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## SOCIAL NEEDS IN SPAIN

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Labour  
market

Report  
**02**

June 2019

### **METHODOLOGICAL APPENDIX**



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## Credits

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# METHODOLOGICAL APPENDIX



Improving employment conditions is widely recognised as a social need. Therefore, many social reality studies and observatories have focused on the best way to measure and assess the quality of the working conditions of those in work and the difficulties faced by those in the labour force to find employment. In the European context, since 1991 the European Foundation for the Improvement of Living and Working Conditions (Eurofound) has published numerous reports and papers that develop knowledge relating to the needs of those of working age in accessing employment and of employees in their working conditions. Specifically, this Foundation maintains a European Observatory of Working Life (EurWORK) and a European Monitoring Centre on Change (EMCC), focusing on the analysis of working conditions in the EU, labour relations and the transformation of the labour market.

The modern definition of unemployment emerged, according to Card (2011), in the United States towards the end of the 1930s based on research conducted by the *Census Bureau and Works Progress Administration*, and was measured for the first time using the standard of the American *Census of Employment* of 1937, which would later be used worldwide. Previously, a first attempt at measuring unemployment in the United States was registered in its 1880 census, in which everyone over the age of 10 who said they had a “profession or occupation” was asked how many weeks they had been unemployed for during the last year. Based on this information, a measurement was devised classifying

employed people as those who had worked during the previous year with “sufficient regularity” in an occupation that yielded them a salary or benefit. The discussion surrounding the definition of unemployment continued into the period of the great depression that followed the *Crash* of 1929, and this ended with the publication of statistics in 1930. Instead of using the previous question, the individual was asked to state their working situation on the day prior to the survey, avoiding, for example, taking into account the regularity of that employment over time. Furthermore, this new measurement provoked a strong response as, for example, Van Kleeck (1931) stressed that this measurement strongly underestimated the significant underemployment in the United States at that time, given that it also failed to consider those who worked part time but wanted to work more hours.

The offices of statistics in developed countries currently broadly adopt the basic International Labour Organization (ILO) unemployment rate indicator. This definition considers an individual to be part of the labour force if they are 16 years old or over and employed, or unemployed but have actively sought work in the previous four weeks and are available to work in the next two weeks. They are considered to be employed if they have worked one paid hour in the survey reference week, otherwise they will be counted as unemployed. The rate is calculated by dividing the total number of persons unemployed by the sum of persons employed and unemployed (labour force) in the society in question. Clearly,

this rate is just a snapshot of the challenges associated with the social needs in any labour market, and therefore does not appropriately encompass any of the three main challenges we are considering: the need for access to employment which does not involve underemployment; the need for access to appropriate working conditions; and an adequate salary.

Table A1 provides a summary of the social need challenges and indicators included in the area relevant to use, and also shows the data source used for their calculation. The variables chosen to reflect each of the three sub-dimensions or challenges identified as important are briefly presented, justified and explained below.

## Table A1. Labour market: challenges, indicators and sources

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### Challenge 1: Having access to employment



#### Workless household:

% of people who live in households in which all those in the labour force are unemployed.

**Source:** EPA- 2nd quarter.

#### Youth unemployment:

% of the labour force aged 20 to 29 who are unemployed.

**Source:** EPA- 2nd quarter.

#### Time-related underemployment:

% of people who live in households with individuals aged 16 to 59 who are part of the labour force and employed <20% of their working potential.

**Source:** EPA- 2nd quarter.

#### Discouraged:

% of people who, while available to work, are not looking for a job because they do not think they will find one.

**Source:** EPA- 2nd quarter.

#### Long-term unemployment:

% of people who live in households in which half or more of the unemployed labour force have been looking for work for over a year.

**Source:** EPA- 2nd quarter.

#### Employment instability:

% of people who live in households in which all employed people have a temporary contract.

**Source:** EPA- 2nd quarter.

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## Challenge 2: Having appropriate working conditions



### Skills mismatch with the position held:

% of people whose work position requires higher or lower qualifications than they have (*skill mismatch*) [differentiating between over-qualification and under-qualification].

