

To measure unemployment or, more generally, the degree of labour utilisation of an economy, various criteria can be used to assess, firstly, whether the individuals lacking employment should be classed as unemployed or as economically inactive, and, secondly, how many of the economy's part-time workers wish to work more hours.

In the first case, the official definition used in Spain and the rest of Europe (that of Eurostat), as well as in the other developed countries, to characterise a person as unemployed follows the criteria of the International Labour Organisation (ILO), which considers people to be unemployed if, at the time they are surveyed, they state that they wish to work, are available to do so within two weeks and have actively sought work in the last four weeks. However, it could be considered, particularly in crisis periods, that this definition is too narrow for assessing the size of the unemployed population, insofar as some people wishing and available to work may not be looking for a job because they believe they will not find one due to the unfavourable economic situation. These people could quickly become part of the active population when the economic situation changes and their prospects of finding work improve.

In principle, for certain analyses of the labour market situation, it may be useful to relax the definition of unemployment. In particular, three alternative measures of unemployment can be calculated. The first adds to the unemployed population those economically inactive individuals not looking for a job because they do not think they will find one, commonly referred to as *discouraged*. The second adds to the definition of unemployed not only these discouraged inactive persons, but also those inactive individuals who, although not looking for a job for some other reason, are available and wish to find work. Finally, the third measure adds also those individuals who, although looking for work, for some reason are not available to begin a new job immediately.

Regarding part-time workers, it can also be argued that a measure of the labour market's idle resources should include the so-called group of underemployed, i.e. those who are currently working part-time and would like to work more hours. However, in the construction and interpretation of a wider definition of unemployment including this group, it has to be taken into account that these workers are only partially available to increase the labour supply.

Various institutions, such as the OECD and the US Department of Labor, habitually use these alternative measures of unemployment to monitor the degree of labour utilisation.<sup>1</sup> Chart 1 shows the recent behaviour of the Spanish unemployment rate using the official definition and the above four alternatives. Naturally, as

<sup>1</sup> Box 3 of the ECB *Economic Bulletin 3/2017* analyses this matter for the euro area.

additional groups are included, the hypothetical levels of underutilisation of the labour force increase. Chart 2, which shows the difference over time between the official unemployment rate and the various alternatives, reveals that the first three definitions of unemployment, when the various groups of the economically inactive population are included, have behaved relatively similarly in recent years. This suggests that the assessment of the cyclical situation of the Spanish labour market need not necessarily change significantly when use is made of narrower definitions of unemployment including inactive persons with weaker links to the labour market.

However, when underemployed workers are taken into account, the measure of labour underutilisation increases considerably between 2008 and 2014, and the gap with respect to the official definition widens over this period. In particular, whereas according to the official definition the unemployment rate increased by 19 pp between 2007 Q2 and 2013 Q1 when it peaked at 26.9%, this increase is 23.1 pp under the metric which includes the underemployed wishing to work more hours, exceeding 35% at the highest point of this series.<sup>2</sup> The decrease from the early-2013 highs to the end-2016 levels exceeds 8 pp under the first four definitions considered, being somewhat lower for the underemployed population.

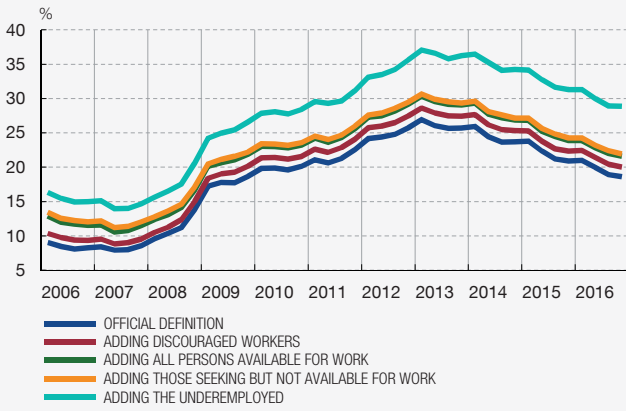
The larger increase in unemployment when the underemployed are considered is explained by the increase in part-time employment in the Spanish economy in this period, up from 11.7% at end-2006 to 15.3% at end-2016 and, above all, by the increase in workers who state that they work part-time involuntarily, i.e. they would like to find a full-time job. This group of individuals went from making up around 30% of part-time workers to a share above 60% (see Chart 3).

