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How do disability rates differ across the island of Ireland?

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AN INSTITIÚID UM THAIGHDE EACNAMAÍOCHTA AGUS SÓISIALTA
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ABBREVIATIONS

CLD	Census Longitudinal Dataset
CVS	Commission for Victims and Survivors
DHSSPS	Department of Health, Social Services and Public Safety
DLA	Disability Living Allowance
DSP	Department of Social Protection
DWP	Department for Work and Pensions
EU	European Union
EU-SILC	EU Survey of Income and Living Conditions
GDP	Gross domestic product
GFA	Good Friday Agreement
LGD	Local Government District
NI	Northern Ireland
NISRA	Northern Ireland Statistics and Research Agency
OECD	Organisation for Economic Co-operation and Development
PIP	Personal Independence Payment
UK	United Kingdom
UN	United Nations
US	United States
WHO	World Health Organization

EXECUTIVE SUMMARY

Ageing populations and the resulting pressures on health and social care systems as well as social security systems are causing disability prevalence to be an increasingly salient issue in Northern Ireland (NI) and Ireland, as well as in many other developed societies. A greater understanding of disability prevalence is therefore important as policies in a number of relevant areas adapt to this changing landscape.

The censuses in NI and Ireland and the subsequent individual level data which are available allow for side-by-side case studies of a range of economic and social issues, including disability. While this contributes to understanding of policy-relevant issues on an all-island basis, differences remain and they are not perfectly comparable. While the census questions differ between jurisdictions, the data support meaningful side-by-side comparisons and the results are interpreted with appropriate caution.

This is the first work to examine disability rates across the island of Ireland. Disability prevalence, as measured by self-reported disability from the respective censuses amongst those aged 20–69 years, is broadly similar across Ireland and Northern Ireland, with rates of 23 per cent in Northern Ireland and 22 per cent in Ireland.

However, severity differs. Northern Ireland has a higher proportion of individuals with severe limitations, with 10.9 per cent of individuals reporting they are 'limited a lot' compared to 6.2 per cent in Ireland who report being limited 'to a great extent'. This suggests that while the headline rates appear similar, the intensity of disability is higher in Northern Ireland.

In NI, disability rates rise steadily with age. However, in Ireland, the pattern is less linear. Disability rates are higher in Ireland at younger age groups while at older age groups, it is much higher in NI. Severe disability follows a similar trend, with NI showing much higher rates among older age groups.

There is a clear relationship between disability prevalence and educational attainment, with disability rates higher amongst those with lower levels of education. And there is a steeper relationship between educational attainment and disability in NI than there is in Ireland. This suggests that education has a strong protective effect in terms of disability. However, we do not prove causality in the analysis.

Higher rates of disability are evident in the North West of the island as well as in parts of the main cities (e.g. parts of Belfast and parts of Dublin) as well as in a column down the middle of Ireland and the South East. It is likely that these rates

of disability are highly correlated with higher rates of deprivation as well as local age profiles.

There is not a consistent border pattern, i.e. we do not see lower or higher levels around the border. However, we can see that areas with lower rates in Ireland are mirrored in the NI county/council area which they meet. More specifically, higher rates are seen in Donegal and Derry and Strabane, while lower rates are seen in Monaghan and Armagh, Banbridge and Craigavon.

Using probit models to examine the factors associated with reporting a disability, differences in observable characteristics – such as age, gender, geographic location – tend to account for a much larger share of the variation in disability rates in NI compared to Ireland and this is particularly the case for severe disability. This indicates that unmeasured factors contribute more to the observed prevalence of disability in Ireland relative to NI.

While having a third-level qualification is correlated with a lower level of being disabled in Ireland by 7 percentage points, for NI the reduction is 15 percentage points. On the other hand, whilst the probability of disability rises with age in both areas, the impacts of age on disability is much larger in NI. For example, being aged 60–69 relative to those aged 20–29 raises the likelihood of disability in NI by 38 percentage points compared to 16 percentage points in Ireland.

Those who are unpaid carers in Ireland are 7 percentage points more likely than those who do not have unpaid caring roles to report as disabled, while this figure is 1 percentage point for NI. This is important as caring is becoming more prevalent in both jurisdictions. In both areas, those identifying as Black, Asian or other mixed ethnicities have lower levels of disability all else being equal, as does being Catholic.

Local labour market conditions exert some influence, but the marginal effects of these variables are relatively small in both regions. This is considerably different to what is found in the international literature on disability but is in line with previous findings for Northern Ireland (Devlin et al., 2023). What is interesting is that this holds in both jurisdictions despite very different health and social care systems, North and South.

In our country-specific econometric modelling, within the NI model, physical and mobility conditions are the strongest predictors of severe disability; mobility conditions requiring wheelchair use raises the likelihood of reporting a severe disability in NI by 21 percentage points, while mobility conditions not requiring a wheelchair raises the probability of severe disability by 16 percentage points. In contrast, having conditions that limit physical activity increases the likelihood of severe disability in Ireland by 7 percentage points.

Reporting psychological, emotional or mental health conditions is strongly associated with reporting a severe health condition in NI and Ireland. More specifically, those with psychological, emotional or mental health conditions are 7 and 10 percentage points more likely respectively to report a severe disability. Having an intellectual disability increases the likelihood of a severe disability by 8 percentage points in NI and 7 percentage points in Ireland.

A range of policy implications arise from the insights in this study. The steeper age gradient in terms of disability in NI may be further evidence of a legacy effect from the NI conflict. Further research could examine whether this spills over in to Ireland. While the data is more comparable than was previously the case, it is not perfectly so and significant differences remain in how disability is captured. Improving data comparability on disability and in health more broadly across the island would greatly support research and information in this important area. More specifically, identical questions and aligned timing of the relevant censuses would be a helpful addition in terms of the data available for studies of disability as well as other important outcomes which shape people's lives.

The findings underscore the importance of tailoring disability-related social security and health interventions to local contexts, particularly in regions where historical and structural factors shape outcomes.