Source: EWCS

### Uncertainty over the time of work:

% of people who repeatedly find out about changes to their work schedules with very little notice.

Source: EWCS

### Work that creates difficulties in balancing work and family life:

% of people who regularly (more than twice a month) work bank holidays or night shifts.

Source: EWCS

### General dissatisfaction with work:

% of people who are very dissatisfied or dissatisfied with the working conditions of their job.

Source: EWCS

### Challenge 3: Having an adequate salary



Employed people with an hourly wage below 2/3 of the median wage:

% of employed people in the labour force with a gross hourly wage below 2/3 of the median wage.

**Source:** EES

**In-work poverty:**

% of employed people who live in households whose family income is below the poverty line.

**Source:** ECV-T

Employed people with a monthly wage below 2/3 of the median wage:

% of employed people in the labour force whose gross monthly wage is below 2/3 of the median monthly wage.

**Source:** EES

**Severe salary reduction:**

% of people who have been employed for two consecutive years and have experienced a reduction of at least 20% of their net monthly wage in the last year.

**Source:** ECV-L

**Notes:**

ECV-T= Cross-Sectional Files of the Living Conditions Survey, 2004 Base and 2013 Base (National Institute of Statistics, INE).

ECV-L= Longitudinal Files of the Living Conditions Survey, 2004 Base and 2013 Base (INE).

EES= Salary Structure Survey (INE).

EWCS= European Working Conditions Survey (Eurofound).

**Source:** Own figures

## First challenge: Having access to employment



The first challenge -having access to employment- is analysed using six indicators that make it possible to identify situations where individuals and families are excluded from employment to different degrees: completely, and therefore unemployed, or partially, as they can no longer work the hours they previously could but are willing to, or in other words, they are faced with a situation of time-related underemployment. Another factor to be considered is that among those outside the labour force, especially in times of crisis, there may be a large number of people who, whilst being available to work, do not look for a job because they think they will not find one and are therefore counted as unemployed. Lastly, we also observe that the duration of the periods of unemployment, as confirmed by all specialist literature, plays a very important role in reducing employment opportunities for many in the labour force, and do the changes to job security, defined by the temporary nature of contracts, indicating that access to what we refer to as employment is transient and short-lived.

The first indicator offers a measurement of the concept of the **population living in workless households**, a wider notion than individual unemployment and which, nevertheless, also reflects a growing phenomenon in many developed countries, where the group of people who live in households that are completely disconnected from employment is generally growing. This measurement counts the people who live in households in which all those in the labour force are unemployed and is similar to the concept of *disconnected households* in American literature (Edelman and Holzer, 2013). The figures are gathered through the Active Population Survey every quarter, and we have chosen the second quarter in order to avoid seasonal effects affecting the first and the third and fourth quarters of the year.

The second indicator assesses the size of the **unemployed population aged 20 to 29**, focusing the analysis in the area of unemployment among people who are likely to be looking for their first job after completing their studies. The selection of these ages for this

indicator is justified in order to, on the one hand, avoid including people under the average age of completing secondary studies (16-18 years) and, on the other hand, to focus the analysis on access to a first job, not going above the age of 29, which is also the maximum age at which people can take part in the active employment policies aimed at young people through, for example, the State Public Employment Service (SEPE).

Thirdly, for the **time-related underemployment** indicator, we will use a very similar definition to the one used by the National Institute of Statistics (INE) itself, following the definition adopted in the 16th International Conference of Labour Statisticians in Geneva in 1998, where a resolution related to measuring underemployment and inadequate employment situations was approved. In order to calculate this, figures from the Active Population Survey on the working hours of employed people is used, and for each of them the gap between their working hours and those they would like to (and could) work is determined, without surpassing the country's mode in full-time employment. Based on this, an underemployed person is defined as one who lives in a household in which those in the labour force work less than 20% of the hours they would be willing to work if they had a full-time contract. We set this threshold following the criteria of EUROSTAT for the calculation of the AROPE index, which measures the risk of poverty and social exclusion based on three dimensions: financial poverty, material deprivation and low work intensity. The third of these dimensions specifically shows that a household suffers low work intensity when individuals in the labour force have worked, on average, less than 20% of the time they could have worked during the last year.

