

Sheltered employment for people with disabilities: An international appraisal with illustrations from the Spanish case

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An international appraisal with illustrations from the Spanish case

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Abstract:

This article presents an updated review of the employment policy of sheltered

employment for people with disabilities. We review the international literature, focusing

on the European Union and especially on Spain, because of the great importance of

sheltered employment centres in this country. Studies have increasingly questioned

sheltered employment's ability to promote labour market integration, mainly compared

with supported employment. However, we lack clear causal evidence, as these arguments

are largely based on descriptive evidence. In addition, sheltered employment centres have

shifted to focus on people with physical disabilities rather than those with mental and

cognitive disabilities, which was the predominant focus until the 2000s.

Keywords: Disability, sheltered employment centre, integration, European Union, Spain

JEL Classification: J14, J41

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1 Introduction

In this article, we present an updated analysis of an employment policy specifically for people with disabilities, known as sheltered employment. Considerable research attention is paid to the use of disability pensions as a path towards early retirement (Bound and Burkhauser, 1999; Cueto and Malo, 2016), but much less attention is devoted to employment policies designed for people with disabilities (Malo and Muñoz-Bullón, 2006). Concerning sheltered employment, we only have surveys from the 1990s and the early 2000s, such as those of Visier (1998) and Delsen (2001). Here, we present an updated picture of what we know about this employment policy.

Sheltered employment is a type of subsidised employment policy in special firms that serve as shelters for people with disabilities. Such firms receive subsidies and/or income transfers to pay the wages of people with disabilities, who usually make up the vast majority of their staff. Depending on the country and laws, the status of such firms ranges from 'true' firms (such as for-profit organisations) to workshops or occupational centres (such as not-for-profit organisations). Because of this variation in firm status, in this article, we use the general term 'sheltered employment centre' (SEC).

One of the most debated topics relating to SECs is their role in labour market integration (Hoffman, 2013; Cueto and Rodríguez, 2014, 2016). Although they provide easier access to jobs, especially for people with mental or severe disabilities of any kind, they have also been criticised because they are often career dead-ends for such people (Cueto and Rodríguez, 2014). Support for SECs is usually based on the argument that some people with disabilities, especially those with mental disabilities, have so few opportunities in the open labour market that SECs are the only places in which they can find work. Critics typically argue that other employment policies, mainly supported employment in firms, are better options than SECs (see, for example, Kregel and Dean, 2002).

Although the analysis presented in this article includes various countries, it focuses on research and empirical information from the European Union (EU), and especially Spain. The Spanish case is interesting for an international audience because of the importance of SECs (in Spanish, *Centros Especiales de Empleo*) there and the strong support for this employment policy from large organisations of people with disabilities, such as Foundation ONCE (Spain's main organisation for people with visual impairments, which

also covers other disabilities) and CERMI (Spain's largest organisation representing people with disabilities).

The remainder of the paper proceeds as follows. In the next section, we provide a conceptual framework of SECs as organisations ranging from firms (for profit organisations) to social workshops. We then review the literature on SECs from an economic perspective, using the Spanish case to offer information from a country where this employment policy is intensively used. Next, we present statistical information about public expenditure in the EU on employment policies for people with disabilities and the relative importance of sheltered employment, and we show the substantial limitations of the information available, even in the case of Spain. Finally, we discuss the lessons and warnings of our review for the future design of labour market integration policies for people with disabilities.

2 Sheltered employment centres: Conceptual framework and literature review

2.1 Conceptual framework

According to the International Labour Organization (Recommendation No. 168, 1983, on the vocational rehabilitation and employment of disabled persons), various types of sheltered employment should be created for 'disabled persons for whom access to open employment is not practicable'. Restricting sheltered employment to people who are 'not employable' in ordinary firms seems to be a clear objective. This recommendation also supports the 'encouragement of co-operation between sheltered and production workshops on organisation and management questions so as to improve the employment situation of their disabled workers and, wherever possible, to help prepare them for employment under normal conditions'. From this perspective, SECs often occupy a middle ground between non-market and protected market environments. Visier (1998) thus considers SECs to be a sort of 'grey market'.

