

12 May 2021

Labour Force Survey – Note on the data series started in 2021

Introduction

In January 2021, the countries of the European Statistical System have started, in a coordinated manner and in conjunction with Eurostat, the collection of a new data series of the Labour Force Survey (LFS), following the adoption of new concepts at the International Labour Organization level and the publication of a set of European regulations to operationalise them.

In Portugal, among the changes introduced by these regulations there are two that stand out by their clear impact in the employment and labour force estimates, making direct comparisons to the estimates from the previous data series (LFS2011, in force from the 1st quarter of 2011 to the 4th quarter of 2020) no longer viable:

- People engaged in agricultural and fishing activities for self-consumption are no longer classified as employed.
- The restriction of the active population to those aged 16 to 89.

These changes were already reflected in LFS2011 and are published together with the Press Release “Employment Statistics - 1st quarter of 2021”¹.

Additionally, to better assess the impact of the full set of changes introduced to the LFS, during the 1st quarter

¹ The calculation method of these backward revised data series has already been published in the [Press Release](http://www.ine.pt/xurl/dest/486275456) of March 9th, 2021 (<http://www.ine.pt/xurl/dest/486275456>, only available in Portuguese).

of 2021 Statistics Portugal carried out, in parallel with the main operation, an additional collection using the previous series questionnaire and a smaller sample. As a result of the assessment of this data, some additional adjustments to the previous data series may occur, if those already made prove to be insufficient to obtain backward revised data series entirely consistent with the new one.

In these circumstances, this note intends to:

1. Briefly present the Integrated European Social Statistics Framework Regulation and the specific implementing regulation for the LFS.
2. List the main novelties introduced in the Portuguese LFS, including new variables and those that are no longer collected.
3. Analyse the already known impacts of those changes and inform about the studies that are being carried out to make the data series LFS1998, LFS2011 and LFS2021 comparable in selected indicators.

1. International legal framework

Following the Resolution concerning statistics of work, employment and labour underutilisation at the 19th International Conference of Labour Statisticians of the International Labour Organization (ILO) in 2013, work was carried out at the European Union level that led to

the publication, in October 2019, of the Integrated European Social Statistics (IESS) Framework Regulation², whose application started on January 1st, 2021.

This regulation aims to ensure that social statistics based on sample surveys and concerning households are produced in a more harmonised and coordinated manner at the European level. It is a regulation common to all household surveys (LFS, SILC³; ICT-HH⁴, HBS⁵, HIS⁶ and AES⁷) and establishes guidance on definitions, statistical populations and observation units, domains, topics and detailed topics, sampling bases, sample characteristics, accuracy criteria, periodicity, data transmission (contents and deadlines) and quality reports.

Along with this regulation an additional set of regulations was also published, among which the “Implementing Regulation in the labour force domain”⁸ stands out.

This regulation establishes the rules for implementing the framework regulation in the LFS specific context, defining:

- detailed technical characteristics such as variables, statistical classifications, population characteristics, reference periods, geographical coverage, samples detailed characteristics, collection periods, rules on editing, imputation, weighting and estimation;

² [Regulation \(EU\) 2019/1700 of the European Parliament and of the Council of 10 October 2019](#)

³ Statistics on Income and Living Conditions

⁴ Information and Communications Technology Usage in Households

⁵ Household Budget Survey

⁶ Health Interview Survey

⁷ Adult Education Survey

⁸ [Commission Implementing Regulation \(EU\) 2019/2240](#)

(https://eur-lex.europa.eu/eli/reg_impl/2019/2240/oj)

- Eurostat data transmission formats;
- quality reports formats and content;
- flowcharts with the order of the blocks of questions on employment and unemployment, for greater input harmonization at European level.

Together with this regulation, explanatory notes and model questions were also defined to guide the operationalisation of the new concepts.

In this context, the Labour Force Survey continues to be carried out in compliance with European regulations, ensuring comparability between the European Union countries.

