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Exit from open-ended social benefits into employment: Access to work, active labour market policies and work intensity

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Abstract

An analysis is made of the sensitivity of minimum income schemes to the effects of labour market participation and active labour market services. Data comes from the only regional scheme in Spain that has an open-ended duration and has existed for a period long enough to be analysed. This scheme shows the closest resemblance with the first national minimum income programme, introduced by the Spanish government in 2020 (Ingreso Mínimo Vital). Survival analysis results show that people who access full-time work contracts have a higher probability of exiting into employment than those who do not, although the majority of people who sign at least one contract remain in the scheme, nevertheless. A defining element for exiting the scheme is work intensity. Thus, despite the fact that the scheme is compatible with some jobs, results suggest that increasing the compatibility between work and benefit would be a crucial factor in facilitating exit from the scheme. In addition, analyses of the elements defining the probability of signing a work contract while on the benefit show that active labour market policies heighten said probability, but do not subsequently influence exit from the scheme.

KEYWORDS
active labour market policy, employment, minimum income schemes, social policy, Spain

1 | INTRODUCTION

Minimum income programmes have become a significant component of the social cohesion system in European societies, designed to protect the most vulnerable populations (Wang, van Vliet, & Goudswaard, 2018). Still, there is wide variance in the programmes' designs across European countries and even regions. This may be partly due to a lack of consensus in the public and academic debate about the optimal equilibrium between providing sufficient protection and the potential dependency that these programmes may foment in recipients. To solve this dilemma, European welfare states need more information about the appropriate quantities, time limits and conditions, in order to be able to provide adequate protection for vulnerable groups without undermining their labour participation.

In Spain, the development of this kind of programme is still recent but the debate about its design and feasibility in comparison with already existing basic income programmes has recently intensified (Aguilar-Hendrickson & Arriba, 2020; Ayala, Arranz, García-Serrano, & Martínez-Virto, 2020; Noguera, 2019). During the past 25 years Minimum Income Schemes (MIS) have been developed by regional administrations as means-based schemes, and been consolidated as a significant pillar of social policy. Starting from a point of low levels of social assistance at the end of the 20th century (Matsaganis, Ferrera, Capucha, & Moreno, 2003) and with a prevalent role for the national government in the provision of social protection (Pfeifer, 2009), during the last few decades Spain has developed and consolidated regional minimum income programmes all over the country (Natili, 2018). According to OECD data, in 2018 Spain spent 23.7% of GDP on social protection (mostly retirement pensions), significantly less than the 31.2% spent in France or the 27.9% spent in Italy. With respect to MIS being managed by sub-national governments, there is a long lasting debate on whether regional fragmentation permits us to consider them a system (Laparra & Ayala, 2009; Pérez Eransus, 2006; Valdueza, 2019). However, as has happened in other European countries, their functionality during the Great Recession has been highlighted by their support of the long-term unemployed, as well as by increasing awareness of how their inadequate provisions have failed to meet the needs of Spanish households during the crisis (Bergantiños, Font, & Bacigalupe, 2017). Partially due to a lack of a national scheme to counter poverty risk, and partially as a response to the severe consequences of the COVID-19 crisis, in 2020 a national minimum income has just been created, the *Ingreso Mínimo Vital*.

Taking the existing schemes together, coverage rates of MIS for the Spanish working-age population more than tripled between 2008 (0.29%) and 2017 (1.04%). In Spain, currently over 300,000 people are entitled to these benefits. MIS increases negatively correlate with falls in unemployment benefit recipients (Figure 1), suggesting that significant numbers of long-term unemployed who lose other benefits end up in this safety net. As the Great Recession developed, this set of sub-national level social programmes devised as a last safety net for the few became an income provider of last resort available to many more.

Since 2008 the more significant role of regional MIS in Spain was accompanied by some normative changes that consolidated them. In short, conditionality imposed by minimum periods of residence in the regions was strengthened; benefits durations were considerably extended; and benefits levels remained mostly unchanged from those at the beginning of the Great Recession. Coverage expanded mainly as a result of increasing numbers of benefit recipients, rather than as a consequence of the extended duration of schemes (Ayala, 2016; Mato Díaz, Otero, Sánchez, & Valdavida, 2017). In fact, all but three schemes (Madrid, Castile-Leon and Asturias) have a limited duration and, thus, recipients stop receiving the benefit when its maximum duration is reached, whether or not they continue to be in need.

This paper looks into one of the exceptions to this general pattern, the case of the Asturian Basic Social Wage (BSW). This programme, in fact, has close similarities with the national one created in 2020: both come from left-wing coalition governments; both are non-contributory subjective rights; both are means-tested and open-ended schemes; both include the option of a complementary benefit if the recipient has other income below benefit level; and both have some flexibility regarding work contracts. Thus, the results of the BSW (created in 2006) could be an interesting predictor of the functioning of the infant *Ingreso Mínimo Vital*.

