



INSTITUTO NACIONAL DE ESTATÍSTICA
STATISTICS PORTUGAL

» The LFS in Portugal: a little history, current status and future plans



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 Barcelona, 7 February 2020





The Labour Force Survey in Portugal



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1. A little history
 2. Current status
 3. Future plans
 4. The Labour Force Survey microdata files



1. A little history



The Labour Force Survey in Portugal

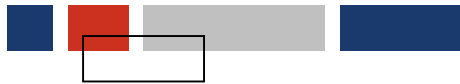
- Started in 1974.
- Comprises 1+5 different series of data:

Permanent Employment Survey:

- 2nd semester 1974 to 2nd semester 1982.

Labour Force Survey:

- 2nd quarter 1983 to 4th quarter 1990 (**Series I**).
- 1st quarter 1991 to 4th quarter 1997 (**Series II**).
- 1st quarter 1998 to 4th quarter 2010 (**Series III**).
- 1st quarter 2011 4th quarter 2020 (**Series IV**).
- As of 1st quarter 2021 (**Series V**) → *under preparation*.



1. A little history



	Permanent Employment Survey	LFS - Series I	LFS - Series II	LFS - Series III	LFS - Series IV
Results reference period	1S1974 to 2S1982	2Q1983 to 4Q1991	1Q1992 to 4Q1997	1Q1998 to 4Q2010	1Q2011 to 4Q2020
Peridicity	Half-yearly	Quarterly			
Sample size (dwellings)	13.3 thousand	36.2 thousand	Around 22.600 (37.000 individuals)		
Representativeness	Mainland	Portugal	Portugal and NUTS II regions		
Weights	Mainland	Portugal	NUTS II regions	NUTS II regions x sex x 5-year age groups; NUTS III	
Rotation pattern	-	1/4 per quarter	1/6 per quarter		
Active population minimum age	10 years old	12 years old	14 years old	15 years old	
Unemployment concepts	Broad sense	Broad + Strict sense (ILO: 13th ICLS)	Strict sense (ILO: 13th ICLS)		
Data collection throughout the quarter	-	5 weeks	6 weeks	13 weeks (uniform distribution)	
Data collection mode	PAPI		CAPI		CAPI + CATI





The Labour Force Survey characteristics I

- **Compulsory** participation (enforced by law) → High response rate.
- **Household** survey.
- **Sample** survey → Sampling design:
 - **Two-stage sampling** (1st stage: census areas selection; 1 or more cells from the 1 km² *grid* INSPIRE; 2nd stage: dwellings selection).
→ Information collected for all household members.
 - **1/6 rotation pattern** (↑ precision of change indicators; semi panel: allows flows estimates; ↓ respondents' burden).
 - Around 22.600 dwellings each quarter (**37.000 individuals**) to accomplish EU Regulations precision levels + national needs.



The Labour Force Survey characteristics II

- **Extrapolation:** independent population estimates.
NUTS II regions x sex x 5-year age groups; (+ NUTS III)
- **Observation unit:** individual + household.
- **Geographic scope:** Portugal (mainland territory + islands).
- **Geographic representativeness:** NUTS II regions (since 1992).
- **Frequency:** quarterly (+ annual averages + monthly results).
- **Questionnaire:**
 - More than **140 questions** + *ad hoc* modules (2nd quarters).
 - **Electronic questionnaire** (filters + validation rules).



The Labour Force Survey characteristics III

- **Concepts:** ILO concepts + Eurostat operationalization rules.

*regulations + explanatory notes + international classifications:
NACE, ISCO, ISCED, NUTS,...*

→ **Harmonization and comparability.**

- **Target population:** resident population in Portugal.
 - Living in private households in the reference week.
 - Absent for short-periods of time.
 - Living in collective households if some contribution to the labour market.
- Excluded: collective households (hotels, hospitals, military barracks, convents, etc.) and emigrants.



The Labour Force Survey characteristics IV

- **Data collection:** continuous, along the 13 weeks of the quarter/ 52 weeks of the year.
→ Each dwelling is assigned a pre-established reference week (Monday to Sunday).
- **Collection mode:**
 - 1st interview: **CAPI** (*Computer Assisted Personal Interviewing*).
 - 2nd to 6th interviews: **CATI** (*Computer Assisted Telephone Interviewing*).

2. Current status

1Q2018	2Q2018	3Q2018	4Q2018	1Q2019	2Q2019	3Q2019	4Q2019
CATI; I6							
CATI; I5	CATI; I6						
CATI; I4	CATI; I5	CATI; I6					
CATI; I3	CATI; I4	CATI; I5	CATI; I6				
CATI; I2	CATI; I3	CATI; I4	CATI; I5	CATI; I6			
CAPI; I1	CATI; I2	CATI; I3	CATI; I4	CATI; I5	CATI; I6		
	CAPI; I1	CATI; I2	CATI; I3	CATI; I4	CATI; I5	CATI; I6	
		CAPI; I1	CATI; I2	CATI; I3	CATI; I4	CATI; I5	CATI; I6
			CAPI; I1	CATI; I2	CATI; I3	CATI; I4	CATI; I5
				CAPI; I1	CATI; I2	CATI; I3	CATI; I4
					CAPI; I1	CATI; I2	CATI; I3
						CAPI; I1	CATI; I2
							CAPI; I1

Legenda:

CAPI: *Computer Assisted Personal Interview*.

