

An evaluation of a mixed employment and training programme for long-term unemployed with high employability difficulties in Spain

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Preliminary version

June 2024

Abstract

This paper exploits administrative records of the Spanish Public Employment Services for the period 2018-2020 to analyse the influence of participation in an active labour market policy aimed at long-term unemployed workers with severe labour market difficulties. The policy combines paid work experience in the public sector for 12 months, training in transversal competencies, and an intensive programme of monitoring and tutoring to assist in the job search process for 15 months. Using the coarsened exact matching method to select a control group of non-participants, we analyse the influence of programme participation on the employment likelihood, distinguishing among high, medium and low-quality jobs 6 and 12 months after participation. The results show a positive and highly significant participation effect, over ten percentage points 6 months after participation and intensifying in the medium term. However, this positive effect is restricted to medium and low-quality jobs. Participation has no effect on access to high-quality jobs (permanent full-time jobs).

JEL Classification: J08, J68, J24

Key words: active labour market policies, programme evaluation, subsidised public sector employment, long-term unemployment, vocational guidance.

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1. Introduction

Active labour market policies (ALMPs) are a key element in the fight against unemployment as they encompass measures aimed at the early activation of people who have lost their jobs. Since the onset of the Great Recession, ALMPs have become a major focus of successive governments' policies. Broadly speaking, ALMPs can be classified into five large blocks. Guidance and job search assistance programmes, whose main objective is to help in the job search process through individual counselling, information market opportunities, identification of jobseekers' skills and their employability weak points. A second block of programmes consists of measures aimed at intermediating in the labour market, favouring the job matching between firms and workers. The third group of measures consists of public training programmes aimed at the acquisition of specific occupational skills and competencies to enable the unemployed to apply for a wider range of jobs, thus improving their employability. Fourthly, there are measures aimed at favouring the employability of certain groups with special labour difficulties, through subsidies and incentives to private-sector employment. Finally, a fifth group comprises measures that consists of subsidies for direct job creation in the public sector.²

Employment and training mixed programmes constitute a comprehensive measure of direct job creation in the public sector that combine temporary paid work-experience with training and tutoring and job-search assistance guidance. Temporary employment programmes in the public sector provide the unemployed work experience and skills helping them to maintain the contact with the labour market reducing the risk of human capital deterioration. This type of public employment programmes constitutes a relevant instrument to increase the employability of the most vulnerable groups in society.

Evaluation of ALMPs plays an essential role for policymakers as a corrective element in the design of policies in order to achieve the main objective of improving the employability and job quality of unemployed workers, especially of the most vulnerable groups. The design and implementation of ALMPs must be accompanied by a rigorous evaluation to detect good practices in their design, as well as to serve as a diagnostic tool to improve possible inefficiencies in order to achieve the main objective of promoting employment and contributing to correct imbalances in the labour market.³ This need for programme evaluation is one of the current principles of economic policy and its mandatory nature is established in the Spanish Employment Strategy (EES) 2012-2014 (RD 1542/2011) and, more recently, in the Spanish Active Employment Support Strategy 2021-2024 (RD 1069/2021, of 4 December).

² See Kluve (2010) for a more detailed description of the different categories.

³ See Malo and Cueto (2015).

The aim of this paper is to evaluate the effect of participation in the “Reactivation and Labour Market Insertion programme for the long-term unemployed with special labour market insertion difficulties”⁴ in the Community of Madrid⁵ during 2018. The aim is to find out the effectiveness of the programme as an instrument to improve access to employment for the most vulnerable people, favour job stability and reduce temporary employment.

The main results show a positive and very significant participation effect, over 10 percentage points 6 months after the participation with an increasing path in the medium term. However, this positive effect is restricted to medium and low-quality jobs. In the short term, the participation effect is larger for low quality jobs, but in the medium term the greatest effect is on medium quality jobs. However, participation in this programme has no effect on access to high quality jobs (permanent full-time jobs).

The rest of the paper is organised as follows. Following this introduction, section 2 reviews the literature on the effects of ALMPs. In section 3, we describe the programme, and section 4 explains the database. Section 5 refers to the methodology and the matching procedure to select the control group. In section 6, we comment on the characteristics of programme participants. Section 7 displays the empirical model, and in section 8, we discuss the results. Finally, section 9 concludes.

2. Literature review

ALMPs aim to improve employability and/or salary perspectives, primarily for people affected by long-term unemployment and other vulnerable groups who face greater difficulties in finding employment.⁶ A large variety of active labour market programmes exists among European countries with different aims.⁷ Over the past decades these measures have become an important element of the functioning of labour markets in most EU countries, especially during the last years of the Great Recession, in which governments have made use of these measures to combat increasing unemployment and longer unemployment spells.

⁴ Programa de Reactivación e inserción laboral para personas desempleadas de larga duración con especiales dificultades de inserción en el mercado laboral. <https://sede.comunidad.madrid/ayudas-becas-subsvenciones/ayuda-desempleados-larga-duracion>

⁵ The Spanish public employment services (PES) comprise the regional employment services of the 17 autonomous communities, which collect regional data about job offers, job demands and contracts.

⁶ According to Calmfors (1994), the direct effects on employment, unemployment and earnings act via three mechanisms: (i) an improved matching process, (ii) an increased and enhanced labour supply and (iii) increased labour demand.

⁷ ALMPs have different aims such as reducing outflows from employment, increasing inflows into employment, increasing labour market attachment, providing income support, increasing productivity, improving job search efficiency or improving job match quality.

In addition to this surge in interest in ALMPs, concerns about the effectiveness and efficiency of such measures have gained special attention among policymakers in the EU Member States. Numerous microeconomic studies on the impact of these types of measures in developed countries can be found in the literature. Heckman et al. (1999) summarised approximately 75 evaluation studies from the US and other countries. For the US economy, Greenberg, Michalopoulos and Robins (2003) provided a survey of 31 evaluations of government-funded programmes for the disadvantaged, and Bergemann and van den Berg (2008) surveyed programme effects by gender. Overall, the results suggest that there is a considerable degree of variation in impact estimates both across different types of programmes and for each given measure.

The effectiveness of employment promotion measures has been extensively analysed in the international academic literature. Card, Kluve and Weber (2010, 2018) conduct a meta-analysis of 207 studies including 857 evaluation estimates of employment programme evaluations and highlight the heterogeneity of the effects of different measures. They find a positive effect of employment subsidies in the private sector, especially for the long-term unemployed and more strongly in periods of economic recession.

In contrast, evaluations of subsidised public sector employment are relatively rare (Card et al., 2018). In their two meta-analysis, Card et al. (2018, 2010) found, similarly to Heckman et al. (1999), a relatively poor performance of public sector employment programs, which they interpreted as the result of that private employers place little value on the experiences gained in a public sector program, perhaps because many of these programs have little or no skill-building component, concluding that only serve to slow down the transition of participants to unsubsidized jobs. Nevertheless, other authors found a positive effect. For instance, Gerfin et al. (2002) investigated the effects of two schemes of subsidised temporary employment in Switzerland (a non-profit employment programme, and a subsidy for temporary jobs in private firms) on the reintegration of the unemployed into work, and found evidence of positive human capital effects for the low-skill unemployed in both types of programmes, but with superior effects in the case of subsidized private employment programs.

The evaluation of subsidised public sector employment is even scarcer for the Spanish case due to the lack of available data. Several studies deserve mention. Clemente et al. (2012) exploited administrative records for the region of Aragón during the period 2005-2010 to analyse an employment and training mixed programme (combining work experience, training and job search assistance) and, based on matching techniques, found a positive effect of the participation on the employment probability, especially in the medium term, and with a wider effect in the economic crisis. Borra et al. (2012) used administrative data from Andalucía to evaluate a short-duration programme (including training, job counselling and work placements) and found positive effects on employment,

job security, working hours and earnings in the short run that are not maintained in the long run. In contrast, Rebollo-Sanz and García-Pérez (2021) evaluate two programmes of local employment initiatives implemented in Andalucía between 2016 and 2018, aimed at unemployed people under the age of 30 and unemployed people over the age of 30, which consist of offering publicly subsidised employment for several months and specific tutoring. They found that the programme aimed at unemployed people under 30 years old, does not increase employability levels for the participants and that the programme aimed at unemployed people over 30 years of age, only favours employability for unemployed people without work experience or those who have been out of the labour market for more than 24 months. The results of Rebollo-Sanz and García-Pérez (2021) for Andalucía, also contrast with the conclusions of Ramos et al. (2009) for a similar programme in Cataluña. It is important to note that, in contrast to the programmes analysed by Borra et al. (2012) and Clemente et al. (2012), the programmes of local employment initiatives evaluated by Rebollo-Sanz and García-Pérez (2021) and Ramos et al. (2009) do not include nor training nor job search assistance.