This analysis allows us to dig deeper into three types of questions. First, this paper contributes to the debate on the potential dependency that MIS can create in those benefitting from them (Immervoll, Jenkins, & Königs, 2015).
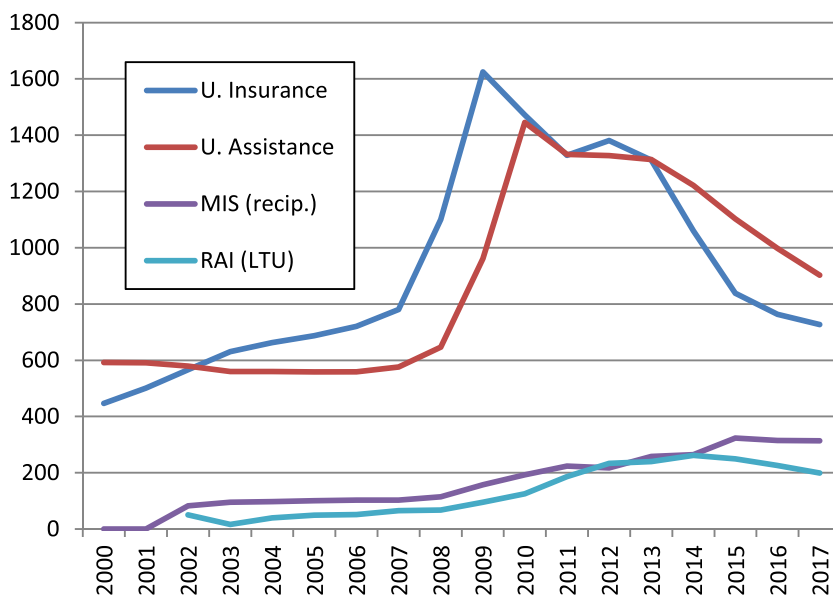
FIGURE 1 Evolution of unemployment benefits (insurance, assistance and LTU) and Minimum Income Scheme recipients in Spain (2000–2017) (thousands).
Source: own elaboration with data from the Ministry of Health, Consumption and Social Welfare and from the Ministry of Work, Migrations and Social Security [Colour figure can be viewed at wileyonlinelibrary.com]

BSW is an open-ended scheme for as long as recipients continue to be in the conditions that led them to joining it in the first place. Therefore, exits can be examined in terms of intervening factors other than benefits ending, particularly those related to access to employment like benefit recipients' connections with the labour market. Second, when MIS is compatible with doing some work, as is the case, the dynamics of benefit recipients who access employment and remain on the benefit are particularly relevant when compared with those who exit the scheme. Third, given the challenges imposed by the Great Recession on public policy for those in need, activation strategies become particularly interesting. In fact, the reorientation of political discourse around social assistance in Europe has put the emphasis on social inclusion, so the focus has moved to activation policies (Aust & Arriba, 2005; Eichhorst, Kaufmann, & Konle-Seidl, 2008; Marchal & Van Mechelen, 2017). Still, empirical literature on the types of and effects of activation policies on well-being and employment has not yet been conclusive (Handler, 2001; Carter and Witworth, 2016). Even if some positive effects of activation have been reported (Graversen & Van Ours, 2008), evidence on social assistance recipients is still scarce and mainly focused on Nordic countries (Dahlberg, Johansson, & Mörk, 2009; Nybom, 2011). Thus, the role of active labour market policies (ALMP) as experienced by benefit recipients is a central component of this research.

The rest of the paper is organised as follows: Section 2 presents the main characteristics of the scheme that is the object of the empirical analysis. Research questions and hypotheses are explained in Section 3. The fourth section is devoted to introducing data and variables. Methods are described in Section 5. Section 6 presents analyses and results, and Section 7 concludes.

2 | MAIN FEATURES OF THE MINIMUM INCOME SCHEME

The BSW has remained largely stable in its design since 2005–06, when the law that created it was passed. The law resulted from a coalition government formed by the Socialist Party and the United Left, and it meant a substantial

reform of the previously existing scheme (Parrilla, 2012). Particularly important was the definition of the minimum income as an open-ended, means-based benefit and its consideration as a right not subject to budgetary restrictions, thus becoming a guaranteed benefit under the approved conditions.

The specific characteristics of the scheme will now be explained. The income threshold for recipients equals the benefit amount, which is included in the regional government budget. In 2020, it amounted to 442.96 Euros per month for an individual household, and provided additional amounts depending on household size and whether disabilities affect household members. In such cases, the household receives the "BSW with increment." Benefit recipients must be at least 25 years old, while there is no upper age limit.[1] Applicants must have been resident in the region for a minimum of 24 months. Receiving the benefit depends not only on income, but also savings; applicants must have spent all their capital or savings except their own housing if they are homeowners. As has been stated above, benefit duration is dependent on the period for which the situation of need lasts, with periodical compliance reviews. Thus, the benefit is terminated when either the review or the recipient reports non-compliance.

Regarding the compatibility of the benefit with work, a reduced "complementary benefit" is compatible with work as long as income does not exceed certain limits. Benefits levels are then set by calculating the difference between actual income and the full benefit. In 2016, about 42% of recipients fell into this category. In addition, if recipients work for periods of less than 30 days per semester, benefits are not affected, whatever the wage level. When beneficiaries exceed these limits, benefits may be suspended for up to a year, and cancelled thereafter if the person continues to work. As shown below, a sizeable proportion (14.3% of recipients) had signed at least one work contract during the period of analysis. These considerations suggest that the scheme moderately allows for compatibility with work. This could mean that beneficiaries may maintain some connections with the labour market, but could also be related to some recipients becoming stuck in temporary and precarious work.

