The Labour Market Impact of the COVID-19 Pandemic on Individuals with Disabilities: The Case of Ireland

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Abstract

The COVID-19 health pandemic had a profound impact on economies and their labour markets worldwide. This included Ireland, with its labour market experiencing substantial increases in unemployment due to the implementation of a number of public health measures. The labour market disruptions caused by COVID-19 disproportionately affected certain sectors (accommodation, food services, etc.), and subgroups of the population (younger workers, women, non-Irish nationals, etc.). There is also reason to suspect that individuals with disabilities were disproportionately affected by the pandemic. In general, prior to the pandemic, people with disabilities already faced significant labour market inequality in Ireland, with their employment rate being 33 per cent in 2019 compared to a rate of 51 per cent across the EU27, and 77 per cent for those without a disability in Ireland. Despite extensive research on the broader impacts of COVID-19, there remains a notable gap in the literature concerning the labour market impact of the health pandemic on people with disabilities. This paper attempts to fill this gap in the literature for Ireland by using data from the 2020 and 2023 Labour Force Survey (LFS) to examine the impact of COVID-19 on disabled peoples' unemployment status relative to those without a disability. Using OLS and propensity score matching econometric techniques, the paper finds that individuals with disabilities were 2.7 percentage points more likely to be unemployed during the COVID-19 pandemic compared to those without disabilities. Even in 2023, people with disabilities remained more likely to be unemployed. However, our year interaction models revealed that the impact of disabilities on unemployment risk remained largely stable during and after the health pandemic. The paper also found some interesting results by disability type. The findings should help to provide policymakers with a clearer perspective on the effects of labour market disruptions on individuals with disabilities and identification of measures needed to support this subgroup of the population during labour market crises.

Keywords: COVID-19, Disabilities, Unemployment Risk, Ireland, OLS.

JEL codes: J01, J14, J18, J64, J68.

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1. Introduction

Employment opportunities for all people of working age is one crucial component for social inclusion (Callander and Schofield, 2013; Dieckhoff and Gash, 2015), well-being (Stiglitz et al., 2009) and poverty prevention (Eurofound, 2001). However, it is a common feature in many countries that access to employment is not equal across all groups of the population. Indeed, many population groups such as, for example, ethnic minorities, people with disabilities, young or older people, female or lone parents, who may be made vulnerable by a set of circumstances or barriers, are facing challenges in accessing employment (Bureau of Labor Statistics, 2013; Bureau of Labor Statistics, 2022; Zwysen et al., 2021; Jablonski al., 2024; EBRD, 2020; Youngblut et al., 2020). Such population subgroups are also more exposed to precarious working conditions when working. Accessing and retaining employment represents a major challenge for many of these groups, and any profound change in economic conditions within a country that impacts its labour market, such as the Great Recession of 2008 or the COVID-19 health pandemic, is more likely to affect the employment prospects of such groups and widen existing disparities.

Take, for example, the 2008 Great Recession, which had a disproportionate impact on specific demographic groups, including women, young people, migrants, unskilled workers, and those with low educational attainment (Abugamza et al., 2024; OECD, 2010; Kelly et al., 2016; Verick, 2011). A study focusing on migrants by Molina et al. (2023), showed that the unemployment rate for working-age migrants in the EU-28 increased from 12 per cent in 2008 to nearly 18 per cent in 2012, compared to lower increases for the overall population. Kelly and Maître (2021) found also similar uneven impact of the Great Recession on the labour market of people with disabilities in Ireland. While the proportion of people in employment fell during the Great Recession regardless of disability status, by 2019 people with disabilities had still not benefitted from the economic recovery to the same extent as those without as they were not back at their pre-recession employment levels.

The COVID-19 pandemic was first confirmed in Ireland in late February 2020, marking the beginning of a pandemic that would last just over two years. From January 2022, public health restrictions began to ease gradually, reflecting improvements in the health situation. Finally, in May 2023, the World Health Organization declared that the COVID-19 pandemic was no longer a global public health emergency. The pandemic also had a profound, and multifaceted, impact on economies and their labour markets worldwide, leading to significant disruptions in economic activity, employment, and social welfare systems. As a small, open economy with strong linkages to global trade, Ireland was especially vulnerable to the disruptions caused by the pandemic, including supply chain interruptions, declining international

demand, and restrictions on domestic activity. The Irish labour market also experienced severe strain, with substantial increases in unemployment and a sharp decline in labour force participation during the height of the crisis. The implementation of public health measures, including the closure of many businesses, resulted in a sharp increase in unemployment. In February 2020, the COVID-19 adjusted unemployment rate was 4.9 per cent and by September, it had increased to 14.7 per cent (McQuinn et al., 2020).[1]

In response to the labour market crisis, the Irish government introduced a series of comprehensive policy measures aimed at providing immediate financial support to workers and businesses, such as the Pandemic Unemployment Payment (PUP), the Temporary Wage Subsidy Scheme (TWSS) and Support for Self-Employed and Small Businesses. The PUP provided direct income support to individuals who lost their jobs due to the COVID-19 pandemic restrictions. The payment was initially set at €350 per week, which was roughly equivalent to the average wage in Ireland at that time. By April 2020, approximately 591,000 people were receiving the PUP (Coates et al., 2020). The TWSS scheme was aimed at helping businesses retain employees by subsidising a portion of employees' wages. As the public health situation improved, the Irish government began to gradually withdraw its labour market supports. The PUP amount was progressively reduced from mid-2021, closed to new applicants at the end of January 2022, and officially ended in March 2022. Similarly, the Employment Wage Subsidy Scheme (EWSS), which had replaced the TWSS in September 2020, was phased out in stages and concluded in late May 2022.

The labour market disruptions caused by the pandemic disproportionately affected certain sectors, particularly accommodation, food services, retail, and construction. These industries experienced the highest share of COVID-19 pandemic-related unemployment due to their dependence on physical presence and social interaction (Coates et al., 2020). The composition of job losses was also uneven, with younger workers, lower-wage earners, women, and non-Irish nationals disproportionately affected, due to their higher employment concentrations in the sectors most severely impacted by the pandemic. For instance, many workers in the hospitality and retail sectors, where many of these groups are employed, have lower job security and are more likely to be employed in part-time or temporary positions, making them more susceptible to any economic downturn.

[1] When COVID-19 commenced, the national statistical data collection agency, the Central Statistics Office (CSO), developed a COVID-19 adjusted unemployment rate to account for the individuals that had been temporarily laid-off because of the pandemic and were in receipt of a COVID-19 support payment, in particular, the Pandemic Unemployment Payment (PUP). The CSO also continued to publish the standard unemployment rate, which is based on the ILO measure of unemployment. For additional information, see: Monthly Unemployment and COVID-19 Adjusted Estimates March 2020 Technical Note – CSO – Central Statistics Office.

There is reason to suspect that individuals with disabilities were also disproportionately affected by the pandemic. Based on a 2023 spending review of the Disability Allowance Scheme (Doyle, 2023), just prior to the pandemic in 2019, in-work Disability Allowance recipients had higher employment concentrations in some of the low wage sectors most severely impacted by the COVID-19 pandemic, such as Wholesale, Retail and Trade (20 per cent employed), and lower employment in the sectors and occupations less impacted by the pandemic (e.g., Information and Communication (1 per cent) and Professional occupations (2 per cent).

In general, prior to the pandemic, people with disabilities already faced significant labour market inequality, especially in Ireland where their employment rate has tended to be low by international standards. In 2019, the employment rate of people with disabilities aged 20–64 across the EU-27 was 51 per cent compared to only 33 per cent in Ireland. In 2020, these employment rates continued to be 51 and 33 per cent respectively (European Commission, 2022a), which suggests that the impact of the COVID-19 pandemic on the employment levels of people with disabilities between 2019 and 2020 was minimal. However, this might not be the case by disability type, because prior to the pandemic Kelly and Maître (2021) found that type of disability significantly influenced employment outcomes, with individuals with intellectual disabilities facing particularly low employment rates: only 15 per cent were employed in Ireland in 2016 compared to 46 per cent of individuals with serious hearing impairments.

Despite extensive research on the broader impacts of the COVID-19 pandemic on the global labour market, and its effect on various sectors and some demographic groups, there remains a notable gap in the literature concerning the labour market impact of the pandemic on people with disabilities. Indeed, the majority of the research on the pandemic's impact on people with disabilities has concentrated on the health-related consequences for this group. This paper seeks to address this gap in the literature by examining the labour market impact of the COVID-19 pandemic on disabled people in Ireland, noting, as mentioned already, that employment rates for this group were already low by European standards.