Focusing on the labour market effects of training measures, we can find ample evidence of their positive effects especially in the medium and long run. For instance, Lechner, Miquel, and Wunsch (2007) analysed public sector sponsored training programmes for unemployed workers in Germany and found that they increase long-term employment prospects and earnings. Nonetheless, these positive effects need some years to materialise because there are initial negative (lock-in) effects for all programmes. The meta-analysis carried out by Kluve (2010) included nearly 100 separate studies from Europe alone and confirmed the effectiveness of training measures. In the same line, Card, Kluve, and Weber (2010) synthesised some of the main lessons in the recent microeconomic evaluation literature. In particular, they conducted a meta-analysis using a sample of 199 'programme estimates' drawn from 97 studies of ALMPs between 1995 and 2007. Their results suggest that training programmes have a larger effect in the medium and the long run.⁸ More recent studies have confirmed that the effectiveness of training is greater in the medium to short term than just in the short term (see Crépon, Ferracci, and Fougère 2012; Lechner et al. 2007; Forslund, Fredriksson, and Vikström 2011; Card et al. 2015).

For the Spanish case several papers analyse the effect of training programmes (Mato and Cueto, 2008; Cueto and Mato, 2009; Cueto et al., 2010; Arellano, 2010; Cansino and Sánchez-Braza, 2011; Clemente et al., 2014; Blázquez et al., 2019). The work of Arellano (2010) assessed the causal effect of training courses on unemployment duration, finding that mid-level courses reduced unemployment among workers who received training programmes in the first quarter of 2000 compared to untrained

⁸ Within training programmes, on-the-job training has proven to be particularly effective in comparison to classroom training (see, for instance, Kluve, 2010).

unemployed workers. Other works focus on specific Spanish regions. An example is Mato and Cueto (2008) and Cueto and Mato (2009), who explored the effect of a voluntary regional training programme on employment probabilities and found that training increases employment probabilities by about 8–9%. Cueto et al. (2010) studied the effect of participation in training (the Spanish *plan FIP*) on the employment probabilities of unemployed in the region of Catalonia for the year 2005 attending to the specific duration of the courses and found that the positive effects increase for courses of longer duration. Cansino and Sánchez-Braza (2011) evaluated the effect of participation in the Spanish Training Schools Programme on the time needed to find a job for the province of Seville in the 1990s. The authors found consistent evidence that participants in the programme got a job more quickly than non-participants. Clemente et al. (2014) exploited administrative records from the PES of the region of Aragón during the period 2005-2010 to analyse the causal effect of training on employment and unemployment hazard rates and found positive effects of training on both the job retention rate and the unemployment exit rate from the fourth and sixth month, respectively, but with differences depending on the characteristics of the participants and the duration of the courses.

Other studies for the Spanish case analysed a wide range of ALMPs (Herrarte and Sáez, 2007; Ramos et al., 2009; Arranz and García-Serrano, 2023). In particular, the work of Ramos et al. (2009) analyses the effectiveness of ALMPs during 2005 in Cataluña. For most of the analysed programmes, they found that the employment probability of participants two years after participation is higher than that of the control group, especially in the case of public employment plans, personalised employment support and professional training. In a recent study, Arranz and García-Serrano (2023) exploits administrative records from the Community of Madrid to analyse the effect of all the labour market services provided by public employment services on the employment probability and found positive effects for labour market intermediation, training programmes, job search assistance (vocational guidance and professional information), but no effects for personalised employment itineraries.

Job search assistance programmes (JSA) have been analysed in a number of studies focusing on EU countries. However, the evidence is mixed and the studies suggest that the performance of such programmes often varies over time and for different types of JSA.⁹ The work of Thomsen (2009) condensed the findings of some studies that evaluated these programmes in nine European countries. Although the programmes differ across countries, the effects are quite positive overall due to the improved matching of jobseekers and jobs, but also due to the threat component that comprises the possibility of the jobseeker to be sanctioned by benefit revocation in the event of noncompliance. As

⁹ See Fay (1996), Heckman, Lalonde, and Smith (1999), Martin and Grubb (2001), Dolton and O’Neill (2002), Kluge and Schmidt (2002), Blundell et al. (2004) and OECD (2005), among others, for evidence on the variability in the size of the estimated effects of JSA programmes.

regards the effects of JSA programmes over time, most papers agree that they are more likely to be effective in the short term (see Card et al. 2010, 2018 for a review). Finally, some papers have studied the role of JSA in optimal programmes that combine active and passive measures. For example, the work of Wunsch (2013) assessed the optimality of job search assistance as a function of its effectiveness in raising exit rates to employment for West Germany in the period 2000-2002.

Finally, there is some evidence on the effects of ALMPs for LTU. Based on impact estimates from over 200 econometric evaluations of active labour market programmes, the meta-analysis of Card et al. (2018) found that the two types of programmes that deliver the best outcomes in the case of LTU are training programmes and economic incentives for employment in the private sector. By contrast, the average impact of JSA is not statistically different from zero. These findings suggest that well-designed ALMPs might be an effective tool to combat long-term unemployment. Taking into account the persistently high levels of long-term unemployment and the poorly designed ALMPs characterising the Spanish labour market in recent years, it is necessary to devote more effort to studying the most effective measures to improve the employment prospects of the LTU. This paper attempts to partially contribute to this aim.

3. The Reactivation and labour market insertion programme for the long-term unemployed with special employment difficulties

This is an employment and training mixed programme that combines paid work-experience during 12 months with training and an intensive tutoring and job-search assistance guidance for a period of at least 15 months. The programme is targeted at long-term unemployed with high employability difficulties. In particular, long-term unemployed jobseekers aged over 45 years old, low qualified females (under first stage of secondary education), very long unemployed jobseekers (over 360 days in unemployment situation) and individuals at risk of social exclusion (recipients of minimum insertion income).¹⁰

This ALMP consists of subsidies¹¹ that the Community of Madrid provides to local entities (city halls and other related entities) to finance the labour costs of the hired individuals (wages costs and

¹⁰ It is a financial benefit, consisting of a basic monthly benefit and a variable supplement. Its aim is at vulnerable individuals lacking sufficient financial resources to meet the basic necessities of life. Receipts are required to sign a formal agreement to take part in the mandatory individual integration programme and to actively participate in the actions contained within the programme. The amount varies according to the number of household members and their financial resources. One person living alone, with no other income, would receive 469.93 monthly euros (587.41 and 662.52 euros for households of two and three people respectively; The maximum amount is 1,134 euros).

¹¹ Extracto de la Orden de 7 de septiembre de 2018, de la Consejera de Economía, Empleo y Hacienda, por la que se convocan subvenciones en el año 2018 para la realización del Programa de Reactivación e Inserción Laboral para personas desempleadas de larga duración con especiales dificultades de inserción en el mercado de trabajo.

social security contributions), training costs and the labour costs of the tutors. In the year 2018, the total amount of the subsidies was 15.6 million euros.¹² The programme combines a period of paid (full-time) work experience and training in transversal skills with a strong impact on employment, reinforced by an intensive mentoring and career guidance actions. The professional experience is carried out in local entities of the Community of Madrid by means of a full-time contract for the realization of activities of public or social interest, with the aim of providing the unemployed with the reinforcement of their labour market skills and activating them for the subsequent job search and access to the labour market. After the call, local entities must apply for the subsidies and once the subvention is granted, the corresponding local employment office sends to the local entity a list of a maximum of four highly vulnerable unemployed for each subsidised contract attending to jobseekers' unemployment duration. Local entities are not allowed to reject the unemployed persons included in the list, except in case they do not assist to the interview or reject to participate in the programme. At least 50% of participants must be females.

