



Integration of LFS with Spanish Affiliation Data

LFS- Workshop

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Introduction

One of the key aspects of statistical product quality is its internal coherence as well as its **coherence** with other statistical operations within the same domain.

This quality principle is more straightforward to study and ensure in a market with few statistical products.

However, given the increased **availability of data**, a more in-depth analysis is required to guarantee this critical aspect of the quality of our statistics.

Objective: Analyse coherence between two labour market statistics in Spain

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- LFS and Affiliation Statistics in Spain
- Integration Process
- Results
- Conclusions

LFS and Affiliation Statistics

LFS

- Survey
- Quarterly
- Residents in Spain and in family households
- Individuals
- INCLUDES civil servants
- International definitions (ILO)

AFILIATION

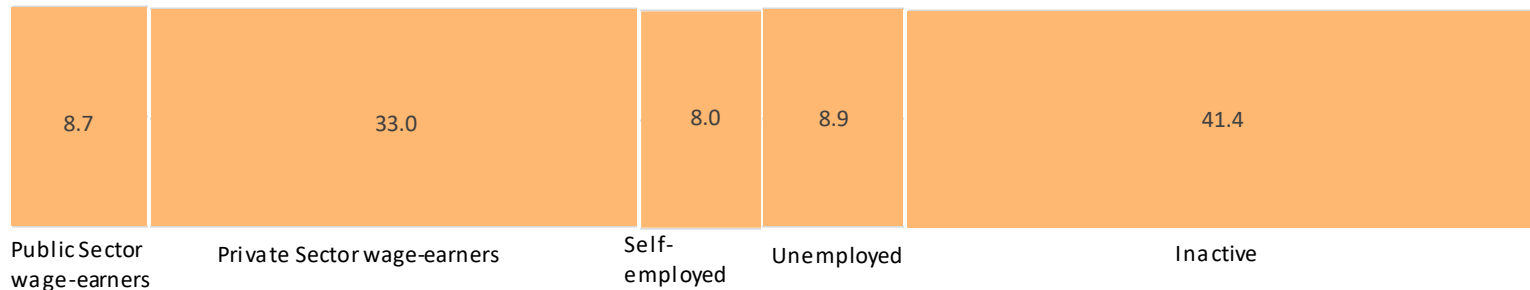
- Administrative Register
- Monthly
- Working in Spain
- Employment relationships (includes multiple jobs)
- NOT INCLUDES civil servants and others groups
- INCLUDES some non-employed individuals (agricultural workers in inactive status)
- National definitions by regulation

Integration Process

- Obtaining the identifier of each interviewed person in the LFS using the personal data collected in the questionnaire and the municipal population register.
- Requesting the registration information on employment affiliations for the identifiers obtained in the previous step.
- Linking the LFS sample with affiliation data.
- Obtaining the variable "affiliated during the reference week."
- Creating coherence tables using the LFS weighting factor.
- Analysing the non-coherent groups and identifying possible causes of such inconsistencies.

LFS and Affiliation Statistics

CLASSIFICATION OF THE POPULATION AGED 16 AND OVER ACCORDING TO THEIR RELATIONSHIP WITH ACTIVITY (%). LFS Q2-2021



- Creation of a series of coherence indices:
 - We classify as coherent those individuals who have declared in the LFS a circumstance that is compatible with the incoherence