CHAPTER 1
Introduction

Disability prevalence has become a pressing issue across developed countries, including in Northern Ireland (NI), the United Kingdom (UK) as a whole, and Ireland. Disability is defined in the United Nations (UN) Convention on the Rights of Persons with Disabilities as 'those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others'. This definition is also adopted by the European Union (EU). Ageing populations, medical advancements (Christensen et al., 2009) and migration patterns (Huang et al., 2023) are all correlated with disability rates. As well as these long-term demographic shifts which impact disability, it is also possible that there has been an increase in disability post-pandemic. The literature on the long-term impact of COVID-19 across a range of academic disciplines continues to expand. With these patterns in mind, governments are facing concerns around the sustainability of health care, social care and social security systems. This and other concerns (e.g. the disability employment gap (The National Human Rights Strategy for Disabled People 2025–2030[1])) have manifested in the UK and Ireland by proposed reform to the social security systems, and particularly reform of disability-related social security (DWP, 2025 for the UK; DSP, 2024 for Ireland). Albeit the proposals were not fully implemented in either jurisdiction following engagement with disability organisations and others.

This report examines disability rates across the island of Ireland. Specifically, we examine how disability rates differ across the two jurisdictions and what might be behind those differences. Recent data developments make this analysis timely. The 2022 Irish census introduced changes to the relevant questions that improve comparability with the 2021 NI census, allowing us to examine disability prevalence and the factors associated with it on the island of Ireland in a way that was not previously possible. While the data are not perfectly comparable, they are closer than they previously were and we discuss this throughout. These side-by-side case studies allow us to examine areas of similarity and areas of difference and to shed light on the observed patterns associated with disability rates. This is important given the different social security systems and health care systems in the jurisdictions.

The remainder of the report is structured as follows: Chapter 2 reviews the relevant international and local literature for Ireland and Northern Ireland and outlines relevant policy contexts. Chapter 3 describes the data sources and methodology,

[1] The National Human Rights Strategy for Disabled People 2025–2030.

including how disability is measured in each jurisdiction. Chapter 4 presents descriptive statistics, Chapter 5 presents the results of econometric analysis, while Chapter 6 concludes.

CHAPTER 2

Literature and policy context

2.1 INTERNATIONAL LITERATURE

There is broad international literature examining the determinants of overall disability rates, although this is more heavily focused on disability-related social security receipt. Existing studies that use self-reported disability tend to examine the prevalence of self-reported disability rates but do not examine determinants in the same way as we have done here. We discuss these later in the chapter. One exception to this is Devlin et al. (2023) which applies econometric techniques to examine both self-reported disability and disability-related social security receipt when comparing Northern Ireland (NI) to England in a bid to understand the consistently higher rates of disability in NI.

While self-reported disability and disability-related social security receipt are not one and the same, only people with disabilities are eligible for the latter, implying substantial overlap between the two measures, particularly for those with severe disabilities. The consensus in the literature is that the main driver of disability rates is the local labour market (Rupp and Stapleton, 1995; Bell and Smith, 2004; Duggan and Imberman, 2009; McVicar, 2013; Benítez-Silva et al., 2010). That is not to say that the limiting factor changes with the labour market but rather how people define themselves changes dependent on their interaction with the labour market and with social security systems. As economies experience periods of growth, and labour markets are strong, disability rates tend to fall. This is likely due to the availability of jobs but also the replacement rate of disability-related social security payments[2]. This is not to say that people are not unwell or impaired but many people who have health conditions or ailments which could be considered as causing a disability report as not disabled, while others with a steady state of health condition or limiting ailment sometimes consider themselves as disabled and at other times not. There are a range of factors at play such as social norms, definition of disability, justification bias, engagement in the labour force, etc. but the relationship over time with the performance of the economy is clear in the literature.

In the United States (US), the replacement rate of disability insurance increased over time as it reflected wage growth, but given wage growth was disproportionate for those on higher wages, it led to an increasing replacement rate for those with disabilities (who are likely to be those on lower wages) (Duggan and Imberman, 2009; Wiczer, 2015). Eligibility for such social security payments also has an

[2] Replacement rates are a way of standardising social security payments and placing them in relative terms. The replacement rate of disability social security payments is the share of average earnings which the payments provide.

important role to play in determining rates of disability. Duggan and Imberman (2009) found that as more women entered the labour force and thus became eligible for disability insurance, which was usually based on work history, the female disability rate not surprisingly increased over time. Furthermore, they found that increasing disability social security registers in the US were down to a relaxing of the screening of applicants and more medical conditions being considered as eligible. The literature in this area in the US in particular is well developed.

Closer to home, there is literature which examines disability social security registers in Great Britain or perhaps more specifically, England. It comes to similar conclusions as is the case in the US. Bell and Smith (2004) find that rising disability rates in the 1980s and 1990s were driven by a weak labour market, particularly for those with low levels of skills, and simultaneously increasing generosity of payments. Burkhauser et al. (2014) come to similar conclusions.

There is also more localised literature which not just examines the role of the labour market but specifically examines the roll industrial decline played in increasing disability rolls, industries such as mining or heavy industry. Beatty and Fothergill (2002; 2013) find that despite significant job losses in these industries in some areas of England, the unemployment rate hardly increased as many of those impacted moved instead on to disability-related social security rather than unemployment-related. This was seen in the case of coal-mine closures in which older men (typically) with a now outdated skillset and who tended to have health conditions as a result of their employment moved to disability benefits until they reached retirement age. Similar findings were also seen in seaside towns where fishing had traditionally been an important sector to the local labour market.

Across the international literature, a consistent finding is that local labour market conditions are a key driver of disability prevalence, with health also playing an important but secondary role. These insights provide a useful lens for interpreting patterns on the island of Ireland.