Receiving the benefit is compatible with access to ALMP like labour market orientation and job-search tutorials, participation in training programmes and protected employment schemes. Slightly over three quarters of beneficiaries included in this research had used some labour market service (88.3%). The fact that BSW is managed by social services and not the public employment services explains why not all benefit recipients access ALMP services. Take-up rates of the different measures available vary, individual job-search tutorials being the most commonly used service.

Assessments of the Asturian BSW conditions in comparison with the different MIS of other Spanish regions have concluded that entrance requirements are somewhat less demanding than the majority of schemes, and that the potentially open-ended duration makes it one of the three most liberal MIS in Spain (Mato Díaz, 2019). In fact, the BSW has been recognised as one of the three schemes held in highest regard, from the point of view of social protection and poverty alleviation or prevention, together with those of the Basque Country and Navarre (Bergantiños et al., 2017; Fernández-Maíllo, 2013). However, BSW differs from the other two in its open-ended character.

3 | RESEARCH QUESTIONS AND HYPOTHESES

This paper's research question attempts to look at the factors, which determine the probability of leaving the minimum income benefit programme under study, the BSW. The fact that MIS significantly increased their coverage rates during the crisis, bringing in large groups of long-term unemployed people, plus the fact that the economic recovery, however moderate, has led to net employment creation since 2014, makes the question of how such recovery affects MIS a debatable matter. As stated above, BSW, a potentially open-ended benefit, allows analysing exits for reasons other than benefit exhaustion.

In order to answer this question, two sets of hypotheses considering the effect of connection with the labour market and ALMP are put forward. The first set of hypotheses refers to connection with the labour market. This refers to different aspects of the relationship with the world of work, which may include labour market attachment,

but also social networks and initiative. MIS recipients may demonstrate higher probability of leaving the scheme near the beginning of their involvement in it, since their connections with the labour market are likely to weaken as time passes (duration dependence) (Mood, 2013). In addition, beneficiaries who have signed work contracts during the reference period would be expected to show relatively high probability of exiting the scheme. But signing a contract does not mean exit, since beneficiaries may work during short periods, which is compatible with the benefit, and/or remain on the complementary benefit. Therefore, among beneficiaries who had at least one contract, the frequency and/or duration of work contracts may help in explaining the probability of leaving the scheme. In addition, the probability of signing a contract may also be higher during the early stages of benefit recipiency than later on, when periods of unemployment may be longer.

In short, the first three hypotheses can be summarised as follows:

H1. *Beneficiaries have a higher probability of leaving it for employment during the early periods on the benefit (duration dependence).*

H2. *Beneficiaries with at least one work contract during their period in the scheme have a higher probability of leaving it for employment than those lacking any such contract.*

H3. *Beneficiaries who worked for longer periods of their time on the benefit (work intensity) have a higher probability of leaving the scheme for employment than those employed for shorter periods.*

A fourth hypothesis relates to the economic environment, affecting the likelihood of recipients connecting with the labour market. Since 2014 employment growth may have played a considerable role in helping some benefit recipients exit the BSW. Thus, the last hypothesis of the first set is stated as follows:

H4. *Increases in total regional employment will mean higher probability of leaving the scheme.*

The second set of hypotheses refers to the role that may be played by ALMP. Whether access to these measures was the result of individual initiative or the consequence of activation mechanisms instigated by the administration, it is expected that they have a positive effect on the probability of leaving the BSW. Individual initiative would signal positive work attachment, while activation would allow ALMP participants to acquire potentially beneficial job-search resources. In addition, participation in ALMP may be related to obtaining a work contract, regardless of whether this leads to exiting the scheme. Thus:

H5a. *Beneficiaries that have used ALMP services have a relatively higher probability of leaving the scheme for employment than those who did not benefit from these services.*

H5b. *Beneficiaries that have used ALMP services have a relatively higher probability of signing a work contract than those who did not benefit from these services.*

4 | DATA AND VARIABLES

Microdata obtained from the regional administration and covering beneficiaries who joined the scheme starting in 2013 was used. The dataset is built from merging two different datasets. The main one includes information on programme related variables (benefit type, starting date, ending date and reasons for exiting the scheme) and some demographic variables (date of birth, sex) and was provided by the public body that administers social services and the BSW.[2] The observation period comprises the period between June 2014 and February 2017.

The second dataset comes from the Public Employment Service (PES). It includes information on work contracts, ALMP services and additional sociodemographic variables like education.[3]

In both datasets the data capture the universe of entitled BSW beneficiaries. Still, due to data quality deficiencies, the merging process of these datasets led to data losses. The final dataset with complete data for all relevant variables comprises information on 5,766 people. Analysis of the lost data suggests that the only bias due to this process may be related to sex (data losses on women are relatively higher than those on men). Because analyses are carried out separately for men and women, this should not affect the results.

The main dependent variable in this research is the probability of leaving the scheme for employment reasons. Given that finding a job is not exactly the same as leaving the scheme for employment, a secondary dependent variable is signing a full-time contract while on the benefit. In the analysis, two groups of independent variables are considered in order to test the stated hypotheses.

The first set of variables refers to connection with the labour market; defined by benefit duration, the type of benefit received and the existence of salaried contracts. Benefit duration is captured by introducing 12-month periods designed to permit analysis of duration dependence. Three types of benefits are considered: the complete type, the complete type with increments due to household size and composition and the complementary type for households with some other income. The availability of the date on which beneficiaries signed their full-time contracts permitted the use of a time variable for access to full-time work. Finally, for those who had at least one full-time contract during the analysed period, a variable is included summarising the duration of such periods in which they had been working, in three categories (less than 10% of the period, between 10 and 25% and more than 25%).