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Following the reasoning of Malo and Rodríguez-Gil (2000) concerning SECs as firms and Malo et al. (2004) about social insertion companies², SECs can be understood as a special type of job creation policy through special firms. For example, imagine that an ordinary for-profit organisation hires workers to produce goods and services. When workers are hired by this firm, they enjoy a 'normalised' position in society, as they obtain wages and implicit recognition as members of society. However, the firm does not hire these workers to achieve social integration, but to produce goods and sell them in the market. The firm 'produces' social integration as a by-product of producing goods or services (Malo et al., 2004). These goods and services have a market and therefore a price, but the social integration of workers with disabilities does not have a market, and consequently, there is not a price for this by-product. A firm including social integration among its objectives at the same priority as profits therefore cannot be as profitable as firms that exclusively focus on profit-maximising behaviour (Malo and Rodríguez-Gil, 2000). This is why public funding is provided for for-profit SECs. If SECs are for-profit firms, they require subsidies for hiring workers with disabilities, permanent subsidies to compensate for the lower productivity of some of these workers, and special subsidies to focus on social integration. Following this conceptual framework, these additional subsidies are a sort of 'shadow price' of social integration (Malo et al., 2004). The higher this shadow price is, the larger the minimum share of people with disabilities on the SEC staff will be; this has been implicitly recognised in the literature for a long time. For example, sheltered workshops are considered to be among the 'most difficult organisations to manage' because managers and staff must care for the social needs of their workers with disabilities while generating profits (Tom Martin & Associates/TMA, 2001). In a survey of SECs in the EU, Delsen (2001) finds that in around half of all SECs, management's most important purpose was providing employment for disabled people.

This is the same reasoning for providing various forms of financial support for social integration firms for people at risk of social exclusion (Malo, 2005). SECs can be seen as a special type of integration firm specialising in people with disabilities. Integration firms usually assume that their workers are 'birds of passage' and that their ultimate objective is to promote integration in the open labour market – that is, among ordinary firms. However, the few available data on reintegrated people thanks to integration firms show

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² About social insertion companies or social enterprises in the European Union, see, for example, Spear and Bidet (2005).

poor results (Rojo, 2000) and limited efficiency because of this social purpose (Retolaza et al., 2014). In the next section, we see that this is less clear for SECs, which have incentives to retain workers with a higher likelihood of being successful in the open labour market because of their productivity (Malo and Rodríguez-Gil, 2000). Delsen (2001) finds that this transition to open employment was at most the third goal in terms of importance for SEC managers and that the observed transition rates to open employment were below 3% of the staff of employees with disabilities, and usually below 2%.

2.2 What do we know about the SECs and labour market integration?

Many studies in the rehabilitation literature analyse SECs, focusing on specific impairments or disabilities, especially mental disabilities (Kregel and Dean, 2002). However, from a microeconomic perspective, it is difficult to obtain a general picture at the international level or even for a specific county. Analyses collect useful descriptive information (Visier, 1998; Delsen, 2001), but the substantial heterogeneity of this information hinders comparisons. A non-negligible portion of this literature corresponds to official reports for national cases (such as Tom Martin & Associates/TMA, 2001, for Ireland), which feature varying levels of analysis. We summarise this literature to provide a general picture of SECs and their role in the labour market integration of people with disabilities.

Sheltered employment in SECs is not equally distributed across the world, or even in specific regions (Visier, 1998). Shima et al. (2008) distinguish three models of employment policies for people with disabilities in the EU: the mainstreaming disability model, which includes employment measures for people with disabilities in all policy domains; a special and separate policies model in which employment policies for people with disabilities are developed specifically for them; and a dual or multi-model system in which those two approaches are combined. Countries using the second and third models have the highest percentages of people with disabilities working in sheltered employment: in Belgium, Italy and Spain, this percentage is above 50%. Although Visier (1998) finds

that sheltered employment was increasing at the international level³ until the end of the twentieth century, Shima et al. (2008) show a heterogeneous picture in the EU in the current century until the Great Recession. Although the number of people with disabilities participating in sheltered employment increased in Austria, Germany, Finland, Italy, Luxembourg and Portugal, other countries, such as Poland and Sweden, saw decreasing trends of employment in sheltered workshops. Some countries, such as France, Spain and Portugal, have sought to reinforce the importance of sheltered employment, whereas others, such as the Netherlands, the United Kingdom (Cueto and Rodríguez, 2014) and the United States (Kregel and Dean, 2002), have increased the promotion of supported employment.

To the best of our knowledge, international empirical evidence of the status of sheltered employment during and after the Great Recession is scant. Rodríguez (2012b) analyses what happened in Spain at the beginning of the financial crisis and finds that sheltered employment increased in importance. The decrease of employment in the open labour market for people with disabilities was greater than that for people without disabilities. Therefore, at least in the case of Spain, SECs served as a buffer against the Great Recession for people with disabilities. Wehman et al. (2013) study the US case and find that during the Great Recession, many people with severe disabilities lost their jobs in the open labour market and that there were increases in sheltered workshops and day-activity programmes; at the same time, there was growing interest in supported employment programmes to help people with severe disabilities keep their jobs.