LFS and Affiliation Statistics - 1 Initial

Q2-2021

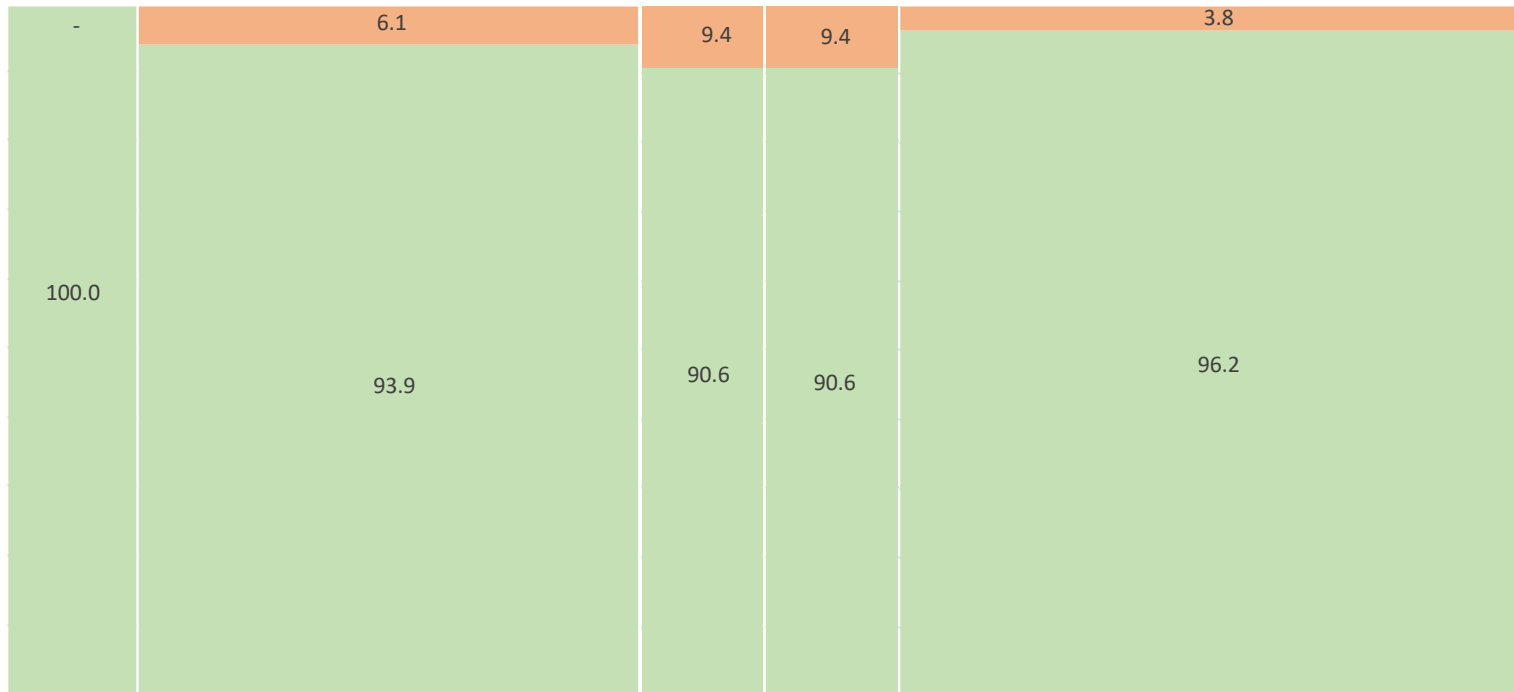


EMPLOYED: 91.0%
NOT EMPLOYED: 95.2%
TOTAL: 93.1%

Public sector employees may be affiliated with other mutual societies such as MUFACE, MUGEJU, ISFAS.

Note: Preliminary data under revision

LFS and Affiliation Statistics - 2



Q2-2021

Some professions have the possibility to affiliate with alternative mutual societies:

- 251-Judges, magistrates, lawyers, and prosecutors
- 245-Architects, urban planners, and geographer engineers.
- 248-Technical architects, surveyors, and designers
- 211-Doctors

EMPLOYED: 94.5%
NOT EMPLOYED: 95.2%
TOTAL: 94.8%

Note: Preliminary data under revision

LFS and Affiliation Statistics - 3



Employed people working abroad may be affiliated with social security systems in other countries.

