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EMPLOYMENT TRANSITIONS AMONG PEOPLE WITH DISABILITIES IN IRELAND

AN ANALYSIS OF THE QUARTERLY NATIONAL HOUSEHOLD SURVEY

DOROTHY WATSON, MARTINA LAWLESS AND BERTRAND MAÎTRE





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List of Acronyms

CSO	Central Statistics Office
DSP	Department of Social Protection
EU-SILC	European Union Survey of Income and Living Conditions
GP	General practitioner
HSE	Health Service Executive
NCSE	National Council for Special Education
NDA	National Disability Authority
NDS	National Disability Survey
QNHS	Quarterly National Household Survey
SILC	Survey of Income and Living Conditions
WHO	World Health Organization
WSS	Wage Subsidy Scheme

Executive Summary

Background

Employment is a crucial issue for people with disabilities because it has a strong bearing on their social inclusion and their economic welfare. People with disabilities are more likely than the general population to be poor and to depend on social welfare payments for their income. An important reason for their economic disadvantage is the difficulty they have in gaining or retaining employment. For policymakers to help improve the wellbeing of people with disabilities, it is vital to understand the processes that lead to employment entries and exits among people with disabilities, including differences in this respect between those with distinct types of disability.

To help address some of these questions, this report draws on the rich data from the Quarterly National Household Survey (QNHS) to examine employment transitions of people with disabilities in Ireland. The QNHS is a unique resource because it tracks people for up to five calendar quarters and has a large enough sample size to allow an examination of the circumstances of working-age people with disabilities. This means that the data can be used to examine employmentrelated transitions and the circumstances in which they occur. The QNHS has previously been used to examine labour market transitions for the overall labour force (Bergin et al., 2015; Conefrey et al., 2015) and for younger workers (Kelly et al., 2012; Kelly et al., 2014). However, it has not previously been used to examine specifically how these transitions might be affected by the individual's disability status or type of disability. The data analysed here cover the period from 2010 to 2015, so we can also look at how the employment situation of people with disabilities is changing as the economy begins to recover from the recession. Having examined these issues, we consider how policies may help address the barriers to employment identified in the analysis.

The following questions are addressed in this report.

- 1. What is the nature and scale of movement in and out of different labour force statuses (employed, unemployed, inactive) for people with disabilities, compared to the population as a whole?
- 2. How do employment entries differ by individual and family characteristics, such as age, gender, marital status, education and household type? After taking account of these, is there still a difference between people with and without a disability?
- 3. How do employment exits differ by job characteristics, such as occupation, sector (public/private and industry), size of workplace, full-time or part-time work as well as individual/family characteristics?

Data and Methods Used

Since 2010, the QNHS has contained detailed questions about whether or not an individual has a disability and, if they do, the type of disability (visual, hearing, other physical, intellectual, learning, psychological or emotional, other disability or a difficulty with one of a range of daily activities) The QNHS records information on the same individuals over five calendar quarters, with disability status recorded in the first quarter they are included. The follow-up information allows us to examine their employment-related transitions. Data are also available on several aspects of an individual's life, including level of education, work situation and household circumstances. We focused on those in the 20-59 age group - the most active working years - in order to avoid the early years when transitions are likely to be dominated by movements between short-term summer jobs and education, and to avoid the later years when people begin to retire. Data were gathered from over 30,000 people of working age (20-59 years) with a disability for at least two quarters between Q1 2010 and Q3 2015. We used statistical models to examine the impact of disability (including type and severity) on employment entries and exits, taking account of other characteristics such as age group, gender, marital status, education and region.

Profile of Working Age People with Disabilities

Compared to other adults aged 20–59 years, people with disabilities tended to be concentrated in the upper end of the age distribution and to have lower levels of education; one half were aged 45 and over, compared to 33 per cent of nondisabled adults, and 45 per cent had no more than the equivalent of Junior Certificate. They were found to be more likely to live alone and 42 per cent lived in a jobless household, so were at a high risk of poverty. Just 31 per cent were at work, but most (82 per cent) had at least some work experience. One half of people with disabilities were either at work or interested in working.

In terms of the type of disability, the largest group reported 'pain, breathing or another chronic illness or condition' (59 per cent), followed at some distance by a mobility limitation (27 per cent), an emotional or psychological condition (16 per cent), intellectual disability (8 per cent), learning disability (8 per cent). Fewer than one in 20 reported blindness/vision impairment or deafness/hearing impairment.

We measure the severity of a disability is measured by the number of different kinds of difficulties an individual faces due to their disability. This includes difficulties with self-care, moving about outside the home, participating in education or work and participating in other activities, such as leisure or transport. Overall, 42 per cent of those affected by one type of disability reported that they did not encounter any of the four difficulties; 29 per cent experienced one difficulty, 17 per cent experienced two of them and just 12 per cent experienced three or four difficulties. There is a hierarchy of difficulty associated with these

types of limitation: those who have difficulty with self-care are also likely to have difficulty going out alone or participating in school, work or other activities. In the indicator of severity, this is captured in the person having difficulty in more than one area. The extent of limitation associated with a disability depends not only on the level of functional impairment but also on the adequacy of the supports available to facilitate the inclusion of people with disabilities.

Disability and Employment Transitions

People with disabilities had a lower rate of employment entry between one calendar quarter and the next, when compared to those without a disability. Expressed as a percentage of those not in employment in the initial quarter, 2 per cent of people with disabilities entered employment between one quarter and the next in the 2013–2015 period, compared to 8 per cent of their counterparts without a disability. The employment exit rate, expressed as a percentage of those at work in the initial quarter, was higher for people with disabilities in the early recovery period from 2013 to 2015 (5 per cent), compared to 2 per cent among those without a disability.

During the same period, the entry and exit rates (expressed as a percentage of all working-age people with disabilities) were very close together, at about 1.56 and 1.54 per cent, respectively. On the basis of this pattern, we would expect very little change in the percentage of people with disabilities in employment without some intervention.

Disability and Employment Entry

People with disabilities have other characteristics besides the disability itself that make it less likely for them to enter employment. These include being older, having lower levels of education and living in a household where nobody is at work. Even taking these characteristics into account, however, the odds of employment entry for the non-employed were found to be only about half as high for people with disabilities as those without a disability.

The odds of entering employment were reduced by about 30 per cent for each additional difficulty a person experienced, such as difficulty with self-care, getting about or participation in education, work or other activities. However, simply having a disability – even if an individual does not report any difficulty – was found to reduce the odds of moving into work by 30 per cent. The chances of entering employment are particularly low for those with intellectual disability: even controlling for level of difficulty, the odds are only about one-third of those of someone without a disability.

Disability and Employment Exit

When it comes to employment exits, the focus is on a smaller subset of adults with a disability because those at work have better education levels, are less seriously affected and tend to be younger. As well as the characteristics noted above, such as lower levels of education and being older, which affect the chances of remaining in employment, some differences occurred between people with and without a disability in terms of the kinds of jobs they have. People with disabilities were found to be less likely to be in professional/managerial occupations and were more likely to be working part-time. Even when we control for individual and job characteristics, however, we find that people with disabilities have almost twice the chance of exiting employment between calendar quarters.

The type and severity of a disability also have implications for employment exit. The chances of employment exit increased with the number of different effects of the disability (regarding self-care, getting out alone, capacity to participate in work or education and capacity to participate in other activities); they were three times higher for those with two effects than for those experiencing only one effect. However, compared to people without a disability, even those with a disability who report no effects have a greater chance of leaving a job (about 55 per cent higher than people with no disability).

We also see some differences by type of disability. Taking account of other factors, including the severity of the disability, the chances of leaving a job were found to be higher among those with deafness/hearing impairment, learning disability and psychological/ emotional disability.

The study also examined the implications of being in the same household as an adult with a disability. Even if an individual did not have a disability themselves, it was found that they were more likely to leave employment if they lived with an adult with a disability. While living with an adult with a disability did not significantly affect the odds of *entering* employment, it did increase the odds of *leaving* employment, by about 11 per cent. This indicates that the impact of disability on employment can go beyond the person with a disability to affect others in the household who may take on caring responsibilities.

Policy Implications

The goal of *The Comprehensive Employment Strategy for People with a Disability,* 2015–2024 (Department of Justice and Equality, 2015) is to enable those who want to work to move into employment. The findings here have several implications for that goal.

- The Comprehensive Employment Strategy for People with a Disability sets an ambitious target to have people with disabilities accounting for 6 per cent of employment in the public sector by 2024. The results here suggest that given the current level of interest in employment among people with disabilities, this target is a reasonable one.
- There are two possible approaches to increasing the employment levels of people with disabilities: enabling those at work to stay in jobs and enabling those not at work to move into jobs. The latter group (those not at work) is much larger, so policy to enhance employment opportunities of people with disabilities cannot afford to ignore this group. Given the lower levels of education of those not in employment, and the length of time since they last worked, the development of labour market skills will be important, as is emphasised in the 'building work skills' strand of the government's labour market strategy, *Pathways to Work 2016–2020*. This also has implications for the education of people with disabilities during their school years.
- Most working-age people with disabilities have worked at some point in the past, although their last job was most often more than four years in the past. In the longer term, retaining people with disabilities at work for as long as is feasible needs to be an element of maximising their employment levels.
- A better understanding is needed of the reasons for the higher job exit rate and lower job entry rate of people with disabilities who do not report any limiting effects of the disability on their lives. Are potential employers underestimating what the person is able to do? Or are there limitations in terms of stamina or health that are not adequately captured by the items included on the QNHS?
- Among those not in employment, differences in levels of education account for about one-fifth of the gap in employment entry between those with and without a disability. Improving the levels of education and skills of people with disabilities who are not currently at work will be an important element in increasing their chances of finding employment.
- As in other research on household joblessness, the significance of the household dimension to employment entry and exit needs to be emphasised. Living in a jobless household reduces the chance that someone will move into work and this is true whether or not the person has a disability. The complex interaction between means testing, benefits

and social protection needs to be assessed to identify potential disincentives. This may be even more important in the case of people with disabilities, because of the care needs that some of them have.

- Given the diversity of circumstances of people with disabilities in terms of the nature and severity of the disability and their level of education and family support – the optimum mix of income support, retention of benefits, and employment support will need to be tailored to the individual's specific circumstances.
- Promoting labour market inclusion of people with disabilities will require genuinely proactive engagement with them in the context of the *Pathways* to Work 2016–2020 strategy. To be effective, the specific barriers to employment they face need to be addressed.

Chapter 1

Introduction

1.1 INTRODUCTION

Having a job plays an important role in preventing or exiting poverty (ILO, 2005; Caputo, 1991; OECD, 1998, 2004, 2009). However, people with disabilities are less likely to participate in the labour market and, when they do so, are more likely to be unemployed. When in employment, they are more likely to be working part-time (Watson, Kingston and McGinnity, 2013). As a result, the risk of poverty is higher for people with disabilities (Gannon and Nolan, 2005; Watson and Nolan, 2011). Nevertheless, there is a strong interest in employment among working-age people with disabilities (CSO, 2010, Table 2.19; Watson and Nolan, 2011; Watson, Banks and Lyons, 2015).

Recent research has highlighted the fact that people with disabilities experience distinct labour market challenges at two important points of transition (Watson, Banks and Lyons, 2015). Those who have been affected by a disability since childhood (about 30% of working-age people with disabilities) experience challenges in terms of maximising their educational achievement and moving into the first job. For those who acquire a disability later in their working lives, the challenge is to remain in employment, either with the same employer in the same job or by retraining for a different kind of work.

The focus of this report is on employment-related transitions among people with disabilities. We include all of those with a disability of working-age, not distinguishing between those who had a disability since childhood and those whose disability had a later onset. This research is relevant to the participation theme in disability policy and, in particular, to the government's *Comprehensive Employment Strategy for People with a Disability, 2015–2024*, published in September 2015. In order to increase participation in employment by people with disabilities, it is important to both increase their flows into employment and reduce their flows into 'non-employment'.

This study adds to previous research by examining in detail the association between disability and employment transitions in order to inform policies designed to enable people with disabilities to participate in employment. This builds on earlier research on employment transitions more generally by members of this research team (Watson, Maître and Russell, 2015; Conefrey, Lawless and Linehan, 2015). This research is particularly timely as it will contribute to our understanding of what is needed to ensure that people with disabilities benefit from economic recovery.

We draw on the research microdata file from the Quarterly National Household Survey (QNHS), focusing on working-age adults (aged 20–59 years), to address the following research questions.

- 1. What is the nature and scale of movement in and out of different labour force statuses (employed, unemployed, inactive) for people with disabilities, compared to the population as a whole? Are there differences between people with and without a disability in terms of their principal economic status before an employment entry or after an employment exit? What are the reported reasons for leaving work and reasons for not looking for work?
- 2. How do employment <u>entries</u> differ by: demographic characteristics (age, gender, education, marital and family status, work status of other household members); type of disability and job characteristics, such as occupation, sector (public/private and industry); size of workplace; and full-time or part-time work?
- 3. How do employment <u>exits</u> differ by: demographic characteristics (age, gender, education, marital and family status, work status of other household members); type of disability and job characteristics, such as occupation, sector (public/private and industry); size of workplace; and full-time or part-time work?

In this analysis, we focused on those in the 20–59 age group – the most active working years. This was in order to avoid the early period when transitions are likely to be dominated by movements between short-term summer jobs and education, as well as the period after 60 years, when people begin to retire.

In this chapter, we examine what we have learned from existing research about the experiences of people with disabilities in the labour market. We then provide a brief outline of disability policy and services in Ireland before describing the data and methodology in this report. This chapter ends with an outline of how the analysis is organised in subsequent sections.

1.2 EXISTING RESEARCH

1.2.1 Disability and Labour Market Outcomes

Research from Ireland and elsewhere has shown that people with disabilities are less likely to be in the labour market and that when they are, they are more likely to be unemployed. The 2010 QNHS, conducted by the Central Statistics Office (CSO), shows that 36 per cent of people with disabilities aged 18–64 years (excluding students) were labour market participants, compared to 77 per cent of those without a disability. Moreover, 22 per cent of people with disabilities were unemployed, compared to 16 per cent of those without a disability (Watson et al., 2013). Employed people with disabilities are more likely to be working part-time (Greve, 2009; Watson et al., 2013). On the other hand, there is a strong interest in employment among working-age people with disabilities who are not presently at work. Figures from the 2006 National Disability Survey indicate that over one-third of non-employed working-age people with disabilities would be interested in work if the circumstances were right (CSO, 2010, Table 2.19; Watson and Nolan, 2011).

Watson and Nolan (2011) noted a number of factors identified by people with disabilities that would enable them to be employed, including flexible work arrangements, modified job tasks, a wage subsidy and accessibility modifications. Wage subsidies or equivalent welfare transfers are important given evidence that the earnings of people with disabilities are typically lower than average (Gannon and Nolan, 2004) and that there can be substantial costs associated with disability itself (Cullinan, Gannon and Lyons, 2011). Such subsidies might be paid to the employer, who then pays the person with a disability the regular wage for the job – like the current Wage Subsidy Scheme – or might be paid to people with disabilities directly as a supplement to earnings.