What do we know about the evolution of the SECs? Are they expanding, as claimed long ago by Visier (1998)? Or are they being replaced by other policies, such as supported employment⁴? May-Simera (2018) argues for the wide use of sheltered employment as employment policy in developed economies for people with disabilities, especially those with intellectual disabilities. However, according to Kregel and Dean (2002), in the US, the SEC model has been progressively replaced by supported employment initiatives,

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³ Visier's (1998) study covers Argentina, Australia, Belgium, Costa Rica, the Czech Republic, Denmark, France, Germany, Greece, India, Ireland, Luxembourg, Norway, Poland, Portugal, South Africa, Spain, Sweden, Switzerland and the United Kingdom.

⁴ Supported employment is usually considered as being opposed to sheltered employment, providing individualised training, assistance, etc., for people with severe disabilities (mainly mental or cognitive disabilities) in firms, not in SECs. Whereas sheltered employment consists of hiring people with disabilities, supported employment usually consists of hiring non-disabled assistants or trainers to assist people with disabilities to adapt to their jobs and/or increase their productivity. See, for example, Hanley-Maxwell et al. (2003) for a review of these programmes.

especially for those with mental and cognitive disabilities. The Spanish case is a good example of the limitations of the available information (even in a country where this policy is crucial, as we will see later). According to Cueto and Rodríguez (2016), between 1996 and 2006, the number of SECs in Spain almost tripled, and their workforce doubled (to more than 47,000 workers in 2006). In 2010, 1,871 SECs employed more than 50,000 workers with disabilities. The number of SECs has grown, and according to declarations by the Minister of Labour, Magdalena Valerio, in 2018, 2,100 SECs in Spain employed 89,884 workers with disabilities⁵. A search for updated information on the webpages of Spain's regional governments (with the exception of the Balearic Islands, where this information is not available) identified 2,158 SECs. According to the Federal Association of SECs in Spain (Spanish Business Federation of Associations of Special Employment Centres, FEACEM)⁶, 97,953 workers with disabilities provided services in SECs in Spain in 2019.

The picture that we obtain from various studies is that sheltered work is mainly done in the manufacturing industry on a subcontracting basis (OECD, 2003). Common tasks are simple work activities ranging from clerical work to assembling, packing, woodwork and sewing (May-Simera, 2018). Wages are lower for people with disabilities than those for workers in ordinary firms, and many of them earn only the minimum wage (Rodríguez et al., 2012). Some authors (such as Holmqvist, 2009) point out that the work in sheltered workshops can even be meaningless. Thus, some SECs are similar to ordinary firms, whereas others resemble therapeutic workshops (Visier, 1998). Some countries have different regulations for different types of SECs, whereas others focus on SECs just for certain subgroups of people with disabilities, mainly those with mental disabilities or severe disabilities of any type (Visier, 1998). Still others, including Spain, distinguish SECs run as for-profit organisations from SECs that are non-government organisations (Rodríguez, 2012a).

SEC employees tend to be relatively young. Although studies focus extensively on people with cognitive or mental disabilities in SECs (Kregel and Dean, 2002), this seems to be

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⁵ Link to the information (in Spanish): https://prensa.mites.gob.es/WebPrensa/noticias/ministro/detalle/3628

 $^{^6 \}quad Link \quad to \quad the \quad information \quad (in \quad Spanish): \quad \underline{http://www.feacem.es/es/centros-especiales-de-empleo/cifras/evolucion-de-la-plantilla-de-trabajadores-con-discapacidad$

the result of a research bias toward the accumulation of research about the US case case in the research literature. For the EU, Delsen (2001) finds important differences by country. Although people with mental disabilities have extensive representation in SECs, many such employees have physical and sensory disabilities (Delsen, 2001). In the Spanish case, Rodríguez and Cueto (2014) show that in 2006, 50.5% of people with disabilities working in SECs had a mental disability, 39% had a physical disability and 10.5% had a sensory disability. According to data provided by the Minister of Labour, in 2018, 38% of workers with disabilities suffered from mental disabilities, 51% from physical disabilities and 11% from sensory disabilities. Although the prevalence of sensory disabilities has remained about the same among workers in SECs, the proportions of physical and mental disabilities have reversed. In other words, the increase in the number of workers with disabilities in SECs is closely related to the increased presence of workers with physical disabilities. Physical disabilities are usually considered to involve fewer work limitations, but there is no statistical information available on the severity of SEC workers' disabilities.