During the participation in the programme, participants receive a specific vocational guidance of at least 15 months duration, including the assignment of an insertion tutor before recruitment, guidance during the work experience period and specific tutoring for active job search at the end of the work experience period. The contract has a minimum duration of 12 months and must be full-time. Training is offered in transversal skills that have a strong impact on employment. Guidance and tutoring begin before the start of the work experience period and is followed up for at least 3 months. The beneficiaries are local entities of the Community of Madrid. The subsidies are intended to finance the salary and social security contribution costs of the tutors (during 15 months) and of the unemployed hired (12 months), as well as the training costs (between 90 and 120 hours).

4. Database

To carry out the analysis we exploit microdata from administrative records of the public employment service of the Community of Madrid (CM). Specifically, we combine information from three records: job seekers, contracts and public employment services for the period from 1 January 2018 to 28 February 2020.

The jobseekers record includes the universe of jobseekers registered at public employment offices. Given that the analysed programme is aimed at the long-term unemployed with special

¹² The subsidies are intended to finance the salary and social security contribution costs of the integration tutors (maximum 3 times the minimum wage) and of the unemployed participants (maximum 2.5 times the minimum wage), as well as the training costs derived from the training actions (maximum 8 €/hour face-to-face/participant).

difficulties of integration into the labour market, in a first phase we select a subsample of unemployed job seekers who meet the criteria established in the regulatory bases of the programme to be eligible for the programme.¹³ It should be noted that registration is voluntary, except for those receiving benefits and those jobseekers who want access to active labour market measures and support for active job searches. As in other European countries, a considerable proportion of unemployed workers¹⁴ in Spain are registered at public employment offices, independently of whether they really use this channel in the job search process. According to the Spanish Labour Force Survey (EPA), in the third quarter of 2018 (at the beginning of the programme), 78.3% of unemployed individuals in Spain were registered as jobseekers in a public employment office. The jobseekers record contains very rich information about personal characteristics (gender, age, education, nationality, language skills, specific occupational work experience, unemployment benefit, time enrolled at PES and others), as well as other features related to the job search process (geographical area of job search, type of workday selected in their job applications, desired occupation, etc.).

The contracts record includes all the employment contracts registered in the Community of Madrid during a specific period of time. Since the registration of contracts is mandatory for employers, the record contains all the contracts that an individual has had, as well as information on the characteristics of the contract and some employer features. For each contract it is possible to know both the characteristics of the contract (type of contract, duration, working hours, occupation, economic activity, etc.) as well as some characteristics of the employer. For the purposes of this paper, we have selected all contracts from the month prior to the start of the programme (January 2018) until February 2020, in order to avoid that factors associated with the declaration of the state of alarm due to the COVID-19 pandemic in March 2020 could bias the results. The classification of the type of job into high, medium or low quality is made on the basis of the information contained in the contracts record. Finally, the services record contains all the public employment services received by jobseekers, differentiating between a wide range of measures. It should be noted that any active labour market policy entails a variety of services, hence, the service record includes the list of all participants in any labour market policy.

¹³ *Orden de 30 de agosto de 2017*, de la Consejera de Economía, Empleo y Hacienda, por la que se establecen las bases reguladoras del Programa de Reactivación e Inserción Laboral para personas desempleadas de larga duración con especiales dificultades de inserción en el mercado de trabajo. (BOCM 13.09.2017). *ORDEN de 27 de junio de 2018*, de la Consejera de Economía, Empleo y Hacienda, por la que se modifica la Orden de 30 de agosto de 2017, de la Consejera de Economía, Empleo y Hacienda, por la que se establecen las bases reguladoras del Programa de reactivación e inserción laboral para personas desempleadas de larga duración con especiales dificultades de inserción en el mercado de trabajo.

¹⁴ According to the Spanish Labour Force Survey, around 70% of unemployed workers were registered in public employment offices before the start of the economic crisis (2007). In 2010, the figure reached above 80%.

5. Methodology

5.1 Employment probability

The aim of the subsidy is to provide participants with work experience that will enable them to access the labour market under better conditions. Therefore, the evaluation of the programme focuses on estimating the probability of accessing a high, medium or low-quality job once finished the period of work experience. Following the definition proposed by Sáez et al. (2011, 2012, 2013) and Blázquez, et al. (2019), the classification of job quality is based on 3 characteristics: type of contract (permanent or fixed-term), duration of the contract (in the case of temporary fixed-term contracts) and weekly working hours. A high-quality job is defined as a job with a permanent contract and a working week of at least 15 hours. Medium quality jobs are defined as permanent contracts with a working week of less than 15 hours, temporary contracts of indefinite duration (interim contracts, works and services contracts, etc.) with a weekly working week of at least 15 hours, and temporary contracts with a duration of at least six months and a minimum weekly working week of 15 hours. The remaining contracts are considered as low-quality jobs (temporary contracts with a working hour of less than 15 weekly hours or a duration of less than 6 months).

Given the discrete nature of the variable of interest (employment probability in a job of high, medium or low quality), the evaluation is based on the estimation of multinomial logistic regression models, which allows us to predict the relative probabilities of the different types of employment, taking those who remain unemployed as the reference category. As we explain in Section 6, this probability is estimated as a function of a binary variable indicating whether or not the unemployed person has participated in the programme, conditional on a set of explanatory variables that include both personal characteristics and previous work experience.

5.2. Selection of the control group

Among the existing methods for impact programme evaluation, in this paper we use a matching procedure to select a control group of non-participants. When estimating the causal effect of participation in an employment policy, it would be ideal to carry out a randomised controlled experiment, where participation in the programme is randomised (Rubin, 1974). A random assignment to the treatment and control group ensures the compliance of independence condition, i.e. that the selection mechanism is independent of the observed outcome, thus allowing direct comparison between the two groups. However, the data available for evaluation are often based on non-randomised observational data. Hence, comparison between the two groups is biased. In these cases, it is desirable to replicate a randomised experiment as similar as possible by obtaining treated and

control groups with similar covariate distributions (Stuart 2010). In this context, matching methods allow to reduce the bias in the estimation of the causal effect of participation when analysing observational data.

By far, the most commonly used matching method in programme evaluations, and especially in evaluations of ALMP, is propensity score matching (PSM)¹⁵. However, the use of the PSM can lead to situations in which two individuals (one participant and one non-participant) have a very similar propensity score and yet have -for instance- a different level of education. In this sense, King and Nielsen (2019) have pointed out that, contrary to its goal, PSM increases imbalance, inefficiency, model dependence and bias, and argued that the weakness of PSM comes from the fact that PSM applies a single model to produce an unbiased estimate.

Access to large databases has allowed the development of other matching techniques that reduce the problems associated with model dependence. In this paper we follow Blázquez et al. (2019) and apply the coarsened exact matching algorithm (CEM) proposed by Iacus, King and Porro (2009, 2011) and Blackwell, Iacus, King and Porro (2009). There is evidence that CEM has a greater capacity than commonly used matching methods in terms of its ability to reduce imbalance, model dependence, estimation error, bias, variance, mean square error and other criteria (see Blackwell et al. 2009; Iacus et al. 2009, 2011a, 2011b, and King et al. 2011). Compared to the PSM, the CEM procedure ensures that there are no differences in the relevant variables between individuals in the treatment and the control group. Briefly, the method first sorts all the observations into strata defined based on a set of pretreatment variables. Individuals within the same stratum have identical values for all the coarsened covariates. The observations within any stratum that do not have at least one observation for each unique value of the treatment variable are discarded. As the idea is to find a control group similar to the treated group, a fewer number of covariates and fewer strata will result in more diverse observations and hence higher imbalance. Similarly, non-participating individuals for whom there is not at least one "twin" participant are also eliminated from the analysis.