Statistics from the European Union Survey of Income and Living Conditions (EU-SILC) data for 2007 suggest that labour market participation by people with disabilities in Europe is about 20 per cent lower than for the general population (Eichhorst et al., 2010, p. 7). Care is needed in interpreting differences between survey findings cross-nationally. There is a great deal of variability across countries in the reported prevalence of disability, even when a harmonised measure is used, and the variations are not consistent with the country differences we would expect based on other factors, such as general health (Gannon and Nolan, 2004; Applica, CESEP and Alphametrics, 2007; Eichhorst et al., 2010). Based on EU-SILC data for 2014, the percentage of people reporting activity limitations was highest in Latvia (37 per cent) and Germany (36 per cent), was well above average in the Netherlands and Denmark (28 per cent) and was the lowest in Malta (10 per cent). The figure for Ireland was 18 per cent.¹

This suggests that there are national differences in the threshold adopted before someone will identify themselves as having a limitation in their activity. We might

¹ Source: Eurostat (2014) European Union Statistics on Income and Living Conditions (EU-SILC) Data on 'Selfperceived long-standing limitations in usual activities due to health problem by sex, age and income quintile, hlth_silc_12'.

expect a positive relationship between prevalence of activity limitation and the employment rate of people whose activities are limited if a higher reported prevalence reflects the inclusion of people with less severe activity limitations, because these people are more likely to be employed. Figures reported in Watson et al. (2013, Figure 1.1) suggest that this is indeed the case: countries reporting lower rates of activity limitation in 2009 tend to have lower rates of employment for those whose activities are limited. Despite these difficulties in comparing across countries, there is evidence that participation in employment by people with disabilities in Ireland is lower than elsewhere in Europe. In Ireland, the prevalence of activity limitation was towards the middle of the range across Europe, but the percentage of people with an activity limitation who are employed was among the lowest. This suggests that, even if we take account of cultural differences in the understanding of activity limitation, the employment rate of people with disabilities is low in Ireland by European standards. The impact of the recession is likely to have reduced the employment rate among people with disabilities even further as their unemployment levels soared in line with the general rise in unemployment (Watson et al., 2010).

Discrimination may be one factor that affects the employment prospects of people with disabilities. McGinnity, Watson and Kingston (2012) examined this issue, drawing on the CSO 2004 and 2010 Equality Modules of the QNHS. Comparing the 2004 and 2010 surveys, the authors found that the rate of reported discrimination of those with a disability dropped between 2004 and 2010. The risk of discrimination remained significantly higher in 2010 for people with disabilities than for those without one, but the gap had narrowed. The authors found a strong association between having a disability and reported discrimination in service domains such as shops/pubs, financial services, health, transport and other public services, with particularly strong associations in health and transport. People with disabilities were not more likely to report work-related discrimination (in seeking work or in the workplace). However, holding other factors constant, when they did experience work-related discrimination, it was more likely to have had a serious impact on their lives. Discrimination faced by people with disabilities in areas such as transport and healthcare may have an indirect impact on their capacity to take up work or remain in a job.

1.2.2 Labour Market Transitions in Ireland

The extent of movement of both individuals between labour market states (employment, unemployment and inactivity) and of employed individuals between jobs provides useful insight into the level of dynamism in the economy. In addition, group differences in transition rates give a measure of possible obstacles or structural barriers preventing the smooth functioning of the labour market in certain sectors or regions where transitions are unusually low. A number of

previous papers have used the QNHS data to examine labour market transitions within Ireland, although they have not addressed the specific issue of how transitions might differ by disability status or type of disability.

Focusing on the mechanisms behind the dramatic rise in the unemployment rate during the financial crisis, Conefrey, Lawless and Lenihan (2015) used microdata from the QNHS to track the labour market status of all working-age individuals over consecutive quarters, calculating average flows between the different labour market states of employment, unemployment and inactivity over different time periods, both before and during the recent crisis. Between Q1 1998 and Q1 2013, the long-run average probability of an employed person remaining employed between one quarter and the next was 96.2 per cent, becoming unemployed was 1.2 per cent and becoming inactive was 2.7 per cent. The impact of the crisis is evident, both in the increased probability of moving from employment to unemployment (from 0.8 per cent in 1998–2007 to over 1.2 per cent in 2008–2013) and in the sharp fall in the probability of moving from unemployment to work, which almost halved, going from 21 per cent to 11.9 per cent across the same two sub-periods. Along with the effects on the unemployed, the probability of an inactive worker regaining employment also almost halved, going from an average of 4.3 per cent in 1998–2007 to 2.9 per cent in 2008–2013.

Looking at some individual characteristics associated with these transition rates, Conefrey, Lawless and Lenihan (2015) showed that transitions from unemployment to employment decrease significantly with the duration of unemployment. A person who has been unemployed for three months or less was found to be four times more likely to regain employment than someone who has been out of work for over one year. The issue of unemployment duration and its effect on finding employment was also examined using QNHS data by Conefrey, McCarthy and Sherman (2013), who used a wider range of individual characteristics to estimate the determinants of re-employment. They found that young males with low educational attainment who have been out of work for more than one year have the lowest probability of finding work. Their findings are in line with national and international results on re-employment probabilities (Lancaster and Nickell, 1980; O'Connell, McGuinness and Kelly, 2012), which identify unemployment duration as an important factor in an individual's likelihood of finding employment, giving rise to concerns that unemployment spells can have long-run effects at the individual level. This could be reinforced if having a disability also increases the transition out of employment into unemployment in the first instance.

The negative effect of unemployment duration on finding employment has been found to be a particular concern for younger people with limited employment

records. Unemployment has been found to have what are known as 'scarring effects', which influence employment transitions for some individuals even after growth has returned at the level of the overall economy. For this reason, a number of papers examining determinants of transitions out of unemployment focus on young workers as a separate category. In Ireland, again using QNHS data, Kelly, McGuinness and O'Connell (2012) examined the youth labour market and found that a young worker's probability of moving into employment falls the longer they have been unemployed. They also showed that moving into employment is negatively affected by low education levels, particularly for individuals with literacy problems. Follow-up work by Kelly et al. (2014) examined how the crisis affected these earlier results and found that although the economic environment was the main cause of the reduction in the probability of transitioning from unemployment into employment, some individual factors such as education and nationality were also important. The effect of education on the probability of finding employment is particularly important for people with a disability, given that early-onset of disability may affect educational opportunities.

1.2.3 Disability and Education

Education is a key influence on life chances, including job prospects, earnings and risk of poverty. Research shows, however, that children with a disability and special educational needs face considerable barriers in engaging in school (Douglas et al., 2012) and are more likely to dislike school (McCoy and Banks, 2012). These students are greatly at risk of poorer academic outcomes (Humphrey et al., 2013). As a result, young people with a disability have fewer education qualifications when they leave school. This leads to a double disadvantage, where economic prospects are reduced both by disability status and by lower levels of education (NDA, 2012). Consequently, young people with disabilities have poorer post-school outcomes compared to their non-disabled peers (Bouck, 2012).

Figures from 2004 and 2010 for Ireland confirm that, although there have been improvements in levels of education generally, levels of education remain lower for people with disabilities. In 2010, the percentage completing second level or Post Leaving Certificate (PLC) education had increased to 29 per cent among people with disabilities from 25 per cent in 2004, and the percentage completing third level education had increased to 19 per cent. However, the percentage completing third level education remained at about half the corresponding figure among people without a disability (38 per cent) (Watson et al., 2013, p. 15).

1.2.4 Consequences of Educational and Labour Market Disadvantage

The consequences of educational and labour market disadvantage are a high level of dependence on social transfers and increased risk of poverty and material deprivation. Analysis by Watson and Maître (2013) showed that adults with a disability in 2011 depended on social transfers for just over one half of their income. In the same year, the income poverty rate among people with disabilities was 45 per cent, compared to 13 per cent of people without a disability. Basic deprivation is an indicator that captures an ability to afford basic goods and services such as food, clothing, home heating, furniture and a basic social life. The level of basic deprivation increased across the board as a result of the recession and in 2011 it was at 39 per cent among people with disabilities and 24 per cent among those without a disability (McGinnity et al., 2013).

1.3 AN OVERVIEW OF DISABILITY POLICY AND LEGISLATION

Policy with respect to people with disabilities in Ireland has moved from a medical model that emphasised disability as a health issue to a 'mainstreaming' social model that emphasises provision of individualised supports to remove barriers to participation in society. Policy now places emphasis on the independence and self-determination of people with disabilities and is concerned with the range of supports and services required to support them, as seen in the 2004 *National Disability Strategy* (NDS). This strategy set out a programme of co-ordinated actions across government departments to support the equal participation of people with disabilities in Irish society. This was to be achieved through a combination of legislation, institutional arrangements and services to support and reinforce equal participation for people with disabilities. As a result, disability policy is broad in scope and includes equality legislation as well a range of services and supports provided by state and non-governmental organisations.

Key developments under the NDS included: provisions for an independent assessment of health and social service needs (the Disability Act, 2005); provision for more inclusive education (the Education for Persons with Special Educational Needs Act 2004); a commitment to implement a Personal Advocacy Service (PAS) for people with disabilities (Citizens Information Act 2007); and legislation covering equal access to employment and provision of goods and services (the Employment Equality Acts 1998–2011 and the Equal Status Acts 2000–2011).

Responsibility for services for people with disabilities is shared across a range of government departments and agencies, with most service delivery taking place through the voluntary or non-profit sector with grant aid from the HSE (Keogh, 2011). The sector is extremely diverse, both in size and in the range of services provided (Keogh, 2011).

Income supports for people with disabilities are administered by the Department of Social Protection. The main long-term weekly benefits are the Disability Allowance and the Invalidity Pension. The Occupational Injuries Benefit Scheme is another set of payments that applies to work-related injuries and illnesses.

In addition to the main income supplements, a range of secondary benefits are available, including: the medical card, which entitles the holder to free GP visits and lower cost prescription medicines; the long-term illness scheme, which covers the cost of medication and appliances needed for certain long-term illnesses; concessions for drivers and passengers with a disability; local authority grants to adapt the home; and a carers' payment for those providing a person with a disability with full-time care. Since these secondary benefits are means tested, there is a concern that the loss of such benefits may be seen as a disincentive to work.

The traditional income support model for people with disabilities assumed that those with a disability would not be able to work at all. In recent years, however, there has been an increasing move towards the use of income supports to enable people with disabilities to find or remain in employment (the Partial Capacity Benefit). In addition, there is an income disregard of ≤ 120 for those in receipt of Disability Allowance who take up employment of a rehabilitative nature. The Wage Subsidy Scheme offers financial support to employers who employ people with disabilities on a full-time basis (21 hours or more), so that the employee in respect of whom the grant assistance is claimed is entitled to the same conditions of employment as other employees.

A major recent policy initiative is *The Comprehensive Employment Strategy for People with a Disability 2015–2024* (Department of Justice and Equality, 2015). Acknowledging the importance of employment to financial security, independence and fulfilment, the goal of this strategy is to ensure that people with disabilities who are able to and want to work are enabled to do so. This will be achieved through a number of approaches: building the skills and capacities of people with disabilities ; providing bridges into work; ensuring that work pays; promoting job retention and re-entry among those who acquire a disability during their working life; ensuring that support systems are co-ordinated; and engaging employers. The strategy provides for three-yearly action plans and a system of monitoring outcomes using national data sources such as the QNHS.

1.4 DATA AND METHODOLOGY

1.4.1 Quarterly National Household Survey

The data used in this study come from the QNHS longitudinal dataset for the period 2010–2015. This survey is conducted on a year-round basis by the CSO, primarily

to provide quarterly data on labour market and employment. Data in respect of every person in the household are collected over a period of five quarters, with a rotational panel design.

We focus on those in the most active years of working life, when people are likely to have completed their education (20–59 years). We do this in order to avoid both the early period when transitions are likely to be dominated by movements between short-term summer jobs and education, and the period after 60 years when people begin to retire. The term 'employment' includes self-employment as well as employee status.

The unit of analysis is the person observed in two adjacent quarters. In the QNHS, a person may be observed for up to five quarters, so that a person present in the survey for five quarters may result in four observations (pairs of quarters). In the analysis of the data, we take account of the fact that the same person may be observed more than once (see section 1.4.2).

The measure of disability in the QNHS is modelled on that used for the Census of Population. The person is first asked whether they have any of the following longlasting conditions: blindness or a serious vision impairment; deafness or a serious hearing impairment; a difficulty with basic physical activities such as walking, climbing stairs, reaching, lifting or carrying; an intellectual disability; a difficulty with learning, remembering or concentrating; a psychological or emotional condition; or a difficulty with pain, breathing or any other chronic illness /condition.² As a follow-up question, the person is asked whether, as a result of their disability, they have difficulty in any of the following: dressing, bathing or getting around inside the home; going out alone to shop or visit a doctor's surgery; working at a job or business or attending school or college; and participating in other activities such as leisure or transport. Both sets of questions have a 'yes' or 'no' response to each item.

Whether or not an individual has a disability is only recorded in the first quarter they are interviewed. This means that those who acquire a disability in subsequent quarters may be missed in this analysis. However, the number of people acquiring a disability between one quarter and the next is likely to be low. As a result, the impact of this lack of information on disability status in subsequent quarters is likely to be minor.

² The QNHS is typically completed on behalf of all household members by an adult member of the household. This means that information can be provided by proxy in respect of household members with a disability, including those with a profound intellectual disability, where they are not able to participate directly. The QNHS only covers people living in private households so people living in residential setting are not included.

We have no information on how long QNHS respondents with a disability have had the disability or at what age they were first affected by it. Other research based on the National Disability Survey indicates that most disability among working-age adults is acquired in adulthood rather than being present from birth. If the person with a disability is not at work, we do not know whether they left work at the time of onset of disability, before this time (perhaps for family reasons) or left work after acquiring a disability but with a time lag. We can investigate some of these issues here by examining the person's reasons for leaving the previous job. However, we cannot determine whether the person's education was affected by their disability.

From 2010 to the third quarter of 2015, there were over 30,000 observations of people with disabilities aged 20–59 years who were in the survey in two adjacent quarters. Of these, about 9,500 were in employment in both quarters, 22,000 were in employment in neither quarter, almost 500 moved into a job between one quarter and the next and 570 moved out of employment between quarters (Table 1.1). The rate of transitions into or out of employment is relatively low over such a short period as a calendar quarter, at about 3 per cent of those with a disability, but there are sufficient cases to examine how the transition dynamics differ for people with and those without a disability.³

	Disability		Disability No Disability	
	Recession (2010–2012)	Recovery (2013–2015)	Recession (2010–2012)	Recovery (2013–2015)
At work, both quarters	5,066	4,482	151,412	120,915
Not at work, both quarters	12,109	10,042	64,619	42,919
Enter employment	259	240	4,920	3,810
Exit employment	334	236	4,800	2,924
Total	17,768	15,000	225,751	170,568

Table 1.1 Work Transitions Among Those Aged 20–59 Years With and Without a Disability (No. Observations)

Source: QNHS Longitudinal Database, 2010-Q3 2015, analysis by authors.

Note: Adults aged 20–59 years, unweighted. Each observation is of one person observed in two adjacent quarters.

1.4.2 Analysis Methodology

The research presents tabular analysis of the QNHS, using weighted data and testing for significance where appropriate. We go beyond a description of people's circumstances to identify the most important correlates of employment for people with disabilities. We do this by conducting a statistical analysis of the individual-level information on people with disabilities and their counterparts without a disability. The statistical analysis allows us to take account of individual differences in addressing the research questions. Such differences might relate to gender, age,

³ On average, each working-age person was observed in 2.64 pairs of quarters, so the 30,000 observed pairs of quarters for working-age people with disabilities represent observations on about 11,300 distinct individuals.

type of disability, family circumstances and education, for example. By drawing on the longitudinal data, we can also examine how circumstances in one quarter contribute to people entering employment, leaving employment, remaining employed or remaining non-employed in the next quarter.

We use statistical models of employment-related transitions: 'remains nonemployed', 'exits employment', 'enters employment' and 'remains employed'. These models also use survey data techniques that permit an adjustment to standard errors and confidence intervals for the fact that the same person may be observed more than once and for the fact that more than one person is interviewed in a household.