Data from the Office for National Statistics (ONS) in the UK shows that the employment rate for people with disabilities rose by 10 percentage points between 2013 and 2023. However, this trend reversed at the start of the pandemic (March 2020), before gradually recovering and stabilising in the final year of the crisis in 2023. As a result, while the disability employment gap decreased by 4.2 percentage points over the decade between 2013 and 2023, it could have decreased further only for the onset of the pandemic (Department for Work and Pensions, 2023). Another UK study looking at the initial impact of the COVID-19 pandemic on the employment status of people

with disabilities found that the disability employment rate dropped from 54.1 per cent at the end of 2019 to 52.3 per cent in the final quarter of 2020, a decline of 1.8 percentage points, whereas the employment rate for non-disabled individuals fell by marginally less over the same period, 1.1 percentage points (Atay et al., 2021). Another UK study by Emerson et al. (2021), based on a survey of over 13,000 working-age individuals, found that during the initial three months of the first COVID-19 pandemic lockdown, there was no significant difference in redundancy rates between people with and without disabilities. However, disabled people were more likely to experience a reduction in working hours and report higher levels of financial stress (Emerson et al., 2021).

In the USA, a study by Houtenville et al. (2021), using data from the US Monthly Current Population Survey for individuals aged 16–64, found no significant difference in the relative employment loss between people with and without disabilities. From February 2020 to January 2021, employment levels for both groups declined by 6–7 per cent.[2] Ne'eman and Maestas (2023), also for the USA, reached a similar conclusion, as employment losses in the United States during the early stages of the pandemic were comparable in proportion for both disabled and non-disabled individuals. Similarly, based on a mixed method study and focusing solely on individuals with partial work disabilities in the Netherlands, de Visser et al. (2023) found that over 80 per cent of these individuals did not experience any change in their employment status during the pandemic. However, those who did lose their jobs reported the most significant decline in self-rated health.

The impact of the COVID-19 pandemic on disabled workers has also been found to vary by factors such as impairment type, age, gender, region, and educational attainment. For example, an international study by Fisher et al. (2022) found that more than half of individuals with intellectual disabilities employed prior to the pandemic experienced negative effects, including job losses and reduced working hours. Although the overall unemployment rates for people with and without disabilities remained relatively stable between 2019 and 2020, significant disparities exist within age groups. Specifically, in the EU-27, the youth unemployment rate for disabled people aged 16 to 24 increased sharply from 25 per cent in 2019 to over 31 per cent in 2020 (European Commission, 2022b). In contrast, the rate for this age group without disabilities increased only slightly from 20 per cent to around 21 per cent, resulting in a 10-percentage point employment gap between people aged 16 to 24 with and without disabilities (European Commission, 2022b). In the UK, young disabled people were the most affected by job losses, with employment rates for those aged 16–24 declining by 1.8 percentage points (Atay et al., 2021). However, in Ireland, research by Smyth and Nolan (2022),

[2] Calculation by the authors from Table 1 in Houtenville et al. (2021).

using data from the Growing Up in Ireland Cohort'98, showed that young people with chronic illness or disability were not more likely to experience job loss during the COVID-19 pandemic than their non-disabled peers. The Atay et al. (2021) study also examined gender differences among people with disabilities and found that the employment rate for disabled men decreased by nearly 4 percentage points, from 55 per cent in Q4 2019 to 51.3 per cent in Q4 2020. While, in contrast, the employment rate for disabled women saw only a modest decline, from 53.5 to 53.1 per cent over the same period (Atay et al., 2021).

The effects of the COVID-19 pandemic also differed based on the level of affluence in various areas. A study by Whelan et al. (2023) showed that people living in disadvantaged areas in Ireland were more likely to receive employment support payments compared to those in wealthier areas, as they were more likely to be employed in lower-paying jobs. Focusing specifically on people with disabilities, a report by Pobal (2024), based on an analysis of Small Area data from the CSO, found that people with disabilities are more concentrated in deprived areas compared to affluent ones, and this concentration is also higher in urban areas than in rural areas. Thus, based on this research and the analysis by Whelan et al. (2023), it is likely that a high proportion of disabled people in disadvantaged areas were in receipt of employment support payments during the COVID-19 pandemic.

The effects of the pandemic clearly extended beyond the labour market, with significant negative consequences for the mental health and financial wellbeing of people with disabilities, as documented by Brown and Ciciurkaite (2023) and Maroto et al. (2021). In the UK, disabled individuals were more likely to become economically inactive after furlough measures ended,[3] and those who remained employed experienced higher levels of financial stress (ONS, 2021).

It is important to note that the recent period in Ireland has seen the development of policies supporting the employment for people with disabilities. It is unlikely, though, that these had any significant mitigating effect against any negative effects of the COVID-19 pandemic on the employment of people with disabilities. For example, the Comprehensive Employment Strategy for People with Disabilities (2015–2024) outlines a ten-year, cross-government approach to increase employment among people with disabilities in Ireland. It focuses on six strategic priorities: building skills and independence, providing tailored supports into work, ensuring work pays, promoting job retention and re-entry, delivering coordinated support services,

[3] During the COVID-19 pandemic, the UK government introduced the job furlough scheme, formerly known as the Coronavirus Job Retention Scheme, to assist in keeping individuals close to the labour market and prevent their reliance on social welfare payments until rehired. Specifically, the scheme provided grants to employers to retain and pay their employees during the COVID-19 pandemic lockdowns, at up to 80 per cent of their wages.

and engaging employers. The strategy emphasises early intervention, inclusive education, accessible transport, and employer incentives, with the expectation to increase the employment rate of people with disabilities from its level of 33 per cent in 2011 to 38 per cent by 2024. The implementation of the strategy was initially supported by action plans, interdepartmental coordination, and annual progress reviews by the National Disability Authority (NDA), an independent statutory body that provides information and advice to government on policy and practice relevant to the lives of persons with disabilities. The NDA's final review, however, concluded that the Comprehensive Employment Strategy has not been very effective. In particular, the NDA noted that a final three-year action plan for 2022–2024 was never agreed, the monitoring and oversight structures did not function in the last few years of the strategy, and some key initiatives to promote the employment of disabled people, such as a national programme of supported employment, were not implemented.[4]

Focusing more specifically on young people with disabilities, the Ability Programme is another employment support programme.[5] The programme ran from 2018 to 2020, but it provided funding until 2021 to local, regional and national projects supporting young people with disabilities aged 15 to 29, to move closer to the labour market. Its aim was to offer person-centred supports to help young participants build confidence, independence, and the skills necessary for education, training, and employment. An evaluation of the Ability Programme found that 74 per cent of 329 study participants improved their soft skills, which would be beneficial in seeking employment.[6] Of the 1,019 programme participants with data available on hard outcomes, 25 per cent obtained paid employment. The Ability Progamme was followed by the WorkAbility programme, a government- and EU-funded initiative running from 2024 to 2028, aimed at improving access to employment, education, and self-employment for people with disabilities. The programme provides funding to local, regional, and national organisations to deliver tailored supports, such as mentoring and training, and it also supports employers' engagement to enhance inclusion and job readiness for people with disabilities.[7]

On the employer side, the Reasonable Accommodation Fund, administered by the Department of Social Protection, provided grants to employers to reduce the financial barriers of providing reasonable accommodations for current or prospective employees with disabilities. Additionally, the Disability Awareness Support Scheme offered funding for training aimed at increasing awareness

[4] For further information, see Final review of progress under the Comprehensive Employment Strategy for People with Disabilities (2015–2024). – National Disability Authority.
[5] This programme was administered by Pobal, a state-sponsored organisation in Ireland with responsibility for administering and managing government and EU funding aimed at supporting social inclusion and addressing social disadvantage in the country.
[6] Ability-Progamme-Evaluation-Report-2018-2021-Final.pdf
[7] This programme is administered by Pobal.

and understanding of disability among employers and co-workers of people with disabilities. This fund, following a review, has been replaced by the Work and Access programme, which aims to remove or reduce barriers in the workplace for people with disabilities.

This paper aims to contribute to the existing literature on the labour market effects of the COVID-19 health pandemic by focusing on its impact on disabled peoples' unemployment status in Ireland relative to those without a disability. Specifically, the paper will explore the following three key research questions:

1. Was the unemployment impact of the COVID-19 pandemic between people with and without disabilities equal?
2. Did the impact vary by type of disability?
3. Was the pace of labour market recovery the same between disabled and non-disabled people?

The remainder of the paper is structured as follows. Section 2 outlines the data and methodology employed to address the aforementioned research questions. Section 3 provides an overview of the demographics and characteristics of the disabled and non-disabled populations analysed. Section 4 presents the results of the econometric models assessing the likelihood of unemployment, while Section 5 concludes with key findings and policy implications.

2. Data and methodology

The data used in this paper comes from the Labour Force Survey (LFS). The LFS, which is compiled by the Central Statistics Office (CSO),[8] is a nationally representative survey of households in Ireland. Its main objective is to provide quarterly data on labour market indicators, such as employment and unemployment. The survey is continuous and targets all private households: since Quarter 3 2018, a total of approximately 32,500 households are surveyed every quarter. Households participate in the survey on a voluntary basis for five consecutive quarters. In each quarter, one-fifth of the households surveyed are replaced, and the LFS sample involves an overlap of 80 per cent between consecutive quarters and 20 per cent between the same quarters in consecutive years.

