# ANALYTICAL ARTICLES Economic Bulletin

4/2022

BANCO DE **ESPAÑA**Eurosistema

HOW DID THE DURATION OF SPAIN'S FURLOUGH SCHEMES AFFECT THEIR EFFICACY?

Mario Izquierdo, Sergio Puente and Iván Auciello

#### **ABSTRACT**

This article assesses how effective Spain's furlough schemes were from the start of the COVID-19 crisis in allowing the workers affected to return to work. On average between 2020 and 2021, the absolute probability of workers resuming their activity was high, although the shorter the furlough scheme, the higher the probability: almost 65% for workers who were furloughed for just one quarter, compared with slightly more than 26% for those who were furloughed for three quarters. When compared with workers of identical characteristics who were not furloughed but lost their jobs and became economically inactive or unemployed, the gap is positive, but it also narrows over time. In consequence, the results show that the furlough schemes – especially the shorter ones – were highly effective in the period analysed. However, the longer the furlough schemes lasted, the less effective they tended to be, especially for certain groups, such as younger workers, those with temporary contracts and workers in certain service activities.

Keywords: furlough schemes, employment, COVID-19.

JEL classification: J23, J63, J08.

The authors of this article are Mario Izquierdo, Sergio Puente and Iván Auciello of the Directorate General Economics, Statistics and Research

### Introduction

Widespread use was made of temporary employment adjustment schemes during the COVID-19 crisis, especially in Europe. According to OECD (2022), between April and May 2020 some 20% of OECD member countries' workers were covered by such schemes, far more than during previous crises. Spain's furlough schemes (ERTE, by their Spanish acronym) were also widely used in the immediate aftermath of the outbreak of the pandemic, affecting more than 3.5 million workers.

The use of this type of schemes has since gradually decreased and now stands at very low levels. In Spain, for instance, just 20,000 workers were on furlough in October 2022. In view of these figures, one question that arises is whether the sharp decline in furlough schemes reflects how effective they were in terms of workers resuming their pre-crisis employment. In principle, the nature of the COVID-19 crisis – which was extremely severe, but patently temporary and exogenous to the economic fundamentals of the agents affected – provides the ideal setting for such instruments to be effective.

Generally, the available evidence shows that the temporary employment adjustment schemes were effective in enabling economies to adjust to the shock caused by the pandemic. However, there is still relatively scant evidence. The academic literature that has studied the consequences of these schemes in past episodes, which is much more extensive, endorses the positive effects for job retention, yet at the same time flags the presence of certain costs associated with their use, especially when the employment adjustment needs are not temporary. In such cases, some of the workers affected may find that their original employers have to reduce their headcount, thus lowering workers' expectations of returning to work. If these workers remain on furlough for a long time, they face a relatively extensive period of inactivity, during which their general skillset or qualifications may suffer and they may have less incentive to search for new employment. Moreover, the evidence for several European countries during the Great Recession<sup>2</sup> shows that, in some cases, the

<sup>1</sup> See, for example, OECD (2021).

<sup>2</sup> See, for example, Giupponi and Landais (2018) for Italy, Cahuc, Kramarz and Nevoux (2018) for France, Kopp and Siegenthaler (2020) for Switzerland, and Arranz, García-Serrano and Hernanz (2018) for Spain.

positive impact of these schemes on employment is limited to certain groups of workers and firms and is generally temporary.

This article analyses how effective Spain's furlough schemes in the pandemic were in allowing the workers affected to return to work, drawing on the previous evidence obtained in Izquierdo, Puente and Regil (2021). As there is now a longer time series available, this article can better analyse how the duration of the furlough schemes affected their efficacy.

## The use of furlough schemes in Spain during the health crisis

Drawing on data from the Spanish Labour Force Survey (EPA, by its Spanish acronym), it is possible to analyse the extent to which the furlough schemes were used in Spain during the pandemic, both on aggregate and among different groups of workers. In aggregate terms, almost 20% of employees were affected by temporary layoffs in 2020 Q2. This percentage fell sharply as the health situation improved, standing at 0.3% of employees in 2021 Q4.<sup>3</sup> By groups of workers, these schemes were very widely used during the health crisis, generally with smaller differences across groups than in previous crises.<sup>4</sup> Nevertheless, the use of furlough schemes was somewhat more prevalent among young workers and those with lower educational levels. Above all, the differences were greater across productive sectors, with a much higher incidence in the service industries most affected by the restrictions on activity, such as hospitality and leisure.