Empirical evidence about the employment integration of people working in SECs is scarce, but in general, it shows that such work is often a career dead-end for people with disabilities. Murphy and Rogan (1995) find that once in sheltered employment, few people with disabilities progress to competitive employment. Weiner-Zivolich and Zivolich (1995) show that many SECs, especially in the United States, have low effective integration in the open labour market, poor working conditions and low wages. However, few studies evaluate the causal impact of working in a SEC on later employment in an ordinary firm. To the best of our knowledge, only two studies do so: Kregel and Dean (2002) and Cueto and Rodríguez (2014).

Kregel and Dean (2002) compare people with cognitive disabilities enrolled in sheltered and supported employment and analyse the differences in their long-term earnings outcomes. They consider a 7-year post-programme period and find that earnings of the supported employment group were 250% greater than those of the sheltered employment group. However, the groups had key differences: those in supported employment were more likely to have worked in ordinary firms before the programme, and the groups' demographic characteristics also differed. Although the authors estimate a fixed effects model to control these differences, it is not sufficient to conclude that the differences in

post-programme earnings were exclusively related to allocations to sheltered or supported employment.

To estimate the causal impact of being hired by a SEC, some studies compare a group of people with disabilities in an SEC with a control group of people with disabilities not working at an SEC that are equal (on average) in terms of the rest of their characteristics. The control group can be defined using a randomised control trial (an 'experimental' approach) or applying statistical techniques to observational information about the nonbeneficiaries of the policy (a 'quasi-experimental' approach) – in this case, people with disabilities not working in SECs. Cueto and Rodríguez (2014) conduct a quasiexperimental evaluation of the impact of being hired by a SEC on labour market integration in ordinary firms based on propensity score matching techniques⁷. They find that having working experience in an SEC makes people with disabilities less likely to be hired by ordinary firms in the future by 29 percentage points (pp) compared to people with disabilities who never worked in a SEC. Those starting their working career in a SEC are 42 pp less likely to work in an ordinary firm later. However, propensity score matching is not considered a powerful methodology for quasi-experimental evaluation because it is based exclusively on observed variables and is therefore potentially biased by omitted variables (Cunningham, 2021). Thus, to the best of our knowledge, we lack reliable causal evidence of the impact of the SECs on the working careers and long-term earnings of people with disabilities compared with a non-treated control group or a group under a different treatment, such as supported employment.

Finally, randomised controlled trials for supported employment and a meta-analysis (Marshall et al., 2014) show consistently positive outcomes for individuals with some mental disabilities, including higher rates of employment in the open labour market, more hours and weeks worked, and higher wages. However, most of the studies included in the meta-analysis consider fewer than 200 individuals (considering both the treatment and control groups). Only one study of this meta-analysis has a relatively large sample of 1,121 treated individuals and 1,117 non-treated individuals. The only study using sheltered employment as the control group has 66 treated individuals and 77 non-treated individuals, and it finds positive effects on finding a job in an ordinary firm and earning

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⁷ About propensity score matching and other quasi-experimental techniques, see, for example, Frölich and Sperlich (2019). On randomised control trials and a general approach to causal inference, see, for example, the extensive review by Imbens and Rubin (2015).

a higher income (Marshall et al., 2014). Howard et al. (2010) find that randomised controlled trials of supported employment programmes in the US increased rates of competitive employment to 30-60%, but this was not the case for trials implemented in Europe, as the evidence does not show a significant improvement in achieving competitive employment one year later. The explanation for this difference is probably the poorer integration of these programmes with mental health services and even economic disincentives for participants in Europe (Howard et al., 2010). Therefore, the lack of causal results for SECs' impact on labour market integration is not necessarily an endorsement of supported employment as an effective policy for labour market integration in Europe, even for people with severe disabilities.

3 The relative importance of sheltered employment policies: The case of Spain

In this section, we present statistical information on sheltered employment policies in Spain because of the long-standing importance of such policies in this country⁸. This information has some limitations, especially regarding the disaggregated results between sheltered employment policies and other employment policies for people with disabilities.

First, we show the relative importance of expenditure on supported employment and rehabilitation in the EU-27 and in Spain. It is important to note that in the statistics published by Eurostat, the term 'supported employment' refers to any policy supporting the employment of people with disabilities, not the specific policy known as 'supported employment' that we have compared to sheltered employment in previous sections.