An important point to note is that collection of the LFS data was affected by the COVID-19 pandemic. Traditionally, face-to-face interviews were used for the first interview, with follow-up interviews, where households agreed, conducted over the phone. However, when the Irish government introduced

[8] Ireland's national statistical data collection agency.

social distancing measures because of the pandemic, the CSO had to switch to telephone-only for the collection of LFS, and all household survey data towards the end of Quarter 1 (Q1) 2020. While the Q1 2020 LFS was only minimally affected by this change, response rates for the LFS in Quarter 2 (Q2) 2020, and the data themselves, were impacted by this enforced change in data collection mode to all telephone interviews. CSO household survey interviewers returned to face-to-face interviewing of some respondents during the second half of 2021, and the LFS is currently collected using a combination of face-to-face and telephone interviewing.[9] During the pandemic, the CSO undertook steps to mitigate against the impact of the pandemic on LFS response rates, and data reliability through weighting, calibration, non-response adjustment and other relevant methodologies.[10] While it is hoped that such steps will have minimised any impact on the data collected during the pandemic, and comparison of the LFS data over time, it cannot be ruled out that some observed differences between Q1 2020 and subsequent quarters, could be due to this change in data collection mode. In this paper, we use LFS data from Q2 2020 and Q2 2023: Q2 2020 is used to capture the COVID-19 pandemic period and Q2 2023 the economy at the end of the pandemic.[11] Since 2020, the LFS disability data are only captured in Q2. In addition, the disability questions asked in previous years to 2020 are different to those asked in Q2 2020 (and Q2 2023). For these reasons, we are not able to use 2019 LFS data, or Q1 2020 data, to examine the labour market situation for individuals with disabilities prior to the COVID-19 pandemic. However, in order to get some insight into this issue, we have examined the labour market status of those identified as having a disability in Q2 2020 and in Q1 2020.[12] These results, specifically their unemployment rate, are presented and discussed in Section 3 (Figure 3).In our analyses, we focus on the working-age population that are in the labour force.[13] This gives rise to a sample size of 10,084 individuals for 2020 and 11,951 for 2023. However, the data were weighted to ensure that these samples were representative of the working age labour force in Ireland in Q2 2020 and Q2 2023.

In this paper, we are examining individuals' risk of being unemployed relative to employed. The LFS includes two measures of a person's economic status: the International Labour Organization (ILO) measure, which is the official measure used in the published LFS to identify the numbers in employment, unemployment and inactivity, and a self-defined Principal Economic Status

[9] Background Notes Labour Force Survey Quarter 4 2024 - Central Statistics Office.
[10] Information Note on Implications of COVID-19 on the Labour Force Survey - Central Statistics Office.
[11] On the 05 May 2023, the World Health Organization (WHO) declared that the COVID-19 pandemic no longer constituted a public health emergency of international concern (WHO statement on COVID-19 pandemic).
[12] For comparability reasons, we have also done the same for those identified as not having a disability in Q2 2020.
[13] Employed and unemployed (i.e., labour force) individuals aged 15–64 years of age (i.e., working-age population). In addition to imposing this age restriction, we also exclude those that are self-employed, as this labour market operates differently to the employee labour market, and those with no economic sector information from the analysis.

(PES) measure. The official ILO measure was used in this paper to identify those in employment and unemployment.[14]

In relation to the disability information that is captured in the LFS, respondents are asked if they have a long-lasting condition or difficulty, type of disability[15] , and its impact on daily activities[16]. For the disability type information, in Q2 2020 and Q2 2023 respondents that indicated that they had a disability were asked the extent to which he/she experienced each disability, to which the person answered: (i) yes, to a great extent, (ii) yes, to some extent, and (iii) no. In the examinations conducted in this paper, we combine the (i) yes, to a great extent, and (ii) yes, to some extent categories[17] and compare this group to individuals that indicated that they did not have the specific disability in question (e.g., blind or visual impairment). With regards to the disability impact information, those with a disability were again asked the extent to which they experienced an effect (e.g., difficulty working). The response categories this time were: (i) yes, a lot, (ii) yes, a little, and (iii) no.[18]

In addition to containing information on an individual's economic and disability status, the LFS includes various demographic and socio-economic information on its participants (e.g., gender, age, educational attainment, citizenship, marital status, family unit type, geographic location, economic sector). These data were included as additional covariates in our estimated unemployment risk models.

For the models in which we included sector information, these data are measured according to the European industrial activity classification (NACE Rev.2). For the unemployed, this information relates to their previous sector of employment, while for the employed it is their current sector.[19]

In terms of our methodology, we began by estimating binary probit models to identify the characteristics associated with being unemployed and, in particular, the impact of having a disability on this outcome. The dependent variable for these models were set equal to 1 if the respondent was unemployed and 0 if he/she was employed. Initially, we included a dummy

[14] The ILO regards an individual to be in employment if he/she worked in the week before the survey for one hour or more for payment or profit, and includes all persons who had a job but were not at work in the week before because of illness, holidays, etc. An individual is defined as unemployed if, in the week before the survey, he or she was without work but was available for work and had taken specific steps in the preceding four weeks to find work (i.e. was looking for a job).
[15] (i) Blind or vision impairment, (ii) deaf or hearing impairment, (iii) difficulty with basis physical activities, (iv) intellectual disability, (v) difficulty with learning, remembering, concentrating, (vi) psychological, emotional or mental health, and (vii) difficulty with pain, breathing, or other chronic illness.
[16] (i) Difficulty dressing, (ii) difficulty going out, (iii) difficulty working/studying, and (iv) difficulty with other activities.
[17] Two categories combined because of small sample sizes for some of the responses and, therefore, the results not reliable.
[18] These data are not used in the analyses conducted in this paper.
[19] In addition to the previously listed data exclusions (footnote 8), individuals that never worked were also excluded.

variable to capture if an individual had a disability or not (Table 3), and then in a second specification we included dummy variables for the type of disability (Table 4). Our estimated specifications also included the various aforementioned controls, initially without including a set of controls that captured sector of current or previous employment (column 1 in each table) and then with such controls included (column 2 in each table).

The coefficient estimates produced through probit estimation cannot be readily interpreted as measuring the impact on the dependent variable (being unemployed) of a one-unit change in an explanatory variable (having a disability) because of the non-linear nature of the estimation procedure. Given this, we also calculated marginal effects after estimating the probit models, using the mean of the explanatory variable as the base, as marginal effects give a measure of the size of the relationship between the dependent variable and explanatory variables. The results from these analyses are presented in Tables 3 and 4. All specifications were weighted,[20] and they were also estimated using an estimation command that accounts for clustering of individuals within households in the LFS.[21]

After estimating our initial binary probit models (without and with sector controls), we ran a series of OLS regression models22 where we included 2023 year interaction terms to test for significant differences in the disability coefficients between the COVID-19 pandemic (Q2 2020) and economic recovery (Q2 2023) periods. If we find significant coefficients on these interaction terms, whether positive or negative, this indicates that there has been a significant change between the two time periods on the impact of having a disability (disability type) on an individual's unemployment risk. These results are presented in Table 6.

3. Descriptive results

We can see from Table 1 that 15.4 per cent of the working-age population in (Q2) 2020 reported having a disability. This rose marginally to 16.8 per cent in (Q2) 2023. The main type of disability reported in 2020 was difficulty with pain, breathing or other chronic illness, followed by difficulty with basic physical activities and psychological, emotional or mental health difficulties. These continued to be the main disabilities in 2023, with the percentages rising marginally between the two periods.

[20] Using the disability weight that the CSO now include in the LFS data, which they advise researchers to use for any disability analysis.
[21] The models were estimated using the STATA command vce (cluster varname) to correct for clustering.
[22] It was not possible to use probit models as interaction terms in nonlinear models cannot be interpreted straightforwardly as linearly separable effects. Therefore, Ordinary Least Squares (OLS) regression was used instead. While OLS can give rise to values outside of the 0–1 range, it is safer to use it than probit when interaction terms are included in a model (Gomila, 2020).

Table 1: Percentage of the working-age population with disabilities: 2020 and 2023

	2020 (Q2)	2023 (Q2)
Disability	15.4	16.8
Disability type:		
Blind or vision impairment	2.4	2.7
Deaf or hearing impairment	2.1	2.0
Difficulty with basic physical activities	5.4	6.2
Intellectual disability	1.8	2.2
Learning, remembering, concentrating	4.1	3.9
Psychological, emotional or mental health	4.7	4.9
Difficulty with pain, breathing or other chronic illness	6.6	8.0

Source: Constructed using LFS data, Q2 2020 and Q2 2023.

Note: Working-age population is defined as those aged 15–64.