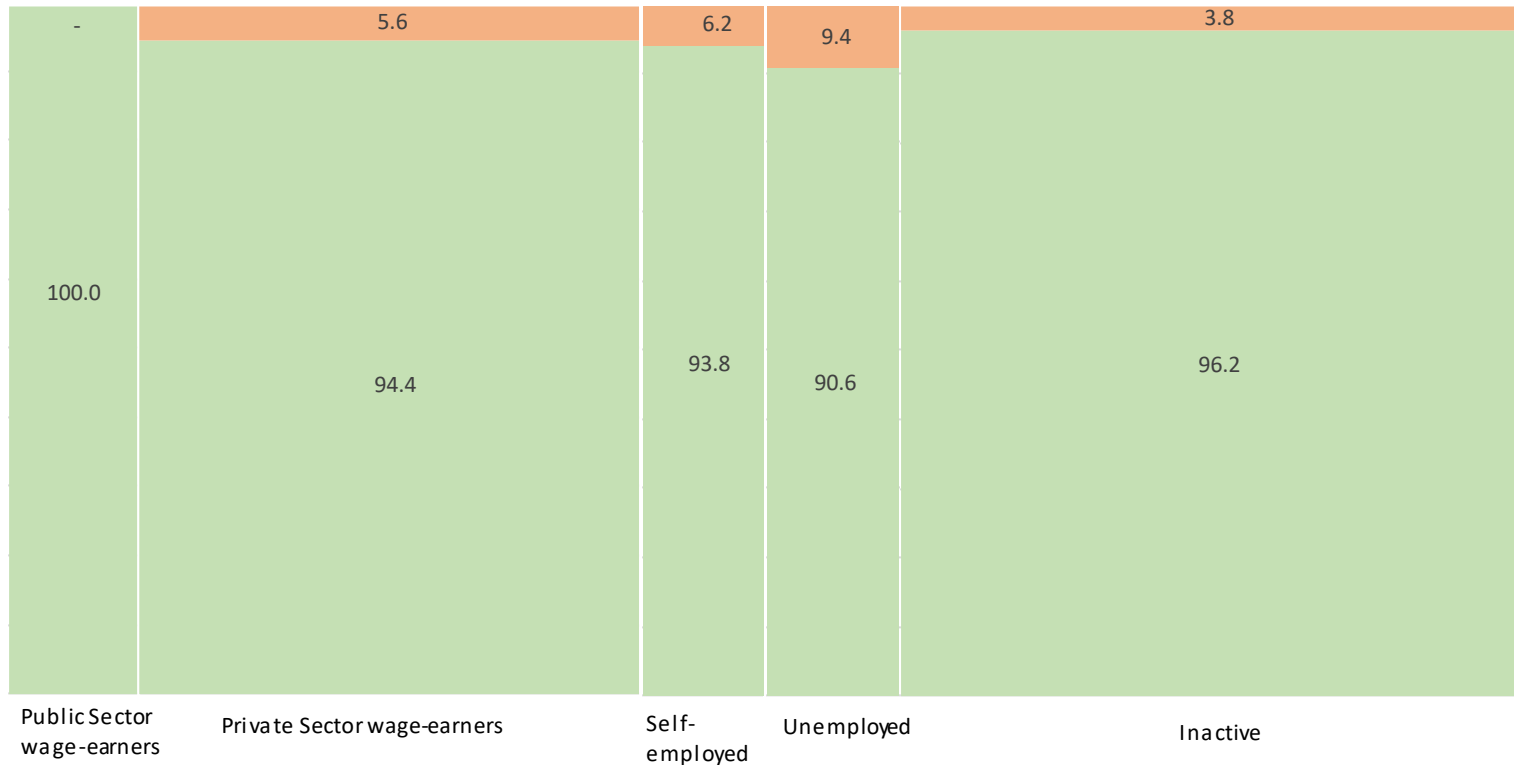
EMPLOYED: 95.0%
NOT EMPLOYED: 95.2%

TOTAL: 95.1%

Note: Preliminary data under revision

LFS and Affiliation Statistics - 4

Q2-2021



Members of the Special System for Employed Agricultural Workers who are in a situation of inactivity, may not be working at that time.

EMPLOYED: 95.3%
NOT EMPLOYED: 95.2%
TOTAL: 95.2%

Note: Preliminary data under revision

LFS and Affiliation Statistics - 5

Q2-2021



Affiliates with a partial retirement contract may not be working at that time.