2. Main novelties in the Labour Force Survey

Although this new data series has not introduced major changes to the conceptual framework underlying the LFS, it still presents some novelties:

- Introduction of a wave approach strategy to estimate non-quarterly variables in order to reduce the respondents’ burden. This principle was also present in the reformulation of the questionnaire and in some methodological changes.
- Operationalisation of the employment concept as in the Resolution adopted at ILO’s 19th International Conference of Labour Statisticians mentioned above.
- New labour force age group - “16 to 89 years old”.
- Questionnaire rearrangement, namely the questions that set the labour status.
- Introduction of new variables; redefinition of variables; elimination of some variables; definition

of core (that is, that are applied equally in all household surveys) and standardised (that are applied equally in only some of the household surveys) variables, to deepen the comparability of results internationally and between surveys.

- Questionnaire modularisation by incorporating questions with different periodicity: quarterly, annual, biennial and eight-yearly (regular modules every 8 years and ad hoc modules every 4).
- Gradual reinforcement of the sample size (more than 1,250 households per quarter, over six quarters), guaranteeing the fulfilment of more demanding accuracy criteria and to prevent a possible decrease in the response rate in times of uncertainty. Thus, until the 4th quarter of 2020, the sample consisted of approximately 22,500 households; in the 2nd quarter of 2022, it will have around 30,000.

The remaining characteristics of the LFS remain unchanged, such as its goals, nature and methodology (sample design and characteristics, which is of the panel type with a rotation scheme in which the households remain in the sample for six consecutive quarters) and are described in detail in the LFS Methodological Document⁹.

Wave approach

The LFS sample is divided into 6 subsamples (called “waves”) and, in each quarter, a new wave gets in and the one that has already been surveyed for six times gets out. Therefore, each household in the LFS sample

is surveyed for six consecutive quarters and there is an overlap of 5/6 of the sample between two consecutive quarters.

The new wave approach strategy consists of surveying non-quarterly variables only in the entry wave of each quarter, thus allowing each respondent to be asked about that variable only once during the six quarters in which he/she participates in the LFS, which reduces the respondent burden by reducing the number of questions to which he/she has to answer to in the following five waves¹⁰.

The variables surveyed under the wave approach strategy are of annual, biennial or eight-yearly periodicity and their results refer to one year, making use of the four waves that were collected during that year.

Another strategy adopted to reduce the respondent burden was the reinforcement of “dependent interviews”, which are of two types:

- Imputation of the answers of those aged 75 or over after the second interview, provided that certain conditions are verified, such as, for example, living in the same household. Thus, all respondents in this age group only need to answer to the entire questionnaire in a single quarter with only residential confirmation questions being asked each following quarter.
- Definition of a set of variables that are only surveyed two or three times, being imputed in subsequent interviews after the confirmation of specific conditions. Among these variables are the date of birth, sex, nationality, country of birth,

⁹ Available at <https://smi.ine.pt/DocumentacaoMetodologica/Detalhes/1572> (only in Portuguese)

¹⁰ For more information, see Annex I.

country of previous residence, years of residence in Portugal, country of birth of father and mother, highest level of education completed and type of upper secondary education (general or vocational).

Operationalisation of the concepts of employment and unemployment

Having not been completely rewritten, ILO's 19th International Conference of Labour Statisticians "Resolution concerning statistics of work, employment and labour underutilisation" introduced changes to the employment concept that allowed it to be correctly distinguished from the concept of work. These changes, when transposed to European regulations¹¹, had an impact on the operationalisation of the concept (that is, on the questionnaire):

- Restriction of the reference age group from 15 years old and over to 16 to 89 years old¹².
- People engaged in agricultural and fishing activities exclusively for self-consumption are no longer classified in the employed population since these activities constitute now a form of work that does not fit the concept of employment.
- New criteria for classifying temporary absences, which allow assessing the maintenance of a formal connection to work.
- To be classified as an unpaid family worker, it is no longer mandatory to live with the owner of the business in which the family worker works.

¹¹ For more information, see Annex II.

¹² At European and ILO levels, the reference working age group starts at 15. However, in Portugal, to comply with national labour legislation, it was established a minimum of 16 years old (Law 7/2009, of 12 February 2009, article 68.º; only in Portuguese).