The purpose of the statistical models is to disentangle the influences of different related factors. For instance, women with a disability may be less likely to be in employment. The statistical model allows us to separate the impact of having a disability from the impact of being a woman. We use logistic regression, a well-established method for carrying out multiple regression analysis on models with categorical outcomes such as whether the person enters or leaves employment. In presenting the results of the analysis, we use model-estimated proportions in different categories in order to increase accessibility of the findings to the lay reader.⁴

Because many of the characteristics are measured at the same point in time, we cannot be certain of the direction of causation. In many instances we can use information on timing to inform insights about the direction. For example, it is reasonable to expect that education was completed before the person made a decision on whether or not to enter the labour market. However, since we do not know the age of onset of the disability, we cannot tell whether the level of education achieved was affected by the person's disability or whether the disability status was affected by the challenging living circumstances associated with lower levels of education.

1.5 OUTLINE OF REPORT

In the next chapter we examine in some detail the employment flows in the 2010–2015 period for people with and without a disability, asking the extent of transitions and the nature of transitions – what the person's main economic status was before moving into work or after exiting work. Chapter 3 examines employment entry and ask to what extent it is influenced by characteristics of the individual and their household, including having a disability. Chapter 4 focuses on employment exits and considers the significance of characteristics of the job as

⁴ These are estimated in Stata using the 'margins' command after the model.

well as characteristics of the individual and their household. Finally, chapter 5 draws together the findings to provide answers to the research questions and to indicate some of the implications for policy on disability and employment.

Chapter 2

Disability and Employment Flows

2.1 INTRODUCTION

This chapter addresses the first research question, which concerns the nature and scale of employment-related transitions for people with and without a disability. We begin by examining the characteristics of people with and without a disability, as background to the analysis. We then examine the nature and scale of movement in and out of different labour force statuses (employed, unemployed, inactive) for people with disabilities, compared to the population as a whole. We ask whether there are differences between people with and without a disability in terms of their principal economic status before an employment entry or after an employment exit. We also explore the reasons reported for leaving work and reasons for not looking for work. Finally, we examine the type and severity of disability.

2.2 CHARACTERISTICS OF PEOPLE WITH DISABILITIES

This section describes the profile of people with and without a disability in the 20– 59 age range, in terms of the individual and family characteristics we expect to be associated with employment transitions. These are shown in Table 2.1.

Men and women each make up roughly one half of both those with and without a disability, but some moderate differences emerged by marital status. Among people with disabilities, men were more likely to be single or formerly married, while the reverse was true among men without a disability. Women with disabilities were slightly more likely than those without a disability to be formerly married and slightly less likely to be married.

The differences in terms of age are more striking, with people with disabilities concentrated towards the upper end of the age range. One-fifth of them were aged 55–59 years, compared to fewer than one in ten of those without a disability. Over one half of working-age people with disabilities were 45 years or over, compared to one-third of those without a disability.

The differences by level of education are also striking. Forty-five per cent of people with disabilities had completed lower second-level education or less, compared to just 17 per cent of people without a disability.

		No	
		Disability	Disability
Gender x marital status	Married men	22%	27%
	Single men	24%	20%
	Formerly married men	4%	2%
	Married women	24%	28%
	Single women	19%	19%
	Formerly married women	8%	3%
	Total	100%	100%
Age group	20–24 years	5%	10%
	25–34 years	17%	28%
	35–44 years	24%	29%
	45–54 years	33%	24%
	55–59 years	21%	9%
	Total	100%	100%
Education	Less than lower 2nd level	25%	5%
	Lower 2nd level	20%	12%
	Upper 2nd Level	28%	36%
	Beyond 2nd level	24%	44%
	Total	100%	100%
Nationality	Non-Irish	9%	16%
	Irish	91%	84%
	Total	100%	100%
Region	Dublin and Mid-East	62%	60%
	Other regions	38%	40%
	Total	100%	100%
Living arrangements	Living alone	15%	6%
	One adult, child(ren)	4%	4%
	2+ adults	47%	40%
	2+ adults, children	34%	50%
	Total	100%	100%
Household joblessness	Not jobless	59%	88%
	Jobless	41%	12%
	Total	100%	100%

Table 2.1 Profile of Adults Aged 20–59 Years by Disability

Source: QNHS Longitudinal Database, 2010–Q3 2015, analysis by authors.

Note: Adults aged 20–59 years, weighted data. The margin of error for the percentages is, at most, 0.4% for people without a disability and 1.0% for people with disabilities.

People with disabilities were found to be less likely to be non-Irish nationals (9 per cent compared to 16 per cent), which partly reflects the relative youth of most migrants to Ireland. It also reflects the fact that migrants tend to be healthier than the native population (Nolan, 2012).

There are only slight regional differences in terms of the proportion of the population with a disability, occurring between those in Dublin and the Mid-East,

and those in the rest of the country. Differences in household composition and whether there was someone at work in the household are larger. People with disabilities were found to be considerably more likely to live alone (15 per cent versus 6 per cent) and less likely to live in a household with two or more adults and children (34 per cent versus 50 per cent). They were more than three times more likely than adults without a disability to live in a jobless household. Household joblessness is an important risk factor for poverty and social exclusion and someone living in a jobless household is less likely to move into employment than someone living with another working adult (Watson, Maître and Russell, 2015).

2.3 EXTENT OF EMPLOYMENT TRANSITIONS

We now examine the extent to which people, both with and without a disability, stayed in the same labour market status or made a transition across quarters. Table 2.2 presents the percentages of those with and without a disability that were in employment and out of work (either unemployed or inactive) in both quarters. It also presents the percentages of people entering and exiting work. To allow for the progressive improvement in economic conditions, we present the transition rates for two sub-periods of 'recession' and 'recovery' (2010–2012 and 2013–2015 respectively) as well as for the total sample period.

Regardless of disability status, the findings show that most people stayed in the same employment situation from one quarter to the next and that people without a disability were much more likely to be in employment. Over the full period, 69 per cent of people without a disability were at work in successive quarters, with a slight increase in the later period compared to the earlier one. For people with disabilities, over the full period, 29 per cent were in employment in both quarters, with 67 per cent not at work in successive quarters.

Turning to those that did change status, on average 2.2 per cent of those without a disability moved into work between each pair of quarters and 1.9 per cent moved out of work. The probability of movement into work did not change substantially when we divided the survey responses into the two sub-periods. The improvement in general economic conditions is evident however in the reduction in the percentage of people moving out of work.

For people with disabilities, the probability of moving into work between any pair of quarters was lower than it was for those without a disability. On average, 1.5 per cent of this group transitioned into work between quarters, with a slight increase to 1.6 per cent in the later sub-period. Movements out of work were also lower than for those without a disability and became less likely as the economy recovered in the 2013–2015 period. These lower exit rates should be interpreted against the fact that a lower percentage of people with disabilities are in employment relative to those without a disability.

	At work both Q	Not at work, both Q	Enter employment	Exit employment
People with no disability				
Total 2010–2015	69%	27%	2.2%	1.9%
2010–2012	67%	29%	2.2%	2.1%
2013–2015	71%	25%	2.3%	1.7%
People with disabilities				
Total 2010–2015	29%	67%	1.5%	1.7%
2010–2012	29%	68%	1.5%	1.9%
2013–2015	30%	67%	1.6%	1.5%

Table 2.2 Work Transitions by Whether Person has a Disability and Period, 20–59 Years

Source: QNHS longitudinal database, 2010–Q3 2015, analysis by authors.

Notes:

Row percentages. Adults aged 20–59 years, weighted data. Differences between people with and without a disability for the total period are statistically significant at p <= .05; when broken down by period, the differences are statistically significant at p <= .05, except for moving out of work during the recovery period (p = .06).

Focusing on the transitions, Figure 2.1 shows the percentages of people that could have made each type of transition who actually did so. In the case of people entering employment, the base is people not in employment in the earlier quarter. For exiting employment, the base is those in employment in the earlier quarter. The figure also uses 'error bars' to give an indication of the size of the 95 per cent confidence interval around these estimates. The confidence intervals are wider for people with disabilities – especially for exiting employment – because of the smaller number of cases.

When it comes to employment entry, the rate is significantly higher for those without a disability (7 per cent in the recession and 8 per cent in the recovery) than for those with a disability (2 per cent in both periods). The figures for employment exit also show a significant difference between the two groups: 5–6 per cent of people with disabilities compared to 3 per cent of those without a disability in the recession and 2 per cent in the recovery. The non-overlapping confidence intervals for those without a disability indicate that their employment entry rate increased between the recession and recovery while their employment exit rate decreased. In the case of people with disabilities, the sample size is not large enough to be able to say whether the rate of transitions changed between the recession and recovery.



Figure 2.1 Work Transitions Among People With and Without a Disability, as a Percentage of Those Who Could Have Made the Transition

Source:QNHS Longitudinal Database, 2010–Q3 2015, analysis by authors.Note:Adults aged 20–59 years, weighted data.

iole. Adults uged 20–39 years, weighted data.

2.4 PRINCIPAL ECONOMIC STATUS BEFORE OR AFTER THE TRANSITION

This section examines the economic status before the transition into employment or after the transition out of employment for people with disabilities and those without a disability. In defining economic status, we adopt the International Labour Organization (ILO) definition. Those who did any work at all in the reference week are treated as being 'at work' while those who were not at work but were available for work and have been actively seeking it were treated as unemployed. The other economic statuses come from the self-defined main status of those who are neither at work nor unemployed, according to the ILO definition.⁵

Figure 2.2 shows the overall economic status of people with and without a disability in the working-age groups. As we have already seen, in the study period, people with disabilities were less likely than those without a disability to be in employment. The percentage who were unemployed was also slightly lower, especially during the recession period (8 per cent versus 11 per cent), but it must be borne in mind that people with disabilities are much less likely to be in the labour market. The usual way of calculating the unemployment rate is to express it as a percentage of those in the labour market, giving an unemployment rate of 20 per cent in both the recession and recovery for people with disabilities compared to figures of 14 per cent and 11 per cent, respectively, for people without a disability. As a percentage of those in the labour market, then, the

⁵ A person defining themselves as at work or unemployed but not meeting the ILO criteria will be classified as 'other'. The 'other' category is made up of 9 per cent who describe their main activity as 'at work' but do not meet the ILO criteria; 78 per cent who describe themselves as unemployed but do not meet the ILO criteria and 13 per cent who describe their main status as 'other'.

unemployment rate was higher for people with disabilities. Not surprisingly, more of those with a disability classified themselves as 'unable to work' due to illness or disability (36 per cent during the recession and 34 per cent in the recovery) compared to about 1 per cent in both periods for those without a disability. For those without a disability, it is likely to be illness rather than disability that is in question. People with disabilities were less likely to be studying, more likely to be caring for home and family, more likely to have retired early and more likely to report the 'other / unknown' economic status.





Source: QNHS Longitudinal Database, 2010-Q3 2015, analysis by authors.

Note: Adults aged 20–59 years, weighted data. 'III/disabled' refers to adults who report being unable to work due to illness or disability. The error bars in the chart show the bounds of the 95% confidence interval for each proportion.

Figure 2.3 compares those with and without a disability who moved into work in terms of their economic status in the previous quarter. In other words, what was the economic status from which they moved into employment? Because of the smaller number of cases of people with disabilities making such a transition, we do not break this down by period. Both groups were most likely to have been unemployed and actively seeking work in the previous quarter, but with a higher figure in this category for those without a disability (55 compared to 39 per cent). Not surprisingly, the proportion of people with disabilities who classified themselves as 'unable to work' because of illness or disability. Another statistically significant difference between the two groups is that people without a disability are more likely to have been students (nearly one-fifth) compared to only 7 per cent of those with a disability go on to higher education. Since we have selected those over age 20, fewer of them would be coming to employment from

school or college. Finally, people with disabilities were also more likely to have classified themselves in the other / unknown category prior to job entry.





Source: QNHS Longitudinal Database, 2010-Q3 2015, analysis by authors.

Note:

Adults aged 20–59 years, weighted data. 'III/disabled' refers to adults who report being unable to work due to illness or disability. The error bars on the chart show the bounds of the 95% confidence interval for each proportion.

Figure 2.4 shows the destination economic status of those who exited employment between quarters. The differences between those with and without a disability very much parallel those seen in terms of the economic status prior to employment entry. Unemployment was the economic status most common to both groups but was relatively more important for those without a disability, with inability to work due to illness or injury also featuring strongly for those with a disability. The other/unknown status also occurred for an important minority of both groups following employment exit.



Figure 2.4 Economic Status Following Employment Exit Among People With and Without a Disability (%)

Source: QNHS Longitudinal Database, 2010-Q3 2015, analysis by authors.

Note: Adults aged 20–59 years, weighted data. 'III/disabled' refers to adults who report being unable to work due to illness or disability. The error bars on the chart show the bounds of the 95% confidence interval for each proportion.

2.5 JOB SEARCH BY PEOPLE WITH DISABILITIES

The detailed employment status categories of the ILO are useful in highlighting whether people with disabilities were in work but wanted to work more hours, were not actively seeking work but wanted to work or did not want a job. Figure 2.5 shows these categories for people with and without a disability. We can see that more people without a disability were at work (over 70 per cent) as we saw earlier, and that they were more likely to be in full-time work (about 80 per cent of those at work). The percentage of people with disabilities who were at work is lower (just under one-third) and about one-third of this group worked part-time. Of those who were at work, roughly similar proportions of people with and without a disability would have liked to work more hours (about one in six).

Among those not at work (69 per cent of people with disabilities and 29 per cent of those with no disability), people without a disability were about three times more likely than those with a disability to be actively seeking work (about 33 per cent and 11 per cent, respectively, of those not at work). This difference may partly reflect the conditions associated with different social welfare payments; those without a disability who are receiving Jobseekers Allowance or Jobseekers Benefit receive their payment on the condition that they are actively seeking work. It was also the case for those not at work that roughly equal proportions of those with and without a disability would have liked a job but were not actively seeking one (about one in six to one in seven). People with disabilities were much more likely to say that they do not want a job, at 50 per cent compared to 16 per cent of those without a disability, among those aged 20–59 years. This amounts to about two-

thirds of people with disabilities who were not at work and about one half of their counterparts without a disability. The inference we can draw from this, however, is that of those not at work, about one-third of people with disabilities and half of those without a disability are either seeking work or would like to work.



Figure 2.5 Detailed ILO Economic Status of People With and Without a Disability (%)

Source: QNHS Longitudinal Database, 2010-Q3 2015, analysis by authors.

Note: Adults aged 20-59, weighted data. The error bars show the bounds of the 95% confidence interval.

A useful exercise with the figures from the detailed economic status categories is to ask what percentage of the workforce would be comprised of people with disabilities if all of those who wanted to work had a job. This is relevant in setting targets such as the that of 3 per cent of employees in public service bodies set out in the Disability Act, 2005 (Pr 5, S47). This is illustrated in Table 2.3, which takes the figures for people aged 20–59 years for the period 2010–Q3 2015. The figures are calibrated to the total population using the most recent estimates (for April 2016). They suggest that if all of those who want a job were in employment, the employment rate would be 50 per cent for people with disabilities and 84 per cent for those without a disability, which contrasts with the figures of 31 per cent and 71 per cent, respectively, in employment in the 2010–2015 period. At present, the figures indicate that approximately 3.4 per cent of those at work are people with disabilities as identified by the Quarterly National Household Survey (QNHS). If the employment rate increased for both those with and without a disability (to 50 per

cent and 84 per cent respectively), 4.6 per cent of those in employment (across both public and private sectors) would be people with disabilities.