Figure 1 shows that expenditure on these policies has been rather stable in the EU-27 since 2009, remaining just below 0.1% of the GDP. In contrast, in Spain, the same series has an increasing long-term trend, with occasional decreases. This increase is clear for 2014 onwards; in other words, during the recovery following the Great Recession. At the beginning of the 2000s, this expenditure was around 0.06% of the GDP, whereas in 2019, it was above the EU-27 average, accounting for 0.12% of the GDP. Thus, Spain differs considerably from the EU average.

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⁸ A short review of the main legal features of the regulation of SECs in Spain is presented in the Appendix.

However, the EU features considerably heterogeneity by country, as Shima et al. (2008) note. Figure 2 displays this heterogeneity for 2019, the most recent year available. Spain (labelled 'ES' in the graph) is above the EU-27 average (accounting for 0.125% and 0.096% of the GDP, respectively), but it is far from the countries with the highest expenditure: Denmark, with 0.967% of the GDP, and the Netherlands, with 0.301% of the GDP.

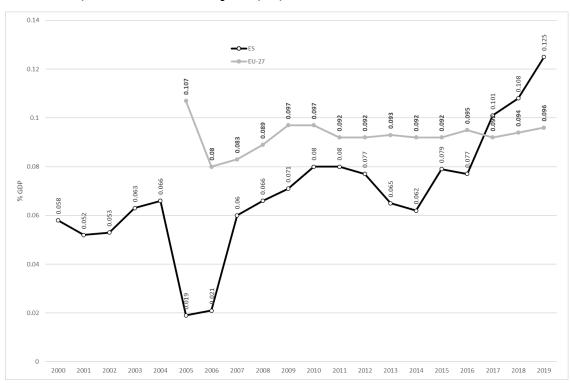


Figure 1: Expenditure on supported employment and rehabilitation (as a percentage of the GDP) in the EU-27 and Spain (ES)

Source: European Commission – Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL).

In the EU statistics, there is not always a distinction between expenditure on employment in the open labour market and sheltered employment. Even for the countries for which we have this broad distinction, there is not comparable information about the distribution of this expenditure to individuals, employers and employment service providers. Therefore, we now analyse the case of Spain to provide a more detailed picture of sheltered employment.

According to Rodríguez (2012c), at the beginning of the 2000s, half of the public expenditure for employment policies for people with disabilities was related to SECs, but

at the end of the past decade, more than 95% of all employment support measures for people with disabilities were related to sheltered employment, either for job maintenance or new job creation projects (see Table A1 in the Appendix). This percentage was very stable in the most recent available years, and in Figure 3, we show the evolution of contracts and public expenditure in employment policies for people with disabilities, taking a base year of 2013 equal to 100 for all concepts.

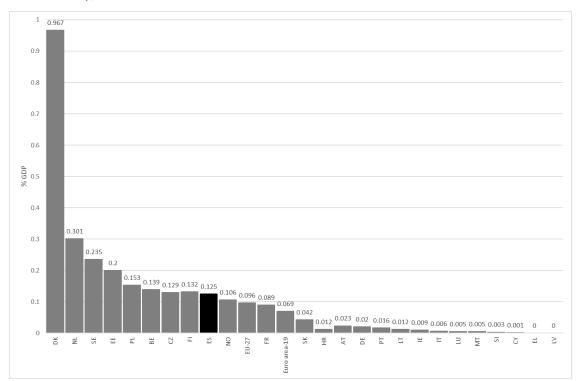


Figure 2. Expenditure on supported employment and rehabilitation (as a percentage of the GDP), 2019

Source: European Commission – Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL)

Following to Rodríguez (2017), between 2006 and 2016, the contracts signed with people with disabilities in Spain increased, mainly because of the growth of non-specific contracts for people with disabilities⁹. The larger volume of hiring by SECs than by ordinary companies stands out, although this trend may be reversing in recent years. Although the most common types of contracts have not changed, between 2013 and 2019, open-ended contracts specific to people with disabilities in ordinary companies have

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⁹ By non-specific, we mean any type of contract not designed specifically for the employment of people with disabilities.

grown the most. Even in 2020, the first year of the COVID-19 pandemic, expenditures on SECs increased slightly, even with a decreasing number of SEC contracts. However, the data during the pandemic are probably also affected by other events, such as the lockdown and general public subsidies for employment maintenance, and they thus merit special consideration that is not yet possible because of the lack of statistical information available for this period.