Given that the programme regulation establishes a set of conditions that individuals must meet to be eligible for the programme, before applying the matching procedure, we select a subsample of jobseekers with the characteristics that they must fulfil for the programme. It is important to highlight that, compared to other evaluations, the selection of the control group used in this study considers an important refinement that allows for a reduction in estimation biases. Following the methodology proposed by Sáez et al. (2011, 2012, 2013) and Blázquez, Herrarte and Sáez (2019), in this paper we

¹⁵ Many ALMP evaluations for the Spanish case uses the PSM to select a control group. See, among others, Arranz and García-Serrano (2023), Rebollo-Sanz and García-Pérez (2021), Clemente et al. (2014), Clemente et al. (2012), Borra et al. (2012), Cansino y Sánchez-Braza (2011), Cueto et al. (2010), Arellano (2010), Ramos et al. (2009), Cueto and Mato (2009), Mato and Cueto (2008), Malo et al. (1999).

restrict the potential control group to those jobseekers that not only have not participated in the analysed programme, but we also impose the condition that they have not participated in other ALMP during the previous or subsequent 6 months. In addition, when selecting the control group, we require that both -treatment and control- are registered as jobseekers in the same month.

The accuracy of the selection of the treatment and the control group to increase estimates' efficiency and reduce selection bias is based on the one hand on selection a wide set of pre-treatment variables that adequately define the strata. On the other hand, it is important to achieve a high matching rate for individuals in the treatment group, i.e. to ensure that as few treatment individuals as possible are excluded from the analysis. Both objectives act in the opposite direction, as the higher the number of variables considered to define the strata or the lower the level of coarsening the variables, the lower the percentage of exact matching.

The pre-treatment variables used for define the strata are gender, age (in groups of 30-34 years; 35-39; 40-44; 45-49; 50-54; 55-59; 60-65), educational level (no studies, primary, lower secondary, upper secondary, intermediate vocational training, higher vocational training, university degree), continuous time registered as jobseeker (less than 1 month, 1-3 months, 3-6 months, 6-12 months, 1-2 years, 2-4 years, more than 4 years), experience in the desired occupation (no experience, 1-11 months, 1 year or more) and nationality (Spanish or foreign). The original universe of participants consisted of 772 persons. After the matching process, we obtain a match among participants of 98.2%, i.e. only 1.8% of the participants will not be part of the analysis. The final sample consists of 58,456 individuals in the control group and 756 in the treatment group.

5.3. Period of analysis

Due to the COVID-19 pandemic and the consequent restrictions on economic activity and mobility established from the declaration of the State of Alarm in Royal Decree 463/2020 of 14 March, the analysis of the employment probability is carried out until February 2020. This limitation is necessary to prevent factors associated with the COVID -19 health crisis -completely exogenous to the labour outcomes of programme participants- could bias the assessment of the impact of participation. Since participation in the programme involves a 12-month period of paid work experience and all participants become unemployed at the end of the work experience, for the purpose of analysing the effect of the programme on employment, the probability of employment should be measured after the end of the subsidised contract, i.e. from the moment the participant starts their job search process. The vast majority of the subsidised contracts end in February 2019 (90.5%), so the maximum period of analysis extends up to 12 months after the end of the subsidised contract. Particularly, we analyse the

employment probability in the 6 months after and 12 months after (with a maximum limit of February 2020). It should be noted that most participants (95.5%) finish the work experience period, while the remaining 4.5% do not. Hence, for the latter, the employment probability is measured in the 6 and 12 months after they stop the work experience period. To ensure that both participants and non-participants have the same initial conditions at the moment of their job search (same length of unemployment duration), the employment probability of non-participants is measured in the 6 and 12 months after participants start their work experience period. The subsidised contracts of the programme start in the months of February and March 2018 and, therefore, end between February and March 2019. This implies that for individuals in the control group the employment probability is measured from February 2018, and for participants from February 2019.¹⁶

6. Characteristics of programme participants

The treatment group consists of the universe of participants in the programme “The Reactivation and labour market insertion programme for the long-term unemployed with special employment difficulties” corresponding to the 2018 open call. As explained in the previous section, out of the universe of 772 participants and after the matching process, a total of 756 individuals, 283 men and 473 women, finally form part of the treatment group.

In Table 1, we present the main characteristics of the participants. Although the programme requires that at least 50% of the participants be women, the first aspect to highlight is that this figure is largely exceeded, with women representing 62.6% of the participants. Of the total number of women, the percentage of unqualified women (lacking the compulsory secondary education graduate certificate or lacking a professional qualification for the occupation) is 23.7%, while qualified women account for 76.3%. By age, the group over 45 years of age account for 61.0% (slightly more than 37% are between 45 and 55 years of age). By gender, the age profile is different. While men under 45 account for 27.9%, women account for 45.7%. Men over 55 account for 72.1% of the sample while for women it is 54.3%. Given that participation in the programme is voluntary, this differential age pattern by gender suggests higher preferences to participate among women under 45 years old, and among men over 45 years old. This would indicate that policies aimed at reactivating unemployed women should be promoted among women over 45 and men under 45, since once this age is exceeded, the first difficulty would lie precisely in getting these groups to participate in these programmes, together with their more difficult reactivation (as is also the case with men of these ages). With regard to

¹⁶ According to Spanish National Accounts, the GDP growth rate was 2.3% and 2.0% in 2018 and 2019 respectively.

nationality, it can be seen that the percentage of male recipients of programmes with foreign nationality is considerably higher than that of women (30% for men compared to 12.1% for women).

Regarding level of education, participants with lower secondary education constitute the largest group (37.3%), followed by those with primary education (18.7%). It can be seen that 11.4% have no education, and around 12.8% have higher education (3.3% upper secondary education and 9.5% intermediate vocational training). The distribution by gender shows that women have on average a higher level of education. It is worth noting that, among the female participants, the percentage of women with medium-high language skills is higher among men (24.4% compared to 19.0%).

By unemployment duration, all participants are long-term unemployed as established in the regulatory bases of the programme (360 days of unemployment in a period of 540 days). Despite the official definition, we have differentiated two subgroups: long-term unemployed (LTU) if they have been (continuously) registered as jobseekers for less than 24 months, and very long-term unemployed (VLTU) if they have been registered as jobseekers over 24 uninterrupted months. According to this classification, 43.3% are LTU while 56.7% are VLTU. By gender, there are fewer LTU men than women (39.6% compared to 45.5%).

Focusing on the type of requested occupation, we clearly observe that three occupations are the most in demand: "Elementary occupations", "Clerks" and "Service sector workers" which represent respectively 28.4%, 25.5% and 19.3% of the total number of participants. There are important gender differences. Among male participants, the most requested occupations are "Elementary occupations", "Skilled workers in industry and construction" and "Service sector workers" with 30.4%, 25.1% and 12.7% respectively. In the case of female participants, the most demanded occupation is "Clerks" with 35.1%, followed by "Elementary occupations" with 27.3% and "Service sector workers" with 23.3%.

There are important differences as regards participants' labour market experience. About one third of the participants had more than two years of experience (slightly more for men 40.6% compared to 29.4% for women). Among these participants, the majority are concentrated in 3-5 years of experience (19.4% and 14.8% for men and women respectively). Among those participants with no previous experience in the requested occupation, who account for 18.0% of the total, there are more women than men (20.7% compared to 13.4% of women). The largest group is that of participants with experience between 1 and 11 months, which is slightly higher for women.

Regarding the area of job search, most of the participants have the province or the Autonomous Community as their area of job search (more than 85%). In this case, gender differences are small. Finally, among the female participants there is a lower percentage of women who were not receiving unemployment benefits before joining the programme, 89.2% compared to 91.9% of men.