In addition, we also use an indicator which tries to measure whether during recessions, with high unemployment rates and severe challenges to finding work, the number of discouraged people increases. This would reduce the size of the labour force and therefore affect both the numerator and the denominator of the unemployment rate. Certainly, if the number of

**discouraged people** is significant, the unemployment rate will not properly reflect the effects of a crisis. The indicator uses figures from the EPA to measure the number of people who live in households in which more than half of the individuals declare that they are available for work but are not looking for work because they do not think they will find it.

Finally, the two remaining employment access indicators are focused on measuring, on the one hand, the number of people who live in households in which those employed have episodes of **long-term unemployment**, and on the other hand, job insecurity through the number of people who live in households in which all those employed have a temporary contract.

## Second challenge: Having appropriate working conditions



In our analysis of the second challenge, “having appropriate working conditions”, we focus on those who are employed, and use information from the European Working Conditions Survey (ECWS) from 2000 to 2015. This survey was produced in Spain by the Ministry of Employment, Migration and Social Security in collaboration with the European institutions from 1990 to 2010, and was called the Survey of Quality of Life at Work (ECVT). Later, it turned into a purely European survey managed by Eurofound following the series for 2010. The series currently available are 1991/1992, 1995/1996, 2000, 2005, 2010 and 2015. The survey makes it possible to research the quality of life of employed people at work, and to obtain continuous statistical information on the socio-occupational situation of employed workers, as well as their perception of working conditions and labour relations.

In relation to the quality of the job of those who are employed, we measure, firstly, the extent of **the mismatch between the skills of the workers and the requirements of the position**, and therefore to what extent supply matches demand. It is of particular interest for us to differentiate between whether this skills mismatch relates to the worker being overqualified or underqualified for their job.

Other suitable working condition indicators we have found to be relevant are: having a job which creates **difficulties in balancing work and family life** due to having to work night shifts or bank holidays, and also because there is repeated **uncertainty surrounding the work schedule**, both of which are aspects which make work difficult or impossible to balance with family life and the social development of the individual in other aspects of life, such as spending time with friends or maintaining a healthy lifestyle. Lastly, we also study the subjective opinion of individuals regarding the working conditions of their job by using an indicator to show the **general subjective dissatisfaction with the job**.

## Third challenge: Having an adequate salary



The third challenge for those who participate in the labour market is related to the job providing an adequate salary. We use the information in the Salary Structure Survey (EES) from 2002, 2006, 2010 and 2014. As indicators of the salary conditions of the population we have studied two different salary concepts: hourly wage and monthly wage. The first focuses on hourly pay, and the second combines hourly pay and the number of working hours that make it possible to achieve a living wage. Furthermore, as a threshold to define whether an employed person does or does not have a low wage, we use a threshold very commonly seen in the literature on this subject:  $\frac{2}{3}$  of the median salary. These indicators reflect the percentage of the **labour force whose gross wage (hourly or monthly) is below this threshold.**

In addition, in this last area we use an indicator related to the concentration of people with low pay in certain households, which is commonly known as **in-work poverty** (Eurofound, 2017). Generally, its existence reveals a lack of job opportunities that allow people to avoid situations of economic hardship through their participation in the labour market. The indicator measures the number of employed people who live in households in which the family income is below the poverty line (60% of the equivalent average income, in accordance with European methodology).

Lastly, we also use a salary stability indicator known as **severe salary reduction**, which reflects the number of people who have been employed for two consecutive years and who have experienced a reduction of at least 20% of their net salary in the last year. For this last calculation we use data from the longitudinal part of the Survey on Living Conditions (ECV) of the INE.

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