The same Resolution introduced changes to the operationalisation of the concept of unemployment¹³, namely in the definition of off-season break and of the activities defining active job search. However, these changes have no impact on unemployment estimates in Portugal:

- Passive search forms were eliminated from the list presented to the respondent, making it impossible to provide this information.
- Instead of "yes / no" questions for all forms of active search, just a positive answer is now sufficient to consider that there was an active job search.
- The active search options were ordered according to the positive response frequencies in the LFS2011 data series, which allows reducing the respondent's burden.

Additionally, in Portugal, the reference age group was changed to 16 to 74 years old¹².

Determining labour status

The initial phase of determining someone's labour status (employed, unemployed or inactive) consists of distinguishing between employed and non-employed persons.

An employed person is someone who, in the reference week, worked at least 1 hour to be paid. However, it is possible to be employed without having worked in the reference week, as long as a formal connection to work is kept. This link is analysed through the classification of a pre-defined list of absences, which has been

¹³ For more information, see Annex III.

changed due to the new concept of employment.

The number of reasons for absence presented to the respondent was reduced from 13 to 10, with more absences now allowing a direct classification as employed¹⁴.

In addition, the filters associated with some of the reasons for absence have been changed. In the LFS2011 series, these filters differed depending on the occupation status (employee, self-employed or unpaid family worker), considered the duration of the absence and, in the case of employees, it was also determined whether the respondent continued to receive an income associated with work equal to or greater than 50% of the usual salary. In the LFS2021 series, these filters were eliminated, being replaced by three distinct filters associated with specific absences¹⁴.

List of variables and questionnaire modularisation

Most of the variables existing in LFS2011 remain in LFS2021, making it possible to continue its analysis. In addition, new variables, more in line with current data needs, were added. However, not wanting to increase the questionnaire dimension and thus the respondent burden, the less asked for variables are no longer collected.

Among the new information that is now collected, the following stand out:

- The health module, collected every two years, consisting of three questions about health status, limitations and their duration.

¹⁴ For more information, see Annex IV.

- A set of questions on the migratory context, complementing the existing quarterly questions. Asked every two years, this set includes questions on the reason for coming to Portugal and the existence of work before coming to Portugal.
- A set of biennial questions on the participation in education and training activities in the last 12 months (as in AES), in addition to the quarterly questions about the last 4 weeks. These questions are fundamental for the calculation of public policy monitoring indicators in this area.
- The new module on average monthly income, which, at the European level, is now released annually and in gross amounts (before taxes and social contributions are discounted). At the national level, in order not to break the quarterly analysis of net values, the original question was maintained with minor changes and was added to the module a set of questions that will allow the conversion between the average monthly net income and the gross one through an exercise of micro-simulation (as in SILC). In addition, answers to this module are subject to statistical imputation if non-responses exceed 5%.
- Annual questions about working hours, which were previously questioned only in the context of an ad hoc module.
- A set of annual questions on economically dependent self-employment. These questions are intended to assess the number of clients of self-employed workers, the existence of clients who, alone, represent a high share of the worker's income and who stipulate the worker's hours (if

clients or him/herself).

- Questions, asked every year, about work experiences at a workplace as part of the education degree curriculum, their duration and payment.
- The identification of Spain's region in which Portugal residents work in. This information is collected every quarter.
- The identification of those working as public servants. This information is self-assess and collected quarterly.

As observed in this set of new variables and as previously stated, the LFS questionnaire was modularised integrating more questions but of different periodicity: quarterly, annual (alternating between even and odd years), biennial and eight-yearly. The last type of periodicity includes collecting regular modules every 8 years on pre-defined topics, whose evolution is to be monitored, and ad hoc modules on free topics, defined at the European level according to the need for information in a given period in time. These free topics are not repeated, but new subjects can be collected every 4 years¹⁵.

Among the information that is no longer collected as it is not requested by LFS users, the following stand out:

- Marital status.
- The module on the situation a year earlier, which collected the place of residence, the labour status, the occupation status and the economic activity of the workplace. This information can be obtained by taking advantage of the longitudinal character of the LFS sample.