In terms of the research on self-reported disability, as mentioned above, it does not quantitatively examine the determinants of disability in the same way as this study or as is common in the literature on social security receipt. An extensive study (54 countries) by Mitra and Sambamoorthi (2013) examines self-reported disability prevalence but does not examine determinants or characteristics; rather it presents sex and age adjusted disability prevalence rates for a range of countries. An earlier Organisation for Economic Co-operation and Development (OECD) study tracked age-specific disability rates amongst older people in 12 OECD countries but does not formally model the determinants (Lafortune and Balestat, 2007). Courtney-Long et al. (2013) utilise a new measure of functional disability to estimate prevalence rates for all US states and Washington DC and find higher

rates amongst older adults, women, ethnic minorities, those with low levels of education and those with lower incomes. Novakovich et al. (2024) look at disability prevalence in the US amongst cigarette smokers. Theis et al. (2019) also examined disability among US adults with an emphasis on type of disability. Overall, the literature employing self-reported measures of disability is largely limited to estimating prevalence of disability across place, gender, age, etc. rather than modelling the factors associated with disability.

2.2 NORTHERN IRELAND

There is a growing evidence base on disability in NI. The aforementioned study by Devlin et al. (2023) examined various measures of disability in NI and compared it to England. They find that regardless of the measure used, disability rates were much higher in NI. This was especially the case for Disability Living Allowance (DLA)[3] receipt. They attributed this to a range of potential reasons such as higher levels of deprivation in NI compared to England, different social norms associated with social security receipt, and the potential long-term impacts of the Troubles conflict in Northern Ireland. French and Cruise (2021) find that work disability, whereby individuals report themselves as limited in the amount of paid work they can and can't do, is also higher in NI amongst those exposed to the conflict. Building on this, Devlin et al. (2025a) find that the high rates of DLA receipt, which were particularly controversial in NI (News Letter, 2016) and which has since been replaced by the Personal Independence Payment (PIP), were at least to some degree caused by exposure to the conflict. The Troubles conflict lasted for some three decades in NI and saw more than 3,400 people killed, with many more injured. There is no robust count of injuries, but estimates are in the region of 50,000, although due to reporting issues, this may be an underestimate. The conflict also had significant mental health impacts, and this is the case for combatants, victims and the general population. While the conflict officially ended in 1998 with the signing of the Good Friday Agreement (GFA), many of those individuals and communities directly impacted to the highest degree continue to face struggles stemming from the legacy of conflict. So, while the conflict has ended some time ago, it continues to impact people's lives, and as a result their health and wellbeing, through ongoing direct stress and also through intergenerational transmission of trauma (Day and Shloim, 2021). It is worth noting that in a 2025 survey, the Commission for Victims and Survivors (CVS) found nearly one-fifth of adults in NI met the legal definition of being a victim or survivor of the conflict. When using a broader definition, this rose to 58 per cent of adults (CVS, 2025).

More specifically, Devlin et al. (2025a) find that those who report as having been impacted by the conflict are 21 percentage points more likely to be in receipt of

[3] Disability Living Allowance (DLA), which has been replaced by PIP, was a social security payment designed to support people with disabilities due to the additional cost associated with living with a disability.

DLA than their peers who were not impacted by the conflict. This equates to explaining about a third of the difference in DLA rates between NI and England. They also find that mental ill-health in particular is more likely amongst those who were exposed to the conflict. Those exposed to the conflict are 38 percentage points more likely to report a mental health diagnosis than their peers. This is in line with previous evidence which points to a discrepancy in poor mental health within the UK. Estimates suggesting prevalence of mental health conditions were 25 per cent higher in NI relative to England (DHSSPS, 2014).

2.3 IRELAND

The Ireland-specific literature on drivers or determinants of disability is more limited. In a study of children, Smyth and Russell (2024) discuss potential explanations for growing disability prevalence amongst children. They give a range of possible explanations, including changes in data collection; increased diagnosis, particularly of certain conditions, e.g. behavioural issues and anxiety; and an increase in the severity of conditions or of need amongst young people.

There is however more expansive literature which looks at the outcomes for people with disabilities in Ireland. People with disabilities in Ireland are more likely to live in poverty, have lower levels of educational attainment, are less likely to be in work (Disability Federation of Ireland, 2024), and when they are working are more likely to have lower incomes (Doorley et al., 2025). Doorley et al. (2025) also find that households with disabled members require much higher income levels to attain the same standard of living as non-disabled households, which thus leads to higher rates of poverty. They are also more likely to face housing discrimination and deprivation (Grotti et al., 2024). This is in line with the literature in other developed economies.

2.4 CONTEXT

Both the UK and Ireland recently proposed significant changes to their disability-related social security systems in a bid to reduce disability-related social security receipt, which with ageing populations has been rising significantly as a proportion of gross domestic product (GDP) (OBR, 2023 for the UK; CSO, 2024). While both jurisdictions show an ageing population over time, with a rising population share of those aged 65 and over, in 2022 the share of the population aged 65 and over in Ireland was 15 per cent compared to 17.6 per cent in NI (Bergin et al., 2025). While ageing is a pressing issue for both jurisdictions, strong net inward migration in Ireland in recent years has helped to boost the working-age population. The health shock of the COVID-19 pandemic has also raised concerns about levels of disability and ill-health. While social security is devolved in NI, it tends to align with policy changes in Westminster due to the constrained finances of the NI Executive.

However, when Disability Living Allowance (DLA) was replaced by Personal Independent Payment (PIP) following the post-2008 recession, the change was mitigated against in NI for some time due to the recognised disproportionate harm that would have been faced in NI from the cut given higher levels of disability social security receipt (Devlin et al., 2023).