	Disability	No Disability	Total
At work ('000s)	58.0	1625.1	1,683.1
Unemployed ('000s)	13.7	226.5	240.1
Others who want to work ('000s)	21.8	85.0	106.9
Do not want to work ('000s)	93.2	362.9	456.1
Total ('000s)	186.7	2,299.5	2,486.2
At Work (as % of group)	31%	71%	68%
At work in this group as % of those at work	3.45%	96.55%	100.00%
Want to work (as % of group)	19%	14%	14%
Want to work in this group as % of all who want to work	10%	90%	100%
At work or want to work (as % of group)	50%	84%	82%
At work or want to work as % of all those who are at work or who want to work	4.61%	95.39%	100.00%

Source: QNHS Longitudinal Database, 2010–Q3 2015, analysis by authors. Population estimate from Table PEA01 from CSO website for April 2016, updated August 2016.

Note: Adults aged 20–59 years, weighted data. The margin of error for the percentage of those who want work (including those already at work) who have a disability is 0.13%.

In interpreting these figures is it important to remember that 'wanting a job' is something that is conditioned by the opportunities that are available, as well as the resources and skills available to the individual. Research has shown that labour force participation is liable to change over the business cycle, particularly for women, and that inactivity is not a fixed category but responds to changes in the environment (Walsh, 1993; Byrne and O'Brien, 2016). Much of the increase in employment in the boom years did not come from people who were unemployed and actively seeking work, but from those who were not initially seeking work, particularly women. The increase in employment was also stimulated by external factors such as changes in the tax system. For example, Callan, van Soest and Walsh (2007) found that changes in the tax treatment of couples had an effect on the increase in married women's labour force participation, but not to the same extent as other factors such as rising education and real wages for example. As opportunities increased, more of those who had not been interested in employment began to take up jobs. So 'interest in work' is something that changes as opportunities increase. For this reason, the 4.6 per cent is probably a conservative figure and may well be exceeded if work is made more attractive and more accessible to people with disabilities.
Another aspect of labour market attachment is the length of time since the person last worked. The longer someone has been out of the labour market, the greater the challenges involved in getting back to work. Figures on the length of time since last having worked are shown in Figure 2.6, which sets this issue in context by also showing the percentage who were at work at the time of the survey and the percentage who never worked. What is striking in this figure is the high percentage of people with disabilities who had some employment experience. Although only 31 per cent were at work at the time of survey, just over one half had worked at some point in the past.⁶ This means that over 80 per cent of adults with a disability in this age range had some employment experience.



Figure 2.6 Whether Currently at Work, Never Worked and Length of Time Since Last Worked, Among People With and Without a Disability (%)

Source: QNHS Longitudinal Database, 2010–Q3 2015, analysis by authors. Note: Adults aged 20–59 years, weighted data.

The biggest group of people with disabilities (35 per cent) had last worked more than four years previously. The previous employment may well have predated the onset of disability. Just 18 per cent had never worked. A much higher proportion of people without a disability were at work at the time of survey (71 per cent) and a further 22 per cent had worked in the past. Just 7 per cent of those without a disability had never worked.

2.6 REASONS FOR LEAVING JOB OR FOR NOT LOOKING FOR WORK

We saw above that many of the job-related transitions among people with disabilities were between work and 'inability to work due to illness/disability'. We

⁶ However, there is not enough information to allow us to ascertain whether the person developed their disability while working or prior to working.

might expect this to be reflected in the reasons given by people with and without a disability for leaving their last job. Figure 2.7 shows that, indeed, the most striking difference between those with and without a disability is that almost one half of those with a disability who were not at work but who had worked in the past left their job for reasons related to illness or disability. This reason is cited by only 4 per cent of those who did not have a disability at the time of the survey.





Source: QNHS Longitudinal Database, 2010–Q3 2015, analysis by authors.

Note: Adults aged 20–59 years not currently working but who worked in the past, weighted data.

Among those without a disability, an involuntary termination (due to dismissal or redundancy) was the most commonly cited reason, by just under one half, followed at some distance by 'other personal/family reasons', followed by the job being of limited duration. These other reasons also occur for people with disabilities. If we discount those who left because of illness or disability, the percentages leaving for other reasons would be reasonably similar for those with and without a disability. While 'own illness or disability' is the most common reason for leaving a job among those with a disability, it is worth noting that this accounts for only one half of those who had previously worked: other issues such as family responsibilities, being dismissed or made redundant and the ending of a temporary job are also significant.

We saw above that 50 per cent of people with disabilities and 16 per cent of those without a disability reported that they did not want a job. Figure 2.8 shows the reasons given by this group for not seeking work. Among people with disabilities, 'own illness or disability' is the dominant reason and was given by three-quarters of those not seeking work. Three reasons emerged for those without a disability who are not seeking work; each reason was given by 25% of this group. These were

that they are currently in education or training; that they are looking after children or an incapacitated adult and other personal or family reasons. Each of these was cited by less than ten per cent of people with disabilities. It is interesting that some reasons we might expect to be important for people with disabilities were very rarely cited (by fewer than 1 per cent), such as believing they do not have the necessary skills or qualifications or being unable to get transport to work (not shown separately in Figure 2.8).





Source: QNHS Longitudinal Database, 2010–Q3 2015, analysis by authors.

Note: Adults aged 20–59 years who are not seeking work, weighted data.

2.7 TYPE AND SEVERITY OF DISABILITY

The QNHS asks specifically about different types of disability, categorising them as blindness, deafness, mobility conditions, intellectual disability, learning disabilities, psychological conditions and a final group covering pain and other conditions. Figure 2.9 shows the percentage of people aged 20–59 years that reported each type of disability. Note that more than one type of disability may be recorded, but only one-quarter recorded more than one type.

The largest group (59 per cent) comprises those who reported having a disability related to pain, breathing or another chronic illness or condition. This is followed by those who reported 'a difficulty with basic physical activities such as walking, climbing stairs, reaching, lifting or carrying', at 27 per cent of those reporting a disability. Sixteen per cent reported a psychological or emotional condition, while about eight per cent reported an intellectual disability and a similar proportion reported a difficulty with learning, remembering or concentrating. Sensory disabilities are the least common among those who reported one of these disability

types; just 3 per cent reported blindness or a serious vision impairment and 4 per cent reported deafness or a serious hearing impairment.⁷





Source:QNHS Longitudinal Database, 2010–Q3 2015, analysis by authors.Note:Adults aged 20–59 years with a disability, weighted data (N=33,131).

The severity of a disability is measured as a count of different kinds of difficulty the person has because of their disability. All those who responded that they had a 'long-lasting condition or difficulty' were subsequently asked if they faced difficulties with a range of daily activities; the activities and results are outlined below.

- Dressing, bathing or getting around inside the home: 8 per cent of people with disabilities.
- Going outside the home alone to shop or visit a doctor's surgery: 15 per cent of people with disabilities.
- Working at a job or business or attending school or college: 48 per cent of people with disabilities.
- Participating in other activities, for example leisure or using transport: 35 per cent of people with disabilities).

⁷ An exploratory analysis by type of disability and previous sector of employment did not reveal a greater concentration of people with disability who worked previously in sectors with a high rate of work-related injuries. Results are available from the authors.

This gives us a five-point scale, with zero indicating that the individual faced none of the difficulties listed and up to four for people who agreed that they were affected by all of them. The distribution is shown in Figure 2.10, by type of disability.





Source: QNHS Longitudinal Database, 2010–Q3 2015, analysis by authors.

Note: Adults aged 20–59 years with a disability, weighted data. Margins of error range from a low of 1% for any disability, to between 4% and 6% for blindness and deafness because of the small number of people with these types of disability. The maximum margin of error for the other types of disability is 1.7% for mobility, 4.2% for intellectual, 3.9% for learning, 2.4% for psychological and 1.3% for pain /other.

Overall, 42 per cent of those who reported one of the types of disability were not affected in any of these four ways, 29 per cent reported experiencing one effect, 17 per cent reported experiencing two effects and just 12 per cent said they experienced three or four effects. There are differences in severity by type of disability. Those with intellectual disability were most likely to report three or four effects (43 per cent), while those with deafness or hearing impairment were most likely to report 'no effect' (59 per cent). Those with pain or other chronic condition were also less likely to report being affected in one of these four ways, with 47 per cent reporting 'no effects'.

Figure 2.11 shows the association between the different types of difficulty and number of difficulties experienced by one individual. There is a strong relationship between the type of difficulty and the number of difficulties. Difficulties in self-care and in going outside alone were more often associated with a high level of impact across different types of activity. This means that those with difficulties in self-care

or in going out alone also tend to have difficulty in participating in activities such as work, education, transport or leisure.



Figure 2.11 Severity of Disability by Type of Difficulty

Source: QNHS Longitudinal Database, 2010–Q3 2015, analysis by authors.

Note: Adults aged 20–59 years with a disability and one or more difficulties, weighted data. Margins of error at p<=.05 are shown by the error bars in the chart.

By contrast, difficulties in participating in work, college or other activities often occur without difficulties in self-care or in going out alone. Of those who reported difficulty with self-care, 85 per cent had three or four of the different kinds of difficulty. The same is true of those who reported difficulty going outside the home alone, with 77 per cent of this group having three or four difficulties. Very few of these groups had just one difficulty (7 per cent for both types). On the other hand, for 41 per cent of those who reported a difficulty in participating in work or education, this was the only one of these four types of difficulty they reported. Those who reported difficulty in participating in other activities had an intermediate level of impact, with 22 per cent reporting only this type of difficulty and another 45 per cent reporting just two of the four types of difficulty. This means that difficulty with participating in work or attending school or college occurs at a lower overall level of impact, affecting many people with disabilities who do not have a difficulty with self-care or in going outside alone.

2.8 SUMMARY

This chapter focuses on describing the broad differences between people with and without a disability in terms of their work experience and work-related transitions. It shows that people with disabilities were less likely to be at work, but that many of them worked in the past; more than 80 per cent had some employment experience. However, their work experience was likely to have taken place more than four years previously. In the 20–59 age group, 31 per cent of people with disabilities were at work, compared to 71 per cent of those without a disability. People with disabilities were more likely to exit employment than to enter

employment between quarters, whereas the opposite was true of those without a disability. As a percentage of those not at work, only 2 per cent of people with disabilities entered employment between one quarter and the next, while over 5 per cent of people with disabilities at work left a job between one quarter and the next.

In terms of self-defined economic status, being 'unable to work due to illness or disability' features strongly for adults with a disability, as we might expect; this was cited by over one-third of them. However, this status is not an impenetrable barrier to employment. Among those people with disabilities who entered a job between one quarter and the next, nearly one-quarter had said in the earlier quarter that they were unable to work due to illness or disability, whereas over one-third had identified themselves as unemployed. The proportions exiting employment into these economic statuses is fairly similar, with slightly more having exited into unemployment than into illness/disability.

Among those at work, about one-third of people with disabilities were working part-time compared to about one-fifth of people without a disability.

About half of people with disabilities said they did not want a job (compared to 16 per cent of other adults). For three-quarters of these people with disabilities, the reason for not seeking work was 'own illness or disability'. This means that one half of those with a disability are either at work or want to work. If all of those (with or without a disability) who wanted to work had a job, people with disabilities as identified in the QNHS would constitute close to 5 per cent of the workforce across both public and private sectors rather than the figure of 3.4 per cent in the 2013–2015 period. This figure could well be exceeded if steps are taken to make work more attractive and more accessible to people with disabilities, as interest in work is increased among those who feel unable to work at present.

Chapter 3

Employment Entries

3.1 INTRODUCTION

This chapter focuses on the second research question and on entries to employment. Specifically, we ask whether the pattern of employment entries differs by whether a person has a disability. In order to address this question, we examine the pattern of employment entry, controlling for a wide range of demographic characteristics in order to isolate the possible effect of disability. The demographic characteristics we examine include age, gender, education, marital and family status and work status of other household members.

The next stage of this analysis considers how the impact of disability might vary depending on the severity of the disability and the particular type of disability. Finally, we investigate whether there are wider household effects on employment participation – can family members with disabilities have a spill-over effect on entering work?

3.2 MODEL OF EMPLOYMENT ENTRY

This section uses a logistic regression model in order to separate the effects of each individual characteristic on the probability of employment entry. This method allows us to estimate the effect of each characteristic, holding all other features of the individual fixed, so that we can compare like with like in a systematic way. This is a particularly useful methodology in cases where a number of characteristics frequently occur together and descriptive analysis can have difficulty in identifying the direct effects of each factor.

For the logistic regression, our model focuses on those not at work in one quarter and aims to identify the factors that significantly affect the probability of their moving into work. This gives us a total sample size of 140,015 individual observations over the period 2010 to 2015.⁸ Table 3.1 presents the results of the baseline model, which we later supplement with information on the type and severity of the disability. In order for employment entry to be observed, we focus on people who were out of work in the first wave and compare the characteristics of those that moved into employment in the succeeding wave relative to those who remained out of work. We also include information on whether individual-

⁸ In a few cases, some individuals are present in more than two consecutive quarters so they are counted more than once. The statistical tests in the models allow for this non-independence of observations.

level labour market status had previously been classified as unemployed or inactive and how long it had been since they last worked.

The results are presented as odds ratios. A ratio greater than one indicates a higher likelihood of employment entry for someone with that characteristic relative to someone in the base or reference category. A number below one means a lower likelihood. For marital status, for example, we compare each gender and marital status category to that of married men (the reference category), holding constant all other characteristics in the table (age group, education, region, nationality, whether unemployed or inactive, when last worked, living arrangements and household work and period). Apart from formerly married men, all of the other gender by marital status groups were less likely to enter employment (the ratios are less than one and statistically significant). The lowest odds of employment entry were for married women, for whom the ratio is just under 0.6 times that of married men.

As will be clear from the analysis in chapter 2, a much larger proportion of people with disabilities than of those without a disability were initially out of work. This means that those without a disability who are not at work formed a smaller group (about 29 per cent of those without a disability) with distinctive characteristics: they were more likely than their employed counterparts to be married women with children, to have lower levels of education or to be young adults making their first transition to work. The fact that we are focusing on a subset of those without a disability means that they may differ from their employed counterparts in other respects as well, such as unmeasured aspects of labour force attachment or motivation to work. This must be kept in mind in interpreting the results. It means that we cannot generalise from the impact of marital status, age or education on the *transition to employment* to the impact on the *state of being employed*.

We did some background checks for interactions between disability and other characteristics to see whether the impacts of characteristics such as gender, marital status, age, education, nationality, region and living arrangements were similar for people with and without a disability. For the large majority of the patterns there was no difference, so this discussion focuses on the overall picture (section 3.2.1) before moving onto results specific to people with disabilities (section 3.2.2).

3.2.1 Disability and Individual Characteristics

As we saw in chapter 2, people with disabilities were found to be less likely to make the transition from not working to working. In this section, we report the results of a series of models designed to statistically isolate the impact of disability and employment entry after taking account of other characteristics such as level of education and age. Some of the differences between people with and without a disability may be due to these characteristics, which differ between people with and without a disability and are linked to the probability of employment entry.

The first model in Table 3.1 shows the overall odds ratio of employment entry for those not at work, comparing those with a disability to those without a disability, and controlling only for the period (recession or recovery).⁹ People with disabilities were found to have 0.268 times the odds of employment entry than those without a disability.

Since education is such a strong predictor of labour market prospects, it is worth looking separately at the impact of education before examining the impact of other characteristics. In the second model, we take account of differences in education. If levels of education were similar between those with a without a disability, we would expect those with a disability to have 0.34 times the odds of employment entry. Education is important in accounting for the gap between people with and without a disability, but a sizeable gap remains even after taking account of differences in education. Expressing the odds gap as the odds of remaining non-employed, the figure is 3.73 (the inverse of 0.268) in model 1, dropping to 2.93 in model 2 - a fall of about one-fifth in the odds of remaining non-employed due to differences in levels of education. Nevertheless, the gap remains sizeable: people with disabilities were found to be 2.9 times more likely to remain non-employed.