The second set of variables refers to the effect of ALMP. Information on the different services used by the beneficiaries is included using five categorical variables indicating the type of service: vocational information and orientation, self-employment orientation, training, employment promotion measures and special employment centres (sheltered work).

In order to capture the effect of labour market situation on risk of leaving the scheme, employment growth is taken into account. This is a time-varying variable that measures net job creation during periods of 12 months.[4] Finally, different sociodemographic control variables are taken into account, like education, disability, age, whether the entitled person was born abroad, household size and residential district.

Table 1 shows the main characteristics of the sample, made up mainly of people with lower secondary education. Most of them received some kind of labour market orientation, and four out of 10 men and one third of women received ALM training. The complementary benefit was received by 42.5% of men and 47% of women. Having a full-time contract while receiving the benefit is much more common among men than women: up to 20% of men and 9% of women had it. More than two thirds of the sample are made up of people over 35 years old. Less than one in 10 have some disability. The migrant population is over-represented among recipients: 20% of men and 27% of women were born abroad. Among men, more than half of the beneficiaries live alone, while among women households with two people are the most frequent (35.9%).

5 | METHODS

With regard to the research methods and considering the specificities of the data, survival analysis is used so the probability of leaving the scheme for employment can be estimated (Bernardi, 2006; Jenkins, 2004). This type of estimation is the most suitable for this kind of analysis because the key variable is time passed from starting to receive BSW benefits until the first full-time contract or until exit into employment. In addition, survival analysis is appropriate in order to be able to take into account that data are right-censored and left-truncated. The observation window starts in July 2014 and ends in February 2017. Thus, information about individuals who joined the scheme before that period is also included if they were still on the benefit in July 2014, but not if they had left prior to that date. Accordingly, data is available until February 2017, when some individuals had exited the scheme while others

TABLE 1 Variables in the BSW sample and percentage of beneficiaries leaving the scheme for employment, having a full-time contract during BSW and leaving the scheme if they have had a full-time contract

		Sample composition		Exits to empt.		Had full-time contract during BSW		Exits to empt. If contract during BSW	
		Male	Female	Male	Female	Male	Female	Male	Female
N		2,779	2,987	2,779	2,987	2,779	2,987	557	268
Total				4.6	3.2	20.0	9.0	14.5	13.1
Time in the BSW (observations)	Year 1	40.1	38.0	4.4	3.1	61.9	61.6	8.1	6.0
	Year 2	31.4	32.4	3.3	2.7	25.9	25.0	4.1	2.7
	Year 3	19.0	19.9	3.3	3.0	9.9	9.0	3.8	3.4
	Year 4	9.5	9.7	2.1	3.5	2.3	4.5	3.1	1.9
BSW benefit type	Complementary	42.5	47.0	5.7	4.0	22.4	9.9	16.7	13.7
	Complete	40.1	18.7	3.3	3.6	21.5	9.7	11.3	13.0
	Increased complete	17.4	34.2	3.7	1.7	11.2	7.3	18.5	12.0
Full-time contracts	None	80.0	91.0	1.8	2.1	-	-	-	-
	At least one	20.0	9.0	14.5	13.1	-	-	-	-
ALM services	None	13.8	9.3	1.9	2.4	5.0	5.1	7.7	14.3
	Professional information and orientation	90.5	86.0	4.7	3.2	21.6	9.6	14.7	13.0
	Self-employment orientation	10.2	8.4	5.6	5.2	23.9	16.3	19.1	19.5
	Training	42.4	31.7	5.9	5.1	28.4	14.6	14.6	15.9
	Employment promotion	9.7	6.9	6.7	8.8	26.8	17.6	25.0	27.8
	Special employment Centre	8.3	8.9	7.8	6.0	30.0	10.9	21.7	17.2
Education (%)	No education	6.0	9.5	3.0	2.5	12.7	5.3	19.0	20.0
	Lower secondary without degree	24.1	23.5	1.8	2.1	12.4	7.1	7.2	14.0
	Lower secondary with degree	47.9	42.1	5.0	2.0	22.0	7.6	15.4	10.4
	Upper secondary	9.7	10.3	5.6	4.5	19.0	11.0	13.7	8.8
	Employment-oriented education	12.5	14.5	6.9	7.4	31.5	16.9	17.4	16.4
Age in 2017	From 18 to 29	13.9	21.1	2.3	1.6	14.8	8.6	10.5	9.3
	From 30 to 34	13.3	11.9	6.2	2.8	28.7	9.9	14.2	8.6
	From 35 to 44	28.9	25.3	6.1	3.7	27.0	10.2	16.1	11.7

(Continues)

TABLE 1 (Continued)

		Sample composition		Exits to empt.		Had full-time contract during BSW		Exits to empt. If contract during BSW	
		Male	Female	Male	Female	Male	Female	Male	Female
	From 45 to 54	25.6	23.2	4.4	4.5	17.9	9.9	15.7	20.3
	55 and more	18.4	18.5	1.8	2.5	9.6	6.0	8.2	12.1
Disability	No	91.2	92.3	4.3	3.1	20.7	9.2	13.7	13.4
	Yes	8.8	7.7	4.9	3.0	12.7	6.1	29.0	7.1
Migrant status	Born abroad	19.8	27.3	3.6	2.9	16.8	8.4	13.0	11.8
	Born in Spain	80.2	72.7	4.6	3.2	20.9	9.2	14.8	13.5
Household size	One	54.7	28.1	3.9	3.5	20.8	10.5	13.9	13.6
	Two	18.8	35.9	4.2	2.8	15.5	9.5	13.6	11.8
	Three	16.6	23.6	4.8	3.1	21.0	7.5	13.4	17.0
	Four and more	9.8	12.4	7.0	3.2	23.1	6.7	20.6	8.0

Note: Source: own elaboration with BSW data.

continued on the benefit. Potential scheme leavers are recipients who started to receive the benefit in 2013 or after and were still doing so in July 2014 or alternatively those who accessed BSW thereafter.

