onwards with those relating to previous periods. | Y | Employment; Unemployment | Y |
| coverage (i.e. target population) | Y | Starting with 2021 - only persons usually resident in private households are covered. | N | No particular variables affected | No; the impact is not noticeable |
| legislation | N | No other change except the new legal base of LFS (see above). | | | |
| classifications | N | | | | |
| geographical boundaries | N | | | | |

| Changes at MEASUREMENT level introduced during the reference year and affecting comparability with previous reference periods (including breaks in series) | | | | | | |
|--|--|--|---|----------|---|--|
| Changes to | | Description of the impact of the changes | Statistics also revised backwards (if Y: year / N) | affected | Break in series to be flagged (if Y: year and quarter/N) | |

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| sampling frame | N | | | |
|------------------------------|---|--|--|--|
| sample design | N | | | |
| rotation pattern | N | | | |
| questionnaire | Y | New questionnaire used starting with 2021 (in line with Eurostat model questionnaire) | | |
| instruction to interviewers | N | | | |
| survey mode | Y | 100% CAPI - since 2021 | | |
| weighting scheme | N | | | |
| use of auxiliary information | N | | | |

8.2.1. Length of comparable time series

[not requested for the LFS quality report]

8.3. Coherence - cross domain

| Coherence of LI | S data with Bus | iness statistics | data | |
|--------------------------------|---|---|--|--|
| | Description of difference in concept | Description of difference in measurement | Give an assessment of the effects of the differences | Give references to description of differences |
| Total employment | also has working contract with his/her own enterprise, he/she will be considered as employee in SBS but as employer in LFS | data, administrative sources (mainly balance sheets) and other statistical surveys data | LFS estimates on employment (in economic activities covered by both statistics, i.e. from B to N sections, excluding K) is higher than SBS estimates (but LFS comprises own-account workers as well) | No special documentation is produced for both LFS and SBS. For SBS, more detailed methodological information can be retrieved on INS website |
| Total employment by NACE | SBS does not comprise budgetary sector (public administration, health, education) and part of services | economic | UNA | UNA |
| Number of hours worked | SBS comprise data on hours worked only by employees. | Idem | UNA | UNA |

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| Coherence of LFS data with registered unemployment | | | | | | |
|---|---|-----|--|--|--|--|
| Description of difference in concept | Give references to description of differences | | | | | |
| Registered unemployment is measured according to national legislation and differs considerably from ILO unemployment. | LFS unemployment - survey data; Registered unemployment - registered data | UNA | | | | |

| Assessment of the effect of differences of LFS unemployment and registered unemployment | | | | | | |
|---|-----------------------|--------------------------|----------------------|-------------------------|--------------------------------|--|
| Give an assessment of the effects of the differences | | | | | | |
| Overall effect | Men under 25 years | Men 25 years and over | Women under 25 years | Women 25 years and over | Regional distribution (NUTS-3) | |
| ILO unemployment | 71431 | 215865 | 42432 | 129467 | UNA | |
| Registered unemployment | 15350 | 111014 | 12630 | 95763 | UNA | |

8.4. Coherence - sub annual and annual statistics

[not requested for the LFS quality report]

8.5. Coherence - National Accounts

See Annex 1.

| Which is the use of LFS data for National Account Data? | | | | | |
|---|----------------------|-------------|----------------------|--------------------|----------------------------|
| | Country uses | Country not | Country combines | Country combines | Country combines sources |
| Country uses LFS | mainly LFS, but | make use of | sources for labour | sources for labour | for labour supply and |
| as the only source | replacing it in a | LFS, or | supply and demand | supply and demand | demand giving precedence |
| for employment in | few industries (or | makes | giving precedence to | not giving | to labour demand sources |
| national accounts. | labour status), on a | minimal use | labour supply | precedence to any | (i.e. employment registers |
| | case-by-case basis | of it | sources (i.e. LFS) | labour side | and/or enterprise surveys) |
| Y | N | N | N | N | N |

8.6. Coherence – internal

[not requested for the LFS quality report]

9. ACCESSIBILITY AND CLARITY

9.1. Dissemination format - News release

[not requested for LFS quality report]

9.2. Dissemination format – Publications

Main publications on survey results are: -LFS annual detailed publication; - Statistical Yearbook; - Social Trends.