The third model adds the controls for gender by marital status, age group, nationality, region, when the person last worked and their living arrangements. It finds that the chance of entering employment was only about half as high for people with disabilities as those without a disability, holding constant all the other individual characteristics. Expressed as the odds of remaining non-employed, the figure is 1.88. In model 2, which controls for these personal and family characteristics, the gap between people with and without a disability is only half that of model 1.

The remaining figures in Table 3.1 show the impact of other characteristics on the chances of employment entry. In general, it was found to be similar for people with and without a disability, with only a few exceptions (see Table A3.1 in the appendix for the full set of interactions). The exceptions, where relevant, are discussed below.

As we might expect, the odds of employment entry were higher for women, especially married women, and for single men than for married men. Across age

⁹ Checks revealed that controlling for the period had virtually no impact on the coefficients for having a disability.

groups, we find some interesting differences in the chances of employment entry. Those in the youngest cohort (20–24 years) were most likely to move into employment. Workers over the age of 45 had a reduced probability of entering employment and the odds decline further (relative to those aged 35 to 44) for those over 55 years.

We find that the chances of employment entry were substantially lower for those with education levels below completion of second level. For those with less than lower second level education, the chance of entering employment was over 70 per cent less than someone with a post-second level education. Given the lower average education levels of people with disabilities found in previous research, this result is of particular relevance to their employment prospects.

Being non-Irish reduces the odds of entering employment. We find some regional variation with higher rates of job entry in Dublin and the Mid-East than elsewhere.

Previous labour market status and employment history are important factors in explaining the chances of moving into employment. People who were initially identified as being unemployed were considerably more likely to enter employment than those classified as inactive. This may be linked with the reason for being inactive, particularly if it is related to some characteristic unmeasured in these models, such as the age of the youngest child (especially for women) or the nature or severity of disability among those with a disability. The difference between the unemployed and inactive was even larger for people with disabilities (odds ratio 3.2 compared to 1.8 for those without a disability). This suggests that, relative to those who are actively seeking work, people with disabilities who are not actively seeking work are farther from the labour market than their non-disabled counterparts.

The length of time since a person last worked is also strongly associated with their chances of moving into employment. Relative to those who never worked, those who worked in the previous year were 2.5 times more likely to enter employment. Among people with disabilities, those who last worked between one and four years previously also had much higher odds of employment entry than those who never worked (1.8 times compared to a smaller effect of 1.1 times for those without a disability). People who were out of work for more than four years were actually less likely to gain employment than those who never worked, indicating possible scarring evidence for long-term unemployment (or inactivity), as identified in the previous literature on labour market transitions discussed in chapter 2.

					People with disabilities, where
		Model 1	Model 2	Model 3	different
Disability	Yes	0.268***	0.341***	0.531***	
	No	1.000	1.000	1.000	
Gender	Married men			1.000	
x marital status	Single men			0.763***	
	Formerly married men			0.857	
	Married women			0.594***	
	Single women			0.844***	
	Formerly married women			0.754***	
Age group	20-24			1.460***	
	25-34			1.050	
	35-44			1.000	
	45-54			0.813***	
	55-59			0.612***	
Education	< lower 2nd level		0.240***	0.377***	
	Lower 2nd level		0.405***	0.498***	
	Upper 2nd Level		0.689***	0.681***	
	Beyond 2nd level		1.000	1.000	
Nationality	Irish			1.000	
	Non-Irish			0.860***	
Region	Dublin and Mid-East			1.105***	
	Other regions			1.000	
Unemployed/Inactive	Unemployed			1.831***	3.158***
	Not active			1.000	
When last worked	Never worked			1.000	
	4+ years ago			0.576***	
	1-4 years ago			1.137**	1.779**
	Under 1 year ago			2.534***	
Living arrangements	Live alone			0.652***	
	One adult, child(ren)			0.460***	
	2+ adults, not jobless			1.000	
	2+ adults, jobless			0.607***	
	2+ adults and child(ren), not jobless			0.877***	
	2+ adults and child(ren), jobless			0.579***	
Period	Recession	1.000	1.000	1.000	
	Recovery	1.153***	1.065*	1.237***	
Constant		0.0768***	0.119***	0.109***	
N cases		140,015	140,015	140,015	
Pseudo R-sq (illustrative)		0.0169	0.0368	0.1256	

Table 3.1 Odds Ratios for Employment Entries by Personal and Family Characteristics

Source: QNHS Longitudinal Dataset, 2010-2015; analysis by authors.

Note:

Base= people aged 20–59 years present in two consecutive quarters and not in employment in the first quarter of each pair. The figures are odds ratios from a logistic regression model for employment entry between quarters. Model 4 shows the odds ratios for people with disabilities where these differ from the overall odds ratios. *** p<0.001, ** p<0.01, * p<0.05. The pseudo-r-squared statistic is for illustrative purposes only as it is calculated from the model run without accounting for clustering and weights.

Family composition and presence of other working adults in the household appear to have an impact on the probability of transitioning into employment when other factors are controlled. This is consistent with earlier research; see, for example, Watson, Maître and Whelan, 2012. Taking as the reference category two or more adults with at least one adult at work, people in all of the other household types were less likely to enter employment. Within the study period, a non-employed person in a jobless household with children has about 60 per cent the odds of employment entry compared to the reference group (non-employed childless adults in households where someone else is already working). The odds ratio is below one half for a lone parent compared to the reference group.

Unsurprisingly, when we look at the differences by period, we see that economic recovery increased the overall odds of entering employment, when that time-frame is compared to the recession years. With all controls in the model, the odds are about one-quarter higher in the recovery period.

3.2.2 Type and Severity of Disability

Our baseline - model 1 - showed a significant reduction in the probability of entering employment for people with disabilities relative to someone with similar personal and educational characteristics but without a disability. However, having a disability encompasses a very wide range of conditions and levels of difficulty, which could have very different implications for participation in the labour market. For this reason, the set of models presented in Table 3.2 delves more deeply into the question of whether different types of disability might vary in their impact on the chances of getting a job and the extent to which this is driven by the severity of the disability itself. Severity of the disability is measured as a count of the number of different kinds of difficulty in everyday activities the individual experiences because of their disability, including difficulty in self-care, going outside alone, engaging in education or work or participating in other activities. This gives us a five-point scale, with zero indicating that the individual faces none of the difficulties listed and four indicating that people agree they are affected by all of them. The Quarterly National Household Survey (QNHS) also asks specifically about the broad type of disability, categorising them as blindness, deafness, mobility conditions, intellectual disability, learning disabilities, psychological conditions, and a final group covering pain and other conditions.¹⁰

Model 2 in Table 3.2 adds the measure of the count of effects to the indicator of having a disability used in the main model. All of the models in this table also control for the individual and family characteristics included in model 1 (for brevity, this is not shown in the table). Adding the measure of the severity of the disability to the indicator for having a disability shows a significant impact of both indicators. This shows that there is a direct effect of having a disability in reducing the probability of moving into a job, even once the extent of the difficulties is taken

¹⁰ See section 2.6 for a description of the type of disability and the measurement of severity of the disability.

into account. Including the measure of the number of effects, however, shows a reduced effect of the direct disability indicator relative to our baseline model – the chances of finding a job are 30 per cent lower for a person with a disability in this model compared to 50 per cent lower in model 1. This isolates the effect of having a disability, even if there are zero effects reported. Increasing levels of severity beyond this reduce the odds of moving into a job, with more effects associated with consistently reducing the chances of finding a job.

Model 3 in Table 3.2 adds the distinct types of difficulties the person may experience rather than a count of the number of difficulties. As we saw in chapter 2, the types of difficulty include difficulty in self-care, going out alone, participating in work/education or in other activities. Much of the impact is captured by the item on 'difficulty in participating in work or school/college' because, as we saw in earlier chapters, most people with the more severe difficulties (such as those regarding self-care and going out alone) also have difficulty in this respect. The impact of having a disability with no effects remains substantially the same with an odds ratio of 0.7.

The result that greater degrees of difficulty with everyday life are associated with a lower probability of finding work is plauible. More striking perhaps is the finding that the indicator for having a disability continues to have a significant effect, reducing the probability of moving into employment even when the severity has been controlled for. This could be interpreted in a number of ways that are not necessarily mutually exclusive. Firstly, the set of questions used to generate the measure we interpret as severity of the disability does not capture fully the ways that disability might affect an individual's capacity to engage in employment. A second possible explanation may relate to the reaction of employers to the disability in itself. They may be reluctant to make modifications to the workplace or job specification to facilitate the employment of someone with a disability, either because this imposes a cost on the business or due to an element of discrimination. A third possible explanation may be that people who are in employment may be more reluctant to acknowledge being limited in their capacity to engage in everyday activities and may minimise the difficulties involved.

Model 4, which controls for the severity of the disability, examines whether the different types of disability have a similar impact on the odds of moving into work. There is no statistically significant additional effect of a number of types of disability, specifically blindness and deafness, on the probability of moving into work once the number of effects has been controlled. However, other conditions are found to have an effect on work transitions even when the level of severity has already been included. The smallest significant effects are found for having a condition characterised by pain or classified under the catch-all 'other' category, which reduces the chances of moving into work by just over 20 per cent, and

mobility disabilities, which reduce the chances of entering employment by 30 per cent relative to someone without a disability. Learning and psychological conditions have effects of similar magnitude, both reducing the chances of moving into work by almost half, even with all of the other observable characteristics of the individual controlled for in the model's specification. The largest effect is that of intellectual disabilities, which is associated with particular challenges in transitioning into work, with an estimated reduction in the chance of moving into work of over 60 per cent.

		Model 2	Model 3	Model 4	Model 5
Disability	Yes	0.707***	0.723***		0.712***
	No	1.000	1.000		1.000
Number of		0.732***			
effects	Count measure			0.741***	0.732***
Type of difficulty	Self-care		0.878		
	Going out		0.612*		
	Work/school		0.577***		
	Other		0.984		
Disability type	No disability			1.000	
	Blindness			0.809	
	Deafness			0.886	
	Mobility			0.696**	
	Intellectual			0.348**	
	Learning			0.555*	
	Psychological			0.551***	
	Pain/Other			0.779**	
Family member	Has a disability				0.954
	No disability				1.000
Constant		0.110***	0.110***	0.110***	0.110***
N cases		140,015	140,002	140,015	140,015
Pseudo r-squared	(w/o svy)	0.1263	0.1260	0.1265	0.1263

Table 3.2 Odds Ratios for Employment Entries Between Quarters, by Type and Severity of Disability

Source: QNHS Longitudinal Dataset, 2010-2015; analysis by authors.

Note: Base= people aged 20–59 years present in two consecutive quarters and not in employment in the first quarter of each pair. The figures are odds ratios from a logistic regression model for employment entry between quarters. The models presented in this table also control for the personal and family characteristics and other characteristics as presented in model 1. The pseudo-r-squared statistic is for illustrative purposes only as it is calculated from the model run without accounting for clustering and weights. *** p<0.001, ** p<0.05.

Model 5 examines whether or not having a family member with a disability can have some effect on labour market participation, due to caring responsibilities that might make it difficult for an individual to find and keep a job. However, controlling for all other factors, we do not find that this has a statistically significant effect on the odds of employment entry.

3.3 SUMMARY

The goal of this chapter is to examine the impact of disability on employment entry, controlling for as many other observable characteristics as possible. The central

finding is that employment entry probabilities between each set of quarters were only about half as high for people with disabilities as those without a disability.

A number of other personal characteristics are found to have significant effects on the chances of moving into work. In particular, we find that the youngest people in the sample (those aged 20–24 years) were the most likely to move into employment, while those at the older end of the age distribution (over 45 years) had a considerably reduced probability of entering employment, if they were not at work. There is also a strong effect of education, with the chances of employment entry found to be substantially lower for those whose highest completed level of education is less than second level. This is of particular relevance for people with disabilities whose level of schooling has been affected by their disability: the level of schooling may already have been affected by the disability among those whose disability was present in childhood. The statistical model suggested that about one-fifth of the gap in the odds of employment entry between those with and without a disability was due to differences in education alone.

The length of time since an individual last worked is also strongly associated with the chances of moving into employment. From a policy perspective, it is therefore important that interventions to engage people with the labour market begin as early as is feasible to avoid the negative effects on employment prospects of being out of work for prolonged periods.

This chapter showed how the type and severity of a disability are also relevant to the pattern of employment entry. The effect of having a disability remains statistically significant in reducing the probability of moving into a job, even once the level of severity is controlled for. At the same time, increasing levels of severity are found to systematically reduce the probability of moving into a job. The analysis by disability type showed that intellectual disability has the strongest impact in reducing the chances of employment entry, while the impact of conditions such as vision or hearing impairment is largely captured by the severity of the condition.

Chapter 4

Employment Exits

4.1 INTRODUCTION

Having examined the determinants of employment entry, we now turn to individuals who are in work and examine the factors that have an impact on their probability of exiting employment.

It is worth emphasising that people with disabilities in employment were found to constitute a minority of all working-age adults with a disability (29 per cent). In this study, they typically had a higher level of education and were younger than all working-age people with disabilities. This can be seen in Figure 4.1. Among people with disabilities, those at work were over-represented among those aged 25–44 years (46 per cent compared to 39 per cent) and under-represented among those aged 55–59 years (17 per cent compared to 24 per cent). People with disabilities in employment were only half as likely to have less than full second-level education and twice as likely to have post-secondary or tertiary education than working-age people with disabilities who are not in employment.



Figure 4.1 Age Group and Education of People with a Disability by Whether in Employment

Source: QNHS Longitudinal Database, 2010-Q3 2015, analysis by authors.

Note: Adults aged 20–59 years with a disability, weighted data. The differences between those at work and those not at work are statistically significant for all the education levels and for all age groups except age 45–54 years.

In addition to examining the effect of disability and the individual's demographic characteristics (age, gender, education, marital and family status and work status of other household members) on employment entry, our model of work exit also includes information on job characteristics, such as occupation, sector (public/private and industry), size of workplace, and full-time or part-time work. We examine how these factors impact on the individual's exit probability and try to isolate the effect of having a disability from these other individual and workplace characteristics. We then look at how the type and severity of the disability contribute to exiting work.

Disability No disability Size of firm Self-Employed 16% 15% Firm 1–50 employees 25% 24% Firm 51–100 employees 22% 23% Firm 101–500 employees 26% 26% Firm 500+ employees 12% 10% Occupation 31% Manager/professional 25% Technical/clerical 23% 22% Services/sales 19% 20% Craft/semi-skilled 20% 20% Elementary 12% 9% Tenure in job 68% Tenure 4+ years 73% 14% 18% Tenure 1-4 years Tenure <1 year 11% 12% Hours worked Full-time 68% 79% Part-time 32% 21% **Economic sector** 4% Agriculture 5% 12% 13% Manufacturing Construction 5% 6% Services 48% 50% 29% 27% Public sector **Union membership** 29% Member 27% Not a member 70% 71%

Table 4.1 Profile of Jobs Held by People With and Without a Disability

Source: QNHS Longitudinal Dataset, 2010-2015; analysis by authors.

Note: Base= people aged 20–59 years in employment. The maximum margin of error is 0.4% for people without a disability and 1.7% for people with disabilities. Differences greater than 2 percentage points between people with and without a disability are statistically significant at p<=05.

We find fewer differences than might be expected between the jobs held by people with and without a disability who are in employment. As shown in Table 4.1, people with disabilities were found to be very similar to those without a disability in terms

of the percentage who are self-employed, the size of organisation in which they work, broad economic sector and union membership rates.