¹⁵ For more information, see Annex V.

- The reason for working less or more hours than usual.
- The number of overtime hours worked. In LFS2021, only the number of hours worked more than usual during the week is asked, while the number of hours worked less on any day of the week is not discounted.
- To the employed population looking for another job is no longer asked:
 - whether they are looking for a new job as an employee or as self-employed; at full or part-time.
 - the reason for searching for a new job;
 - if they are actively looking for a new job.

Finally, it should be noted that there is a reduced set of variables whose collection frequency has been reduced from quarterly to annual or biennial, as they refer to information of a more structural nature. Of this group, the following stand out:

- The reason why employees have a limited-time employment contract (now collected annually).
- The reason why part-time workers (underemployed or not) and non-employed persons who are not actively seeking work or who are not available to work in the reference period need to care for children or other dependent relatives (ill, disabled or elderly relatives) (annual).
- Questions about atypical schedules (shift, evening, night, Saturday or Sunday work) (biennial).
- Questions about the previous professional experience of non-employed persons (occupation,

workplace economic activity, occupation status and existence of employees) (annual).

- The education and training field of study of the secondary education, post-secondary non-tertiary education or tertiary education degree completed (annual).

3. Impacts of the changes introduced

As previously said, the changes associated with the new data series imply the start of a new LFS data series. For this reason and to allow users to continue performing longitudinal analyses, Statistics Portugal has released backward revised data series since the 1st quarter of 2011. These data series include the two changes whose impacts are already known and can be reflected backwards:

- The restriction of the labour force to the age group 16 to 89 has practically no impact on the estimates of the LFS2011 data series, since, especially in more recent years, all persons aged 15 or 90 years old or over were already classified as inactive, similar to what, by regulation, is now imposed in the LFS2021 series.
- The reclassification of persons engaged in agricultural and fishing activities for self-consumption as part of the inactive population has a negative impact on the employed population estimates, since, although their number has been decreasing since 2011, this group of people was estimated at around 130 thousand in 2020.

However, as these two changes do not run out the set of changes introduced, Statistics Portugal carried out, in

parallel with the main operation, an additional collection using the questionnaire from the previous series and a smaller sample¹⁶, and is currently evaluating whether further adjustments are still needed in the LFS2011 series.

In addition, Portugal and the rest of the European Union countries will ensure that, for selected indicators¹⁷, until December 2021, Eurostat will receive backward revised data series consistent with the new one since the 1st quarter of 2009.

¹⁶ For more information, see Annex I.

¹⁷ For more information, see Annex VI.

ANNEXES

I. Diagram showing the wave approach strategy and the implementation of the additional collection, in the 1st quarter of 2021, in parallel with the main operation

1Q-2020	2Q-2020	3Q-2020	4Q-2020	1Q-2021
CATI; W6; Q1				
CATI; W5; Q1	CATI; W6; Q1			CATI; W7; Q1
CATI; W4; Q1	CATI; W5; Q1	CATI; W6; Q1		CATI; W7; Q1
CATI; W3; Q1	CATI; W4; Q1	CATI; W5; Q1	CATI; W6; Q1	CATI; W7; Q1
CATI; W2; Q1	CATI; W3; Q1	CATI; W4; Q1	CATI; W5; Q1	CATI; W6; Q2S
CAPI; W1; Q1	CATI; W2; Q1	CATI; W3; Q1	CATI; W4; Q1	CATI; W5; Q2S
	CATI; W1; Q1	CATI; W2; Q1	CATI; W3; Q1	CATI; W4; Q2S
		CATI; W1; Q1	CATI; W2; Q1	CATI; W3; Q2S
			CATI; W1; Q1	CATI; W2; Q2S
				CATI; W1; Q2A

Legenda:

CAPI: *Computer Assisted Personal Interviewing*.

CATI: *Computer Assisted Telephone Interviewing*.

W1, ..., W6: 1st wave; ...; 6th wave.

Q1: Questionnaire in force until the 4th quarter of 2020.

Q2A: New enlarged questionnaire (all periodicity variables), in force since the 1st quarter of 2021.