In Table 2, we present a profile of working age individuals with and without disabilities. We can see from this table that those with disabilities tend to be older – 30 per cent are aged 55–64 compared to only 15.4 per cent of those without a disability. A larger percentage also have lower levels of education – 30 per cent have a lower secondary or less qualification compared to 16 per cent of those without a disability. A smaller percentage of individuals with disabilities are employed, 51 per cent compared to 78 per cent of those without a disability, while a much larger percentage are inactive – 45 per cent compared to 19 per cent of those without a disability. A higher proportion of those with a disability are Irish citizens (87 per cent compared to 81 per cent). The main economic sector of employment for both groups is the health sector, followed by retail and industry. Those with and without disabilities are also similar with regards to gender, marital status and geographic location.

Table 2: Profile of the working-age population with and without disabilities: 2023 (Q2)

	Without disabilities	With disabilities
Gender:		
Male	49.6	47.8
Female	50.4	52.2
Age:		
15–19	10.3	8.6
20–24	9.5	7.4
25–35	19.4	13.9
35–44	24.1	19.4
45–54	21.3	21.1
55–64	15.4	29.6
Citizenship:		
Irish	80.7	87.0
UK	1.7	[2.1]
EU-15	2.7	[1.9]
NMS	6.2	4.7
Africa	0.9	*
Asia	4.1	*
North America, Australia and Oceania	0.6	*
Rest of Europe/world	3.1	*
Educational attainment:		
Primary or less	4.1	10.4
Lower secondary	11.5	19.2
Upper secondary	23.5	23.0
Post secondary	11.7	13.7
Ordinary degree	7.5	6.9
Higher/post-graduate degree	39.8	24.5
Education unknown	1.9	2.3
Marital status:		
Single	46.7	47.3
Married	48.8	41.5
Widowed	0.9	2.1
Divorced	3.7	9.1
Family status:		
Couple no children	15.7	15.5
Couple children	57.7	45.1
Lone parent	12.6	18.5
Not in family unit	14.0	20.9
Geographic location:		
Dublin	29.8	28.8
Border	7.7	8.3
Midlands	6.1	5.6
West	9.3	8.9
Mid-East	14.9	13.6
Mid-West	9.8	9.2
South-East	8.3	10.9
South-West	14.2	14.7

Table 2: Continued

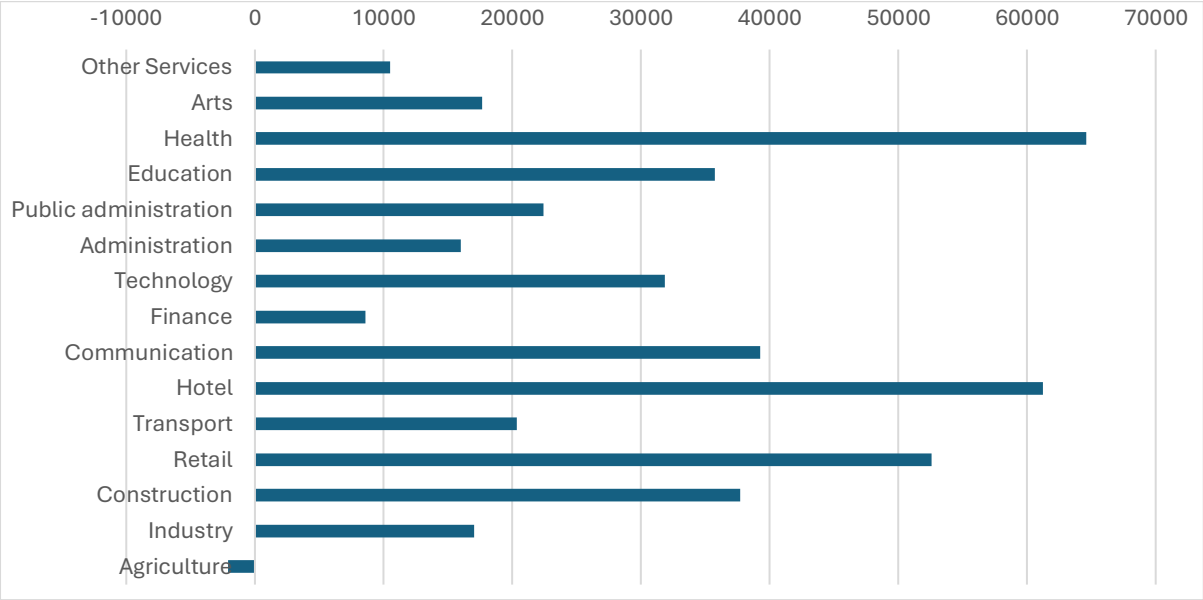
	Without disabilities	With disabilities
ILO:		
Employed	77.9	50.8
Unemployed	3.3	4.4
Inactive	18.8	44.8
Economic sector of employment:		
Agriculture	2.8	[3.3]
Industry	12.1	13.3
Construction	6.6	5.2
Retail	12.8	12.6
Transport	4.2	4.9
Hotel	6.8	6.1
Communication	6.8	6.4
Finance	5.4	4.1
Technology	6.7	6.0
Administration	4.0	6.1
Public administration	5.6	4.5
Education	8.4	7.9
Health	13.4	14.7
Arts	2.2	*
Other services	2.2	*
Unknown	*	*

Source: Constructed using Q2 2023 LFS data.

Note: [ ] indicates that results need to be interpreted with caution; * means the result cannot be presented as the sample size on which it is based on is too small (i.e., less than 20 observations).

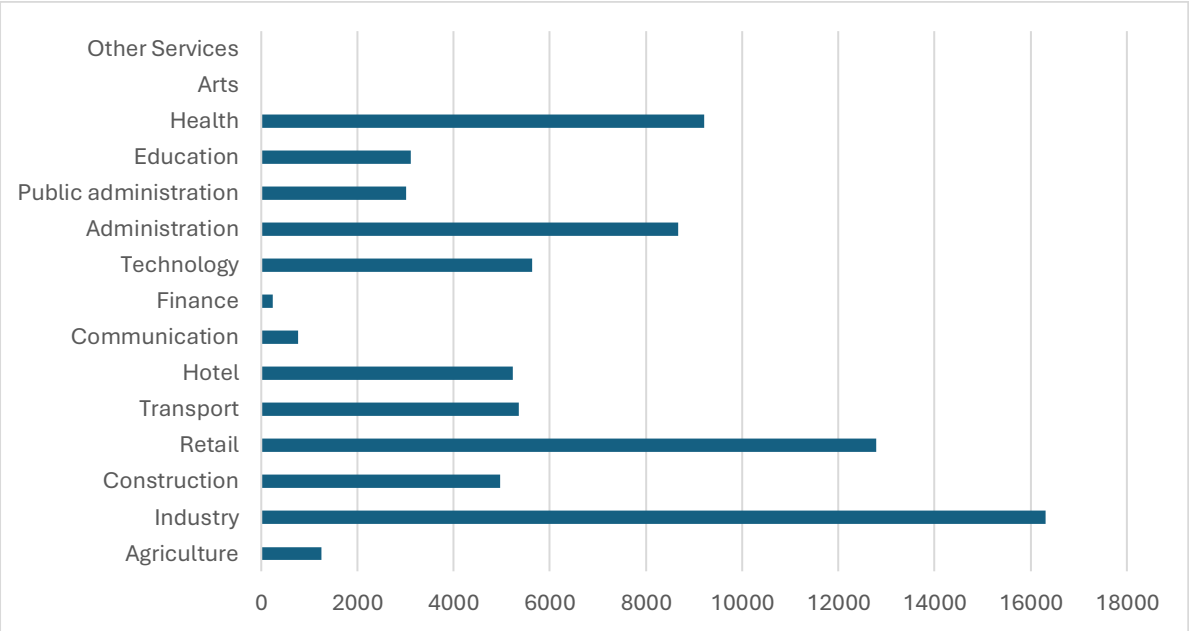
In Figures 1 and 2, we present sectoral changes in employment between 2020 and 2023 for those without and with disabilities respectively. For those without disabilities (Figure 1), apart from agriculture, there was a growth in employment across all sectors, in particular the health, accommodation, and retail sectors. Those with disabilities (Figure 2) saw a growth in employment across all reported sectors, especially the industry and retail sectors.

Figure 1: Sectoral change in employment between 2020 and 2023 for individuals without disabilities



Source: Constructed using LFS data, Q2 2020 and Q2 2023.

Figure 2: Sectoral change in employment between 2020 and 2023 for individuals with disabilities



Source: Constructed using LFS data, Q2 2020 and Q2 2023.

Note: Other services and arts sectors results cannot be presented due to small samples.