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9.3. Dissemination format - online database

| Documentation, explanation, quality limitations, graphic | Documentation, explanation, quality limitations, graphics etc. | | | | | |
|---|--|--|--|--|--|--|
| Web link to national methodological publication | data | Accompanying information to data | Further assistance available to users | | | |
| Link to the national web page (national language(s)) - online database(https://statistici.insse.ro/shop/) - LFS methodology (http://colectaredate.insse.ro/metadata/public.htm?locale=en) Link to the national web page (English) - online database(https://statistici.insse.ro/shop/?lang=en) - LFS methodology https://colectaredate.insse.ro/metadata/public.htm?locale=en) | data are processed in order to answer to a larger number of users (internal and international). The synthesis of the annual Quality Report is available on INS-WFR | Publications on LFS results (published in Romanian and English) contain survey methodology and organisation, analysis (including graphs) and tables with detailed data | publications are stored in the electronic library of INS. Upon users request, the entire publication or parts of it may be extracted | | | |

9.3.1. Data tables – consultations

[not requested for the LFS quality report]

9.4. Dissemination format - microdata access

| Accessibility to I national microd (Y/N) | JFS Who is entitled to the lata(researchers, institutions)? | access firms, | 1 , 5 | ner assistance able to users |
|--|---|------------------|--|---------------------------------|
| Y | Researchers | | Data on CD, provided after a contract is Database description Upo signed | n request |

9.5. Dissemination format – other

[not requested for the LFS quality report]

9.6. Documentation on methodology

References to methodological notes about the survey and its characteristics - LFS methodology (https://insse.ro/cms/)

9.7. Quality management – documentation

[not requested for the LFS quality report]

9.7.1. Metadata completeness – rate

[not requested for the LFS quality report]

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9.7.2. Metadata – consultations

[not requested for the LFS quality report]

10. COST AND BURDEN

Number of staff involved in central and regional offices, excluding interviewers Consider only staff directly employed by the NS Full-time equivalents:

Total - 195 (not in FTE)

- of which professional and managerial - 195 (not in FTE)

| Duration of the interview | | | | |
|---|------------|---------------|----------------|--|
| | Minutes | | | |
| | Total | First wave | Later waves | |
| Average duration of the interview | 12 min. | 8 min. | 12 min. | |
| Core questionnaire (pr person) | 8 min. | 8 min. | 8 min. | |
| Ad hoc Modules (pr person) | 4 min. | - | 4 min. | |
| Note: This table should only show the burden on the respondents, not time spent in the field to contact the household or fill in adminstrative forms. | | | | |

11. CONFIDENTIALITY

11.1. Confidentiality – policy

[not requested for the LFS quality report]

11.2. Confidentiality - data treatment

Same as Eurostat except few variables

12. COMMENT

Symbols used:

 $NA-not\ applicable$

UNA – information not available

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Annex 1

Conceptual and measurement differences between the estimates from Labour force Survey (LFS) and those from National Accounts (NA-ESA2010)