While social security has been a devolved policy area for some time, NI has not carved out a unique policy approach in this regard (Fitzpatrick and O'Sullivan, 2021). Fitzpatrick and O'Sullivan (2021) argue that the UK and Irish systems based on the work of Beveridge – which informed the post-WWII welfare state in the UK – have more in common than not. One key difference which has evolved over time is the means testing of disability-related social security in Ireland. Disability Allowance, the key payment for those in Ireland with disabilities, is means tested, while PIP in NI is not means tested and is solely aimed at supporting the additional costs people with disabilities face. On the other hand, Disability Allowance in Ireland is significantly more generous than is the case in NI at €244 (approximately £215) per week. PIP is made up of two components, both of which have two payment levels, but the maximum amount possible to be in receipt of is £187.45 per week, which is equivalent to €212. While these are the main social security payments for people with disabilities, individuals may also be eligible for other payments or supports. The Disability Allowance scheme in Ireland also comes with a range of other wrap-around supports, e.g. free travel, free fuel allowance and other more holistic financial supports; while in NI, those on low incomes receive much less in terms of holistic supports.

One other significant difference between NI and Ireland which relates to disability is the differing health care systems in operation. There are issues in both jurisdictions about the current performance of the relevant health systems and the subsequent outcomes. For a discussion on primary health care across the island of Ireland, see Connolly et al. (2022). They found health waiting lists to be growing in both jurisdictions, although these are more concerning in NI, but simultaneously found higher levels of unmet need in Ireland due to the charges which can be required for care.

2.5 ALL-ISLAND COMPARISON FACTORS

While this is the first work to examine disability rates across the island of Ireland, there is a growing body of research which helps to frame the analysis. Education is known to have a protective effect on disability and Smyth et al. (2022) find that education levels are significantly better in Ireland than is the case in NI. While we discuss above health is a secondary determinant of disability rolls, it remains important. In a report on primary health care North and South of the Irish border, Connolly et al. (2022) find that differences in the health care systems as well as difficulty in finding comparable data make comparisons difficult. However, they do

find that there are significant issues in both systems due to waiting lists. Also, while the data which were available to the researchers were limited and there was no clear jurisdiction which was definitively better in terms of health outcomes, life expectancy and infant mortality, often considered overall measures of a health care system's performance, were both better in Ireland in recent years. More recent work on standards of living also found a diverging gap, in favour of Ireland, for life expectancy (Bergin et al., 2025).

Taken together, these cross-border differences in education, health care and living standards highlight the need for the analysis to go beyond individual characteristics, and to consider structural factors that may shape disability prevalence.

CHAPTER 3
Data and methods

3.1 DATA

We utilise census microdata from both jurisdictions. For Ireland, we use the Census Longitudinal Dataset (CLD) which is a 10 per cent sample of the Irish census[4]. This covers about 700,000 individuals. The dataset contains a range of variables on individuals including but not limited to educational attainment, work status, disability status, and other personal characteristics (e.g. gender, age, ethnic minority background).

For NI, we use the Northern Ireland Census 2021 Comprehensive Microdata dataset[5]. This includes 98.5 per cent of the census records from 2021, which represents about 1.87 million individuals and some 760,000 households. This dataset is relatively new to the NI data infrastructure and to date there are no works published which utilise the data. The dataset is largely similar to the Irish data and contains a range of information on each individual.

Census day in NI took place on 21 March 2021 and thus was in the midst of the COVID-19 pandemic. Interestingly, the return rate (97.2%) was higher than that of the previous census (93.6%). The Northern Ireland Statistics and Research Agency (NISRA) published information on COVID-19 impacts and believe the pandemic to have affected labour market data. The Irish census day was on 3 April 2022. It is possible that given the impact of COVID-19 on long-term health and disability that this is felt in disability data in Ireland to a greater extent than the earlier data collection in NI. However, while we believe any impact to be limited, we are unable to measure these effects in the data.

We restrict our study to those who are aged 20–69 years as these individuals are more likely to be influenced by policy than those who are very young and born with limiting conditions or difficulties and those who are 70 or above who no longer are going to be participating in the labour market, eligible for disability-related social security payments in the same way, and other factors which mean they will be more immune to policy changes which are designed to reduce disability rolls or such like. The authors believe that a study of childhood disability would be useful, particularly given recent increases in certain types of disability amongst the younger cohort, specifically intellectual and learning difficulties, but should be its

[4] The sample is chosen by selecting residents whose birthday falls on one of 37 randomly chosen dates. The census is longitudinal in nature as it connects data between the 2016 and 2022 censuses but in this work, we focus on the 2022 wave only. The data is accessible via the CSO online research portal to accredited researchers.

[5] The data is available under strict secure access conditions to accredited researchers and can only be accessed in the NISRA Secure Access Safe setting in Belfast.

own study. Previous work on childhood disability utilised census data from 2011 and 2016 (Whelan et al., 2021); it would be worthwhile updating this study in light of the COVID-19 pandemic.

3.1.1 Measuring disability

Measuring disability can be problematic, with the exact question and potential responses playing a role in how people respond. Furthermore, self-reporting disability can be impacted by justification bias whereby individuals can be more likely to report as disabled or in poor health to justify their behaviour, e.g. not engaging in the labour market (Oguzoglu, 2012) which will be influenced by institutional arrangements. Recent work by Rennane and Morris (2025) find that self-reports as a measure of disability are significantly higher than those measures derived from functional questions alone, which is likely at least to some degree to be driven by the aforementioned biases which can occur. However, in saying that, while self-reports can lead to such biases, we should also note that individuals have the most information about their current health and disability status, so it can be argued that they are best placed to answer such questions.

The questions used to gauge disability in the relevant census questionnaires, and the possible responses, are displayed in Table 3.1. The NI measure is more in line with a standard definition of disability in light of the social model with which disability now tends to be viewed and which is the model used by the UN, the World Health Organization (WHO), the EU, etc. The measure in the Irish census, by focusing on presence of conditions as well as difficulties, is not as directly aligned with the social model and reflects the medical model to a certain degree. By social model, we mean viewing the barriers which those with impairments face as a result of the structures and systems in place in society, rather than as being caused by the condition or difficulty in and of itself. Prior to the move to the social model, the medical model was the argument of the day which solely based any barriers faced as a result exclusively of the health condition, difficulty or impairment (Sense, n.d.). However, both census questions emphasise that for it to be a disability, it should be a long-term condition rather than just a short-term illness.