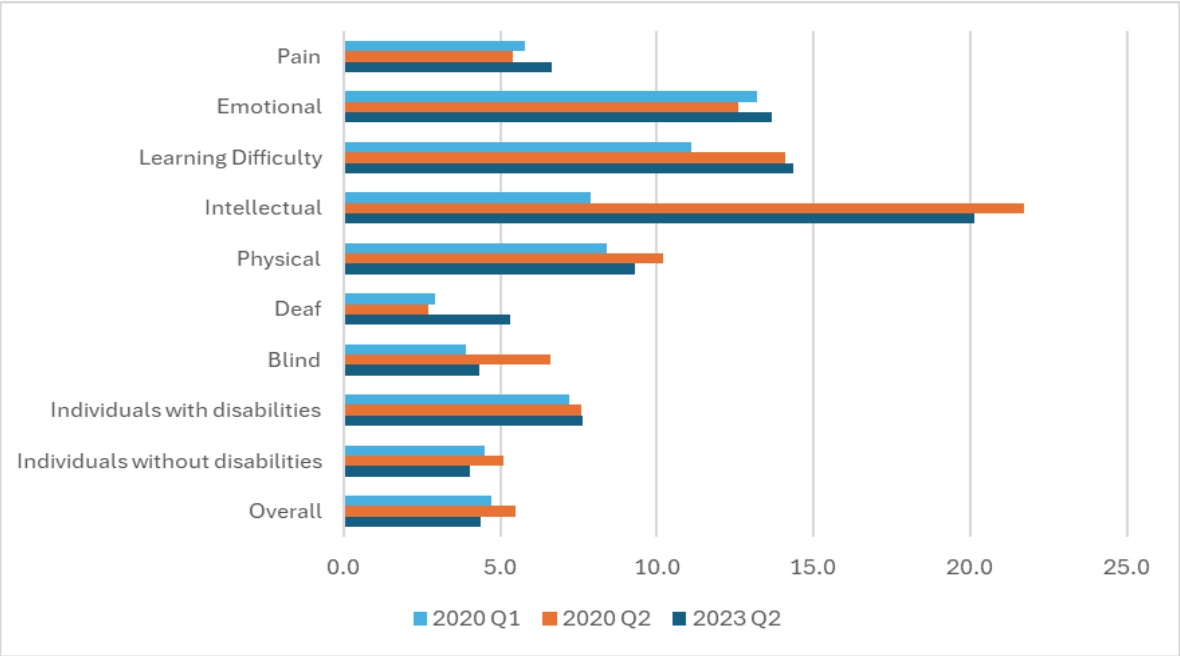
In Figure 3 we illustrate the unemployment rates of individuals with and without disabilities just prior to the COVID-19 pandemic (Q1 2020), during the pandemic (Q2 2020), and after (Q2 2023).[23] Just before the start of the COVID-19 pandemic, the overall unemployment rate stood at 4.7 per cent. After its onset (Q2 2020), the standard ILO unemployment rate increased to 5.4 per cent. It then declined to 4.4 per cent after, lower to what the rate had been just before the commencement of the COVID-19 pandemic.

For those without a disability, their unemployment rate followed a similar pattern to the overall rate – rising during the pandemic and then returning afterward to a rate lower to what it had been at the start. However, for those with a disability, starting off with a somewhat higher unemployment rate to those without – 7.2 per cent compared to 4.5 per cent, their rate increased to 7.6 per cent during the COVID-19 pandemic and continued to remain at this higher level after the pandemic.

Those with a psychological, emotional or mental health difficulty had the highest unemployment rate prior to the pandemic (13.2 per cent) and those who are deaf or have a hearing impairment the lowest (2.9 per cent). With the onset of the COVID-19 pandemic, those with an intellectual disability had the highest unemployment rate (21.7 per cent), followed by those with difficulty learning, remembering or concentrating (14.1 per cent) and those with a psychological, emotional or mental health difficulty (12.6 per cent). Those who were deaf or had a hearing impairment continued to have the lowest unemployment rate in Q2 2020 (2.7 per cent). Apart from those who were deaf or had a hearing impairment, and those who had difficulty with pain, breathing or other chronic illnesses, the unemployment rates for all other disability type groups increased during the onset of the pandemic. After the COVID-19 pandemic (Q2 2023), the unemployment rate declined marginally for some disability type groups but did not return to their pre-pandemic levels (e.g., blindness or vision impairment, difficulty with basic physical activities and intellectual disability), while for other groups, the rate increased further (e.g., difficulty with learning, remembering or concentrating and psychological, emotional or mental health issues). Those who were deaf or had a hearing impairment, and those who had difficulty with pain, breathing or other chronic illnesses, also saw their unemployment rates rise in the recovery period, even though they had not increased in the early stages of the COVID-19 pandemic.

[23] We undertook statistical significance tests on the unemployment rate results presented in this figure and the observed differences are statistically significant.

Figure 3: Unemployment rates of those with and without disabilities: 2020 and 2023 (%)



Source: Constructed using LFS data, Q1 2020, Q2 2020 and Q2 2023.

Descriptively then, the pace of labour market recovery from the COVID-19 pandemic has not been the same for individuals with and without disabilities: there has been recovery for those without a disability, while for disabled people there has been no recovery, and for some disability type groups, their unemployment rates increased further during the recovery period. In the next section, we will econometrically examine this issue. Specifically, what impact having a disability has on someone's likelihood of being unemployed during the COVID-19 pandemic (Q2 2020) and what has happened to this effect in the recovery period (i.e., Q2 2023).

4. Econometric results

Table 3 presents the results from our probit models of the impact of having a disability on being unemployed relative to employed in both 2020 and 2023. Model 1 excludes sector of employment, while Model 2 adds current/previous sector of employment.

In 2020, there was no difference between men and women with regards to their risk of being unemployed, but after the COVID-19 pandemic men were significantly more likely than women to be unemployed. This result continues to hold when we control for economic sector, albeit it is not as strong. During the COVID-19 pandemic, those aged 20–24, 25–34 and 55–64 were more likely to be unemployed compared to those aged 35–44, but the size of this

effect was much larger among those aged 20–24. After the COVID-19 pandemic, however, and when we control for economic sector, this age effect almost disappears, with those aged 55–64 the only age category more likely to be unemployed compared to those aged 35–44, while those aged 15–19 were less likely to be unemployed compared to those aged 35–44, and those aged and 45–54 marginally so.

Those with a post-secondary qualification were more likely to be unemployed compared to those with a primary or less qualification during the COVID-19 pandemic. This was also the case for those with an upper secondary or ordinary degree qualification, albeit the strength of these two effects are weak. However, once you control for economic sector, these results no longer hold, with those with an ordinary degree now being considerably less likely to be unemployed compared to those with a primary or less qualification. After the COVID-19 pandemic, all those with a qualification above primary or less appear to be more likely to be unemployed, but this education effect disappears once you control for economic sector.

In relation to our key variable of interest, we find that those individuals with a disability are more likely to be unemployed during the COVID-19 pandemic. This continues to be the case when we control for economic sector, with the size of the effect increasing marginally from 2.6 percentage points to 2.7 percentage points. In 2023, individuals with a disability continue to be more likely to be unemployed compared to those people without a disability, with the effect again being smaller once we control for economic sector of employment (2.4 percentage points compared to 2 percentage points when sector of employment is controlled for).

Table 3: Probit model of unemployment – disability: 2020 and 2023 (marginal effects)

	Model 1 (no sector)		Model 2 (sector)	
	2020	**2023**	**2020**	**2023**
Disability	0.026***	0.024***	0.027***	0.020***
	(0.009)	(0.004)	(0.009)	(0.003)
Gender (ref female):				
Male	0.007	0.008***	0.002	0.006*
	(0.005)	(0.002)	(0.004)	(0.003)
Age (ref age 35–44):				
Age 15–19	0.017	-0.003	0.013	-0.006**
	(0.011)	(0.002)	(0.009)	(0.002)
Age 20–24	0.043***	0.009	0.038***	0.006
	(0.010)	(0.006)	(0.010)	(0.006)
Age 25–34	0.022***	0.003*	0.021***	0.002
	(0.005)	(0.002)	(0.004)	(0.002)
Age 45–54	0.006	-0.006*	0.007	-0.005*
	(0.005)	(0.003)	(0.006)	(0.002)
Age 55–64	0.016***	0.004*	0.017***	0.005***
	(0.006)	(0.002)	(0.007)	(0.002)
Marital status (ref married):				
Single	0.031***	0.015***	0.027***	0.013***
	(0.005)	(0.001)	(0.006)	(0.001)
Widow	-0.010**	0.002	-0.008**	0.004
	(0.004)	(0.005)	(0.004)	(0.005)
Divorced	0.037***	0.026***	0.033***	0.024***
	(0.008)	(0.008)	(0.008)	(0.007)
Family status (ref couple, no children):				
Couple, with children	0.010**	0.010***	0.009**	0.009***
	(0.005)	(0.003)	(0.005)	(0.002)
Lone parent	0.020***	0.022***	0.017***	0.018***
	(0.005)	(0.003)	(0.005)	(0.003)
Not in family unit	0.005	0.006	0.004	0.004
	(0.008)	(0.004)	(0.008)	(0.003)
Citizenship (ref Irish):				
UK	0.034	-0.000	0.026	-0.002
	(0.029)	(0.005)	(0.023)	(0.004)
EU-13	0.015	0.010	0.009	0.002
	(0.011)	(0.017)	(0.012)	(0.011)
New Member States (NMS)	0.035***	0.010***	0.025***	0.006**
	(0.003)	(0.004)	(0.003)	(0.003)
Africa	0.034	0.030	0.040	0.022
	(0.029)	(0.022)	(0.033)	(0.019)
Asia	-0.004	0.024**	-0.007	0.022**
	(0.020)	(0.012)	(0.016)	(0.012)
North America, Australia, Oceania	0.144	0.043	0.151	0.027*
	(0.155)	(0.031)	(0.157)	(0.019)
Rest of Europe/World	0.014	-0.000	0.007	-0.005
	(0.022)	(0.004)	(0.022)	(0.004)
UK	0.034	-0.000	0.026	-0.002