As regards the duration of the furlough schemes, using EPA flow data the employment status of the workers interviewed can be monitored over the six quarters they are included in the survey, and thus the number of quarters in which they remained on furlough can be calculated. <sup>5</sup> Chart 1 depicts the distribution of workers who were on furlough at any point in 2020 and 2021, according to how long that status lasted in quarters and their different personal characteristics.

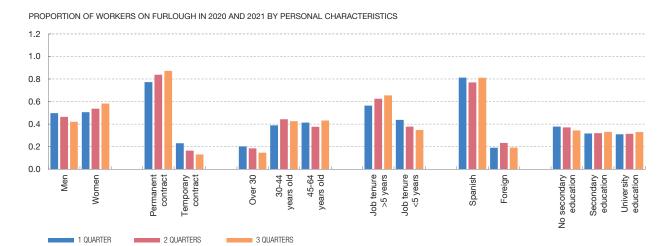
As the chart shows, in furlough schemes that lasted for one quarter the gender split was almost equal, but the longer the schemes lasted, the greater the proportion of female workers. As is typical among schemes of this kind, they were more prevalent among workers with permanent contracts; moreover, the longer the furlough lasted, the higher the proportion of permanent contracts. Probably partly reflecting these

<sup>3</sup> The 2020 figures are not strictly comparable with those for 2021, as the EPA data include workers on short-time work schemes for 2020, but not for 2021, as these data ceased to be available in early 2021.

<sup>4</sup> In the 2008 crisis, furlough schemes mainly affected university-educated men with long job tenure. By economic sector, they were highly concentrated in manufacturing and, to a lesser extent, in construction and some service industries, such as retail.

<sup>5</sup> The EPA is a quarterly survey, so it does not take into account potential moves to and from furlough within a quarter. Rather, the information used refers to the employment status of each individual in the week before the interview and that employment status is assigned throughout the quarter.

Chart 1 WORKERS ON FURLOUGH IN 2020 AND 2021 BY PERSONAL CHARACTERISTICS



SOURCE: Own calculations drawing on EPA data.



differences by type of contract, the incidence of furlough schemes increased with age, and somewhat more so for workers who were on furlough for longer. Job tenure had a similar impact, reflecting the more extensive use of furlough schemes in the case of longer-standing employment relationships that would entail higher layoff costs.

## The efficacy of furlough schemes as a mechanism for the return to work

Using furlough schemes as a mechanism for preserving an employment relationship has a clear theoretical rationale in terms of the intrinsic value associated with the relationship. Indeed, job seekers endeavour to fit into those jobs that best match their characteristics and skills, and firms similarly seek workers who best match the skills required. The resulting productivity of the employment relationship is greater than that which may be attributed specifically to either the worker or the job separately. Consequently, the outbreak of the pandemic, which was a unique crisis in that it was exogenous to firms' specific conditions, as well as being severe and markedly temporary, provided a particularly appropriate scenario for the use of furlough schemes as a mechanism for preserving employment relationships.

However, once the worst of the crisis was over, remaining on furlough could be detrimental to workers' employment prospects for two reasons. First, because it could discourage them from searching for another job, in the hope that they will return to work, which may not happen or may be delayed (if their employer has structural viability problems, for example). Second, because a protracted period of inactivity could lead to a loss of working skills that could outweigh the value of the employment relationship being protected. Given all this, it is no surprise that the absolute efficacy of furlough schemes – measured as the proportion of affected workers returning to employment in the following quarter – decreases from 64.5% after one quarter on furlough to 41.1% after two consecutive quarters and to 26.2% after three consecutive quarters on furlough.

As the probability of returning to work may depend on the duration of the worker's inactivity, irrespective of whether or not they are covered by a furlough scheme, this section uses an empirical approach to estimate relative efficacy, i.e. by comparing furloughed workers with other similar workers not covered by a furlough scheme. Specifically, the methodology used is akin to that in Izquierdo, Puente and Regil (2021), but with the difference that the availability of data referring to a longer time span allows for more protracted durations of furlough to be studied. To this end, EPA flow microdata are used, which enable an individual's employment status to be monitored over six consecutive quarters, thus allowing an analysis of the flows of workers returning to active employment status, be it in the same firm following the end of the furlough scheme or at a new job in a different firm. The group of interest comprises workers who were temporarily laid off at some point between 2020 Q2 and 2021 Q4. Drawing on the EPA panel,<sup>6</sup> the probabilities of these workers resuming work after one, two or three consecutive quarters on furlough can be calculated and compared with those for workers who lost their jobs in that period and remained unemployed or economically inactive (but not furloughed) for the same number of quarters.7