Table 1. Main characteristics of programme participants (Treatment group)

		Total	Men	Women
	Total	756	283	473
Specific groups	Men	37.4%	100.0%	-
	Non-qualified women (a)	14.8%	-	23.7%
	Qualified women	47.8%	-	76.3%
	< 45 years old	39.0%	27.9%	45.7%
	> 45 years old	61.0%	72.1%	54.3%
	Long term unemployed - LTU (< 24 uninterrupted months)	43.3%	39.6%	45.5%
	Very LTU - VLTU (>24 uninterrupted months)	56.7%	60.4%	54.5%
Age	< 30 years	3.7%	1.8%	4.9%
	30-44 years	35.3%	26.1%	40.8%
	45-54 years	37.6%	42.0%	34.9%
	>55 years	23.4%	30.0%	19.5%
Educational level	No education	11.4%	17.7%	7.6%
	Primary education	18.7%	23.0%	16.1%
	Lower secondary education	37.3%	33.6%	39.5%
	General upper secondary education	13.2%	11.7%	14.2%
	Intermediate vocational training	6.6%	2.8%	8.9%
	Higher vocational training	3.3%	2.5%	3.8%
	University degree	9.5%	8.8%	9.9%
Language knowledge	Low	79.0%	75.6%	81.0%
	Intermediate / Advanced	21.0%	24.4%	19.0%
Nationality	Spanish	81.2%	70.0%	87.9%
	Foreign	18.8%	30.0%	12.1%
Time registered as jobseeker ^(b)	< 1 month	1.7%	1.4%	1.9%
	1-3 months	2.4%	3.2%	1.9%
	3-6 months	6.9%	4.9%	8.0%
	6-12 months	12.2%	13.4%	11.4%
	1-2 years	20.1%	16.6%	22.2%
	2-4 years	26.3%	26.9%	26.0%
	> 4 years	30.4%	33.6%	28.5%
Requested occupation	Managers	0.28%	0.47%	0.12%
	Professionals	1.04%	0.94%	1.11%
	Tecnicians	4.28%	5.83%	3.08%
	Clerks	13.34%	3.62%	20.94%
	Service workers	18.24%	9.61%	25.00%
	skilled agricultural workers	3.66%	5.67%	2.09%
	Skilled workers in industry and construction	15.41%	31.34%	2.96%
	Operators	4.70%	7.87%	2.22%
Elementary occupations	39.05%	34.65%	42.49%	
Labour market experience	No experience	18.0%	13.4%	20.7%
	1-11 months	34.9%	32.9%	36.2%
	1-2 years	13.5%	13.1%	13.7%
	3-5 years	16.5%	19.4%	14.8%
	5-10 years	8.6%	9.2%	8.2%
	> 10 years	8.5%	12.0%	6.3%
Geographical area of job search	Local council	6.7%	4.2%	8.2%
	Province or Community of Madrid	86.2%	87.6%	85.4%
	Spain / Europe	4.9%	7.1%	3.6%
	Others	2.1%	1.1%	2.7%
Unemployment subsidy	No	90.2%	91.9%	89.2%
	Yes	9.8%	8.1%	10.8%

(a) They lack the professional qualification for the occupation and the Compulsory Secondary Education Graduate or equivalent.

(b) Uninterrupted time.

7. Empirical model

As explained above, the variable of interest is the employment probability and job quality 6 and 12 months after participation. The dependent variable y_{it} takes four alternative values: 1 if the person gets a high quality job, 2 if he/she gets a medium quality job, 3 if he/she gets a low quality job, and 0 if he/she does not get any job (contract) in the period of analysis. Since the registration of contracts is compulsory, this value 0 is assumed to be a situation of unemployment and is the reference category in the estimations. The analysis excludes situations of self-employment, as this kind of employed is not linked to a contract. The model to be estimated is shown in equation (1):

$$pr(y_{it} = j | P_i, X_{ki}) \quad \text{with } j = 0,1,2,3 \quad (1)$$

where P_i is the main variable of interest, taking the value 1 if the person i has participated in the programme (treatment group), and 0 otherwise (control group). Positive and significant values of the coefficient associated with this variable will indicate a positive effect of programme participation on the employment likelihood. X_{ki} is the vector of explanatory variables which includes both personal (gender, age, nationality, educational level, language knowledge) and labour characteristics (labour market experience in the requested occupation, time registered as a jobseeker, requested occupation -white collar or blue collar-, area of job search, working hours demanded -full time, part time or indifferent-, and a dummy indicating whether the person receives unemployment benefits or not).

Given the discrete nature of the dependent variable, the model in equation 1 is estimated by multinomial logistic regression models and then compute the corresponding marginal effects, calculated as the mean values of the marginal effects. In a first step, we estimate basic binary logit models where the dependent variable y_{it} takes the value 1 if the person has had a contract (regardless of its quality) and the value 0 if he/she has not.

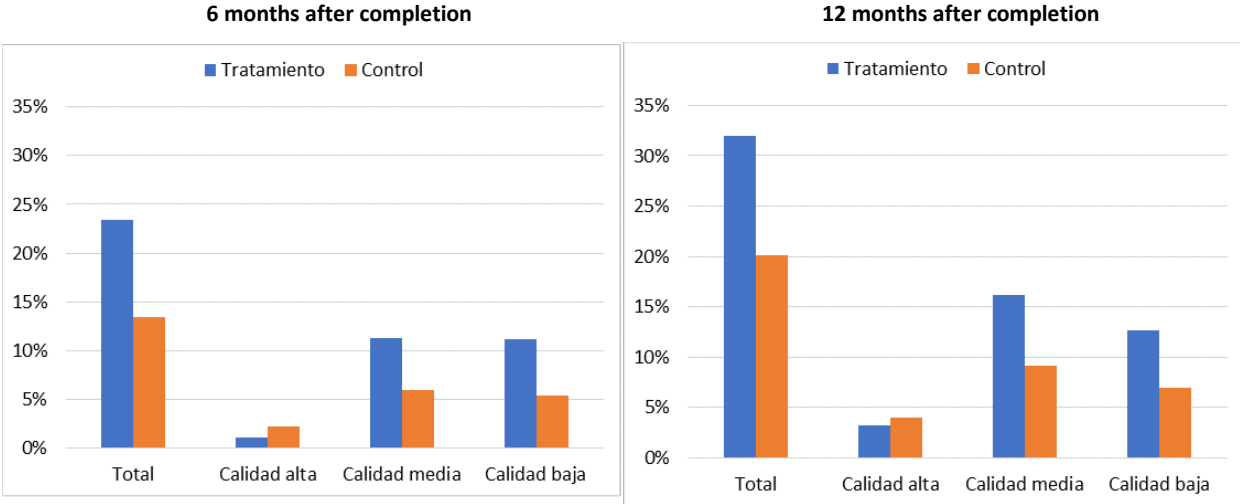
In addition to the estimates for the total sample, we perform separate estimates for the programme's priority groups according to gender, age and time in unemployment.

8. Results

8.1. Descriptive analysis

Before presenting the econometric analysis, this section provides some descriptive evidence. Figure 1 shows the mean values of the employment probability 6 and 12 months after the completion of the work experience period. The mean values of the employment rate display three distinct features: (i) the overall employment probability for participants is higher than that for non-participants; (ii) the most likely type of employment for participants and non-participants is medium quality, followed by low quality-jobs, while the lowest figures are for high-quality jobs. Since we measure employment accumulating the contracts that a person has had on a specific period, the employment probabilities in the 12-month period are higher than in the 6-month period.

Figure 1. Mean values of the employment probability (treatment vs. control group)



In particular, for the total sample we observe that the average probability of finding a job 6 months after the end of the subsidised contract is higher for the participant group (23.4% versus 13.4% for the control group, see Figure 1, left panel). When we distinguish by job quality, we find that the advantage of participants over non-participants is only observed in medium and low-quality jobs. Although participants and non-participants have very low probabilities of accessing high quality jobs, for these types of jobs, non-participants have higher employment probabilities than participants (2.1% compared to 1.1% for participants).

For the 12-month time horizon the employment probability of participants increases to 32%, especially due to the increase in the probability of medium-quality employment, which also increases more for participants than for non-participants (see Figure 1, right-hand panel). Although the probability of high-quality jobs remains low at 12 months, we find an increase for participants from

1.1% to 3.2%, and although the figure is still lower than for non-participants, the difference between participants and non-participants is smoother than at 6 months.

8.2. Programme participation impact

Table 2 displays the estimation results of equation 1 in terms of marginal effects. Each row in the table displays the results of the programme participation for each independent group in the two analysed periods (6 and 12 months after the subsidized contract finish). Vertical bars plotted in Figures 2a to 2d display the marginal effects associated to the participation, and horizontal lines represent the corresponding mean value of the estimated employment probability.