EMPLOYED: 95.3%
NOT EMPLOYED: 96.4%
TOTAL: 95.8%

Note: Preliminary data under revision

LFS and Affiliation Statistics - Final

Q2-2021



EMPLOYED: 95.3%
NOT EMPLOYED: 96.6%

TOTAL: 95.9%

Note: Preliminary data under revision

Explained inconsistency

Q2- 2021 RELATIONSHIP WITH ECONOMIC ACTIVITY (LFS)	COHERENCE WITH AFFILIATION STATUS DURING THE REFERENCE WEEK					
	Total		COHERENT		NOT COHERENT	
	Value	%	Value	%	Value	%
TOTAL (POB > 16 YEARS)	39,633,100	100.0	36,899,000	93.1	2,734,100	6.9
EMPLOYED	19,671,700	100.0	17,896,700	91.0	1,775,000	9.0
Public Sector wage-earners	3,439,600	100.0	2,752,600	80.0	687,000	20.0
Private Sector wage-earners	13,067,900	100.0	12,276,000	93.9	791,800	6.1
Self-employed	3,164,200	100.0	2,868,100	90.6	296,100	9.4
NON-EMPLOYED	19,961,500	100.0	19,002,300	95.2	959,200	4.8
UNEMPLOYED	3,543,800	100.0	3,212,100	90.6	331,800	9.4
INACTIVE	16,417,600	100.0	15,790,200	96.2	627,400	3.8

EMPLOYED: 91.0%
NOT EMPLOYED: 95.2%

TOTAL: 93.1%



Q2- 2021 RELATIONSHIP WITH ECONOMIC ACTIVITY (LFS)	COHERENCE WITH AFFILIATION STATUS DURING THE REFERENCE WEEK					
	Total		COHERENT		NOT COHERENT	
	Value	%	Value	%	Value	%
TOTAL (POB > 16 YEARS)	39,633,100	100.0	38,023,000	95.9	1,610,100	4.1
EMPLOYED	19,671,700	100.0	18,738,700	95.3	933,000	4.7
Public Sector wage-earners	3,439,600	100.0	3,439,600	100.0	.	.
Private Sector wage-earners	13,067,900	100.0	12,330,800	94.4	737,100	5.6
Self-employed	3,164,200	100.0	2,968,400	93.8	195,900	6.2
NON-EMPLOYED	19,961,500	100.0	19,284,300	96.6	677,200	3.4
UNEMPLOYED	3,543,800	100.0	3,316,700	93.6	227,100	6.4
INACTIVE	16,417,600	100.0	15,967,600	97.3	450,000	2.7

EMPLOYED: 95.3%
NOT EMPLOYED: 96.6%

TOTAL: 95.9%

[Report](#)

Note: Preliminary data under revision

Explained inconsistency

EMPLOYED

- Public sector employees
- Professions with the possibility to affiliate with alternative mutual societies
- Spanish residents working abroad

NOT- EMPLOYED

- Members of the Special System for Employed Agricultural Workers who are in a situation of inactivity
- Affiliated through a partial retirement contract

Unexplained inconsistency

- Difficulty of perfectly framing short work periods in time (both in terms of the response collected in the survey associated with the reference week and the statuses recorded in the Affiliation)
- Informal employment: a share of the occupation not registered in Affiliation and registered in LFS (higher ratio of temporary work relations, in specific sectors and occupations, etc.)
- People who pay Social Security contributions without working or who simply do not respond to the survey truthfully are also significant and deserve to be analysed carefully

Conclusion

- The realization of these coherence studies is increasingly necessary in an environment where there **is growing availability of data** and, consequently, **new statistics**. Moreover, these exercises are highly cost-effective as studying the coherence between two statistics enhances **the quality of both statistical products**. Users of these statistics have access to an explanation of possible observed inconsistencies.
- From the producer's perspective, we also improve the quality as this contrast of concepts and figures enables us to understand and measure in more detail the strengths and weaknesses of our statistics. In other words, we have a tool for **constant quality assessment**, including the measurement of coverage.
- Furthermore, in the process of conducting these studies, efficient **communication among the producers** of both statistics, as well as data providers, is necessary. This also contributes to higher quality as it aligns with the new principle of coordination outlined in the Code of Good Practices.
- On the other hand, the **unexplained groups** can serve as a starting point for further analysis of the informal economy, its characteristics, and its evolution over time.
- Lastly, this exercise can be the starting point for the development **of new statistical products** that are based on the survey and include registry information, or alternatively, use registry data and leverage the cross-referencing with the survey to obtain a statistical definition that is more aligned with the reality we aim to measure.

Elaboración del plan