Specifically, a logit model is estimated for each quarter, where the dependent variable is the probability of the return to effective employment<sup>8</sup> after a certain number of quarters either on furlough or of unemployment or economic inactivity. For a duration of one quarter, the sample is defined as all workers who were in effective employment in t-1, but who in t were temporarily laid off or became unemployed or economically inactive. For the two-quarter model, the sample likewise begins with workers in effective employment in t-1 and analyses whether they were on furlough or unemployed/economically inactive in t and t+1. The three-quarter model is constructed in a similar manner.

<sup>6</sup> In principle the EPA monitors individuals for six consecutive quarters, enabling an analysis of transitions during a maximum of four quarters, given the need for an initial quarter (to identify the employment status before furlough) and a final quarter (to estimate the probabilities of a return to work). However, the number of observations after four months on furlough is too small to permit precise estimates, and the analysis is therefore limited to three quarters.

During the pandemic, the distinction between the unemployed and the economically inactive was fairly artificial, as many of those wishing to look for work were unable to do so, due to the mobility restrictions. Consequently, the peer group includes both unemployed and economically inactive persons who lost their jobs and those who were furloughed. Nevertheless, as the article seeks to analyse the return to work after furlough, and since the distinction between the unemployed and the economically inactive has a bearing on the incentives for looking for work, it is reasonable to include both these groups in the peer group.

<sup>8</sup> That is to say, the worker was employed without being temporarily laid off.

Table 1

DIFFERENCE IN THE PROBABILITY OF FURLOUGHED WORKERS RESUMING EFFECTIVE EMPLOYMENT COMPARED WITH UNEMPLOYED OR ECONOMICALLY INACTIVE WORKERS

Variables interacted with the layoff indicator	Employment resumed after 1 quarter on furlough		Employment resumed after 2 quarters on furlough		Employment resumed after 3 quarters on furlough	
No interaction	28.7	***	23.4	***	13.4	***
By gender						
Men	31.9	***	24.1	***	5.7	**
Women	25.8	***	22.7	***	19.2	***
By age group						
16 to 29 years old	24.3	***	14.0	***	3.4	
30 to 44 years old	26.0	***	22.1	***	8.3	***
45 to 64 years old	34.2	***	31.0	***	23.3	***
By employment contract						
Permanent	32.0	***	25.1	***	15.4	***
Temporary	22.8	***	17.0	***	-1.1	
By educational level						
Primary	25.0	***	30.2	***	13.7	*
Secondary	30.3	***	22.1	***	10.6	***
University	26.3	***	24.5	***	19.1	***
By economic sector						
Industry and construction	37.1	***	37.8	***	30.7	***
Retail. Hospitality. Car repair	28.3	***	15.4	***	14.8	***
Transportation. Communications	17.5	***	27.5	***	8.4	
Finance. Insurance. Real estate. Administrative	31.5	***	42.0	***	20.5	***
General government, education and health care	17.6	***	40.0	***	8.6	
Other services	30.4	***	16.2	***	-1.2	
Number of observations	14,831		4,216		1,652	
Proportion of furloughed workers in the sample (%)	36.9		17.2		13.6	
Average probability of employment being resumed in the sample (%)	54.0		34.6		26.5	

SOURCE: Banco de España. Own calculations drawing on EPA flow microdata.

NOTE: The asterisks \*, \*\* and \*\*\* denote significance levels of 10%, 5% and 1%, respectively. The analysis covers periods of furlough or unemployment starting between 2020 Q2 and 2021 Q4. The interactions with each variable are estimated using separate models. All estimates include controls for gender, age, previous and current employment status, contract type, level of education, economic sector, region of Spain and job tenure.