In Ireland, it is possible that the question used could lead to an overestimate of disability as people who have, for example, a hearing impairment to some extent may not necessarily be limited in their day-to-day activities or in their ability to participate in society. Some areas also pick up long-term health conditions which do not necessarily mean an individual is disabled or would not self-report themselves as such (e.g. blindness or a vision impairment or a mental health issue). To account for this possibility, we use a more refined measure of disability for Ireland whereby we consider only those who report a long-term lasting condition or difficulty ‘to a great extent’ to be disabled. That the condition, or difficulty, impacts them to a great degree suggests a limitation which is more in line with a

standard definition of disability. We do the same for NI using the level of limitation in the possible answers. Again, it must be noted that while the individual level data available in the jurisdictions are useful additions to the data infrastructure for studying various economic and social issues across the island of Ireland, the questions used to gauge disability are not identical, and thus direct comparisons are impossible; rather, we use side-by-side case studies to begin to fill the gap in the literature.

TABLE 3.1 DISABILITY MEASURES AS PER CENSUS, NORTHERN IRELAND AND IRELAND

Northern Ireland	Ireland
Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months? Yes, limited a lot Yes, limited a little No	Do you have any of the following long-lasting conditions or difficulties: Blindness or a vision impairment; deafness or a 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 mental health issue; a difficulty with pain, breathing or any other chronic illness or condition? Yes, to a great extent Yes, to some extent No

On this basis, we use a disability measure which is any positive response to the relevant question, but we follow this up by examining more specific measures of disability, that is those who report as 'Yes, limited a little' for NI and 'Yes, to some extent' in Ireland.

Other potential data sources for examining disability across the island of Ireland are limited. The EU Survey of Income and Living Conditions (EU-SILC) provides a wealth of data on disability, which is comparable; but following Brexit, NI no longer participates in SILC and the last year for which data is available is 2018.

3.2 METHODS

The analysis combines descriptive and econometric techniques to explore disability prevalence and the factors associated with disability across the island of Ireland. We begin with an extensive descriptive exercise examining disability rates by various characteristics such as age, gender, ethnicity, educational attainment, etc. These characteristics are those which are noted in the literature as having a relationship with disability prevalence (Fors et al., 2022 for age and gender; Nazroo, 2001 for ethnicity; Stonkute et al., 2023 for education). The results for NI and Ireland are presented side-by-side to allow comparisons to be made.

Building on this, we estimate probit models to examine the factors associated with reporting a disability. Probit models are used as standard when the outcome variable is a binary variable, in this case disabled or not. The model utilised is similar to that used in Devlin et al. (2023) to examine disability in NI and England, although that takes a pooled approached. In an ideal scenario, we would also utilise a pooled model, running regression analysis on the data in both jurisdictions combined. However, given the secure access conditions placed upon census microdata, this is not possible, and thus separate models are presented side-by-side. To capture variation in severity, we estimate separate models for all individuals reporting a disability, those with less severe limitations, and those with more severe limitations. The results are presented as average marginal effects, interpretable as the percentage point change in the probability of reporting as disabled from a one-unit change in the relevant explanatory variable. The probit model used takes the form:

$$\Pr(y_j = 1 | x_j) = \Phi(\beta X_j') \quad (1)$$

where y_j is the outcome in question for individual j, and X_j contains the socio-demographic, labour market and other relevant controls. β represents the various parameter to be estimated for each control. This approach allows us to identify both common factors associated with and jurisdiction-specific influences on disability rates.

CHAPTER 4
Results

4.1 DESCRIPTIVE STATISTICS

The Irish census subsample of 20–69-year-olds has 296,312 observations; while the NI data, which is a complete dataset of census data, has 1,139,443 observations for the specific cohort. Table 4.1 presents descriptive statistics of the data. 50.9 per cent are female in Ireland compared to 48.9 per cent in NI. The 40–49 age group in Ireland is larger than the 50–59 and 20–29 groups, due to historical migration and population growth trends. This is in line with other demographic data (Eurostat, 2024). The Irish population also has slightly more individuals educated to degree level or above, although this is likely to be even starker among lower age groups (Smyth et al., 2022). There are significant differences in terms of ethnic make-up of the populations, again not surprising given the levels of migration into Ireland. 97 per cent of those in NI are white Irish or white British compared to 79.9 per cent who report as white Irish in Ireland. There are 0.2 per cent in NI who report as Irish Traveller/Roma/other white compared to 13.3 per cent in Ireland. Ireland also has greater shares of those who are Black or other mixed ethnicities. The share of those who are Asian is 1.7 per cent in both jurisdictions. Not surprisingly, religion make-up also differs: 71 per cent report as Catholic in Ireland compared to 46.7 per cent in NI. 44.3 per cent in NI report as Protestant (including Church of Ireland) compared to 2.5 per cent in Ireland. Other religions and no religion make up much higher shares in Ireland compared to NI, 1.4 per cent (7.6%) in NI report as other religion (no religion) compared to 8 per cent (18.5%) in Ireland. There is also a much larger share of individuals in NI who report as undertaking unpaid care, 16 per cent compared to 9 per cent.