In occupational terms, people with disabilities were less likely to work as managers or professionals (25 per cent compared to 31 per cent for those without a disability) and were more likely to work part-time (32 per cent compared to 21 per cent). They were also more likely to have been in their jobs for four or more years (73 per cent versus 68 per cent). We might expect that the existence of a target for employment of people with disabilities in the public sector would lead to them being more likely to be found in public sector jobs. However, the target is quite low, and the percentage working in the public sector is very similar for people with and without a disability: 29 per cent of workers with a disability and 27 per cent of workers without a disability are in the public sector. ^{11, 12}

4.2 MODEL OF EMPLOYMENT EXITS

In order to examine employment exit, data from a different sample are used to that presented in section 4.1; here, the sample only includes those people who were in work at the start of each quarter.

4.2.1 Individual Characteristics and Employment Exits

We saw in chapter 2 that people with disabilities were more likely to exit employment than those with a disability. We now use a statistical model to examine the extent to which this difference may be accounted for by differences between people with and without a disability in age, level of education and other characteristics. The results are shown in Table 4.2.

The first model shows the overall difference between those with and without a disability in terms of the odds of employment exit, controlling only for the period (recession or recovery). We can see that people with disabilities were about twice as likely to leave employment. As in the previous chapter, we are interested in whether education accounts for any of the gap between those with and without a disability so the second model adds a control for level of education. The gap, expressed in terms of the higher odds of exiting among people with disabilities, is reduced only slightly, by about 5 per cent (from 2.062 to 1.964). This is a more modest impact of education in accounting for differences in employment exit relative to the larger significance in accounting for differences in employment entry. The smaller effect in this instance arises because people with disabilities who are at work are a select subset of all working-age adults with a disability and they

¹¹ The target in the Disability Act, 2005 is that 3 per cent of jobs in the public sector should be filled by people with disabilities. According to the *Comprehensive Employment Strategy for People with Disabilities 2015–2014* (Department of Justice and Equality, 2015), the target is to be increased on a phased basis to 6 per cent by 2024.

¹² As a proxy, public sector employees in the QNHS data are identified as those in the public administration, health and education sectors.

are much less likely to have very low levels of education.

Model 3 includes controls for other individual or family characteristics. This model also includes the controls for job characteristics, as shown in Table 4.3. Even with all of these characteristics controlled, the odds of employment exit were about twice as high (1.97 odds ratio) for people with disabilities compared to the odds of exit for an otherwise identical individual (in terms of the characteristics in the table) without a disability.

		Model 1	Model 2		People with
					disabilities
				Model 3	(where
		4 4 4		(part A)	different)
Disability	Yes	2.062***	1.964***	1.974***	
	No	1.000	1.000	1.000	
Gender x	Married men			1.000	
marital	Single men			1 351***	
status	Single men			1.351	
	Formerly married men			1.406***	
	Married women			1.213***	
	Single women			1.186**	
	Formerly married			1.056	
	20.24			1.030	
Age group	20-24			1.00*	1 (70**
	25-34			1.100*	1.679***
	35-44			1.000	
	45-54			1.006	
- 1	55-59		4 766***	1.355***	
Education	< lower 2nd level		1.755***	1.219**	
	Lower 2nd level		1.661***	1.296***	
	Upper 2nd Level		1.733***	1.211***	
	Beyond 2nd level		1.000	1.000	
Nationality	Irish			1.000	
	Non-Irish			1.093*	
Region	Dublin and Mid-East			0.949	
	Other regions			1.000	
Family					
type and	Live alone			1.110	
work	One adult and child(ren)			1.351***	
	2+ adults, 1 Working			1.402***	
	2+addults and child(ren), 1Working			1.254***	
	2+adults, 2+Working			1.000	
	2+adults and child(ren).				
	2+Working			1.151***	
Period	Recession	1.000	1.000	1.000	
	Recovery	0.767***	0.813***	0.736***	

Table 4.2 Odds Ratios for Employment Exits Between Quarters, by Personal and Family Characteristics

Source: QNHS Longitudinal Dataset, 2010-2015; analysis by authors.

Note: Base= people aged 20–59 years present in two consecutive quarters and in employment in the first quarter of each pair. The figures are odds ratios from a logistic regression model for employment exit between quarters. Model 3 in this table also controls for the firm and job characteristics as presented in model 3, part B (Table 4.3). *** p<0.001, ** p<0.01, * p<0.05.

We then look at the impact of other personal characteristics on the probability of exiting employment. Taking gender and marital status together, compared to the base group of married men, almost all other groups were significantly more likely to exit employment in any given two quarter period. The one exception is formerly married women, who did not differ from married men in the odds of exiting employment with other characteristics controlled. Single men and formerly married men had the highest exit probability, at almost 35–40 per cent higher than married men while single women and married women are 18–21 per cent more likely to exit.

The effect of age on employment exit is measured relative to those aged 35–44 years. The youngest group of workers were most at risk of employment exit, with those aged 20–24 years being 1.8 times more likely to leave work than the reference group. The higher rate of exit among those under 25 years is consistent with their lower levels of labour market experience and with the fact that some may have returned to education. Among people with disabilities, those aged 25–34 years were also more likely to exit employment (odds ratio 1.7). At the other end of the age spectrum, workers aged 55–59 years were more likely to exit employment. Some of the pattern for older workers may be linked to early retirement or to the greater prevalence of health problems in this age group.

Previous research has consistently found a strong relationship between education and job entry and exit, which is also a feature of our model of employment exit. Relative to post-second level education, all lower levels have a higher chance of employment exit. The lower levels of education (upper secondary and less) are found to increase the chances of exiting employment by between 20 and 30 per cent compared to the higher reference category. Since people with disabilities tend to have lower average levels of education (for example, see Watson et al., 2013), the impact of education will tend to further increase the gap between those with and those without a disability.

Non-Irish citizens were found to have a greater employment exit probability than Irish workers (just under 10 per cent higher). We do not find any evidence of regional variation once all other characteristics have been controlled for.

Family composition and work status of other adults were also associated with differences in employment exit, with the highest odds of exit found for the sole earner in a household: 35 per cent higher odds of exit for lone parents, 20 per cent higher for a sole earner with no children and 25 per cent higher where there are children. All family structures examined had a higher risk of employment exit than the base category of two working adults without children. The presence of children in a household was associated with an increased chance of employment exit while

the presence of another working adult was associated with a reduced chance of employment exit.

Finally, the recovery in the economy is addressed by the inclusion of an indicator variable for the period 2013–2015 relative to 2010–2012. This shows that the chance of employment exit in the second period was about 74 per cent the size of that in the recession period.

4.2.2 Job Characteristics and Employment Exits

In examining the factors affecting the likelihood of exiting employment, we supplement the individual characteristics used in the employment entry model with a range of characteristics of the job and firm where the individual worked. The characteristics examined include firm size, broad occupation class, sector of employment, job tenure and union membership. These results are presented in Table 4.3, a continuation of the model in Table 4.2, which presented the effects of individual characteristics. A number of these job and firm characteristics were found to have significant effects on the probability of exiting work.

Firm size is divided into five groups: those who are self-employed; firms with 1–50 employees; firms with 51–100 employees, firms with 101–500 employees; and firms with more than 500 employees. Relative to the reference category of small firms, we find that the self-employed were approximately 10 per cent less likely to move out of work from one quarter to the next and that those working for larger firms were also significantly less likely to stop working. The effects for each of the three firm groups with more than 50 employees are very similar in magnitude, with a reduction in exit chances of around 20 per cent.¹³

There are a number of reasons for differences in the probability of exit by firm size. The first is that larger companies are less at risk of complete closure than smaller firms; this is particularly the case with more recently established firms. This would affect the entire workforce of these organisations. Secondly, more directly related to the employment experiences of workers with a disability but also affecting others who may need flexibility for family reasons, larger companies are more likely to have a wide variety of specialised roles. As a result, it may be easier for them to find a suitable job match for a worker who becomes disabled or who needs flexible hours for family reasons. Larger companies may also be in a better position to absorb costs of potential adaptations to the workplace or job specification that make such flexibility possible.

¹³ Sensitivity tests with more detailed firm size classes showed the same pattern.

		Model 3 (part B)	People with disabilities, where different
Firm size	Self-employed	0.901*	
	Firm 1–50 employees	1.000	
	Firm 51–100 employees	0.881***	
	Firm 101–500 employees	0.811***	
	Firm 500+ employees	0.810***	
Occupation	Manager/professional	0.796***	
	Technical/clerical	0.846**	
	Services/sales	0.872**	
	Craft/semi-skilled	0.821***	
	Elementary	1.000	
Job tenure	Tenure 4+ years	1.000	
	Tenure 1-4 years	1.607***	
	Tenure <1 year	3.437***	2.449***
Full-time/part-time	Full-time	1.000	
	Part-time	2.284***	1.762**
Sector	Agriculture	0.770**	
	Manufacturing	1.000	
	Construction	1.814***	
	Services	0.859**	
	Public sector	0.835***	
Union	Member	0.603***	
	Not a member	1.000	
Constant		0.0151***	
N cases		263,214	
Pseudo r-squared (w/o svy)		0.102	

Table 4.3 Udds Ratios for Employment Exits Between Quarters, by Firm and Job Characterist	Firm and Job Characteristics
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Source: QNHS Longitudinal Dataset, 2010-2015; analysis by authors.

Note: Base= people aged 20–59 years present in two consecutive quarters and in employment in the first quarter of each pair. The figures are odds ratios from a logistic regression model for employment exit between quarters. The models presented in this table also control for the personal and family characteristics as presented in model 1 (part A). The final column presents the odds ratio for people with disabilities where this differs from that for people without a disability and is calculated from the model in Table A4.1 (appendix). The pseudo-r-squared statistic is for illustrative purposes only as it is calculated from the model run without accounting for clustering and weights. *** p<0.001, ** p<0.05.

In the context of our focus on the effect of disability on labour market transition, it is tempting to interpret the mitigating effect of self-employment on lowering the exit probability as coming from the greater degree of control and flexibility over that self-employed people may have over their working life. However, some of the persistence of self-employment is undoubtedly due to the fact that the self-employed are not entitled to the insurance-related non-means tested Jobseeker's Benefit. This was seen during the recession in the rising income poverty rate of the self-employed who did not have the 'floor' provided by social protection when their incomes from work collapsed (Watson et al., 2016 forthcoming).

In addition to the effect of worker education level, we also find that type of

occupation had an important bearing on the probability of leaving work.¹⁴ Information on job type is collected in the Quarterly National Household Survey (QNHS) using the International Standard Classification of Occupations (ISCO) coding system. We aggregated these occupations into five broad groups in order to keep the number of individuals in each group as large as possible. The categories used are: managerial and professional; technical and clerical; services and sales; craft and semi-skilled and elementary (or unskilled) occupations. Elementary occupations are used as the reference category and, relative to this group, all other occupation types have a lower risk of exiting employment. This is consistent with the earlier finding that higher levels of education, reflected here in the skill requirements of the job, make workers less vulnerable to job exit.

The type of jobs covered by the elementary occupation classification are most likely to be physically demanding. This may have an additional relevance for people with disabilities who, because of lower levels of education, are also likely to be overrepresented in lower-skilled occupations. As well as the direct effect of disability, their representation in elementary occupations may also contribute to a higher exit rate. Elementary occupations are also jobs found in sectors such as construction, agriculture and industry, where the risks of at-work injury are likely to be higher than in most service sector jobs (Russell, Maître and Watson, 2015).

The risk of exiting a job was found to be at its highest in the early stage of the job for all workers, regardless of disability status. The effect of job tenure is sharp, with the chance of exiting being between 2.4 times and 3.4 times higher for those in a job less than one year compared to those who have been in the same job for more than four years. The odds of exiting at this early stage were higher for people without a disability. This may arise because those with a disability who are in employment are a more select group, as noted earlier. The odds of leaving were about 60 per cent higher for someone who has been in the job between one and four years, compared to four years and over. This may, to a certain extent, capture the effect of temporary and seasonal jobs being short-lived by definition, but it also shows the contribution that job or firm-specific human capital can have in making more experienced workers less exposed to job loss.

Unfortunately, we are not able to relate the length of time in the current occupation to the time of onset of the disability, which would allow us to discuss in more detail the extent to which workers that develop a disability are at a different risk of job exit, relative to those who already had the disability when they started the job. Further work in this area would inform understanding regarding whether there is a differential willingness of firms to make adaptations for existing workers with new needs, compared to making the same adaptations for newly

¹⁴ The occupational categories are very broad so the correlation with education is modest. We checked the impact of including both education and occupation in the same model by running separate models, one with each variable only. There was little difference in the coefficients for education and occupation, however.

hired (and hence less embedded in the skill structure of the firm) workers.

Another pattern that emerges strongly from our analysis of the effects of job characteristics on employment exit is that part-time work emerged as being considerably less stable than full-time employment. Part-time workers had between 1.8 times and 2.3 times the odds of leaving employment between calendar quarters (with the higher figure for those without a disability) relative to full-time workers. This is a statistically significant finding, even controlling for job tenure and therefore suggests that part-time work is less embedded and more sensitive to changes in demand for labour than full-time positions. This finding may be of particular importance to the employment prospects of people with disabilities, for whom part-time hours would be more suitable, particularly if they are dealing with mobility or pain-related conditions: a part-time contract would expose them to a less stable employment arrangement. The potential benefits of part-time work for people whose disability would make full-time and parttime workers with disabilities than is found of their non-disabled counterparts.

Employment sector is an important factor in determining the probability of employment exit. Relative to manufacturing, we find that jobs in the construction industry came with the highest risk of job exit, with construction workers just over 80 per cent more likely to leave between calendar quarters. This is despite the fact that our data source begins in date from 2010, by which point the greatest impact of the recession on job loss in construction would have passed.¹⁵ Similar to the hypothesis regarding elementary occupations, the physical nature of much of the work in the construction sector and the relatively high risk of on-the-job injury may make this effect particularly relevant to workers with a disability. Other sectors, with the notable inclusion of the public sector, had a much lower probability of job exit compared to manufacturing.¹⁶ In addition, the levels of union membership are higher in the public sector and we find that being part of a union provides a further protective effect, reducing the odds of job exit by approximately 40 per cent.

4.2.3 Type and Severity of Disability and Employment Exits

The set of models presented in Table 4.4 examine how the type and severity of the disability contribute to leaving work. Similar to the equivalent models for job entry in the previous chapter, we use a count measure of the number of effects a disability has on an individual in terms of difficulties coping with aspects of everyday life. We also examine, separately, the different types of difficulty (regarding self-care, going out alone, participating in work/education or participating in other activities). The count measure ranges from zero for no effects

¹⁵ Between 2008 and 2010, 125,200 jobs were lost in the construction sector compared to 343,000 between 2010 and 2013. Authors' calculation based on the QNHS data.

¹⁶ Public sector employees in the QNHS data are identified approximately as those in the public administration, health and education sectors.

to a maximum of four. Each of the four models presented also control for all of the characteristics already discussed in the baseline model – both the individual and job characteristics.

		Model 2	Model 3	Model 4	Model 5
Disability	Yes	1.551***	1.539***		1.524***
	No	1.000	1.000		1.000
Number of effects	Count measure	1.510***		1.499***	1.513***
Type of effect	Self-care		1.369		
	Going out		1.473		
	Work/school		2.345***		
	Other		1.019		
Disability type	No disability			1.000	
	Blindness			1.537	
	Deafness			1.520**	
	Mobility			1.456	
	Intellectual			1.403	
	Learning			2.193***	
	Psychological			1.527***	
	Pain/other			1.537	
Family member	Also has a disability				1.116*
	No disability				1.000
Constant		0.015***	0.015***	0.015***	0.015***
N cases		263,214	263,208	263,214	263,214
Pseudo r-squared (w/o svy)	0.1030	0.1030	0.1032	0.1031

Table 4.4	Odds Ratios for Emp	loyment Exits Between Quarte	ers, by Type and Severity	of Disability
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Source: QNHS Longitudinal Dataset, 2010-2015; analysis by authors.