The results are presented in Table 1, which shows the difference between the probability of a furloughed worker resuming effective employment and that of an unemployed or economically inactive worker doing so, after controlling for differences in the workers' observable characteristics. As can be seen in the first row ("No interaction"), in all cases furloughed workers are significantly more likely to return to work than those who were unemployed or economically inactive. This indicates just how effective these schemes were during the COVID-19 crisis. These results are in line with those obtained in Izquierdo, Puente and Regil (2021) on data up to end-2020,

BANCO DE ESPAÑA

<sup>9</sup> Specifically, the regressions include controls for gender, age, previous and current employment status, contract type, level of education, economic sector, region of Spain and job tenure.

and in other recent studies.<sup>10</sup> The gap between these probabilities also narrows as the duration of furlough or unemployment/economic inactivity increases, decreasing by more than half over time, from 28.7 percentage points (pp) after one quarter to 13.4 pp after three quarters. This demonstrates that furlough schemes become relatively less effective in promoting the return to work as the circumstances prompting their use persist.

Both the relative efficacy of the furlough schemes in enabling the return to work and their diminishing efficacy in doing so over time vary across groups. This can be seen in the other rows of Table 1, which show the results of an estimation similar to the aggregate exercise, but in which the variable of interest (the layoff indicator) interacts in each case with different observable variables reflecting the workers' characteristics, 11 such as gender, age and contract type. Specifically, the findings show that men are more likely to return to work than women, but only in the case of short periods on furlough, as the effect for men decreases more sharply over time. Moreover, the effect is greater and longer-lasting for older workers and for those with permanent rather than temporary contracts. By level of education, the efficacy of furlough schemes in ensuring the return to work declines more quickly among lower skilled workers. By sector, their relative efficacy is greater and more persistent in industry, while in some service sectors 22 employability after three quarters on furlough ceases to be distinguishable from that of an equivalent worker who is unemployed or economically inactive but not covered by a furlough scheme.

Overall, these results tend to confirm that furlough schemes have been an appropriate mechanism for protecting employment relationships and that they are more effective – in absolute and relative terms – over short periods. Their extended use over time, however, tends to make them less effective, especially for certain groups of workers. In particular, the results by age, contract type and economic sector appear to point to a greater loss of this relative efficacy in circumstances where the value of the employment relationship, in terms of job tenure or firm-specific human capital requirements, is lower. This would be the case of younger workers, those with a temporary contract and workers in certain service activities. Nonetheless, owing to the small size of the EPA sample panel, these results should be interpreted with caution and will require further analysis when administrative data<sup>13</sup> with richer information in this respect become available.

24.11.2022.

<sup>10</sup> See, for example, García-Clemente, Rubino and Congregado (2022) for an evaluation of the impact of furlough schemes on the probability of being re-employed, also drawing on EPA flow data.

<sup>11</sup> A separate estimation is performed for each variable and for each furlough duration.

<sup>12</sup> Specifically, for transportation and communications, non-market sectors and other services.

<sup>13</sup> Once the 2021 data from the social security administrative labour records (MCVL, by the Spanish acronym) become available, an analysis of the work trajectories beyond the six quarters permitted by the EPA will be possible.

#### REFERENCES

- Arranz, J. M., C. García-Serrano and V. Hernanz (2018), "Short-Time Work and Employment Stability: Evidence from a Policy Change", *British Journal of Industrial Relations*, 56(1), March, pp. 189-222.
- Cahuc P., F. Kramarz and S. Nevoux (2018), "When Short-Time Work Works", IZA Discussion Paper No 11673.
- García-Clemente, J., N. Rubino and E. Congregado (2022), Evaluating the effects of short and medium-term temporary work reduction schemes: the case of Spain's ERTE during the COVID-19 outbreak, available at https://mpra.ub.uni-muenchen. de/114504/.
- Giupponi, G. and C. Landais (2018), "Subsidizing labor hoarding in recessions: the employment and welfare effects of short time work", CEP *Discussion Paper* No 1585.
- Izquierdo, M., S. Puente and A. V. Regil (2021), "Furlough schemes in the COVID-19 crisis: an initial analysis of furloughed employees resuming work", Analytical Article, *Economic Bulletin* 2/2021, Banco de España.
- Kopp, D. and M. Siegenthaler (2020), "Short-Time Work and Unemployment in and after the Great Recession", KOF Working Papers No 19-462, KOF Swiss Economic Institute, ETH Zurich.
- OECD (2021), "Job retention schemes during the COVID-19 crisis: Promoting job retention while supporting job creation", *Employment Outlook*, Chapter 2.
- OECD (2022), Riding the waves: Adjusting job retention schemes through the COVID-19 crisis, available at https://www.oecd.org/coronavirus/policy-responses/riding-the-waves-adjusting-job-retention-schemes-through-the-covid-19-crisis-ae8f892f/#figure-d1e240.