Considering the overall effect for the whole sample, we find that programme participation has a positive and highly significant impact on employment probability, exceeding 10 percentage points. Specifically, in the 6-month period, participants achieve an employment likelihood that is 10.05 pp higher than non-participants. In addition, we observe that the effect of participation intensifies over time, as at 12 months the marginal effect on the overall probability of employment increases up to 12.07 pp.

When attending to job quality, it can be seen, as already suggested by the previous descriptive analysis, that the positive impact of participation is limited to medium-quality and low-quality jobs, intensifying over time. Although in the short term (6 months) the effect of participation seems to be more important on low-quality jobs (impact of 5.88 pp), when the period of analysis is extended to 12 months, the greatest impact is observed on medium-quality jobs (6.74 pp). Although the marginal effects relating to the effects of participation on high-quality jobs are negative (but very small), they are not statistically significant at any of the time horizons considered, so it can be concluded that there are no differences between participants and non-participants and therefore the effect of the participation on high-quality jobs is null.

Table 2. Impact of the programme participation on the employment likelihood (marginal effects)

	Logit	Multinomial logit model (job quality)		
	Total	High	Medium	Low
PANEL A: Total				
6 months	0.1005 ***	-0.0100	0.0509 ***	0.0588 ***
12 months	0.1207 ***	-0.0076	0.0674 ***	0.0611 ***
PANEL B: Gender				
Men				
6 months	0.0944 ***	-0.0088	0.0522 ***	0.0435 ***
12 months	0.1288 ***	0.0061	0.0576 ***	0.0576 ***
Non-qualified women				
6 months	0.0842 ***	-0.3902 ***	0.0688 ***	0.0796 ***
12 months	0.0943 ***	-0.0209	0.0714 ***	0.0283
Qualified women				
6 months	0.0702 ***	-0.0066	0.0284 ***	0.0422 ***
12 months	0.0858 ***	-0.0126	0.0485 ***	0.0421 ***
PANEL C: Age				
< 45 years old				
6 months	0.1143 ***	-0.0223	0.0505 ***	0.0837 ***
12 months	0.1194 ***	-0.0195	0.074 ***	0.0636 ***
≥ 45 years old				
6 months	0.0925 ***	-0.0024	0.0522 ***	0.0422 ***
12 months	0.1201 ***	-0.0002	0.0645 ***	0.0565 ***
PANEL D: unemployment duration				
LTU^(a)				
6 months	0.0614 **	-0.0266 **	0.0272 *	0.0605 ***
12 months	0.0561 **	-0.0337 *	0.0296 *	0.0607 ***
VLTU^(b)				
6 months	0.1309 ***	0.0029	0.0693 ***	0.0575 ***
12 months	0.1689 ***	0.0116 **	0.0943 ***	0.0624 ***

Significance level: *** 1%, ** 5%, * 10%

Reference category: non-employed individuals.

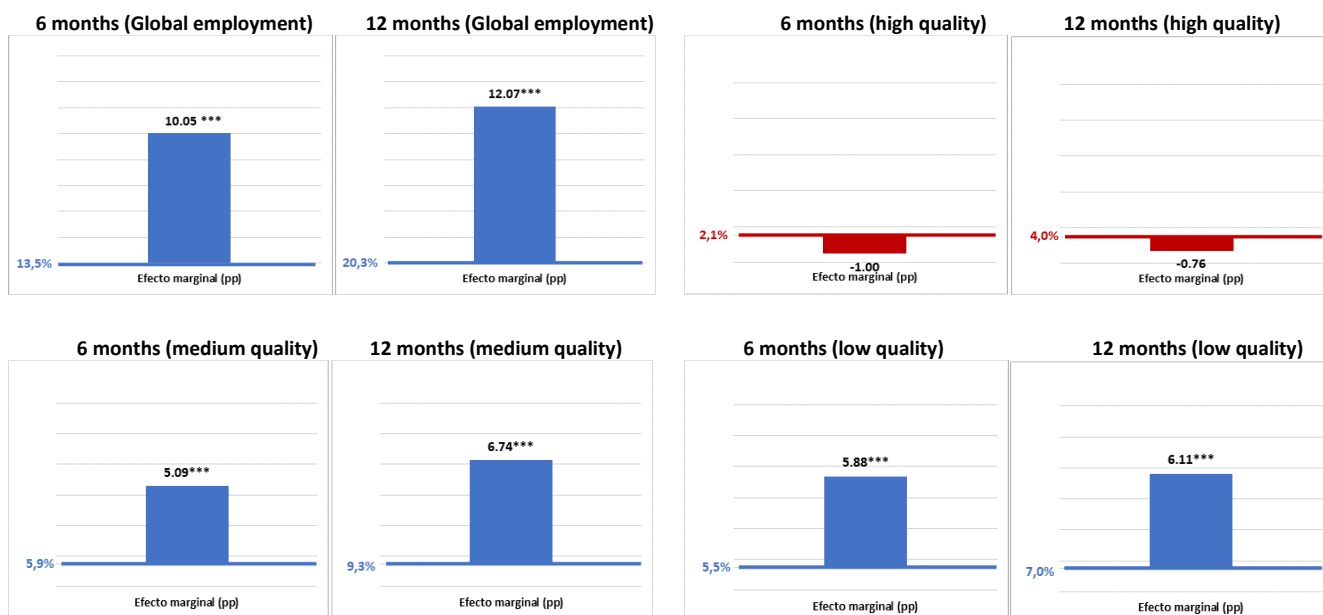
Controls: gender, age, educational level, nationality, language knowledge, (uninterrupted) time registered as jobseeker, labour market experience in the requested occupation, requested occupation, geographical area of job search, dummy variable of receiving an unemployment subsidy.

Marginal effects computed as mean of individual marginal effects.

^(a) Registered as a jobseeker for at least 360 days during the 540 days prior to the date of joining the programme but less than 24 months of uninterrupted registration.

^(b) Very long-term unemployed: Registered as jobseekers for 24 uninterrupted months.

Figure 2.a. Impact of the programme participation on the employment likelihood (marginal effects), Total sample