As to the factors which may explain this increase, Chart 4 shows the workers who find involuntary part-time work in each quarter. First, it can be seen that, from 2008, the inflows into involuntary part-time work increase notably not only from the unemployed population, but also from those in full-time employment. This suggests that, with the arrival of the crisis, firms reduced their demand for labour and a somewhat higher proportion of jobs became part-time, despite the fact that their incumbents wanted to work more hours. Second, the inflows into involuntary part-time work also increased from the population with part-time employment for other reasons, which would seem to indicate that some workers who before 2008 did or could not work more hours, became willing to do so after that year.<sup>3</sup> The latest behaviour of these inflows,

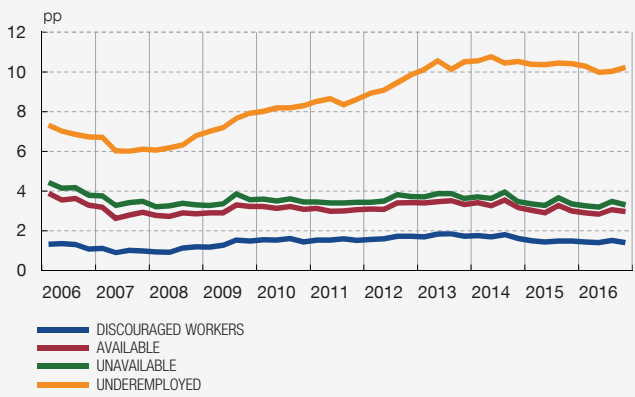
<sup>2</sup> The increases obtained using the various alternatives for active workers were similar to that observed under the official definition (19.4 pp and 19.8 pp, respectively, according to whether discouraged workers or all available workers are included).

<sup>3</sup> Although the reasons are unknown, this may be due to, for example, a wish to work more hours in a crisis situation in which the spouse has lost his/her job.

Panel 1  
ALTERNATIVE MEASURES OF THE UNEMPLOYMENT RATE



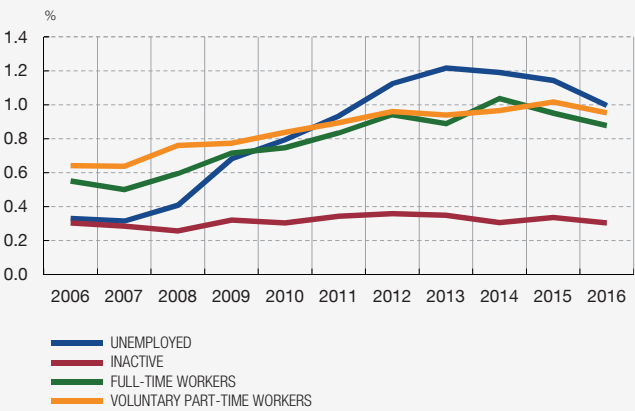
Panel 2  
DIFFERENCE BETWEEN OFFICIAL AND ALTERNATIVE UNEMPLOYMENT RATES AS A RESULT OF INCLUDING THE VARIOUS POPULATION GROUPS



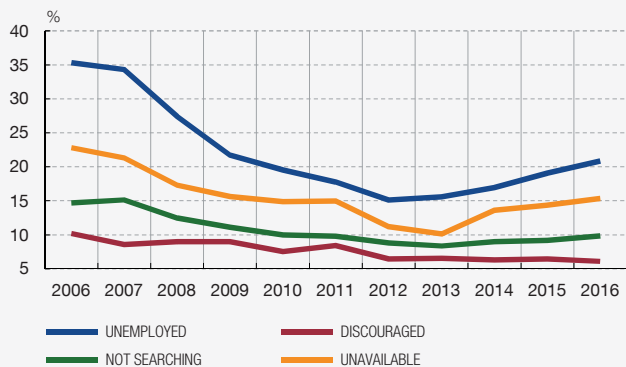
Panel 3  
PART-TIME WORKERS WISHING TO WORK FULL TIME