We estimate a piece-wise constant exponential model on the probability of leaving the scheme for employment and the probability of having a full-time contract for all recipients. We also estimate the same type of model for probability of leaving the scheme for employment for recipients with a full-time contract. This is a semi-parametric hazard model that allows us to avoid making any assumption on the baseline hazard function. Instead, it is possible to introduce interval variable dummies on the spell duration, assuming that the risk of leaving is constant at each interval but can vary between intervals. This model specification also permits bringing in time-varying covariates, like the above-mentioned increase in regional employment.

This is the specification of the model:

$$h_i(t) = h_0 . \lambda_i, \text{where } \lambda_i \equiv \exp(\beta' X_i).$$

$h_i(t)$ is the risk function considering the independent variables X (human capital, ALMP, labour market attachment and employment growth) and time t. Hazard is constant within each of K intervals along the survival time axis:

$$\text{Log}[h_i(t)] = \log(h_{01}) + \beta' X_i, t \in (0, \tau_1]$$
$$\text{Log}[h_i(t)] = \log(h_{01}) + \beta' X_i, t \in (\tau_2, \tau_1]$$
$$\dots$$
$$\text{Log}[h_i(t)] = \log(h_{01}) + \beta' X_i, t \in (\tau_{K-1}, \tau_K]$$

Regarding unobserved heterogeneity, evidence indicates that when baseline hazard function specification is flexible, biases in non-frailty models are minor (Jenkins, 2004). Indeed, we have estimated the models allowing for unobserved heterogeneity, assuming Gamma mixture distribution and found that according to this estimation the frailty-model is not preferable to the non-frailty one. Thus, we present the non-frailty estimations.

Hazard ratios, standard errors and significance levels are presented. Models are always estimated separately for both men and women.

6 | ANALYSIS AND RESULTS

To analyse exits to employment from receiving the benefit, we first carry out a descriptive analysis of the percentage of recipients who left the scheme dependent on their main characteristics. Then, the analysis has three steps. First, a survival analysis about probability of leaving the scheme for employment was performed. This showed that the most significant explanatory variable was having had at least one full-time job. Thus, a second survival analysis uses access to the first full-time job as the dependent variable. Third, a final analysis looks exclusively at beneficiaries who had at least one such job in order to study the determinants that led some to leave the scheme for employment while others remained on the benefit.

6.1 | Exiting the benefit

Table 1 presents descriptive data on the variables considered in the analyses. First of all, the percentage of BSW recipients that exited the scheme for employment reasons between July 2014 and February 2017 is close to 3.9% and is larger for men than for women (4.6% vs. 3.2%). These proportions could be considered small, but it is worth reflecting on the composition of the population that is on benefit. As stated above, MIS was devised to be an income safety net for vulnerable people at risk of exclusion or poverty. In a recent paper on outflows from the Basque

Country scheme, significant differences in unemployment exit rates between those on benefit and those not practically disappear when the analysis controls for socioeconomic factors (de la Rica & Gorjón, 2019).

Considering connections to the labour market, information about the kind of benefit and the existence of employment seem to correlate with exit rate from the scheme. Beneficiaries in the complementary modality have a higher exit rate than the mean (5.7% for men and 4% for women vs. the mean of 4.6% and 3.2%). Similarly, those who have not had any full-time contract in the analysed period have a much lower exit rate (1.8% and 2.1%) than those who had at least one. Among the latter group, high exit rates were observed of more than three times the men's average and more than four times the women's (14.5% for men and 13.1% for women). Furthermore, exit rates are higher during the first year on the benefit for men, while the relationship between time in the scheme and the proportion of exits is not clear for women.

Regarding access to ALMP services, men and women who did not access such services show low percentages of exits (1.9% and 2.4%), while those who did show higher exit rates (above 6%), were particularly those who received employment promotion and accessed special employment centres.

Exit rates by education, age, disability and country of origin are also presented. BSW recipients with upper-secondary education and employment-oriented education (mostly vocational education and training) show relatively high exit rates from BSW into employment. Intermediate age cohorts like men between 30 and 54 years old and women between 35 and 54 have relatively high exit rates. Beneficiaries with disabilities show little difference in exit rates into employment. Exit rates for those born abroad are lower than exit rates for Spaniards: 3.6% of men and 2.9% of women born abroad abandoned the benefit for employment reasons. In comparison, the corresponding figures for Spanish-born men and women are 4.6% and 3.2%. in addition, the percentage leaving the benefit is higher among men living in households of four or more people (7%).

Having presented the basic descriptive analysis, survival models were carried out in order to combine all these potential explanatory factors. Models consider the probability of exiting the scheme exclusively for employment reasons during the period July 2014–February 2017 to be the dependent variable.