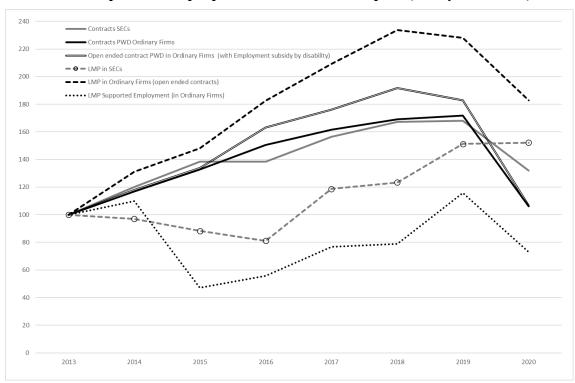


Figure 3. Contracts and public expenditure (in constant 2013 prices) on active labour market policies for people with disabilities in Spain (base year = 2013)

Source: Our calculations from data published in the 'Anuario de Estadísticas del Ministerio de Trabajo y Economía Social' and the Spanish Public Employment Service ('Servicio Público de Empleo Estatal'). See the original data in the Appendix (Table A1).

The greatest increases in hiring subsidies linked to contracts are observed in those for permanent hiring. The evolution of financial support for the permanent contracting of people with disabilities in ordinary firms follows a similar trend to the number of signed contracts.

This relationship is less clear in the case of subsidies for contracts in the SECs. In other words, the subsidies for hiring received during a year do not depend solely on the number

of contracts concluded that year, but also on contracts from previous years that are still in force. There are three relevant types of subsidies:

- For the maintenance of jobs. These subsidies are linked to the number of workers at an SEC irrespective of their type of contract. In 2019, this type of subsidy accounted for slightly more than 92.5% of the total financial support for the labour market integration of people with disabilities in SECs.
- For job creation projects. These subsidies are related to the percentage of new jobs in relation to the total number of workers in the SEC. In 2019, they accounted for slightly more than 2.3% of the financial support for the labour market integration of people with disabilities in SECs.
- For professional activity support units and multi-professional teams in SECs. These subsidies are for hiring workers without disabilities, i.e. specialists who, through the development of different functions and tasks, help workers with disabilities in the SEC to overcome barriers and difficulties in the job. In 2019, they accounted for 5% of the total financial support for the labour market integration of people with disabilities in SECs.

Finally, there are data about some of the programmes for supported employment (the dotted line in Figure 3). In this case, subsidies partially cover the wages and Social Security contributions of labour trainers (who usually do not have disabilities) but not the labour costs of the supported worker with disabilities. Supported employment projects are linked to the hiring of a severely disabled worker by a company in the ordinary labour market through an open-ended or fixed-term contract for at least six months. The amounts of these grants vary depending on the severity of the disabilities of the workers who receive this support. There was a general increasing trend from 2015 to 2019, with a sudden decrease in 2020 that was probably linked to the lockdown. These subsidies accounted for 5.6% of all subsidies for the labour integration of people with disabilities in ordinary companies in 2020.

In AIReF (2020), we have additional information from the Public Employment Service and Social Security, although again, this information is not complete, as it does not provide information on supported employment in ordinary companies. The available information is summarised in Table 1.

Table 1. Total expenditure and beneficiaries of subsidies for hiring people with disabilities in 2018 (Spain).

	Beneficiaries		Expenditure (Million euro)	
	n	%	n	%
SECs	117,450	47.66	346.40	42.11
Open-ended contracts in ordinary firms	71,237	28.91	246.42	29.96
ONCE	22,386	9.08	172.88	21.02
Fixed-term contracts in ordinary firms	28,901	11.73	49.99	6.08
Self-employment	5,500	2.23	6.36	0.77
Training contracts	938	0.38	0.51	0.06
Total	246,412	100	823	100

Source: AIReF (2020).

As shown, there is a close relationship between the percentage of subsidies for SECs (47.66%) and the percentage of these subsidies of the total expenditure on employment subsidies for people with disabilities (42.11%). There is a similar relationship for the case of open-ended contracts in ordinary firms (28.91% and 29.96%, respectively). However, ONCE¹⁰ receives more than 20% of the subsidies for the employment of people with disabilities, although these subsidies correspond to just over 9% of the workers benefited by these policies. ONCE is the main employer of workers with disabilities in Spain, and legal provisions give ONCE the same subsidies for hiring as an SEC, including a fiscal subsidy for the total amount to be paid to Social Security (AIReF, 2020). This amount is higher for ONCE, so the fiscal subsidy is larger. For our purposes, this means that ONCE is essentially operating as a SEC. Therefore, summing up the data for SECs and ONCE, almost 57% of beneficiaries correspond to this type of sheltered employment. In addition, SECs and ONCE account for 63% of the total subsidies for people with disabilities. Finally, in the cases of temporary contracts, training contracts and self-employment, the percentage of workers covered is higher than the weight of these subsidies over the total expenditure employment subsidies for people with disabilities. Our interpretation of these data is that sheltered employment in SECs is now the most important employment policy for people with disabilities in Spain, and ONCE has a prominent role in the implementation of this policy. However, a key problem is the absence of data to analyse whether this policy is cost-effective, which should be extremely important for policy makers as well as for people with disabilities, considering that this policy receives more

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¹⁰ For details, see https://www.once.es/otras-webs/english

than 60% of public expenditure on such policies and because empirical research casts doubt on this policy's ability to achieve full labour market integration for people with disabilities.