Table 3: Continued

	Model 1 (no sector)		Model 2 (sector)	
	2020	**2023**	**2020**	**2023**
Educational attainment (ref primary or less):				
Lower secondary	0.046	-0.004	0.043*	-0.004
	(0.031)	(0.004)	(0.027)	(0.005)
Upper secondary	0.025*	0.001	0.024**	0.002
	(0.014)	(0.006)	(0.011)	(0.006)
Post secondary	0.033**	-0.002	0.036***	-0.000
	(0.014)	(0.007)	(0.011)	(0.007)
Ordinary degree	0.024*	-0.015***	0.032***	-0.012
	(0.013)	(0.005)	(0.011)	(0.005)
Higher/post-graduate degree	0.009	-0.009	0.017*	-0.005
	(0.011)	(0.006)	(0.008)	(0.006)
Location (ref Dublin):				
Border	0.008	0.002	0.010	0.005
	(0.009)	(0.006)	(0.010)	(0.007)
Midlands	0.005***	-0.012	0.005*	-0.009
	(0.002)	(0.009)	(0.003)	(0.008)
West	0.002	-0.007***	0.001	-0.005***
	(0.011)	(0.002)	(0.010)	(0.002)
Mid-East	-0.002	-0.009**	-0.001	-0.008**
	(0.004)	(0.004)	(0.004)	(0.003)
Mid-West	0.000	0.001	0.001	0.001
	(0.011)	(0.004)	(0.011)	(0.004)
South-East	0.007	0.004	0.006	0.005
	(0.008)	(0.013)	(0.007)	(0.011)
South-West	-0.001	-0.003	-0.002	-0.002
	(0.003)	(0.003)	(0.003)	(0.002)

Table 3: Continued

	Model 1 (no sector)		Model 2 (sector)	
	2020	2023	2020	2023
Sector (ref industry):				
Agriculture, forestry and fishing			-0.016**	-0.016*
			(0.006)	(0.004)
Construction			0.011**	0.000
			(0.006)	(0.010)
Wholesale and retail			0.003	0.003
			(0.005)	(0.005)
Transportation and storage			0.017	0.002
			(0.013)	(0.009)
Accommodation and food			0.023***	0.022**
			(0.007)	(0.012)
Information and communication			-0.001	0.018***
			(0.011)	(0.005)
Finance, insurance and real estate			-0.007	-0.003
			(0.004)	(0.002)
Professional, scientific and technical			-0.008	0.007
			(0.008)	(0.016)
Administrative and support services			0.022	0.033*
			(0.023)	(0.025)
Public administration and defence			-0.019***	-0.011**
			(0.003)	(0.004)
Education			-0.016*	-0.006
			(0.007)	(0.006)
Health and social work			-0.020***	-0.011*
			(0.004)	(0.005)
Creative, arts and entertainment			0.043***	0.011
			(0.021)	(0.011)
Other services			0.017	0.033**
			(0.021)	(0.024)
Observations	8,333	9,612	8,333	9,612
Pseudo R-squared	0.0722	0.0535	0.0937	0.0781

Note: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

In Table 4, we examine the impact that disability type has on an individual's unemployment risk. All our other covariate results (e.g., age, gender, educational attainment) are in-line with those presented in Table 3.

We can see from Table 4 that those with basic physical activity difficulties, learning, remembering or concentrating difficulties, or psychological, emotional or mental health issues are significantly more likely to be unemployed compared to those that do not have a disability during the COVID-19 pandemic, and, apart from those with learning, remembering or concentrating difficulties, these results continue to hold after the pandemic (2023).

Those with an intellectual difficulty are also more likely to be unemployed compared to those that do not have a disability after the COVID-19 pandemic, with the strength of this effect increasing once we control for economic sector of employment.

Those who are deaf or have a hearing impairment are the only group that we find are less likely to be unemployed compared to those that do not have a disability during the COVID-19 pandemic, and this is the case whether or not we control for economic sector. However, after the pandemic (2023), and once we control for economic sector, we find that these individuals are more likely to be unemployed compared to those that do not have a disability.

Table 4: Probit model of unemployment – disability type: 2020 and 2023 (marginal effects)

	Model 1 (no sector)		**Model 2 (sector)**	
	2020	**2023**	**2020**	**2023**
Disability type (ref not the specific disability):				
Blind or vision impairment	0.011	-0.009	0.011	-0.009
	(0.009)	(0.008)	(0.009)	(0.007)
Deaf or hearing impairment	-0.020***	0.026	-0.020***	0.027***
	(0.003)	(0.017)	(0.003)	(0.014)
Difficulty with basic physical activities	0.051***	0.037***	0.051***	0.034***
	(0.005)	(0.006)	(0.005)	(0.003)
Intellectual disability	0.014	0.016*	0.015	0.013**
	(0.016)	(0.008)	(0.015)	(0.008)
Learning, remembering, concentrating difficulty	0.021**	0.011	0.022***	0.012
	(0.008)	(0.018)	(0.011)	(0.019)
Psychological, emotional or mental health issue	0.033**	0.031***	0.030***	0.026***
	(0.015)	(0.008)	(0.013)	(0.009)
Pain, breathing or chronic illness difficulty	-0.005	-0.003	-0.004	-0.002
	(0.012)	(0.005)	(0.013)	(0.005)
Gender (ref female):				
Male	0.007	0.008***	0.002	0.005*
	(0.005)	(0.002)	(0.004)	(0.003)
Age (ref age 35–44):				
Age 15–19	0.016	-0.004	0.013	-0.006**
	(0.010)	(0.002)	(0.009)	(0.003)
Age 20–24	0.042***	0.009	0.037***	0.006
	(0.010)	(0.006)	(0.010)	(0.005)
Age 25–34	0.021***	0.003	0.020***	0.002
	(0.005)	(0.002)	(0.004)	(0.002)
Age 45–54	0.006	-0.005*	0.007	-0.005**
	(0.005)	(0.003)	(0.006)	(0.002)
Age 55–64	0.016***	0.005*	0.017***	0.005**
	(0.006)	(0.002)	(0.006)	(0.002)

Table 4: Continued

	Model 1 (no sector)		Model 2 (sector)	
	2020	**2023**	**2020**	**2023**
Marital status (ref married):				
Single	0.031***	0.014***	0.027***	0.013***
	(0.004)	(0.001)	(0.005)	(0.001)
Widow	-0.011***	0.003	-0.009***	0.004
	(0.003)	(0.008)	(0.003)	(0.007)
Divorced	0.037***	0.025***	0.033***	0.023***
	(0.007)	(0.007)	(0.007)	(0.006)
Family status (ref couple, no children):				
Couple, with children	0.010**	0.010***	0.009**	0.009***
	(0.005)	(0.002)	(0.005)	(0.002)
Lone parent	0.018***	0.021***	0.016***	0.018***
	(0.005)	(0.003)	(0.005)	(0.003)
Not in family unit	0.004	0.005	0.004	0.004
	(0.008)	(0.003)	(0.008)	(0.003)
Citizenship (ref Irish):				
UK	0.032	-0.000	0.024	-0.002
	(0.027)	(0.005)	(0.022)	(0.004)
EU-13	0.013	0.010	0.007	0.003
	(0.011)	(0.017)	(0.012)	(0.012)
New Member States (NMS)	0.034***	0.011***	0.024***	0.006**
	(0.003)	(0.004)	(0.003)	(0.003)
Africa	0.032	0.033	0.037	0.025*
	(0.028)	(0.022)	(0.032)	(0.018)
Asia	-0.004	0.025**	-0.007	0.023**
	(0.019)	(0.012)	(0.015)	(0.012)
North America, Australia, Oceania	0.149	0.041	0.156*	0.026*
	(0.156)	(0.032)	(0.158)	(0.020)
Rest of Europe/world	0.013	0.000	0.007	-0.005
	(0.021)	(0.004)	(0.021)	(0.004)
Educational attainment (ref primary or less):				
Lower secondary	0.046	-0.004	0.043*	-0.004
	(0.033)	(0.004)	(0.030)	(0.004)
Upper secondary	0.025*	0.001	0.024**	0.002
	(0.015)	(0.006)	(0.012)	(0.007)
Post secondary	0.033**	-0.002	0.036***	-0.000
	(0.015)	(0.007)	(0.013)	(0.007)
Ordinary degree	0.024*	-0.014***	0.032***	-0.011
	(0.015)	(0.005)	(0.013)	(0.006)
Higher/post-graduate degree	0.009	-0.008	0.018*	-0.004
	(0.012)	(0.006)	(0.009)	(0.006)