| Compilation aspects | NA – ESA2010 | LFS | Reason for adjustment |
|--------------------------|---|---|-----------------------|
| Definition | Employment (ESA2010): all persons – both employees and self-employed – engaged in some productive activity that falls within the production boundary of the ESA. The employment includes both residents and non-residents who work for resident producer units. | Employment (ILO) : comprise all the persons aged 15 years and over who have carried out an economic activity producing goods or services of at least one hour in the reference period (one week), in order to get income as salary, payment in kind or other benefits. | |
| Occupational status-type | Employees, including employers (ESA2010): all persons who, by agreement, work for another resident institutional unit and receive remuneration (recorded as D.1 compensation of employees in ESA). The relationship of employer to employee exists when there is an agreement, which may be formal or informal, between an enterprise and a person, normally entered into voluntarily by both parties, whereby the person works for the enterprise in return for remuneration in cash or in kind. The following categories are included: • persons (manual and non-manual workers, management personnel, domestic staff, people carrying out remunerated productive activity under employment programs) engaged by an employer under a contract of employment; • civil servants and other government employees whose terms and conditions of employment are laid down by public law; • the armed forces, consisting of those who have enlisted for both long and short engagements and also conscripts (including conscripts working for civil purposes); • ministers of religion, if they are paid directly by general government or a non-profit institution; • owners of corporations and quasi-corporations if they work in these enterprises; • students who have a formal commitment whereby they contribute some of their own labour as an input into an enterprise process of production in return for remuneration and education services; • outworkers if there is an explicit agreement that the outworker is remunerated on the basis of the work done that is, the amount of labour which is contributed as an input into some | Employees: that person who carries out his activity based on a labour contract within an economic or social unit – irrespectively of its ownership type –or for private persons, getting a remuneration as salary, in cash or in kind, as commission etc. The "labour contract" comprise also any other kind of labour agreement (in write or verbal form), another than the labour contract / status (job) agreement. Employers: that person who carries out his occupation (trade) in his own unit (enterprise, agency, workshop, shop, office, farm etc.), for whose activity he has employed one or several employees. This category also includes employees, who are also employees of their own enterprise, as well as holders of management agreements or franchise who use employees. Self-employed: that person who carries out his activity in his own unit or in individual business, hiring no employee, being helped or not by contributing family members. This status also includes independent entrepreneurs (peddlers, coaches, women taking care of children, carters, private taxidrivers etc.), free-lancers (strolling musicians, fine artists, lawyers), occasional day-workers, holders of management or franchise contracts who do not use employees, individual farmers or those who work in agricultural associations. Contributing family worker - that person who carries out his activity within an economic family unit run by a family member or relative, not receiving remuneration as salary or pay in kind. Such a unit is considered peasant's (agricultural) household. If several persons of a household work in their own agricultural household, one of them - generally the household head - is considered self-employed, | Not adjusted |

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| Compilation aspects | NA - ESA2010 | LFS | Reason for adjustment |
|---|---|---|-----------------------|
| | process of production; disabled workers, provided the formal or informal relationship of employer to employee exists; persons employed by temporary employment agencies, who are to be included in the industry of the agency which employs them, and not in the industry of the enterprise for which they actually work. Persons temporarily not at work, are also considered as employees if they have a formal job attachment. This formal attachment should be determined according to the following criteria: | while the others are considered contributing family workers. Member of an agricultural holding or of a non agricultural co-operative - is considered that person who has worked either as owner of agricultural land within an agricultural holding constituted according to the Law 36/1991, or as member of a craftsmen, consumer or credit co-operative. | |
| Concept | Domestic concept (ESA2010): employment involves resident and non-resident employees and self-employed persons employed by the resident producer units. | National concept: there are covered all persons permanently or temporary resident in Romanian (usually resident population) | Yes; |
| Type of activity used for classification by industry | Homogenous branch (ESA2010) consists of a grouping of units of homogenous production. The set of activities covered by a homogenous branch is identified by reference to a product classification. The homogenous branch produces those goods or services specified in the classification and only those products. | conomic activity of the employer is: activity of the economic and social unit (autonomous body, commercial company, institution, organisation, association etc.), if the unit has no subunits; activity of the subunit (of plant-type, factory, section, computing office, transport base, platform, canteen, enterprise shop etc.), if the interviewees stated such a job; main activity of the economic and | Yes |

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| Compilation aspects | NA – ESA2010 | LFS | Reason for adjustment |
|---|--|--|-----------------------|
| | | social unit for senior officials or persons carrying out auxiliary activities (administrative, marketing, consulting, supply - sale, accounting etc.); - activity determined by the occupation, for persons working on their own account: - activity of the job for the supported person, for contributing family workers. | |
| Level of detail by activity - publication | - Sections NACE Rev.2 for annual data - A10 NACE Rev.2 for quarterly data | Sections NACE Rev.2 | No |
| Data sources (input data) | National accounts integrate information from many sources: - Labour Force Survey (AMIGO) at annual and quarterly level Administrative data: - Budgetary statements of General Government; - Accounting statements of financial and non-profit units; - Data provided by Ministry of Labour, Family, Social Security and Elderly; - Data provided by Ministry of Foreign Affairs etc. | Direct survey | Yes |
| Data validation /exhaustiveness based on: | Labour Cost Survey National accounts ('Wages and salaries, gross') Structural business survey | - | Yes |
| Measurement unit | Number of persons Number of hours actually worked | Number of persons Number of hours worked | Yes |
| Other | More appropriate to be used when examining employment and GDP together Interpretation: employment in resident production units irrespective of the place of residence of the employed person | Harmonized concepts (especially within Europe) and therefore provides internationally comparable results <i>Interpretation:</i> resident persons in employment | |