As shown in Table 2, we find a greater influence exerted by connection with the labour market on probability of leaving the benefit for employment reasons. Men on the complete benefit have lower risk of exiting BSW for employment than those on the complementary one. For women, those on the incremented benefit are those with the lowest risk of exiting. These results suggest that men entitled to the complementary benefit are closer to the labour market. Similarly, the most relevant exit predictor is having had at least one full-time work contract. After having a full-time contract, male recipients have four times the risk of exit when compared with those who did not have any. This risk is almost 3.4 times higher for women recipients.

As for time in the BSW, results show that once a recipient enters the scheme the risk of leaving is low during the first 2 years for women and high during the fourth year for men. This could be related, first, to the lengthy process of accessing the scheme and the perception by recipients that an early exit into an uncertain labour market is not worthwhile. Second, it could also be related to growing financial needs of the household as the years go by. These needs might prompt recipients to look for additional income sources, which, in turn, could take them into the labour market and out of the benefit. Third, another explanation of these results could lie in the complexity and difficulty of the situations faced by people around the time they enter an MIS. Leaving these situations behind may take a considerable amount of time.

Regarding the role of ALMP services, they do not show any significant effect on the risk of exiting the scheme for men. As for women, having participated in employment promotion entails a 60% higher risk of leaving the scheme.

Finally, employment growth does not help to explain exit from BSW.[5] Not all individual characteristics contribute to explaining exit from the BSW. Neither immigrant status, nor disability nor household size show a significant relationship with risk of leaving, and other variables such as age and educational outcomes appear to have a limited role too.

TABLE 2 Probability of leaving the BSW for employment, men and women

		Male		Female	
		Haz. Ratio	Std. err.	Haz. Ratio	Std. err.
Time in the BSW	First year	0.94	0.27	0.44***	0.13
	Second year	0.89	0.22	0.54**	0.15
	Third year (ref.)				
	Fourth year	2.08**	0.61	1.26	0.42
BSW type	BSW complement.(ref.)				
	BSW complete	0.45***	0.10	0.94	0.27
	BSW incremented	0.74	0.22	0.44***	0.13
Having had a full-time contract		4.08***	0.92	3.47***	1.00
Employment growth		1.10	0.08	1.02	0.08
ALM services	Self-employment orientation	1.05	0.30	1.05	0.33
	Training	1.21	0.25	1.44	0.34
	Employment promotion	1.25	0.33	2.44***	0.70
	Special employment Centre	1.42	0.39	1.46	0.45
Educational level	No education	0.62	0.33	0.75	0.37
	Lower second. No degree	0.38**	0.15	0.56	0.22
	Lower second. Degree	0.73	0.22	0.47**	0.16
	Upper second. (ref.)				
	Employment-oriented education	0.96	0.33	1.38	0.46
Age	18–29	0.49*	0.20	0.83	0.32
	30–34	1.09	0.28	0.91	0.34
	35–44 (ref.)				
	45–54	0.70	0.17	1.34	0.37
	55 and more	0.32***	0.12	0.69	0.24
Disability	No (ref.)				
	Yes	0.97	0.33	0.64	0.27
Foreign born	No (ref.)				
	Yes	0.89	0.24	1.21	0.32
Household size	One (ref.)				
	Two	0.94	0.25	1.00	0.27
	Three	1.17	0.32	1.22	0.38
	Four and more	0.60	0.37	1.04	0.45
Constant		0.002	0.002	0.001	0.001
	No. of subjects	2,773	2,974		
	No. of observations	7,028	7,674		
	No. of failures	120	92		
	Time at risk	63,604.57	69,429		
	Log likelihood	−469	−384		
	Prob > chi2	0.000	0.000		

Note: Piece-wise constant exponential models. Source: own elaboration with BSW data. Controls were introduced for residential districts.

6.2 | Obtaining a first full-time contract while being a BSW recipient

Having had at least one full-time contract during the period of analysis is one of the main determinants of leaving the scheme to enter employment. However, not all beneficiaries who had a contract have exited because, as stated above, benefit and work are compatible to some extent. Nevertheless, it seems important to analyse the patterns related to obtaining at least one contract. One in five men and almost one in 10 women have worked full time during the period of analysis (see descriptive data back in Table 1). Recipients on both the complementary and complete benefits present higher and similar percentages of people with full time contracts: above 20% for men and 9% for women, while only 11.2% of men and 7.3% of women for those on the increased complete benefit. Furthermore, the percentage of beneficiaries with their first full-time contract is higher shortly after they started with the benefit: above 60% for observations of both men and women in the first year and 25% in the second, but below 10% in the third year and only 2.3% for men and 4.5% for women in the fourth.

Having received ALMP is also related to higher percentages of people registering at least one work contract. While only 5% of beneficiaries who did not receive any ALMP had at least one full-time contract, this figure is above 20% for men receiving some kind of ALMP and above 10% for women. It even comes close to 30% for men receiving training and employment promotion services. Being in the most active working age cohorts seems to correlate with full-time work, as does education: 31.5% of men and 16.9% of women who have employment-oriented education (university degree or vocational education and training) had at least one full-time contract. Having a disability signifies a lower proportion of recipients on full-time contracts. While migrant and native women present a similar proportion of working beneficiaries, the percentage is higher among Spanish-born than among foreign-born men (20.9% vs. 16.8%). Women in one-person households and men in four or more person households show a higher percentage of people with a full-time contract while staying on the BSW.