Significance level: *** 1%, ** 5%, * 10%

Impact of programme participation by gender

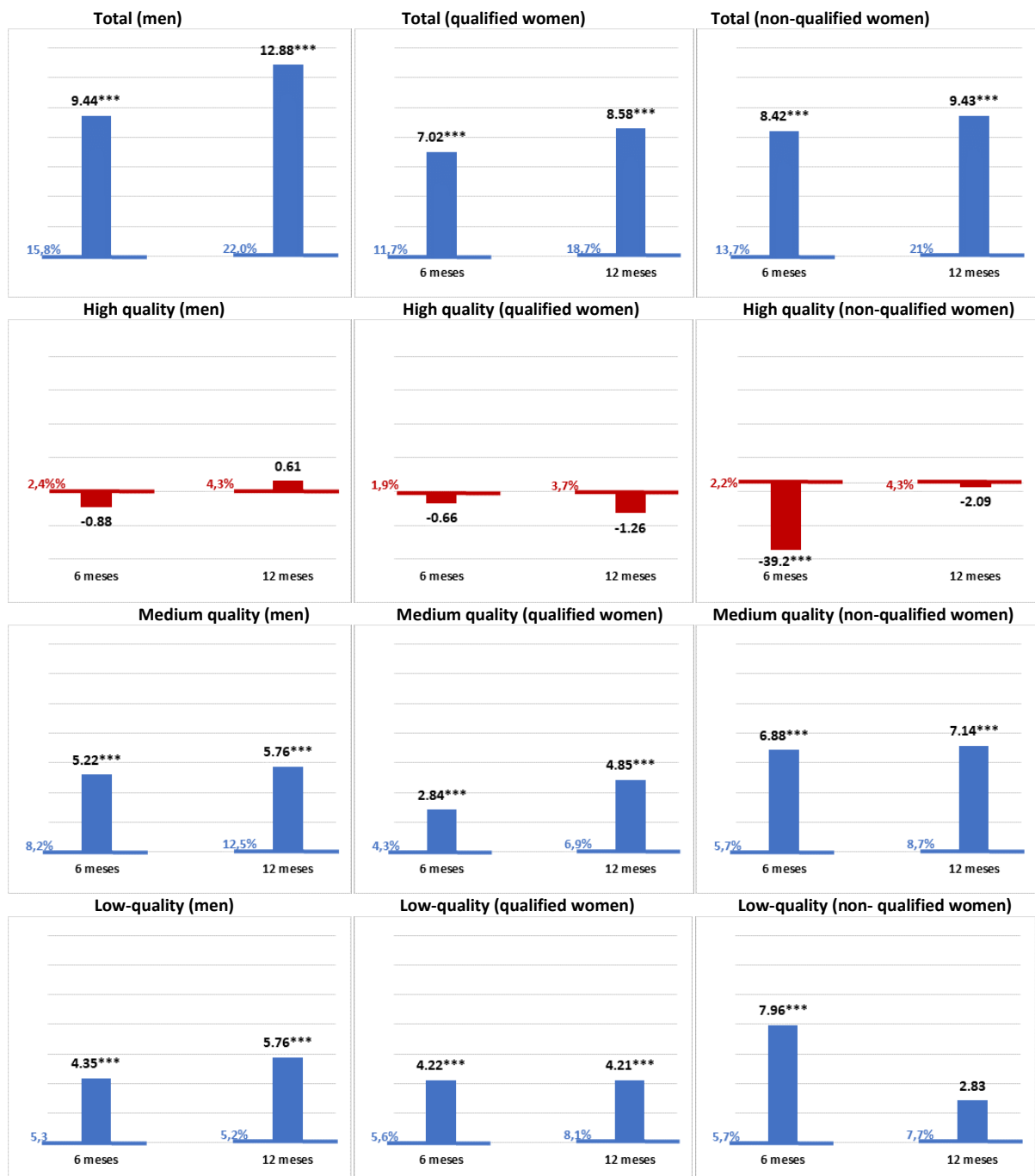
Distinguishing by gender, the results show that the effect of participation is positive for both men and women, regardless of whether they are skilled or unskilled. For all of them, the impact is positive in both periods, again with a process of intensification as the period of analysis extends (Table 2, Panel B, and Figure 2b). In general, we find that men benefit the most from participation. Among women, the unskilled are the ones who experience the greatest impact. Specifically, male participants have a 9.44 pp higher probability of employment than the control group at 6 months, and the impact rises to 12.88 pp at 12 months. In the case of unskilled women, who started from higher employment probabilities than skilled women (see horizontal lines in Figure 2b), the impact of participation at 6 months is estimated at 8.42 pp and 9.43 pp at 12 months.

Attending to job quality, the positive effects of participation are concentrated in access to medium-quality jobs. For this type of jobs, all the analysed collectives benefit from participation, although the group that benefits most is that of unskilled women, for whom the impact of participation is estimated to be around 7 pp. On the other hand, those who benefit least in terms of access to medium-quality jobs are qualified women, with a positive, but small, impact in the short term (2.84 pp) and somewhat greater in the medium term (4.85 pp). We also observe a positive effect of participation on access to low-quality jobs, but only for men and skilled women. In the case of unskilled

women, the short-term impact is quantitatively important (7.96 pp), but disappears in the medium term.

For both men and skilled women, the impact of participation on the probability of accessing high quality jobs is non-existent. The high negative effect on the probability of getting such jobs for unskilled women is remarkable.

Figure 2.b. Impact of the programme participation on the employment likelihood (mg. effects) by gender



Significance level: *** 1%, ** 5%, * 10%

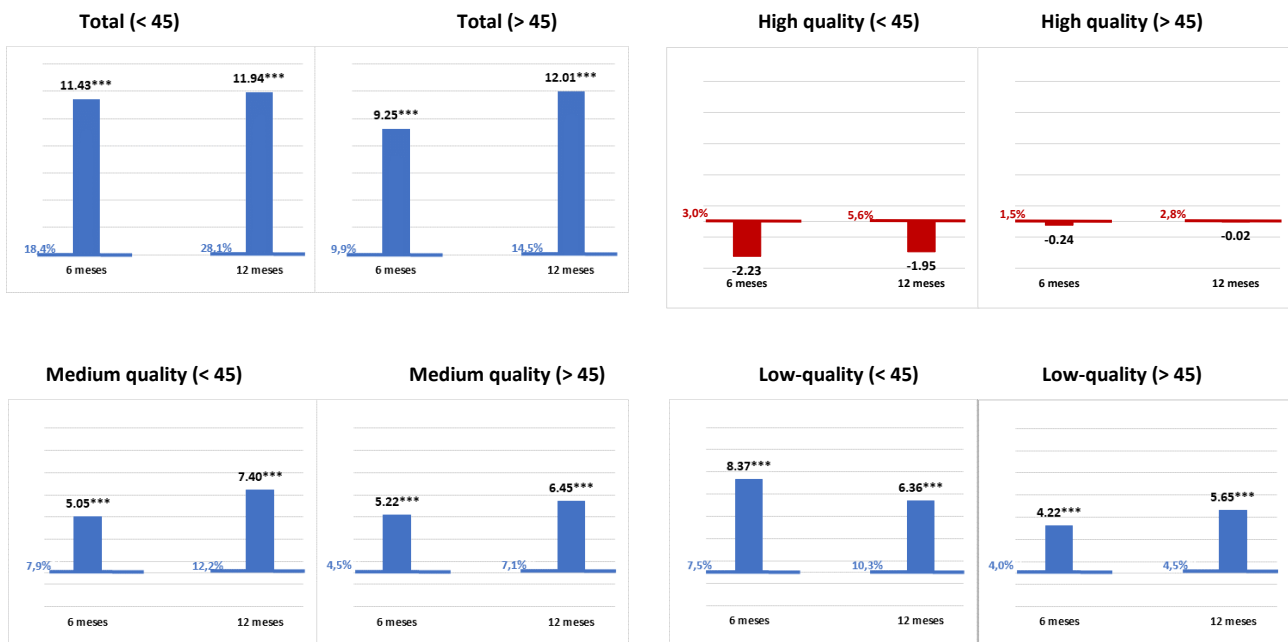
Impact of programme participation by age

When looking at the impact of participation distinguishing between under and over 45s, the results show that, in the short term, the impact of participation is higher for individuals aged under 45 years old (11.43 pp after 6 months), while in the medium term the impact is very similar for both (11.94 pp for under 45s and 12.01 pp for over 45s). Hence, we conclude that both benefit equally from the programme.

If we consider the quality of employment, we observe that the programme has had no effect in terms of access to high quality jobs for either of the two groups considered and in neither of the two time horizons. On the other hand, participation in the programme has had an effect on access to medium and low quality jobs. For those under 45 years of age, the impact of participation is stronger on access to low quality jobs (8.37 pp), while in the medium term the impact is greater on medium quality jobs (7.40 pp). For those over 45 years of age, the impact is greater on medium quality jobs, both in the short and medium term (5.22 pp and 6.45 pp respectively).

We find that the programme has had no effect in terms of access to high-quality jobs for either of the two groups considered and at either of the two time horizons. In contrast, participation in the programme has had an effect on access to medium and low quality jobs. For those under 45 years of age, the impact of participation is stronger on access to low quality jobs (8.37 pp), while in the medium term the impact is greater on medium quality jobs (7.40 pp). For those over 45 years of age, the impact is greater on medium quality jobs, both in the short and medium term (5.22 pp and 6.45 pp respectively).

Figure 2.c. Impact of the programme participation on the employment likelihood (mg. effects) by age



Significance level: *** 1%, ** 5%, * 10%

Impact of programme participation by unemployment duration

We also distinguish between two types of long-term unemployed: LTU and VLTU. LTU are considered to be those persons registered as jobseekers for at least 360 days during the 540 days, but less than 24 uninterrupted months of registration. If they have been registered as a jobseeker for more than 24 continuous months, they are considered to be VLTU. As shown in Figure 2c, the estimated average probabilities are higher for LTU than for VLTU. By job quality, in both time horizons the most likely type of job is medium quality, followed by low quality jobs, and finally, the least likely are high quality jobs.