Table 4: Continued

	Model 1 (no sector)		Model 2 (sector)	
	2020	**2023**	**2020**	**2023**
Location (ref Dublin):				
Border	0.008	0.002	0.010	0.005
	(0.008)	(0.006)	(0.009)	(0.007)
Midlands	0.005***	-0.012	0.005*	-0.009
	(0.002)	(0.009)	(0.003)	(0.008)
West	0.001	-0.007***	0.001	-0.005***
	(0.012)	(0.002)	(0.010)	(0.002)
Mid-East	-0.002	-0.010***	-0.001	-0.008**
	(0.004)	(0.004)	(0.004)	(0.003)
Mid-West	-0.000	0.001	0.001	0.002
	(0.010)	(0.004)	(0.011)	(0.004)
South-East	0.008	0.005	0.007	0.006
	(0.009)	(0.013)	(0.007)	(0.011)
South-West	-0.001	-0.003	-0.002	-0.002
	(0.003)	(0.003)	(0.003)	(0.002)
Sector (ref industry):				
Agriculture, forestry and fishing			-0.016**	-0.016*
			(0.005)	(0.004)
Construction			0.012**	-0.000
			(0.006)	(0.010)
Wholesale and retail			0.003	0.002
			(0.004)	(0.005)
Transportation and storage			0.018	0.002
			(0.013)	(0.009)
Accommodation and food			0.024***	0.021**
			(0.008)	(0.012)
Information and communication			-0.001	0.016***
			(0.011)	(0.005)
Finance, insurance and real estate			-0.006	-0.003
			(0.003)	(0.002)
Professional, scientific and technical			-0.007	0.006
			(0.008)	(0.016)
Administrative and support services			0.022	0.032*
			(0.022)	(0.024)
Public administration and defence			-0.019***	-0.012***
			(0.003)	(0.003)
Education			-0.015*	-0.007
			(0.007)	(0.006)
Health and social work			-0.019***	-0.011*
			(0.004)	(0.005)
Creative, arts and entertainment			0.044***	0.010
			(0.022)	(0.010)
Other services			0.019	0.034**
			(0.020)	(0.023)
Observations	8,333	9,612	8,333	9,612
Pseudo R-squared	0.0766	0.0598	0.0978	0.0848

Note: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

Given this finding for people who are deaf or have a hearing impairment, we used propensity score matching (PSM) to check the robustness of the result. This methodology accounts for potential selection effects, in this case, being deaf or having a hearing impairment, by matching treatment and control group individuals on key observable characteristics. We used individuals that did not have a disability as our control group, with our treatment groups defined as those who were deaf or had a hearing impairment. PSM is a two-step non-parametric technique that is designed to address the non-random selection that exists in treatment groups. In step one, each individual's probability (or propensity score) of receiving the treatment, in this case being deaf or having a hearing impairment, is assessed conditional on a set of explanatory variables (e.g., age, gender, educational attainment). Treatment and control group individuals are then matched on the basis of their propensity scores, which is equivalent to matching on the key characteristics of the treatment group. In the second step, the average outcome measures of the treatment and control groups are compared. In this case, risk of unemployment.

The results from this sensitivity check showed that the negative (positive) result from being deaf or having a hearing impairment on the risk of being unemployed in 2020 (2023) held when we tested for sample selection bias, albeit the effect is weaker (Table 5).

Table 5: PSM model of impact of having a hearing difficulty on risk of unemployment: 2020 and 2023

	2020	2023
No. years on IC panel:		
Deaf or hearing impairment	-0.0163*	0.036**
	(0.0124)	(0.0206)

Notes: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

To test the validity of our PSM results, we undertook the 'pstest' diagnostic test in Stata. This test examines the extent to which individuals in the treatment group were matched with individuals in the control group across a range of observable characteristics, i.e., that the data are balanced. The results showed that the data are perfectly balanced.[24]

Table 6 below presents the results from our 2023 year interaction model, specifically for the economic sector of employment specification. In particular, this interaction model estimates whether the change in unemployment risk between 2020 and 2023 for our disability/disability type variables are statistically significant. 'Yes' indicates that the change over time in

[24] Results available from the authors on request.

unemployment risk presented in Tables 3 and 4 was statistically significant and ‘no’ indicates that the change was not significant.

It can be seen clearly from Table 6 that the change observed for the impact of having a disability on an individual’s risk of unemployment between the COVID-19 pandemic and after the pandemic is not statistically significant. In other words, this risk has not changed over time. With regards to those who are deaf or have a hearing impairment, however, the increased risk of being unemployed between 2020 and 2023 is statistically significant, but the changes in unemployment risk observed for the other disability types are not statistically significant.

Table 6: Probit model of unemployment: Significant change in impact of disability on risk of unemployment between 2020 and 2023 (sector controls included)

	Interaction model results
Disability	No
Disability type (ref not the specific disability):	
Blind or vision impairment	No
Deaf or hearing impairment	Yes
Difficulty with basic physical activities	No
Intellectual disability	No
Learning, remembering, concentrating difficulty	No
Psychological, emotional or mental health issue	No
Pain, breathing or chronic illness difficulty	No

Note: See Table 4 for marginal effect results. All other controls were also included in interaction models (e.g., age, gender, educational attainment, geographic location): results available from the authors on request.

5. Conclusions and discussion

In this paper, we used the CSO’s Labour Force Survey (LFS) data, specifically Quarter 2 (Q2) 2020 and Q2 2023 data, to examine the labour market impact of the COVID-19 pandemic on individuals with disabilities compared to those without. Q2 2020 captures the beginning of the COVID-19 pandemic, while Q2 2023 reflects the state of the economy after the pandemic's peak. In addition to the regular labour market and demographic information that is captured in the LFS, its 2020 and 2023 Q2 data provides detailed information on an individual’s disability status. Specifically, data are collected on whether an individual has a disability, the nature of the disability that they experience (blindness, deafness, physical, intellectual, etc.), and its impact on daily activities (e.g., working and studying). Using these data, this paper investigates the risk of unemployment for disabled people of working age

compared to those without a disability during the COVID-19 pandemic and the post-COVID-19 pandemic period. In particular, we examine the unemployment rates of those people with and without disabilities prior to the pandemic, to see if there are differences in their labour market status before the onset of the COVID-19 pandemic, what happened when the pandemic commenced, and then during the recovery period. We also econometrically examine the impact of having a disability on someone's unemployment risk during the pandemic and then what its effect is during the recovery period.

Descriptive results show that 15.4 per cent of the working-age population reported having a disability during the onset of the COVID-19 pandemic (Q2 2020), and this had increased slightly to 16.8 per cent during the recovery period (Q2 2023). In both 2020 and 2023, the most commonly reported disabilities were chronic pain, followed by physical and emotional difficulties. When considering employment characteristics, fewer individuals with disabilities were employed in 2023, 51 per cent compared to 78 per cent of those without disabilities. A larger proportion of people with disabilities were also inactive25 in 2023, 45 per cent compared to 19 per cent of those without disabilities. However, both groups shared some similar employment characteristics. For example, the most common sectors of employment for both groups were health, retail, and industry.

At the start of the COVID-19 pandemic, the unemployment rate for people with disabilities rose slightly from 7.2 per cent in Q1 2020 to 7.6 per cent in Q2 2020, mirroring the trend for those without disabilities, though the increase was marginally greater for individuals without disabilities, with their rate of unemployment rising from 4.5 per cent in Q1 2020 to 5.1 per cent in Q2 2020. However, this overall trend masks notable disparities between disability types. Specifically, the rise in unemployment was especially sharp for individuals with intellectual disabilities, with their rate of unemployment going from 7.9 per cent in Q1 2020 to 21.7 per cent in Q2 2020. This was the highest unemployment rate among all disability groups. The increase was also quite large for those with blindness and vision impairments, although they had a relatively low unemployment rate in absolute terms. By Q2 2023, the overall unemployment rate had returned to levels similar to Q1 2020. This was also the case for individuals without disabilities. However, in general, people with disabilities did not experience the same labour market recovery as their unemployment rate in Q2 2023 remained at the high level at the onset of the COVID-19 pandemic (7.6 per cent, Q2 2020). The unemployment rates for those with an intellectual disability (though still the highest), physical, and blindness and vision impairment did show some improvement compared to Q2 2020, but the unemployment rates for any of the disability type categories did not return to their pre-pandemic levels, and for those with chronic pain, emotional

[25] Inactive are those people not in the labour force, i.e., they are nether employed or unemployed.

difficulties, learning disabilities, and hearing impairments, their rates increased compared to Q1 2020.