The importance of full-time work regarding the probability of leaving the benefit stresses the importance of better understanding its determinants. In order to do so, we have estimated survival models where the dependent variable is accessing a first full-time work contract. Table 3 presents hazard ratios from these models.

Connection with the labour market appears to be an important determinant of having a full-time contract, showing evidence of duration dependence (Mood, 2013). Recipients are more likely to have said connection during the first years on the benefit. In addition, financial needs may play a role in combining the benefit with a paid job: men living in bigger households have a higher probability of doing so. This probability is 2.5 times higher for men living in households of four and more people when compared with unipersonal households. This may be explained by having greater financial needs than those covered by the benefit. This pattern is not found for females, which could be explained by their greater assumption of family responsibilities.

ALMP appear to be an important factor in predicting the access to a first full-time job, especially training and special employment centres for men, and training and employment promotion for women. Education has only a moderate effect in determining probability of having a full-time contract in the case of men and no significant effect in the case of women, although the coefficients show the to be expected positive effect of higher education levels. In addition, beneficiaries in the most active working age cohorts have a higher probability of having a contract. Having a disability has a negative effect on accessing full-time work.

6.3 | Leaving versus remaining on the scheme for those who had some work

Still, not every recipient that has worked full-time at some point during BSW ends up exiting the MIS. Only 14.5% and 13.1% beneficiaries who had at least one full-time job have abandoned the scheme during the observation window. Table 4 presents hazard ratio from models estimating the probability of leaving the scheme for this subsample of BSW recipients. Two variables seem to play an important role in determining who leaves the scheme: time since first-time contract and work intensity. First, even if it was more probable that beneficiaries had a full-time contract

TABLE 3 Probability of having a full-time contract during BSW, men and women

		Male		Female	
		Haz. Ratio	Std. err.	Haz. Ratio	Std. err.
Time in the BSW	First year	2.70***	0.40	2.83***	0.63
	Second year	1.41**	0.23	1.40	0.33
	Third year (ref.)				
	Fourth year	0.66	0.21	1.45	0.51
BSW type	BSW complement. (ref.)				
	BSW complete	0.75***	0.08	0.91	0.16
	BSW incremented	0.38***	0.06	0.69**	0.10
Employment growth		1.06***	0.02	1.02	0.02
ALM services	Self-employment orientation	1.02	0.14	1.38*	0.24
	Training	1.70***	0.16	1.90***	0.26
	Employment promotion	1.15	0.15	1.83***	0.35
	Special employment Centre	1.58***	0.22	0.92	0.19
Educational level	No education	0.76	0.20	0.62	0.20
	Lower second. No degree	0.68**	0.12	0.70	0.16
	Lower second. Degree	1.06	0.16	0.72	0.15
	Upper second. (ref.)				
	Employment-oriented education	1.34*	0.23	1.40	0.30
Age	18–29	0.74*	0.12	1.26	0.24
	30–34	1.10	0.13	1.00	0.21
	35–44 (ref.)				
	45–54	0.61***	0.07	1.01	0.17
	55 and more	0.37***	0.06	0.67*	0.15
Disability	No (ref.)				
	Yes	0.49***	0.09	0.54**	0.16
Foreign born	No (ref.)				
	Yes	0.90	0.11	1.18	0.18
Household size	One (ref.)				
	Two	0.82	0.11	0.95	0.15
	Three	1.37**	0.18	0.83	0.16
	Four and more	2.50***	0.63	0.89	0.30
Constant		0.004	0.002	0.00	0.00
	No. of subjects	2,775		2,976	
	No. of observations	6,923		7,840	
	No. of failures	556		268	
	Time at risk	62,885		72,612	
	Log likelihood	−1,961		−1,197	
	Prob > chi2	0.000		0.000	

Note: Piece-wise constant exponential models. Source: own elaboration with BSW data. Controls were introduced for residential districts.

TABLE 4 Probability of leaving the BSW for employment, men and women

		Male		Female	
		Haz. Ratio	Std. err.	Haz. Ratio	Std. err.
Time in the BSW	First year	0.31***	0.12	0.19***	0.08
	Second year	0.42**	0.15	0.35***	0.13
	Third year (ref.)				
	Fourth year	2.81***	1.09	1.71	0.92
BSW type	BSW complement. (ref.)				
	BSW complete	0.50*	0.16	1.56	0.64
	BSW incremented	1.34	0.57	0.86	0.33
Work intensity	Less than 10%	0.48*	0.20	0.39**	0.18
	10–25% (ref.)				
	25% or more	4.32***	1.50	4.66***	1.67
Employment growth		1.14	0.13	0.88	0.09
ALM services	Self-employment orientation	0.84	0.35	0.71	0.31
	Training	0.99	0.28	1.19	0.38
	Employment promotion	2.83	1.04	2.70**	1.09
	Special employment Centre	1.03	0.44	1.27	0.57
Educational level	No education	0.84	0.62	1.07	0.81
	Lower second. No degree	0.35	0.23	0.90	0.48
	Lower second. Degree	0.85	0.36	0.42*	0.20
	Upper second. (ref.)				
	Employment-oriented education	0.58	0.28	0.97	0.45
Age	18–29	0.34	0.22	0.75	0.36
	30–34	0.95	0.33	0.41	0.24
	35–44 (ref.)				
	45–54	0.97	0.33	1.65	0.61
	55 and more	0.29	0.20	0.56	0.32
Disability	No (ref.)				
	Yes	1.19	0.59	0.32	0.22
Foreign born	No (ref.)				
	Yes	1.11	0.46	0.52	0.23
Household size	One (ref.)				
	Two	0.60	0.26	0.98	0.37
	Three	0.85	0.34	1.35	0.57
	Four and more	0.41	0.34	0.00	0.00
Constant		0.00***	0.01	0.00***	0.00
	No. of subjects	493		605.00	
	No. of observations	1,292		1,551.00	
	No. of failures	65		53.00	
	Time at risk	11,471		13,975.00	
	Log likelihood	−165		−152	
	Prob > chi2	0.000		0.000	