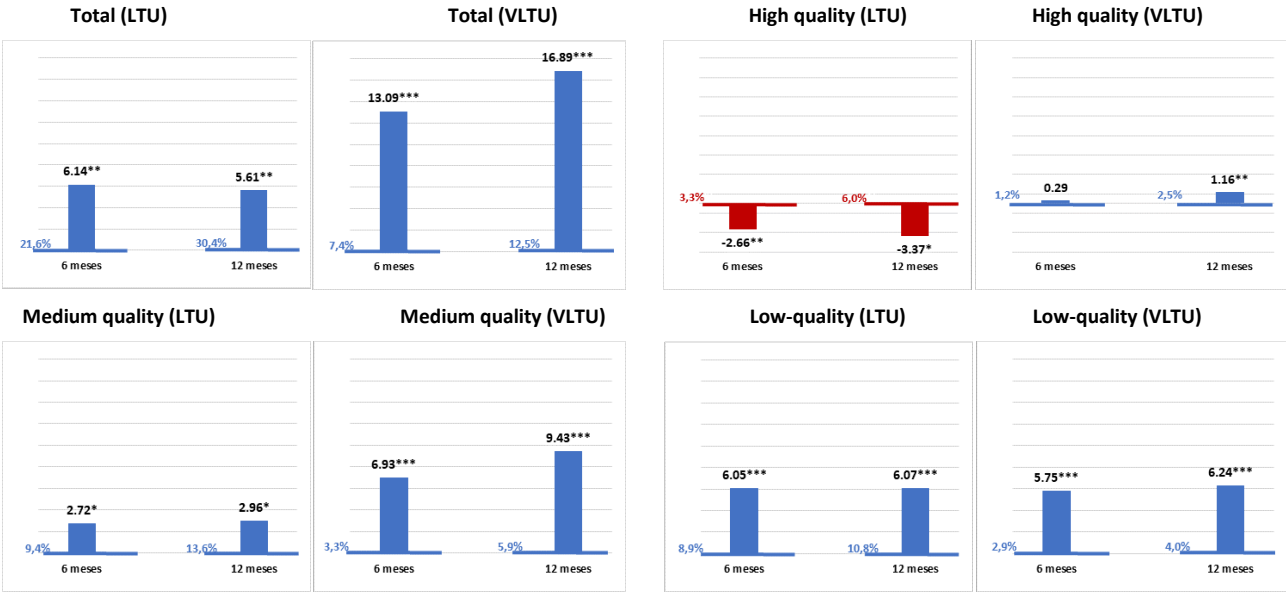
The results show that participation in the programme is particularly beneficial for the VLMP, for whom the difference in the overall probability of employment after 6 months in favour of participants is 13.09 pp, rising significantly after 12 months from the end of the subsidised contract to 16.89 pp. LTU also benefit from participation, but in this case the impact amounts are significantly lower. Specifically, LTU participants have a 6.14 pp higher probability of employment than their non-participant counterparts at 6 months and 5.61 pp at 12 months.

Attending to job quality, some differences deserve mention with respect to the conclusions obtained for the rest of the groups. Specifically, the positive effect of participation for VLTU is mainly in medium-quality jobs, but also in low-quality jobs, with the effect intensifying in both cases when the time horizon is extended from 6 to 12 months. Specifically, at 12 months the impact of participation

on access to medium-quality jobs is 9.43 pp. It is particularly noteworthy that, of the groups analysed in this programme, VLTU are the only ones for whom a positive and significant effect of participation on access to high-quality jobs is observed, with an estimated effect of 1.16 pp at 12 months. Although quantitatively this effect is small, it should not be forgotten that the average probability of accessing high-quality jobs for VLTU is very low (2.5% for all participants and non-participants), so that in relative terms 1 pp is not negligible.

In the case of the LTU, the effect of participation is positive on low-quality jobs (around 6 pp in both periods) and although there is also a positive effect on access to medium-quality jobs, the effect is comparatively small and statistically insignificant. There are also statistically significant differences in access to high-quality jobs, which are more evident in the short term. But in this case, the impact would be negative, as in the short run, LTU participants have a 2.66 pp lower probability of high-quality employment than non-participants.

Figure 2.d. Impact of the programme participation on the employment likelihood (mg. effects) by unemployment duration



Significance level: *** 1%, ** 5%, * 10%

9. Conclusions

This article analyses the impact of participation in an active labour market policy carried out between 2018 and 2019 by the Community of Madrid called “Reactivation and Labour Market Insertion programme for the long-term unemployed with special labour market insertion difficulties”. This is a mixed employment and training programme that combines full-time paid professional practice for a period of 12 months, training in transversal skills with a strong impact on employment, and guidance and tutoring for job search for a minimum period of 15 months. The aim of the programme is to promote the hiring of long-term unemployed people with special difficulties of insertion in the labour market (over 45 years old, non-qualified women, and people in a situation or at risk of social exclusion receiving the minimum insertion income). The measure consists of a subsidy granted by the Community of Madrid to local entities to finance the salary and social security contribution costs of the unemployed hired (for 12 months) and of the insertion tutors (for 15 months), as well as the training costs (between 90 and 120 hours). At the end of the 12-month period of work experience in the local entity, the unemployed start the job search process with the support and guidance of the tutors of the programme.

We analyse the effect of programme participation on individuals’ employment probability and job quality (high, medium and low quality) and considering 2 time horizons: 6 and 12 months after the completion of the paid work experience period. Job quality is based on the type of contract, the working day and the duration of the contract (in the case of temporary contracts).

For the purpose of the paper, we exploit microdata from administrative records of the regional public employment service of the Community of Madrid from January 2018 to February 2020. Specifically, the jobseekers record, the contracts record and the services record. Given the observational nature of our data, the methodology for the evaluation is based on the selection of a control group of long-term unemployed people who have not participated in the programme (or in any other) but possess observable characteristics similar to those of the treatment group in terms of gender, age, educational level, unemployment duration, nationality and characteristics of the job search process. To select the control group we apply a matching procedure. In particular, we use the coarsened exact matching algorithm proposed by Iacus, King and Porro (2009, 2011) and Blackwell, Iacus, King and Porro (2009).

In general terms, given the severe employability difficulties of the unemployed targeted by this programme, the results show that the average employment probabilities for participants are low, both at 6 months (23.4%) and 12 months (32%) after participation. Moreover, it is especially concentrated in medium and low-quality jobs, while the probability of accessing high quality jobs is particularly low

(1.1% at 6 months and 3.2% at 12 months). Differentiating by specific groups, men have higher employment probabilities than women, while those aged over 45 years have lower employment probabilities than those under 45, and very long-term unemployed display lower probabilities than long-term unemployed.

At the aggregate level, the impact of programme participation is positive and very significant, exceeding 10 percentage points 6 months after the period of work experience and intensifying in the medium term. However, this positive impact is limited to medium and low-quality jobs. In the short term, the effect of participation is quantitatively more relevant on low quality jobs, but in the medium term the greatest impact is on medium quality jobs (6.74 pp). However, programme participation has no effect on access to high-quality jobs.

Attending to specific groups, we find a positive effect of participation in both periods for both men and women (irrespective of whether they are skilled or unskilled), for those aged under and over 45 years old and also for LTU and VLTU, but the intensity of the effect of participation is different according to the group. Regarding gender, men benefit the most, followed by unskilled women. There are no large differences in age, although, in the short term, those who benefit most are individuals under 45. From the perspective of unemployment duration, the VLTU benefit most from participation. For the latter, the effect of participation at six months is 13 pp and increases to almost 17 pp at 12 months.

Generally, the most remarkable effects for all groups appear regarding the probability of accessing medium-quality jobs, especially in the medium term. Considering the particular employability difficulties of the participants in this programme, which in the case of the VLTU are exacerbated by the fact that they have been unemployed for more than two years without interruption, it is noteworthy that, among the analysed collectives, the VLTU are the only ones for whom participation has a positive effect on the probability of accessing high-quality jobs (slightly more than 1 pp after 12 months). This result is even more striking when considering that the VLTU are the least likely to have access to high-quality jobs among all the analysed collectives.

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