In short, the statistical information is not clear or fully detailed, either at the EU level or in the Spanish case. Nevertheless, even this fragmented information shows the increasing importance of sheltered employment policies and SECs. This may be partially related to a composition effect from the Great Recession, when more people with disabilities lost jobs in the open labour market than in SECs (Rodríguez, 2012b). However, the relative weight of this employment policy is striking considering that the empirical evidence shows that working for SECs is not related to a better working career in ordinary firms. Reliable impact evaluations are necessary to determine whether financial support for SECs is cost-effective or whether other policy options should receive funding.

4 Discussion: lessons and warnings for the future

People with disabilities face some of the greatest problems with labour market integration. There is a vast body of literature, mostly produced in the 1980s and 1990s, that analyses the negative incentives of disability pensions on the employment of people with disabilities, especially for aged workers relatively closer to retirement (see, for example, the review by Bound and Burkhauser, 1999). However, the employment difficulties of people with disabilities are much broader than those related to the design of disability pensions and retirement. Most EU countries have implemented labour market policies specifically for people with disabilities to improve their labour market integration. The available meta-analyses of these active policies show that effectiveness is rather low or null (Lahey et al., 2017) or else is extremely heterogeneous, with important limitations related to the methodological quality (Tripney et al., 2019).

In this article, we have focused on sheltered employment centres (SECs) as an employment policy. This policy includes different sets of subsidies for a special type of firm (SECs) where people with disabilities account for most of the staff. SECs feature important differences by country (Visier, 1998), but we can distinguish two main types: those similar to a typical for-profit organisation (i.e. a firm) and those created with a social

purpose. Nevertheless, the objective of the labour market integration of their workers with disabilities is present in all of them. It is difficult to draw a general picture of SECs and their evolution at the international level. Some authors argue that they are growing in number and financial support (Visier, 1998; Delsen, 2001), but there is also extensive criticism about their role in promoting integration in the open labour market, especially in the United States (Hoffman, 2013). The few evaluations of the causal impact of the SECs on the careers of people with disabilities find that being a worker in an SEC is problematic and even detrimental to obtaining a job in the open labour market (Kregel and Dean, 2002; Cueto and Rodríguez, 2014). Although a large body of descriptive literature supports this argument, additional evidence with other methodological approaches and better data will be essential to confirm these results.

This research also reviews the main statistical information on sheltered employment for the Spanish case. This policy has a long tradition in Spain, and there is a clear increasing trend in employment policies for people with disabilities linked to the expansion of SECs and financial support for them (Rodríguez, 2017). However, it is striking that the published information on SECs is extremely limited. Researchers must deduce the evolution of the SEC not only from fragmentary statistical information but also from isolated information in declarations by public authorities. The databases with microdata related to individuals working in SECs or the SECs themselves are not available for independent researchers. Databases that previously included suitable information no longer contain this information, such as the MCVL used by Cueto and Rodríguez (2014) to conduct a quasi-experimental evaluation of the impact of SECs on the careers of people with disabilities. This disappearance of previously available information also affects the statistics published at the European level. This worrying trend might be related to policy makers' decreasing interest in the employment of people with disabilities during the Great Recession, when unemployment increased throughout the European Union. If this is the reason for the recent lack of information, including the lack of comparable information between countries, the economic crisis related to the pandemic will not improve current statistical limitations. In any case, the limited available information shows that the use of SECs as an employment policy has stalled, especially in Spain, where the long-running debate continues as to whether SECs promote the integration of people with disabilities in the 'ordinary' labour market or are a dead-end for the careers of people with disabilities (Cueto and Rodríguez, 2016). The debate remains open because there are very few data

with which to conduct more impact evaluations (experimental or quasi-experimental) that compare SECs with other available options, such as supported employment or subsidies for ordinary firms.