Note: Piece-wise constant exponential models. Source: own elaboration with BSW data. Controls were introduced for residential districts.

at the beginning of their time in the scheme, they do not seem to leave the benefit just then, but rather much later. This may mean that even for people with some connection to the labour market, it takes a while to exit from the MIS. Second, work intensity plays a very important role. Those who worked more than 25% of the time covered by the observation window show a significantly higher probability of leaving the scheme, while the probability for those working less than 10% is about half of that corresponding to the group who worked between 10% and 25% of the observed time. Furthermore, men on the complete benefit have a lower probability of leaving the scheme than those on the complementary one.

In addition, these models suggest that generally speaking ALMP does not affect the probability of leaving the scheme, for those who had full-time contracts. However, employment promotion does produce a positive result for women.

7 | CONCLUSIONS

The first three hypotheses of this paper stated that connections with the labour market would affect the probability of leaving an open-ended MIS. First, that time spent on the benefit could negatively influence the probability of leaving the MIS for employment (duration dependence). Results show that the duration dependence hypothesis does not hold in terms of exiting the scheme. However, modelling the access to full-time work contracts produces the exact expected result regarding time spent on the benefit. It seems that there is a gap period between the moment when recipients start work and when some of them exit the MIS. Thus, H1 is partially accepted. One reason for this is the results obtained in relation to the second hypothesis, which stated that beneficiaries with at least one work contract during their period in the BSW would have a higher probability of leaving the scheme for employment. This hypothesis can be confirmed since all the models produced show positive and significant signs of the corresponding variable. The third hypothesis stated that beneficiaries who worked for longer periods of time on the benefit would have a higher probability of leaving the scheme for employment than those working for shorter periods. This work intensity effect produced significant results among beneficiaries who had at least one full-time contract. Thus, this hypothesis is also confirmed.

The second set of hypotheses established a potential effect of ALMP service use on the probability of leaving the scheme for employment. The models partially support acknowledging this relationship, since ALMP participation influences the probability of accessing full-time work. However, the role of these services is indirect because models estimating MIS exit show little proof of ALMP influence and then only for female recipients who received employment promotion measures. Thus, H5a is only partially accepted, while H5b can be confirmed. Namely that access to ALMP seems useful for re-entering employment, but no significant effect appears when the attainment of a full-time work contract is included in the analysis of exits.

Summing up, two conclusions can be highlighted. First, accessing full-time jobs can be considered a necessary condition for exiting this MIS for employment, albeit not a sufficient one. The majority of those who had at least one such job subsequently remained in the scheme. The key factor for exiting MIS is recipients being able to increase the number of days worked. This brings up the question of whether existing limits on compatibility between work and benefit could be hampering the exit possibilities of some beneficiaries. Under current BSW norms, those limits are 30 days worked out of every 180. Increasing recipients' chances of leaving an open-ended scheme like the one analysed here would require a more flexible approach to compatibility between work and benefit. This conclusion at least should be taken into account in Spain when deciding on the so-called "work incentives" to be developed within the new open-ended national minimum income (*Ingreso Mínimo Vital*).

Second, the analysis of ALMP services received by MIS beneficiaries shows that they tend to influence first access to full-time work, but not necessarily exits from the scheme into employment. These results seem to contribute to the available research, which highlights how personal characteristics make it very difficult for MIS beneficiaries to access paid work (Ayala & Rodríguez, 2007; de la Rica & Gorjón, 2019; Riba, Ballart, & Blasco, 2011). For those

capable of work, approaching participation in ALMP as part of a strategy, an element within a personal programme of integration into the labour market, should dominate over unstructured, piecemeal approaches. Thus, there is a need to reconsider the activation services available to MIS recipients, which may require more profound change and effort than general ALMP.

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ENDNOTES

[1] Exceptions to the minimum age take into account orphanhood, disability, having dependants with disabilities, having a marital or similar relationship, being a victim of gender violence and coming out of a prison. Asturias is one of the five autonomous communities in which people over 65 may receive MIS.

[2] Consejería de Servicios y Derechos Sociales del Principado de Asturias.

[3] Time-specific data on work contracts is available for the whole observation window (until February 2017), but for some reason data on access to ALMP services exists only until July 2016. Thus, it is possible that access to ALMP is underrepresented for some beneficiaries who entered the scheme during the last few months. We have done the analyses without these people, and the results do not change significantly.

[4] This variable is defined as the net growth in jobs (hundreds) between the central months of each yearly interval.

[5] Since the benefit was created, employment in the region ranged between a minimum of 336,866 and a maximum of 411,452. Thus, the variability of the employment variable amounts to 745.8 units.

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