The results from the econometric models, controlling for peoples' demographics and economic sector of employment, support the descriptive findings. Specifically, they show that individuals with disabilities were 2.7 percentage points more likely to be unemployed during the COVID-19 pandemic (Q2 2020) compared to those without disabilities. The results from the econometric analysis also showed that even in 2023 people with disabilities remained more likely to be unemployed compared to their non-disabled counterparts (2 percentage points).

The same analysis by disability type revealed that individuals with physical or emotional disabilities were significantly more likely to be unemployed compared to those without disabilities, both during and after the pandemic. For people with intellectual disabilities, the likelihood of unemployment was also high during the COVID-19 pandemic, though this effect weakened and became insignificant once economic sector of employment was accounted for. However, by 2023, they remained statistically more likely to be unemployed, even after controlling for their economic sector.

For individuals with learning disabilities, the likelihood of unemployment was also high during the COVID-19 pandemic, after controlling for economic sector of employment, but this was no longer the case post-pandemic. In contrast to these results, people with hearing impairments were less likely to be unemployed compared to those without a disability during the pandemic, and this held true even when controlling for their economic sector of employment. However, in 2023, once economic sector was controlled for, they were more likely to be unemployed than those without a disability.

Finally, our model's inclusion of a time interaction term revealed that, except for hearing impairments, the impact of disabilities on unemployment risk remained largely stable from the COVID-19 pandemic period to the post-pandemic period.

The findings of this study reveal that while people of working age, regardless of disability status, experienced an increase in unemployment during the COVID-19 pandemic, people with disabilities have not seen the same recovery as those without disabilities. This disparity highlights the importance and need for targeted policy interventions for keeping and supporting the reintegration of people with disabilities into the labour market, particularly following disruptions such as the COVID-19 pandemic, or any future economic recessions or societal crises that may disproportionately affect groups which may be made vulnerable by circumstances or disabling barriers in society, such as people with disabilities.

Several policies could be developed and implemented, and/or existing policies enhanced, to help protect the employment of individuals with disabilities and provide necessary support during periods of economic crises. One such policy could be the development of targeted inclusive workplace practices aimed at retaining employees with disabilities in their current roles. Depending on the sector, promoting flexible work arrangements, such as remote working, an approach that proved beneficial during the pandemic for many sectors and businesses, could significantly support individuals with disabilities, particularly those experiencing chronic pain or emotional disabilities.

Sector-specific interventions could also play a significant contribution. The study highlights that many individuals with disabilities are employed in sectors such as health and retail, which were particularly vulnerable to economic disruptions during the COVID-19 pandemic. Collaborating with employers to create inclusive opportunities within these sectors, including the possibility of job retention or reassignment to roles less vulnerable to disruption, could better protect people with disabilities during times of economic, or other, disruptions.

One policy that was recently rolled out that could support people with disabilities to enter/retain employment, in periods of economic crises or otherwise, is the Work and Access scheme, an initiative that supports people with a disability to get a job, or to stay in work, by removing or reducing barriers in the workplace (communication support, in-work support, personal reader, work equipment, etc.). This scheme was only introduced in 2024; therefore, it will take some time before its effectiveness can be assessed. Nevertheless, it will be important that the scheme is evaluated in time to identify if it is achieving its objectives around helping people with disabilities to obtain, or stay in, employment.

Financial incentives, like a wage subsidy scheme, is another potential policy option for supporting people with disabilities to obtain and/or retain employment, in both economically challenging and non-economically challenging times. The Temporary COVID-19 Wage Subsidy Scheme (TWSS) that was introduced in Ireland in early 2020, and later replaced by the Employment Wage Subsidy Scheme (EWSS) in late 2020, along with broader financial measures in response to the COVID-19 pandemic, successfully helped preserve many jobs and businesses in Ireland during the pandemic, offering financial security to employees affected by sectoral disruptions.[26] This is also likely to have included people with disabilities. In general, wage subsidy schemes are often used by governments across OECD countries to support employers to hire and/or retain employees, often in times of economic crises but such schemes are also often introduced to target certain subgroups

[26] Wage Subsidy Scheme ends after 2 years of unprecedented support to employers.

in the populations that can find it difficult to gain entry to employment, such as youths and the long-term unemployed. This can also include people with disabilities, as has been the case in Ireland. Specifically, the Irish Wage Subsidy Scheme (WSS) for people with disabilities was implemented as a three-year pilot programme in 2005. After a review of this pilot, the WSS was introduced as a permanent, non-statutory, scheme in 2008. The WSS supports employers in the private sector to offer substantial and sustainable employment to people with disabilities. In 2020, the government made a commitment in its programme for government to improve and expand on its targeted employment schemes, including the WSS, to assist more people with disabilities to remain in employment. A review of the scheme in 2024 led to a number of recommendations, with a revised WSS put in place in June 2025 (Department of Social Protection, 2024).[27] The WSS, however, has never been formally evaluated, using counterfactual impact evaluation (CIE) techniques,[28] to assess if the scheme is effective in assisting people with disabilities to either obtain or stay in employment. Given that this is one of the main schemes used by the government to assist people with disabilities into employment, it is important that the WSS is formally evaluated, after the revised scheme becomes embedded, to ensure it is meeting its objectives.

Targeted employment support programmes are also essential for assisting people with disabilities to re-enter the workforce. Enhanced job placement services tailored to the unique needs of individuals with disabilities, particularly those with intellectual disabilities, learning difficulties or emotional difficulties, can help address the higher unemployment rates that these groups face. Existing examples of these services include Employability, the Individual Placement and Support Model, and WorkAbility, but there is room for these schemes to be scaled up. There is also a need for a national system of supported employment to be developed to support those with higher support needs. Additionally, vocational training programmes, such as the Vocational Training Opportunities Scheme (VTOS) and Specialist Training Provision specifically designed to match the abilities and interests of people with disabilities could help close the skills gap and improve, for example, employability in sectors less prone to disruption, such as those experienced during the COVID-19 pandemic.

The European Union is improving corporate transparency regarding environmental, social, and governance issues. In relation to disability, the Corporate Sustainability Reporting Directive (CSRD), effective since January

[27] See also: Taoiseach Micheál Martin and Minister Dara Calleary launch reformed Wage Subsidy Scheme (accessed 07 July 2025).
[28] CIE compares the outcomes of individuals participating in a programme (the treated group) with the outcomes of a comparison group, similar in all respects to the treated one but for participation in the programme (the control group) (Counterfactual impact evaluation - European Commission). CIE is the best tool for establishing a causal link between policies and their effects, and it is internationally recognised as being the gold standard approach for assessing the effectiveness of a policy or programme.

2023, requires companies of a specific size to report on diversity, equity, and inclusion, including data on employees with disabilities (e.g., workforce composition, accessibility policies, and measures taken to support disabled employees). Larger companies (i.e., with 500 plus employees) need to start reporting under the CSRD this year (2025) and smaller companies in 2026. This directive should result in increased transparency, accountability, and the inclusion of an increasing number of disabled people in the workplace in Ireland, even during economic, or other economy-wide, crises. However, it is important to note that even with this Directive, or any of the aforementioned policies/schemes to assist people with disabilities to enter/retain employment, the quality of the job that individuals with disabilities are in, or that they obtain, matters as much as increasing the number of people with disabilities in employment. As for individuals without disabilities, the jobs obtained by people with disabilities should also not be precarious (e.g., part-time or temporary), low paid or leave a person vulnerable during crises, such as an economic downturn or future pandemic.

Based on the research in this paper, and other work, the COVID-19 pandemic had strong negative physical, mental, and economic impacts on people with disabilities. This highlights their heightened vulnerability to health and economic crises, and the need for targeted state programmes and interventions, as outlined here. Such measures could align by extension with Article 11 of the UN Convention on the Rights of Persons with Disabilities (UNCRPD), which obliges states to take all necessary steps to ensure the protection and safety of persons with disabilities in situations of risk, including humanitarian emergencies and natural disasters.

The analyses undertaken in this paper gave rise to some findings that cannot be easily answered with the available data. In particular, the reason for the large increase in unemployment among people with intellectual disabilities, and the somewhat unusual unemployment pattern observed for people who are deaf/have a hearing impairment. The use of qualitative research to explore the reasons for these findings is something that should be considered for future work. For example, were supported employment efforts adversely impacted by the move to hybrid working arrangements, such that opportunities to support and mentor those with intellectual disabilities became more difficult and this is a factor contributing to the rise in their unemployment rate and making them more likely to be unemployed since the end of the pandemic? This, and other possible explanations for the results derived in this paper, could be explored through qualitative research.

Finally, for people with disabilities who lose their jobs, it is critical to ensure access to adequate economic support through the social protection system. Thus, unemployment benefits and other financial supports must be easily

accessible and sufficient, considering that individuals with disabilities often face longer periods of unemployment compared to those without disabilities.

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