CATI: *Computer Assisted Telephone Interview*.

I1, ..., I6: 1st Interview; ...; 6th Interview.

Quarter-on-Quarter change: 5/6 common sample.

Year-on-Year change: 1/3 common sample.



2. Current status



Questionnaire organisation (10 Modules):

Module R – Identification of dwelling residents (11 questions)

Module A – Individual data (16 questions)

Module B – Labour status (13 questions)

Module C – Employment characteristics of the main job (48 questions)

Module D – Job seeking (26 questions)

Module E – Registration at a public employment office (3 questions)

Module F – Previous work experience (8 questions)

Module G – Situation 1 year before (5 questions)

Module H – Education and training (10 questions)

Module I – Income (1 question)



2. Current status



Data available

- **General characterisation:**

Sex, age, education level, region of residence, country of birth, citizenship, household composition, Rural/Urban areas typology, etc.

- **Labour Market** directly related:

Labour market status, sector of economic activity of the employer, occupation, labour status, contractual arrangements, hours worked, situation 1 year before, previous work experience, job seeking, unemployment duration, net monthly pay from the main job (employees), underemployment, inactive marginally attached to the labour force, NEET, *ad hoc* modules variables, etc.



The Labour Force Survey characteristics as of 2021

- **New EU Regulations + 19th ICLS concepts** (↑ harmonization).
- **Several frequencies**, depending on variables: quarterly, yearly, biennial, quadrennial, regular modules (every 8 years), *ad hoc* modules → *several weights*.
- **Specific in Portugal:**
 - Active population minimum age: **16 years old**.
 - Wave approach (**subsampling**).
 - **Dependent interviewing**.
 - **Automatic coding** of NACE and ISCO (AI techniques).
 - CAPI (1st interview) + CATI/**CAWI** (2nd to 6th interviews).
 - Unchanged: sample design and sample size, representativeness, weights calculation, and rotation scheme.



4. The Labour Force Survey microdata files



The Scientific Use Files (SUF)

- **Anonymized** microdata for **scientific purposes** only → **by law!**
- Access has to be granted (to **1 researcher**, not 1 entity) by the Ministry of Education (research proposal submission).
- Fill in an **application form** + sign a **confidentiality undertaking**.
- **Files** (SPSS; ascii) + **explanatory notes** + **rules for publication**.
- EU Regulation 557/2013.
- **Data:**
 - All questionnaire **questions**.
 - + **derived variables** (to facilitate users' calculations).
 - + **technical variables** (unique identifiers, reference weeks and weights).



4. The Labour Force Survey microdata files



The Scientific Use Files (SUF)

- Available **37 days** after the end of the reference quarter, **for free**.
- **Details:**
 - **Age:** single ages.
 - **Country of birth/citizenship:** all countries (without aggregation).
 - **Activity** (NACE): 2 digits level.
 - **Occupation** (ISCO): 2 digits level.
 - **Income:** continuous variable.
 - **Identifiers:** unique individual identifiers, allowing to track respondents across time.
 - **Regions** (actual and 1 year ago residence; place of work): NUTS II.



4. The Labour Force Survey microdata files



The Scientific Use Files (SUF) provided by Eurostat

- Similar purposes and accreditation process...
- Built with the **microdata files sent by Statistics Portugal every quarter** (list of 90 pre-defined variables, some optional + derived variables + technical variables).
- **Details:**
 - **Age:** 5-year bands.
 - **Country of birth/citizenship:** aggregation into 15 country groups.
 - **Activity** (NACE): 1 digit level.
 - **Occupation** (ISCO): up to 3 digits level.
 - **Income:** only provided as (national) deciles and from 2009 onwards.
 - **Identifiers:** household numbers are randomized per dataset, not allowing to track respondents across time.



4. The Labour Force Survey microdata files



The Public Use Files (PUF)

- **Not published at Statistics Portugal website.** Requirements for publishing:
 1. **Further aggregations** (recoding) and/or **suppression** of several variables.
 2. **Perturbation** methods (problem: data not real, only “to enable interested parties to become familiar with using microdata while protecting the privacy of data providers”).
- **Published at Eurostat website** for Portugal:
 - **1+2 methods** applied; not real data, although plausible results.
 - Previous agreement with Statistics Portugal.
 - 2004 to 2013 files (quarters and years), except year 2004.
- EC Regulation 223/2009 (art. 23.º).



Thank you!