Note: Base= people aged 20–59 years present in two consecutive quarters and in employment in the first quarter of each pair. The figures are odds ratios from a logistic regression model for employment exit between quarters. The models presented in this table also control for the personal, family, firm and job characteristics as presented in model 1 (parts A and B). The pseudor-squared statistic is for illustrative purposes only as it is calculated from the model run without accounting for clustering and weights. *** p<0.001, ** p<0.05.

Severity of a disability was found to increase the chances of employment exit and reduce the contribution of the simple indicator of having a disability. As with employment entry, however, the results of model 2 continue to show a significant effect on employment transitions for having a disability, even once the severity is controlled for. Model 3 examines the different types of difficulty, rather than the count of difficulties. Much of the impact is captured by the item on having difficulty in participating in work or school/college – the least severe of the different difficulties, as we saw in chapter 2. Most of those who have problems with self-care or going out alone were already captured by this indicator. As before, however, even when we take account of the different difficulties, people who have a disability but report none of these specific difficulties had more than a 50 per cent higher chance of exiting employment.

Model 4 looks at whether the type of disability plays a role in influencing employment exits. Controlling for the severity of the disability, the results indicate that deafness, learning disabilities and psychological conditions had an increased association with leaving work.

The final model presented in Table 4.4 looks at the effect of having a family member with a disability. Although we find no negative impact of this variable on the chances of moving *into* employment, we do observe a modest effect on the chances of leaving work, by just over 10 per cent compared to an individual with otherwise similar characteristics (p<=.05). This suggests that policy initiatives aimed at improving the employment engagement of people with disabilities need to be cognisant of the broader household dimension as well as the impact of disability directly on the individual's employment. As well as the impact of the work situation of other household members, as identified above and in the research on household joblessness (for example, see Watson, Maître and Whelan, 2012), it is clear that the disability status of other household members is also relevant to employment transitions.

4.3 SUMMARY

This chapter examines the factors that impact on an individual's exit from work and tries to isolate the effect of having a disability from the effects of a variety of individual and workplace characteristics that may be associated with disability. Similar to the findings on employment entry, we find that having a disability had a significant effect, even when a wide range of other characteristics are controlled for. In our baseline model, we find that the chances of exiting employment were twice as high for someone with a disability compared to an otherwise identical individual without a disability.

Chapter 3 showed that, for the general population, those in the youngest age group were most likely to move into work. Here, however, we find that they were also the most at risk of employment exit. This is in line with their lower levels of labour market experience and could also be related to the fact that some may have returned to education. As with employment entry, the level of education was found to play a key role in reducing the odds of employment exit, with levels of education at lower secondary level or less increasing the chances of exiting employment by between 20 and 30 per cent.

We examine how exit from work can be affected by workplace and job characteristics as well as individual factors. People in self-employment and those working for larger companies were less at risk of exit than those working for firms with 1–50 employees. Occupation also played a role in determining which individuals are most at risk of job exit, with elementary occupations at the highest

risk of exiting employment. This reinforces the earlier finding that higher levels of education make workers less vulnerable to job exit. The risk of exiting a job was found to be at its highest in the early stage of the work relationship for all workers, regardless of disability status. This is likely to be part of the explanation for the higher risk of exit of younger workers. Exit probabilities are 3.4 times more likely for those in a job less than one year compared to someone in the same job for more than four years.

Another job characteristic that has a relatively substantial effect on the chances of employment exit is the type of hours worked, with part-time work found to be considerably less stable than full-time employment. Jobs in the construction industry were the most at risk of job exit, while other sectors, with the notable inclusion of the public sector, had a much lower probability of job exit. The varying levels of union membership across sectors appear to have played a role in this effect.

Similar to the equivalent models for job entry in chapter 3, we examine the effects of the type and severity of a disability. We find a similar pattern to that for employment entry, with the signs reversed – our indicator of the severity of the disability increased the chances of employment exit and reduced the contribution of the simple indicator of having a disability. Again, the significant negative direct effect of having a disability remained, even when severity is controlled for. In terms of variation by type of disability, we find that deafness, learning disabilities and psychological conditions had an increased association with leaving work, even when the model controls for severity of the disability.

Chapter 5

Conclusions and Policy Implications

5.1 INTRODUCTION

This chapter of the report draws together the results to address the research questions and examine the implications for policy. Focusing on working-age people with disabilities, the research questions are:

- 1. What is the nature and scale of employment transitions for people with disabilities, compared to the population as a whole?
- 2. How do employment entries differ by individual characteristics, such as age group, gender, education, marital and family status, work status of other household members, type and severity of disability?
- 3. How do employment exits differ by individual and job characteristics and by type and severity of disability?

Throughout the report we focused on those in aged 20–59 years – the most active working years. We did this in order to avoid both the early years of adulthood, when many people are still in education and transitions are likely to be dominated by movements between short-term summer jobs and education, and the later years, when people begin to retire.

As background to the discussion, it is useful to recap the profiles of people with and without a disability, as discussed in chapter two. People with and without a disability were found to be similar in terms of the proportions of men and women, but there were differences by age group, marital status, level of education and living arrangements. Both men and women with a disability were less likely to be married than those without a disability. They were also more likely to live alone (15 per cent) and less likely to live in a multi-adult household with children. People with disabilities tended to be older, with one half aged 45–59 years, compared to just one-third of those without a disability. The differences by level of education are particularly striking: 45 per cent of people with disabilities had attained no more than lower second level education (Junior Certificate or equivalent) compared to just 17 per cent of those without a disability. People with disabilities were over three times more likely to live in a jobless household (42 per cent compared to 12 per cent), a known risk factor for poverty and deprivation (Gannon and Nolan, 2005; Watson and Maître, 2013; McGinnity et al., 2013).

5.2 EXTENT OF EMPLOYMENT TRANSITIONS

The first set of questions examined in chapter two concerned the extent and nature of employment transitions. This is an important question for policy because it concerns whether the employment gap between those with and without a disability is mainly driven by a difference in the rate of those moving into work, a difference in the rate of those moving out of work or by both factors, at roughly equal importance.

Focusing on the period 2013–2015 and on those aged 20–59 years, 69 per cent of people without a disability were employed in both pairs of quarters and 27 per cent were not at work in both quarters. The situation of people with disabilities was almost the inverse, with 67 per cent not employed in both quarters and just 29 per cent employed in both quarters.

Because the period from one quarter to the next is a short one, the percentages making a transition are small. The rate of employment entry for people with disabilities was only about two-thirds the rate for those without a disability (1.6 per cent compared to 2.3 per cent). The rate of employment exit was also somewhat lower (1.5 per cent compared to 1.7 per cent) but this is because there are fewer people with disabilities at work in the first place (29 per cent compared to 69 per cent). Expressed as a percentage of those at work, the employment exit rate in 2013–2015 was much higher for people with disabilities than for those without (5 per cent compared to 2 per cent).

It is notable that the entry and exit rates for people with disabilities were very close together at about 1.56 and 1.54 per cent, respectively, in the recovery years (2013–2015). Overall, then, we would expect very little change in the percentage of people with disabilities in employment without some intervention.

The analysis in chapter 2 suggested that if all of those with a disability who were at work or wanted to work had a job, the employment rate of people with disabilities would be 50 per cent and people with disabilities would constitute just under 5 per cent of those at work.

5.3 EMPLOYMENT ENTRIES

Chapter 3 focused on employment entries among those not in employment in the first wave. It showed that the rate of employment entry differed between people with and without a disability, even after controlling for individual and family characteristics such as gender by marital status, age group, education, presence of children and whether there were other people at work in the household.

The odds of employment entry were only about half as high for people with disabilities as those with no disability. Other characteristics that reduced the chances of employment entry were: being a single man or a woman, rather than a married man; being of older age within the 20–59 year age range; having a lower level of education; being non-Irish; having last worked more than four years previously; living alone; living with children or with a jobless adult. Those living in parts of the country outside Dublin and the Mid-East also had a lower chance of entering employment. There was a 24 per cent improvement in the odds of employment entry between the recession years of 2010–2012 and the later period of 2013–2015. Several of these characteristics are also relevant to the lower employment rate of people with disabilities, since they were more likely to be single, older and have lower levels of education. Even with these controlled, however, an employment entry gap remained between people with and without a disability.

Chapter 3 also examined the consequences of the severity and type of disability. The severity of disability was measured as a count of the number of different kinds of difficulty associated with the disability, regarding self-care, going outside alone, participating in work or education and participating in other activities such as leisure or transport.

The results indicate that simply having a disability – even if the person does not report any of the four types of difficulty – reduces the odds of moving into work. Someone with a disability but with none of the four kinds of difficulty still had a 30 per cent lower chance of entering employment; this chance dropped further as the severity of the disability increased. We found that the impact of simply having a disability to be statistically significant for all types except sensory disability (blindness or visual impairment and deafness or hearing impairment). This means that even when a person does not report any of the four types of difficulty, their chances of entering work are lower if they have mobility disability, intellectual disability, learning disability, psychological/emotional disability or pain/'other' condition. The chances of entering employment were found to be particularly low for those with an intellectual disability: even controlling for level of difficulty, the odds were only about one-third of those of someone without a disability.

5.4 EMPLOYMENT EXITS

Chapter 4 turned to employment exits and the individual characteristics that may account for some of the differences between people with or without a disability in terms of their rates of exit. It explored the same individual and family characteristics applied in the previous chapter, as well as the significance of job characteristics, such as size of firm, sector, occupation, whether working full-time or part-time and length of time in a job. In interpreting the results, it is important to keep in mind that although most working-age adults without a disability are in employment, this is only true of a minority of those with a disability. As a result, the sample of working-age adults with a disability in employment tend to be younger and have markedly better levels of education than people with disabilities in general.

We began by profiling people with and without a disability in terms of the characteristics of their jobs. The two groups looked very similar in terms of the percentage who were self-employed, the size of the company they worked for organisation, their industrial sector and union membership rates. People with disabilities were less likely to be found in managerial/professional occupations, however, and more likely to be working part-time.

As anticipated, several individual and job characteristics were associated with employment exits. The chances of leaving employment were higher for married and single women, and for non-married men, than for married men; for adults under 35 years or over 55 years; those with lower levels of education, non-Irish nationals, those with children or those who were the sole earner in the household. The exit rate was higher in the recession than in the years after 2012, indicating a drop of about one-quarter in the chances of exiting employment as the economic recovery began. Several job characteristics were also associated with a higher rate of exiting employment, including being an employee of a small organisation, working in an unskilled manual or service job, working part-time, being with the employer for a shorter period and working in the construction sector. The exit rate was lower in the public sector and in the services sector generally and also in agriculture than in manufacturing. Union members also had a significantly lower exit rate than non-union members, which may reflect greater levels of employment protection in unionised employment.

Even with all of these characteristics taken into account, however, the exit rate was significantly higher for people with disabilities, whose chances of leaving employment were almost twice those of people without a disability. Some additional checks showed that the influence of individual characteristics and job characteristics were broadly similar for people with and without a disability. This means that in addition to the greater chance of exiting employment due to the disability itself – or the way it is perceived by employers – people with disabilities have a higher exit rate arising from their lower levels of education and their higher representation in part-time work.

Just as we saw in the case of employment entry, the type and severity of the disability had implications for employment exit. While the chances of employment exit increased with the number of different effects of the disability (on self-care, getting out alone, capacity to participate in work or education and capacity to participate in other activities), there was still a greater chance of leaving a job

among those who report no such effects (about 55 per cent higher than people with no disability). Looking at the pattern by type of disability, we see a pattern that is somewhat different from that observed in the case of employment entry. Recall that when it comes to employment exits, we are focusing on a smaller subset of adults with a disability who have better education levels and who tend to be younger. Compared to those with no disability, and controlling for the severity of the disability as well as other individual and job characteristics, we see that the odds of leaving a job were higher among those with deafness/hearing impairment, learning disability and psychological/emotional disability. The pattern looks quite similar for the other types of disability (suggesting increased odds of leaving employment), but the difference compared to people without a disability only reached statistical significance for these three disability types.

One other issue we explored, both in terms of employment entry and employment exit, was whether living with an adult with a disability had an impact on the chances of a transition. We found that living with an adult with a disability did not significantly affect the odds to entering employment but it did slightly increase the odds of leaving employment (by about 11 per cent). This indicates that the impact of disability on employment can go beyond the person with a disability to affect others in the household, who may take on caring responsibilities.

5.5 LIMITATIONS AND FUTURE RESEARCH

One drawback in examining the quarter-on-quarter transitions, as noted in chapter 1, is that whether or not a person has a disability is only recorded in the first quarter they are interviewed. Since the rate of acquiring a disability between one quarter and the next is likely to be low, the impact of this lack of information is likely to be minor. It would considerably enhance the usefulness of the Quarterly National Household Survey (QNHS) data for research on disability, however, if the disability status of the individual was recorded at each interview, so that we could investigate whether a change in employment circumstances occurs at the time of disability onset. Another useful addition to the data would be the inclusion of a question regarding when the person was first affected by the disability. This would allow us to examine whether leaving work occurred with the onset of the disability or some time afterwards. Expanding the period of time during which someone with a disability remains at work is likely to be an important element in increasing the employment rate of people with disabilities and data on this lag period would be important in assessing progress in this respect.

This report focuses on those aged 20–59 years. This has the advantage of largely eliminating the 'noise' due to movements between temporary summer jobs and education. However, this approach limited the extent to which we could discuss the transition from education to employment or non-employment. Although the proportion of people with disabilities who are affected in their school years is low,

for this group whether or not they make the transition to a first job is a crucial issue. There is scope to use the QNHS, particularly if the data are combined across several years, to examine the factors that facilitate making a successful transition from education to employment for young adults with a disability.

5.6 IMPLICATIONS

5.6.1 Possible Targets for the Employment of People with Disabilities

Since the goal of *The Comprehensive Employment Strategy for People with a Disability, 2015–2024* (Department of Justice and Equality, 2015) is to enable those who want to work to move into employment, the first important question is what is the size of this group? The results in chapter 2 addressed this issue, focusing on the 2013–2015 period. The analysis indicated that about one half of an estimated 189,000 working-age people with disabilities want to work. Of these, about 31 per cent (59,500) are already at work, leaving 19 per cent of people with disabilities who would like to work, or about 35,600 individuals.

According to the QNHS indicator of disability, people with disabilities constitute about 7.5 per cent of the population aged 20–59 years, those identified as 'working-age' for the purpose of this analysis. From 2010 to 2015, people with disabilities constituted just 3.4 per cent of those in employment. The target for employment of people with disabilities in the public sector under the Disability Act was 3 per cent and this target has been reached. The *Comprehensive Employment Strategy* sets a more ambitious target of 6 per cent by 2024. The results here suggest that if all of those who want to work had a job, irrespective of disability status, people with disabilities as identified in the QNHS would constitute 4.6 per cent of those in employment. These results suggest that an increase from 3 per cent to 6 per cent in the public sector target is a reasonable one. As the employment level of people with disabilities rises, we would expect the percentage who 'would like to work' to increase as a result of a demonstration effect. In addition, as the average age of the workforce rises with population ageing, we would expect to see a higher proportion of those at work to acquire a disability.

In the longer term, as noted in chapter 2, as barriers to employment are reduced and supports for employment are increased, the percentage of people with disabilities who want to work is likely to increase, so this percentage can be adjusted accordingly. Indeed, this in itself might be taken as a sign of success since such a change in expectations would suggest that the barriers to work for people with disabilities are no longer insurmountable and that the supports available to them have improved.