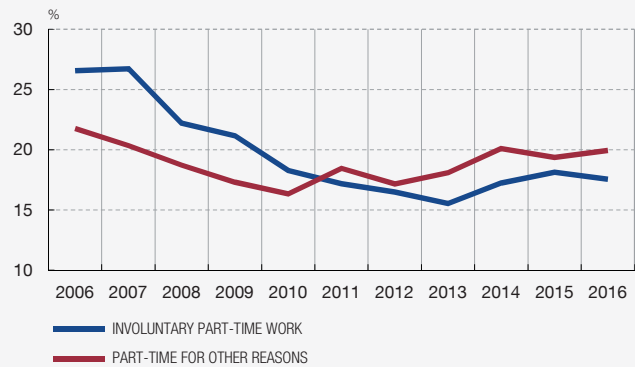
Panel 4  
INFLOWS INTO INVOLUNTARY PART-TIME EMPLOYMENT BY ORIGIN



Panel 5  
PROBABILITY OF FINDING WORK BY TYPE OF UNEMPLOYED/INACTIVE PERSON



Panel 6  
PROBABILITY OF FINDING FULL-TIME WORK BY SEARCHER'S PART-TIME JOB TYPE



SOURCE: Spanish Labour Force Survey microdata (INE).

which have not returned to their pre-crisis levels, seems to indicate that a portion of the increase in the volume of part-time work has become permanent in the Spanish labour market. Otherwise, a period of recovery would be expected to give rise initially to an increase in the hours worked by each individual and subsequently in employment, and this has not happened.

The legal reforms approved during this period may have played a role in these developments. For example, the reform in 2012 introduced the possibility of overtime under part-time employment contracts and Royal Decree-Law introduced additional flexibility in the use of these contracts by firms, thus fostering demand for jobs of this type.

Any assessment of how accurately the various definitions of unemployment reflect the labour market situation has to consider that, as the criteria for including the various groups are relaxed, their relationship with the labour market becomes progressively weaker and they may therefore be less likely to find work. Specifically, the Spanish Labour Force Survey data in Chart 5 indicate that the probability of finding work in the next quarter is much higher for the unemployed per the official definition, while the other groups considered as potential workers have a notably lower probability of finding work.

This latter circumstance is in fact apparent throughout the whole of the period analysed, so the recovery in employment in the last three years has not increased the probability that discouraged inactive persons or those not seeking work for some other reason

will find a job. This has caused an increase in the difference between the probability of finding work for individuals in these groups and for those included in the official definition of unemployment.

Regarding the underemployed, Chart 6 shows a marked decrease in the probability that an involuntary part-time worker will find a full-time job. Thus, according to the latest Spanish Labour Force Survey, this probability was 17.5% in 2016, somewhat below that observed for persons holding a part-time job for other reasons (20 %),<sup>4</sup> whereas before the crisis the probability of finding full-time work was higher among involuntary part-time workers. In recent years this probability has not increased for involuntary part-time workers, which in turn affects the likelihood of a more permanent change in the demand for part-time work.

In short, the inclusion of various types of inactive persons as unemployed or the consideration of underemployed workers raises the unemployment rate, but does not significantly change our picture of the cyclical position of the economy. Further, everything seems to indicate that the recent increase in involuntary part-time workers has a structural component which does not seem to be reversing in the recovery. In any event, it should be kept in mind that these alternative measures cannot replace the habitual ones developed by the international institutions using the strictest statistical quality controls.

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4 These reasons include attending training activities, caring for family members or other obligations, and not wanting a full-time job.