At the same time, at the international level and especially in the United States, there is increasing scepticism regarding the effectiveness of supported employment and the ineffectiveness (or at least the unknown causal effects) of sheltered employment. The debate over the most effective labour market policies for people with disabilities requires experimental and quasi-experimental evaluations. This issue involves not only the responsible use of public resources (as for any policy) but also providing disadvantaged workers with the best available options for full integration in the labour market, especially in countries in which sheltered employment has become central in employment strategies for people with disabilities. More, better and internationally comparable statistical information at the EU level is crucial for the design of cost-effective employment policies for people with disabilities in general and in the case of SECs in particular.

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Appendix. Basic features of the Spanish legal regulation of sheltered employment centres

The Act for Social Integration for People with Disabilities (in Spanish, Ley de Integración Social del Minusválido, hereafter LISMI) was enacted in Spain in 1982. This initiative can be considered the beginning of a comprehensive policy towards people with disabilities with two main objectives: improving disability pensions and promoting the employment of people with disabilities. The promotion of employment was explicitly understood in this legal regulation as a way for people with disabilities to socially integrate, and it included various subsidies and fiscal incentives for hiring people with disabilities. Special employment centres (SECs) were among the means for such social integration through employment explicitly stated in this regulation, which included specific financial subsidies for these organisations that were more generous than subsidies for hiring by ordinary firms. In 2013, the LISMI has been replaced with the Royal Legislative Decree 1/2013 (Consolidated Text of the Act on the Rights of People with Disabilities and their Social Inclusion). However, this change in the main legal regulation does not affect the basic regulations for SECs.

The LISMI defined SECs as organisations promoted by public or private agencies that have the primary goal of performing productive work, are regularly involved in market operations and seek to provide profitable employment and personal and social adjustment services for their workers with disabilities. They were thus defined as 'special' or 'protected' firms because of their social objectives of labour market integration of people with disabilities. When the LISMI was enacted, all of the staff of these centres were to be people with disabilities, but this requirement was later relaxed to a minimum threshold of 70% (66/1997 Act).

The LISMI set forth a step-by-step strategy for labour market integration. When necessary, occupational centres (with a therapeutic objective) would help to deal with the limitations of people with impairments and disabilities. People with disabilities with a basic level of employability (sometimes thanks to their prior experience in occupational centres) and with difficulty integrating into 'ordinary' firms would be hired by the SECs. People with disabilities working in a SEC would accumulate human capital and basic knowledge about certain occupations via learning-by-doing. This process would lead to these workers later entering the 'non-protected' labour market. The promotion of

employment at this stage would be related to the financial subsidies and fiscal incentives for ordinary firms to hire workers with disabilities.

Although the SECs could use the contractual arrangements provided by the Spanish Workers Charter (including specific fiscal and financial subsidies), the employment contracts were presumed to be open-ended but with a probationary period of 6 months. Since 1999, SEC employment contracts can be open-ended or fixed-term, and the probationary period is set by collective agreement but is not to exceed 6 months. A special contract related to poor performance has been designed for SECs, which use this contract with workers with disabilities with performance 25% below the standard set by a multi-professional team of experts. In this case, the SEC and the worker bargain for a wage reduction that does not exceed the above percentage. There are also provisions to cover the employee's absence to attend remedial treatments and to participate in guidance, training and retraining activities.

Table A1 presents the available information about the numbers of contracts in SECs and public expenditure in active labour market policies in SECs and ordinary firms in Spain. These data were used in Figure 3.

Table A1. Contracts and public expenditure (in constant 2013 prices) in active labour market policies (ALMP) for people with disabilities (PWD) in Spain (original data used in Figure 3)

	Contracts in SECs	Contracts of PWD in ordinary firms	Open-ended contracts of PWD in ordinary firms	ALMP expenditure of PWD in SECs	ALMP expenditure of PWD in ordinary firms	Public expenditure in supported employment in ordinary firms
2013	49,608	20,040	6,062	257,786,721	3,805,097	563,958
2014	59,559	23,418	7,158	250,086,030	4,988,027	618,938
2015	68,613	26,625	8,120	227,434,033	5,633,157	266,405
2016	68,648	30,154	9,885	209,110,456	6,951,329	314,688
2017	77,677	32,391	10,678	305,899,486	7,959,425	433,471
2018	82,981	33,892	11,619	318,208,441	8,889,301	445,611
2019	83,408	34,410	11,082	389,912,885	8,683,697	652,937
2020	65,461	21,245	6,467	392,456,011	6,959,007	411,930

Source: "Anuario de Estadísticas del Ministerio de Trabajo y Economía Social" and the Spanish Public Employment Service ("Servicio Público de Empleo Estatal").