It is worth noting here that since disability is a matter of degree, if the measure used to identify people with disabilities is changed this could have a significant impact on our capacity to compare trends over time. If a broader measure of disability were used, for instance, we might expect to identify a larger number of affected individuals among whom the severity of the disability is lower. As a result, we would expect to see both a higher percentage at work and a higher percentage interested in work. The need for comparable indicators should be kept in mind in monitoring progress towards a target.

5.6.2 Maximising Job Entries or Minimising Job Exits?

Among people with disabilities, the number of non-employed people is more than twice as high as the number of employed people. As a result, any improvement in the employment rate of people with disabilities, in the short term, will need to look seriously at the employment of those not currently at work. Given the typically lower levels of education and greater age of people with disabilities not in employment, this strategy will face many of the same challenges that arise in the context of addressing long-term unemployment, as the long-term unemployed have a similar profile to those with disabilities (McGuinness, Kelly and Walsh, 2014; O'Connell, McGuinness and Kelly, 2012). The development of labour market skills will be important, as is emphasised in the 'building work skills' strand of the *Pathways to Work* strategy (Department of Social Protection, 2016).

Most people with disabilities had worked at some point in the past, although it was most often more than four years previous to their participation in the QNHS. In the longer term, then, efforts to retain people with disabilities in employment for as long as possible will also be important. As noted in chapter 4, people with disabilities in employment tend to be better educated than those who are not at work. Retaining their human capital, experience and skills is of benefit to the economy as well as to the individuals themselves and their families.

5.6.3 Which People with a Disability are Closest to the Labour Market?

As noted above, and like the general population, people with disabilities who have higher levels of education and who are younger are more likely to be employed. The level of education has a particularly strong effect. This finding partly captures elements of the type and age of onset of the disability, since those affected by disability while in school – particularly by intellectual disability – face particular challenges in moving into the first job.

Another important factor is the severity of the disability: those who are less seriously affected are more likely to enter employment and less likely to leave employment. It is significant, nonetheless, that even if people are not affected by their disability in terms of self-care, ability to get about or capacity to participate in work or other activities, we still see a reduced probability of moving into work and an increased probability of leaving work. The reasons for this could be investigated to good use. Are potential employers underestimating the capacity of individuals with a disability? Could modifications to the job or to working hours enhance the capacity of people with disabilities to become, or remain, economically active?

The results here also suggest that a key element of any change strategy will be to intervene at an early stage of an out-of-work period due to disability. The longer someone has been out of work, the less likely it is that they will return to employment.

5.6.4 Education and Skills

People with disabilities were found to have lower levels of education than those without a disability, but level of education was associated with a greater probability of being in work. Improving the human capital of people with disabilities who are not currently at work will be an important element in increasing their chances of finding employment. As we also saw, in chapter 2, about one-fifth of the employment entry gap between people with and without a disability was linked to differences in levels of education.

5.6.4 Significance of the Household Dimension

Consistent with earlier research on employment transitions, we found that living in a jobless household made it less likely that someone would make a transition into employment, and this pattern was no different for people with disabilities. There are a number of reasons why this pattern might occur, including a greater distance from informal networks that might lead to work; the impact of one family member's employment on the entitlement to social protection payments or secondary benefits for other household members; or living in an area with fewer employment opportunities. In the case of people with disabilities, the potential loss of a medical card is likely to be particularly significant; another family member may receive a Carer's Allowance to support them in providing help to the person with a disability.

The analysis of employment exits also showed that living with an adult with a disability increased the probability of exit from employment (though not reducing the probability of employment entry). This suggests that the impact of disability on employment extends beyond the person directly affected. It could be used to further explore the reasons for leaving employment. In particular, are there perverse incentives linked to the means testing of benefits and secondary benefits such as the medical card, or is there a better way to provide the supports needed by someone with a disability, if a family member leaves employment to take on an unpaid caring role?
5.6.5 Making Work Pay

As noted above, the lower levels of education of many people with disabilities is likely to limit their earnings potential. The earnings capacity of people with disabilities is likely to be further reduced by aspects of having a disability as well as the need for reduced hours. Taken alongside the increased costs associated with a disability, some form of continuing income supplement is likely to be needed for many people with disabilities when they do take up employment.

Currently (2016), the Interdepartmental Expert Group on Making Work Pay for People with Disabilities, hosted by the Department of Social Protection, is examining the complex interaction between the benefit system (including the medical card), the additional costs of work associated with a disability, and the net income gains in employment. The goal is to identify the optimum mix of policies to enhance the capacity of people with disabilities to participate to the maximum extent possible. It is important to note here that 'making work pay' is not all about financial incentives to work. Other issues such as entitlement to secondary benefits, access to transport, the affordability of supports and aids and the availability of flexible working arrangements are also important.

Another issue to keep in mind in this context is the diversity of circumstances covered by the term 'disability'. Although people with disabilities have many disadvantages on average, such as lower levels of education and a need for additional modifications or supports in order to take up employment, the extent to which this is the case varies considerably. As noted above, people with disabilities who are younger, those who have higher levels of education and those less seriously affected by the disability are closer to the labour market in that they are more likely to enter employment and less likely to exit. This means that an assessment of the need for supplementary earnings or specific supports would ideally need to be individualised and tailored to individual circumstances.

5.6.6 Equal Treatment

This report showed that people with disabilities were less like to enter work and more likely to leave work, even when they do not report difficulties with self-care, going out alone, participating in a job or business or school/college. A possible explanation of this pattern is the existence of discrimination or its anticipation.

Previous research that focused specifically on the experience of discrimination suggested that people with disabilities were not more likely to report work-related discrimination than those without a disability when other factors were controlled (McGinnity, Watson and Kingston, 2012). However, focusing on discrimination seen as having a serious impact on one's life, the rate was higher among people with disabilities. In addition, the higher rates of discrimination experienced in

access to services such as transport and healthcare are likely to have an indirect impact on the capacity of people with disabilities to find employment or remain in employment. This points to the importance of ensuring that people with disabilities receive the equal treatment to which they are entitled, not only in the workplace but across other services as well.

A move in the direction of equal treatment in the context of government policy on employment can be seen in the inclusion of people with disabilities in the Pathways to Work strategy (Department of Social Protection, 2016). The strategy intends to 'extend and intensify the pro-active engagement approach for people with disabilities ' (ibid, 2016, p. 22). Specific targets will need to be set in order to give effect to this goal.

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Appendix 1

Additional Tables

Table A1.1 Relevant Items from QNHS, 2010–2015

Description	Name*
Disability	
Whether person has at least one long-lasting condition or difficulty	DISABILITIES
Type: Blindness or serious vision impairment	DISABILITYTYPE1
Type: Deafness or serious hearing impairment	DISABILITYTYPE2
Type: A difficulty with basic physical activities such as walking, climbing stairs, reaching, lifting or carrying	DISABILITYTYPE3
Type: An intellectual disability	DISABILITYTYPE4
Type: A difficulty with learning, remembering or concentrating	DISABILITYTYPE5
Type: A psychological or emotional condition	DISABILITYTYPE6
Type: A difficulty with pain, breathing or any other chronic illness /condition	DISABILITYTYPE7
Nature of difficulty: Dressing, bathing or getting around inside the home	DISABILITYIMPACT1
Nature of difficulty: Going out alone to shop or visit a doctor's surgery	DISABILITYIMPACT2
Nature of difficulty: Working at a job or business, attending school/ college	DISABILITYIMPACT3
Nature of difficulty: Participating in other activities (e.g. leisure, transport)	DISABILITYIMPACT4
Work / economic status	
The ILO derived work status	ILO
Detailed main labour status (work, unemployed, home duties etc.)	MAINSTAT_CSO
Demographic characteristics	
Sex	SEX
Age	AGE
Marital status	MARSTAT
HH type (one adult, lone parent, couple, couple with children)	ННТҮРЕ
Early school leaver aged 18–24 years	EARLYSCHOOLLEAVER
Classification of a person as not being in employment, education or training	NEET
Highest level of education or training successfully completed	HATLEVEL_X1, HATLEVEL
Year when highest level of education or training was successfully completed	HATYEAR
Orientation of the programme completed at the highest education level	HATVOC
The National Framework of Qualifications education level of the respondent	EDUCATION_NFQ_X1 EDUCATION_NFQ

Table A1.1 (Continued)

Description	Name*	
Current job		
Year and month person started this job; time since started this job.	YSTARTWK, STARTIME	MSTARTWK
Number of hours per week usually worked	HWUSUAL	
Professional status	STAPRO	
Employee status	EMPSCHEME	
Economic activity of the local unit	NACEREV1_2D, NACEREV2_2D	
Number of persons working at the local unit	SIZEFIRM_X3, SIZEFIRM	
Occupation	ISCO88_3D, ISCO08_4D	
Supervisory responsibilities	SUPVISOR	
Reasons for the part-time work	FTPTREAS	
Permanency of the job	TEMP	
Reasons has temporary job/work contract of limited duration	TEMPREAS	
Type of temporary job	TEMPTYPE	
Total duration of temporary job or work contract of limited duration	TEMPDUR	
Contract with a temporary employment agency	TEMPAGCY	
Monthly (take home) pay from main job (deciles)	INCDECIL	
Previous job		
Existence of previous employment experience	EXISTPR	
Year/month in which person last worked	YEARPR, MONTHPR	
Time since person last worked	LEAVTIME	
Main reason for leaving last job or business	LEAVREAS	
Economic activity of the local unit in which person last worked	NACEPRREV1_2D, NACEPRREV2_2D	
Occupation of last job	ISCOPR88_3D, ISCO	PR08_4D
Seeking/wanting work		
Seeking employment during previous four weeks	SEEKWORK	
Reasons for not searching for employment	SEEKREAS_DETAILED	
Type of employment sought	SEEKTYPE	
Duration of search for employment (detail)	SEEKDURMONTHS	
Duration of unemployment (detailed)	DURUNE_DETAILED	
Willingness to work for person not seeking employment	WANTWORK	
Availability to start working within two weeks	AVAILBLE	
Reasons for not being available to start working within 2 weeks	AVAIREAS	
Need for care facilities (for children, other persons)	NEEDCARE	

Source: QNHS.

Note: *Name of the variable on the QNHS Longitudinal Dataset.

		Employment entry model	
		Disability	
		Main effect	interactions
Disability	Yes	0.441**	
	No	1.000	
Gender x	Married men	1.000	1.000
marital status	Single men	0.778***	0.819
	Formerly married men	0.861	0.917
	Married women	0.590***	0.979
	Single women	0.851***	0.928
	Formerly married		
	women	0.748***	1.015
Age group	20–24	1.442***	0.908
	25–34	1.048	0.983
	35–44	1.000	1.000
	45–54	0.815***	0.937
	55–59	0.615***	0.914
Education	< lower 2nd level	0.403***	0.764
	Lower 2nd level	0.497***	1.070
	Upper 2nd Level	0.686***	0.849
	Beyond 2nd level	1.000	1.000
Nationality	Irish	1.000	1.000
	Non-Irish	0.859***	0.968
Region	Dublin and Mid-East	1.099***	1.067
	Other regions	1.000	1.000
Unemployed/Inactive	Unemployed	1.774***	1.780***
	Not active	1.000	1.000
When last worked	Never worked	1.000	1.000
	4+ years ago	0.580***	0.990
	1-4 years ago	1.102*	1.614**
	Under 1 year ago	2.490***	1.349
Family type and	Live alone	0.662***	0.929
work	One adult and ch	0.443***	1.577
	2+ ad, 1 Working	1.000	1.000
	2+ad & ch, 1Working	0.622***	0.808
	2+ad, 2+Working	0.872***	1.154
	2+ad & ch, 2+Working	0.579***	0.942
Period	Recession	1.000	1.000
	Recovery	1.240***	0.925
Constant		0.111***	
N cases		140,015	
Pseudo r-squared (w/o svy)		0.1269	

Table A3.1 Odds Ratios for Employment Entry with Interaction Effects for Disability

Source: QNHS Longitudinal Dataset, 2010-2015; analysis by authors.

Note: Base= people aged 20–59 years present in two consecutive quarters and not in employment in the first quarter of each pair. The figures are odds ratios from a logistic regression model for employment entry between quarters. The pseudo-r-squared statistic is for illustrative purposes only as it is calculated from the model run without accounting for clustering and weights. *** p<0.001, ** p<0.01, * p<0.05.

		Employment ex	Employment exit model – part 1	
			Disability	
		Main effect	interactions	
Disability	Yes	1.451		
	No	1.000		
Gender x	Married men	1.000	1.000	
marital status	Single men	1.358***	1.002	
	Formerly married men	1.378**	1.302	
	Married women	1.208***	1.080	
	Single women	1.189**	1.019	
	Formerly married women	1.031	1.428	
Age group	20–24	1.795***	1.332	
	25–34	1.069	1.571**	
	35–44	1.000	1.000	
	45–54	0.987	1.307	
	55–59	1.370***	0.958	
Education	< lower 2nd level	1.249**	1.003	
	Lower 2nd level	1.261***	1.371	
	Upper 2nd Level	1.203***	1.114	
	Beyond 2nd level	1.000	1.000	
Nationality	Irish	1.000	1.000	
	Non-Irish	1.097*	0.880	
Region	Dublin and Mid-East	0.962	0.795	
	Other regions	1.000	1.000	
Family type and	Live alone	1.123	0.875	
Work	One adult and ch	1.386***	0.691	
	2+ ad, 1 Working	1.433***	0.739	
	2+ad & ch, 1Working	1.236***	1.237	
	2+ad, 2+Working	1.000	1.000	
	2+ad & ch, 2+Working	1.159***	0.875	
Period	Recession	1.000	1.000	
	Recovery	0.735***	1.040	

Table A4.1 Odds Ratios for Employment Exits with Interaction Effects between Disability and Personal and Family Characteristics and Job Characteristics

Source: QNHS Longitudinal Dataset, 2010-2015; analysis by authors.

Note: Base= people aged 20–59 years present in two consecutive quarters and in employment in the first quarter of each pair. The figures are odds ratios from a logistic regression model for employment exit between quarters. The models presented in this table also control for the job characteristics as presented in Table A4.2. *** p<0.001, ** p<0.01, * p<0.05.

(Table A4.1 continued overleaf)

Table A4.1 (Continued)

		Employment exit model – part 2	
			Disability
		Main effect	interactions
Firm size	Self-employed	0.891*	1.176
	Firm 1–50 employees	1.000	1.132
	Firm 51–100 employees	0.874***	1.163
	Firm 101–500 employees	0.803***	1.351
	Firm 500+ employees	0.795***	1.132
Occupation	Manager/professional	1.000	1.000
	Technical/clerical	0.793***	1.055
	Services/sales	0.838***	1.107
	Craft/mechanical	0.865**	1.127
	Elementary	0.817***	1.057
Job tenure	Tenure 4+ years	1.000	1.000
	Tenure 1-4 years	1.636***	0.801
	Tenure <1 year	3.514***	0.698*
Full-time/part-time	Full-time	1.000	1.000
	Part-time	2.322***	0.759*
Sector	Agriculture	0.769**	1.015
	Manufacturing	1.000	1.000
	Construction	1.813***	0.983
	Services	0.842***	1.410
	Public sector	0.832***	1.060
Union	Member	0.594***	1.163
	Not a member	1.000	1.000
Constant		0.0154***	
N cases		263,214	
Pseudo r-squared (w/o svy)		0.1031	

Source: QNHS Longitudinal Dataset, 2010-2015; analysis by authors.

Note: Base= people aged 20–59 years present in two consecutive quarters and in employment in the first quarter of each pair. The figures are odds ratios from a logistic regression model for employment exit between quarters. The models presented in this table also control for the personal and family characteristics as presented in Table A4.1 part 1. The pseudo-r-squared statistic is for illustrative purposes only as it is calculated from the model run without accounting for clustering and weights. *** p<0.001, ** p<0.05.

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