Q2S: New simpler questionnaire (quarterly variables), in force since the 1st quarter of 2021.

Parallel sample (pilot survey)

II. Employment concept according to the implementation regulation in the labour force domain (article 2, no. 10)

«Employed persons» comprise persons aged 15 to 89 (in completed years at the end of the reference week) who, during the reference week, were in one of the following categories:

(a) persons who during the reference week worked for at least 1 hour for pay or profit, including contributing family workers;

(b) persons with a job or business who were temporarily not at work during the reference week but had an attachment to their job, where the following groups have a job attachment:

- persons not at work due to holidays, working time arrangements, sick leave, maternity or paternity leave;
- persons in job-related training;
- persons on parental leave, either receiving and/or being entitled to job-related income or benefits, or whose

parental leave is expected to be 3 months or less;

- seasonal workers during the off-season, where they continue to regularly perform tasks and duties for the job or business, excluding fulfilment of legal or administrative obligations;
- persons temporarily not at work for other reasons where the expected duration of the absence is 3 months or less;

(c) persons that produce agricultural goods whose main part is intended for sale or barter.

Persons in own-use production work, voluntary workers, unpaid trainees and individuals involved in other forms of work are not included in employment on the basis of those activities.»

III. Unemployment concept according to the implementation regulation in the labour force domain (article 2, no. 11)

«Unemployed persons' comprise persons aged 15 to 74 (in completed years at the end of the reference week) who were:

- (a) during the reference week not employed according to the definition of employment described in paragraph 10; and
- (b) currently available for work, i.e. were available for paid employment or self-employment before the end of the 2 weeks following the reference week; and
- (c) actively seeking work, i.e. had either carried out activities in the four-week period ending with the reference week to seek paid employment or self-employment or found a job to start within a period of at most 3 months from the end of the reference week.

For the purposes of identifying active job search, such activities are:

- studying job advertisements;
- placing or answering job advertisements;
- placing or updating CVs online;
- contacting employers directly;
- asking friends, relatives or acquaintances;
- contacting a public employment service;
- contacting a private employment agency;
- taking a test, interview or examination as part of a recruitment process; and
- making preparations to set up a business.

Seasonal workers not at work during the reference week (off-season) but who expect to return to their seasonal job are to be considered as having 'found a job'.»

IV. Absences classification in data series LFS2011 and LFS2021

LFS2011 – Reasons for absence from work during the entire reference week:

1. Annual or bank holidays – **Employed**
2. Own illness, injury or temporary disability (includes “sick leave”) – **Employed**
3. Maternity/paternity leave/adoption – **Employed**
4. Parental leave – **Additional filters**
5. Slack work for technical or economic reasons (includes lay-off) – **Additional filters**
6. Flexible (working time banking) or variable working hours – **Additional filters**
7. Bad weather – **Additional filters**
8. Strike or other labour dispute – **Additional filters**
9. School education or training – **Additional filters**
10. Seasonal work – **Additional filters**
11. Waiting for a new job to start – **Non-employed**
12. Unpaid leave – **Additional filters**
13. Other reasons (e.g. marriage leave, general government special mobility – “supranumerary plan”, pre-retirement, irregular/occasional activity) – **Additional filters**

Additional filters

- Self-employed worker → **Employed**
- Unpaid family worker:
 - Absence duration equal or under 3 months → **Employed**
 - Absence duration over 3 months or does not know / does not answer → **Non-employed**
- Employee:
 - Absence duration equal or under 3 months → **Employed**
 - Absence duration over 3 months and continues to receive an income equal to or over 50% of the regular salary → **Empregado**
 - Absence duration over 3 months and receives an income less than 50% of the regular salary or does not receives any income → **Non-employed**
 -
 - Does not know / does not answer → **Non-employed**

LFS2011 – Reasons for absence from work during the entire reference week:

1. Annual or bank holidays – **Employed**
2. Flexible working hours (e.g. flexitime schemes, time bank, variable hours, shifts, zero-hour contract) – **Employed**
3. Own illness, injury or temporary disability (includes “sick leave”) – **Employed**
4. Maternity/paternity leave/adoption (initial parental leave) – **Employed**
5. Additional/extended parental leave or childcare leave– **Additional filters 1**
6. Job-related training (required or paid by the employer or employed continued to receive a salary or it took place during working hours) – **Employed**
7. Slack work for technical or economic reasons (includes lay-off)¹⁸ – **Additional filters 2**
8. Seasonal work – **Additional filters 3**
9. New job, not yet started in the reference week – **Non-employed**
10. Other reason (e.g. bad weather, strike, unpaid leave, leave for taking care of family member (not parental leave), pre-retirement, military) – **Additional filters 2**

Additional filters 1

- Continues to receive an income → **Employed**
- Does not receive an income and absence duration is equal or under 3 months → **Empregado**
- Does not receive an income and absence duration is over 3 months → **Non-employed**

Additional filters 2

- Absence duration equal or under 3 months → **Employed**
- Absence duration over 3 months → **Non-employed**

Additional filters 3

- Still involved on a regular basis in activities related to the seasonal work (maintenance tasks, remodelling, etc.) → **Employed**
- Not involved in activities related to the seasonal work (maintenance tasks, remodelling, etc.) → **Non-employed**

¹⁸ In European terms, this answer option is included in “Other reason” because, during the years prior to 2020, it was an absence motive with a very small number of answers (without enough expression to be published by itself) and the European regulations were published in 2019. However, due to the measures adopted to contain the COVID-19 pandemic in Portugal from March 2020 onwards, it became the main reason for absence from work in the reference week, which is why, at the national level, it was decided to keep this answering option isolated.

V. Labour Force Survey non-quarterly modules

For the period from 2021 to 2028, the LFS modules were already decided:

Topics (fixed periodicity)	Years							
	2021	2022	2023	2024	2025	2026	2027	2028
Reason to migrate (2Y)	x		x		x		x	
Working time arrangements (2Y)	x		x		x		x	
Frequency of formal and non-formal education and training activities (12 months) (2Y)		x		x		x		x
Disability and other elements of the European health module (2Y)		x		x		x		x
Labour market situation of migrants and their immediate descendants (8Y)	x							
Ad hoc subject - Job skills		x						
Pensions and labour market situation (8Y)			x					
Young people on the labour market (8Y)				x				
Reconciliation between work and family life (8Y)					x			
Ad hoc subject - to be defined						x		
Work organisation and working time arrangements (8Y)							x	
Accidents at work and other work-related health problems (8Y)								x

VI. Minimum set of indicators for which backward revised series since the 1st quarter of 2009 will be made available at Eurostat national level

Required indicators and breakdowns in all European Union countries

- Employment level by sex and age group (16-24, 25-64, 20-64, 65-89)
- Unemployment level by sex and age group (16-24, 25-64, 65-74)

Optional indicators and breakdowns

- Employment level by sex and age group (25-54, 55-64, 55-74)
- Unemployment level by sex and age group (20-64, 25-54, 55-64, 55-74)
- Employment level by sex, educational attainment^(a) and age group (16-64, 16-74, 20-64)
- Employees by sex and age group (16-64, 20-64)
- Part-time employment by sex and age group (16-64, 20-64)
- Employees with temporary contracts by sex
- Unemployment level by sex, educational attainment^(a) and age group (16-64, 16-74, 20-64)
- Long-term unemployment by sex and age group (16-74, 20-64)

- Inactivity by sex, educational attainment^(a) and age group (16-64, 16-74, 20-64)
- Underemployed part-time workers by sex and age group (16-74, 20-64)
- Persons seeking work but not immediately available by sex and age group (16-74, 20-64)
- Persons available to work but not seeking by sex and age group (16-74, 20-64)
- Young people not employed neither in education or training activities (NEET) by sex and age group (16-24, 16--29)

^(a) Educational attainment considered:

- First and second stages of basic education (at most) (ISCED 0-2)
- Upper secondary and post-secondary non-tertiary education (ISCED 3-4)
- Tertiary education (ISCED 5-8)