TABLE 4.1 DESCRIPTIVE STATISTICS OF DATA, NORTHERN IRELAND AND IRELAND

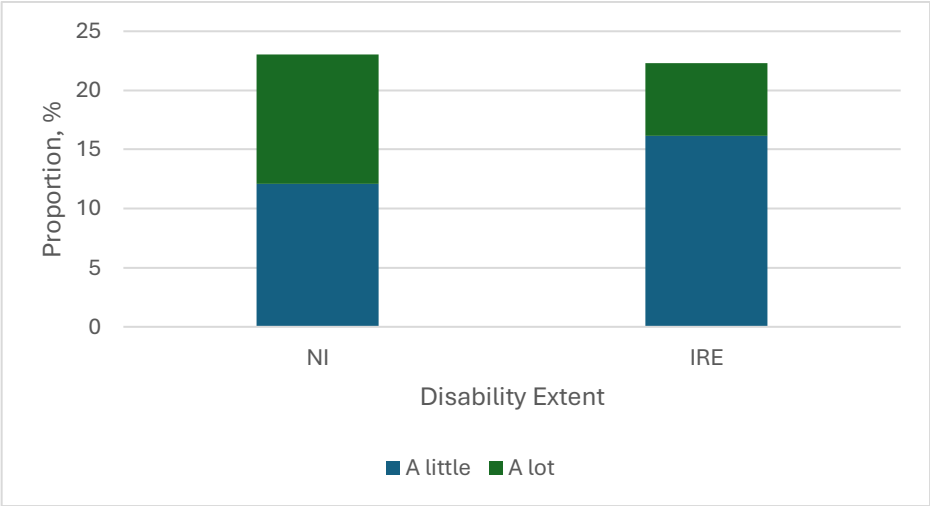
	Northern Ireland	Ireland
Female	48.9	50.9
Married	48.5	51.2
Unpaid carer	16.0	9.0
Education level		
Secondary or lower	38.4	38.7
Technical/vocational/higher	23.9	21.2
Degree plus	37.7	40.1
Age group		
20–29 years	18.7	17.9
30–39 years	21.3	21.6
40–49 years	20.7	24.4
50–59 years	22.0	20.2
60–69 years	17.3	16.0
Ethnicity		
White British/Irish	97.0	79.9
Traveller/Roma/other white	0.2	13.3
Black	0.5	1.5
Asian	1.7	1.7
Other/mixed	0.7	3.7
Religion		
Catholic	46.7	71.0
Church of Ireland/Protestant	44.3	2.5
Other stated	1.4	8.0
No religion	7.6	18.5
Local labour market conditions		
Weekly wage (£/€)	461.98	864.46
Unemployment, %	3.1	3.4
N	1139443	296312

The overall disability rate for those aged 20–69 years is similar across jurisdictions at 23 per cent in NI and 22 per cent in Ireland[6]. However, important differences emerge when we use the more specific definitions. Figure 4.1 shows the disability rate in both jurisdictions and distinguishes between the share who report as disabled a little or to some extent and the share as disabled a lot or to a great extent. In NI, 10.9 per cent of individuals report being 'limited a lot', compared to 6.2 per cent in Ireland. Conversely, Ireland has a higher share of individuals reporting milder limitations ('to some extent') than NI (16.1% vs 12.1%). While caution should be used in drawing conclusions based on the differing questions and possible responses, the difference in the more severe disability is in line with

[6] Based on a sample of 296312 observations in Ireland and 1139443 in NI.

priors. In previous research, the disability rate in NI was found to be about twice that of England (Devlin et al., 2023).

FIGURE 4.1 DISABILITY PREVALENCE BY SEVERITY, NORTHERN IRELAND AND IRELAND



Note: Those aged 20–69 years.

Figure 4.2 shows the disability rate by age category for Ireland and NI. The disability–age gradient is well documented albeit the relationship varies across contexts (Wahrendorf et al., 2013). This is evident here. In NI, disability rates rise steadily with age. However, in Ireland, the pattern is less linear. The disability rate in Ireland is higher in the 20–29-year age group than it is for 30–39-year age group, possibly related to a 'healthy migrant effect' (Nolan, 2011) or as a result of the differing questions used. However, if it does overestimate disability, as discussed elsewhere, there is no reason to believe that this would occur to a greater extent amongst younger people in such a way that would alter the standard disability–age gradient. Interestingly, disability rates are higher in Ireland at younger age groups; while at older age groups, it is much higher in NI. Severe disability follows a similar trend, with NI showing much higher rates among older age groups.

FIGURE 4.2 DISABILITY PREVALENCE BY AGE GROUP, NORTHERN IRELAND AND IRELAND

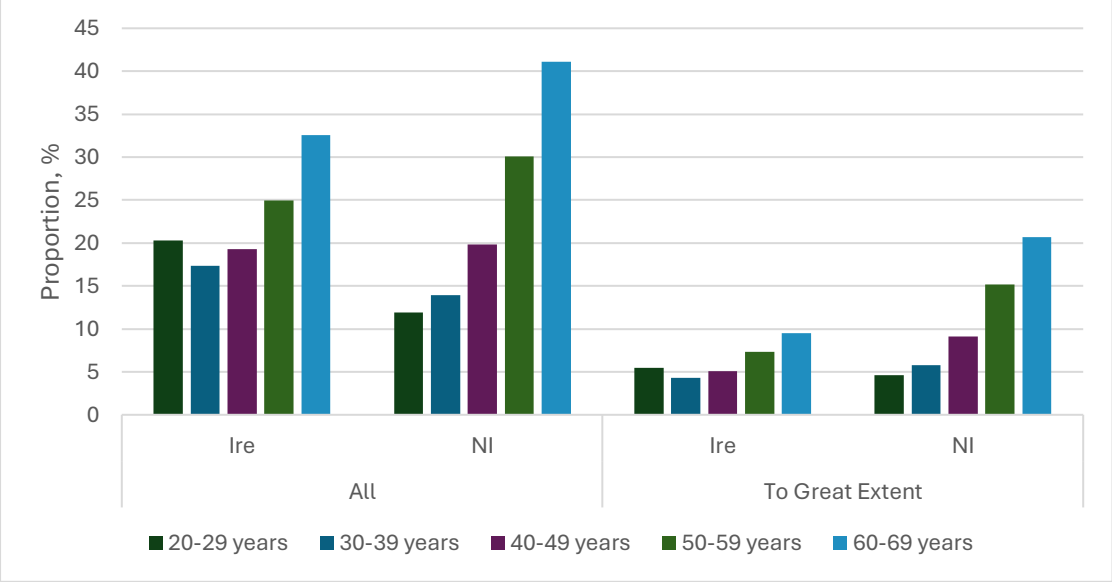
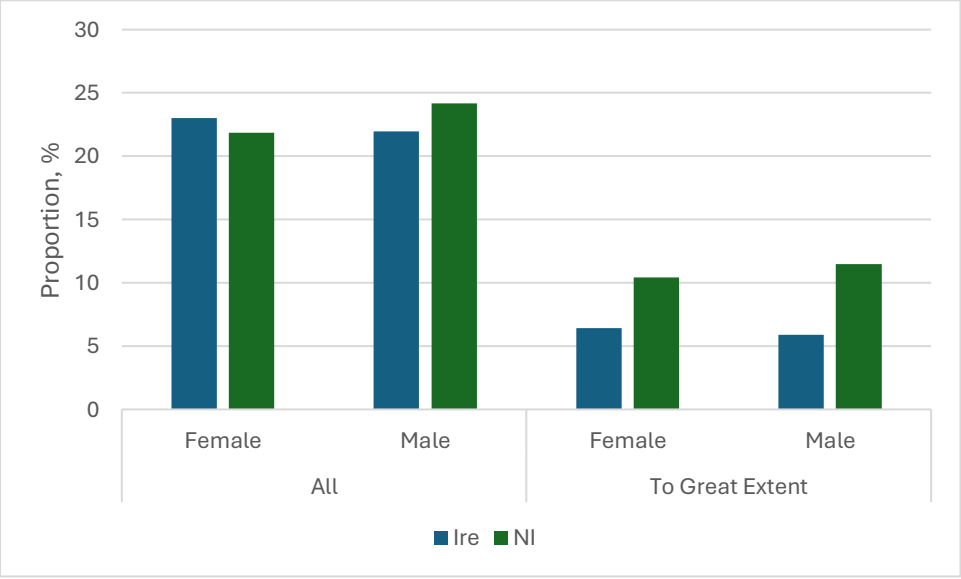


Figure 4.3 presents disability prevalence by gender. There are no stark differences, although the disability rate is slightly higher in Ireland for females relative to NI and the opposite is true for males, with the rate higher in NI. Severe disability is more common among men in NI, while in Ireland the gender gap is smaller.

FIGURE 4.3 DISABILITY PREVALENCE BY GENDER, NORTHERN IRELAND AND IRELAND



There is also a clear relationship between disability prevalence and educational attainment, with disability rates higher amongst those with lower levels of education (Figure 4.4). Amongst those with low levels of education, the disability rate is 35 per cent and 27 per cent in NI and Ireland respectively. For those with a third-level education, the disability rate falls to 13 per cent in NI and 17 per cent in Ireland. Disability rates in NI exceed those of Ireland at lower levels of education; while as education increases, rates are higher in Ireland. More specifically, there is a steeper relationship between educational attainment and disability in NI than there is in Ireland. That rates are highest in NI amongst those with low levels of education and are higher than those in Ireland must be viewed in light of differing levels of education across the island, with educational attainment in NI lower than that of Ireland (Smyth et al., 2022). This suggests that education has a strong protective effect in terms of disability. However, we do not prove causality in our analysis, and it is potential the relationship works in the other direction, or both. It may be that disability as a child/young person limits educational attainment.

FIGURE 4.4 DISABILITY PREVALENCE BY EDUCATIONAL ATTAINMENT, NORTHERN IRELAND AND IRELAND

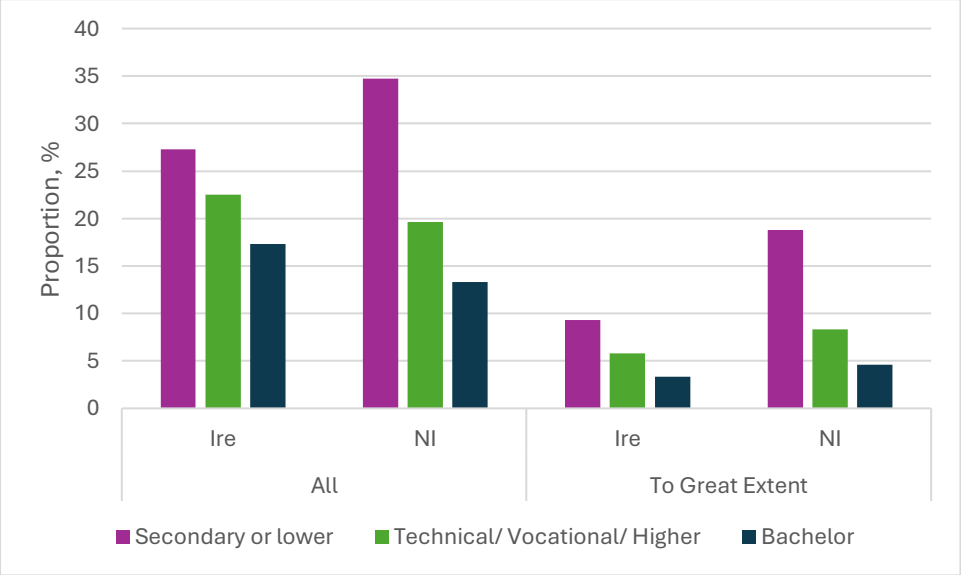
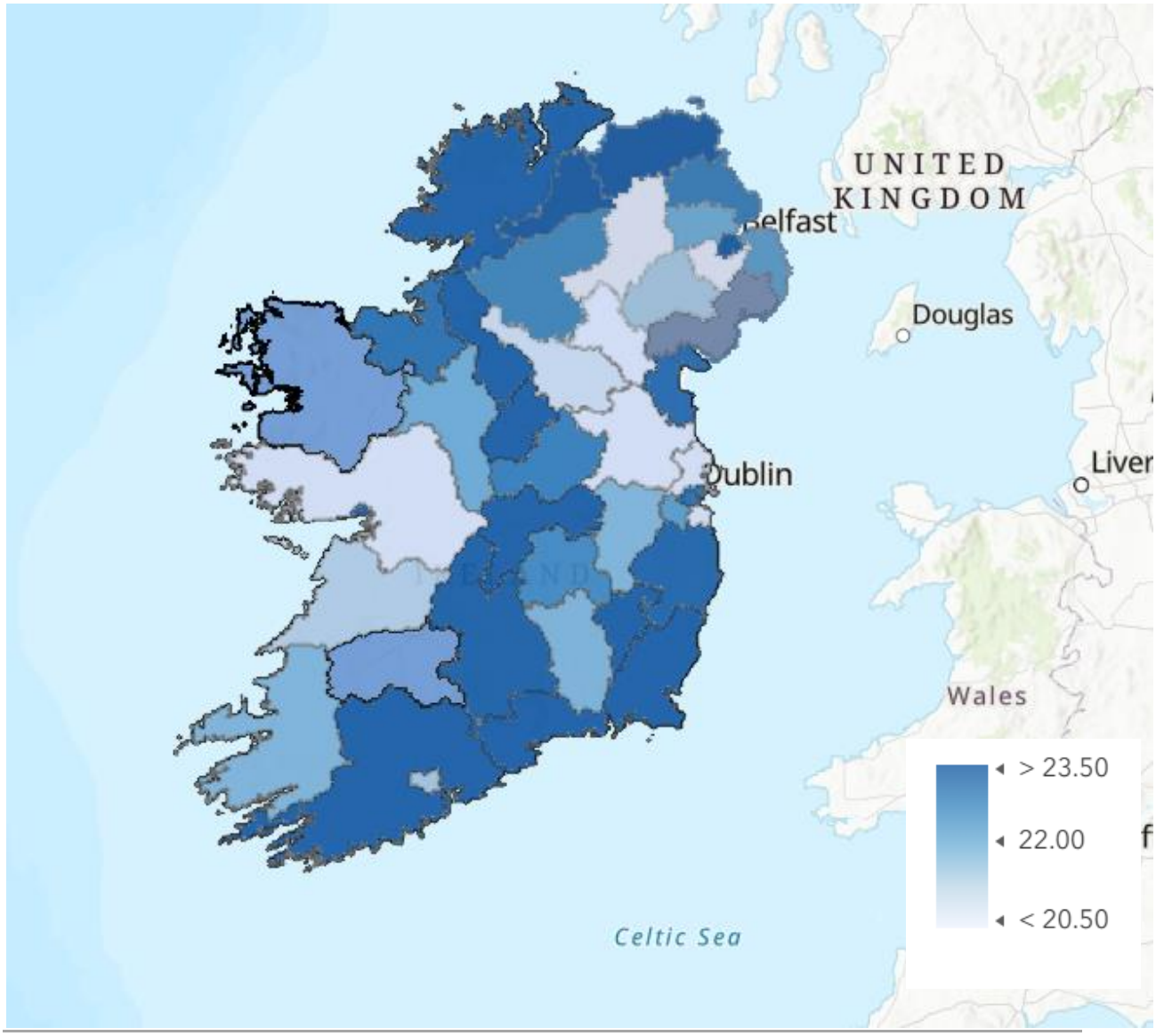


Figure 4.5 maps disability rates across the island of Ireland at county council level for Ireland and Local Government District (LGD) for NI. Higher rates of disability are evident in the North West of the island as well as in parts of the main cities (e.g. parts of Belfast and parts of Dublin) as well as in a column down the middle of Ireland and the South East. It is likely that these rates of disability are highly correlated with higher rates of deprivation as well as local age profiles. Interestingly, there is not a consistent border pattern, i.e. we do not see lower or higher levels around the border. However, we can see that areas with lower rates in Ireland are mirrored in the NI county which they meet. More specifically, higher rates are seen in Donegal and Derry and Strabane, while lower rates are seen in Monaghan and Armagh, Banbridge and Craigavon.

FIGURE 4.5 MAP OF DISABILITY PREVALENCE ACROSS THE ISLAND OF IRELAND, OVERALL DISABILITY PREVALENCE



Source: Authors' own using relevant census data for NI and Ireland.

CHAPTER 5
Econometric analysis

In this section, we model the factors associated with disability in both jurisdictions. The models are estimated in the first instance for all persons reporting a disability and then separately for (a) those supporting moderate disabilities and (b) those with more severe levels of disability. This is done to account for differences in the questions used in the respective censuses and is discussed in the Data section. The estimation methodology is probit, and marginal effects are reported. The models control for a range of potential factors associated with disability, including age, gender, ethnicity, marital status, religious status and geographical location. The results of the models are reported in Table 5.1. It is noticeable that differences in the observable characteristics explain much more of the variation in disability rates in NI compared to Ireland. The pseudo R2 statistics, which provide a measure of the explained variation, are substantially higher in all the NI models relative to Ireland. This is particularly the case in the models for severe disability. This suggests that unobservable factors, which is anything else which has not been captured by our models, play a much more significant role in determining Irish disability probabilities relative to NI. From a policy perspective, higher levels of unobserved heterogeneity in the factors associated with disability rates, which is the case for Ireland, make it more problematic to design focused/tailored policy responses. However, we caveat that this difference may be in some part driven by differences in how disability is captured North and South.

In all of the models, we find the probability of disability increasing with age and decreasing with educational attainment. However, we detect substantial differences in the influences of these variables between jurisdictions and also according to the severity of disability. Significant differences also occur with respect to religious background, ethnicity and local labour market characteristics.

With regard to the model for overall (severe or moderate) disability, while the coefficients for both age, education and marital status take the same signs in both jurisdictions, the marginal effects are generally much larger in NI. For instance, whilst having a third-level qualification reduces the probability of being disabled in Ireland by 7 percentage points relative to the reference category, for NI the reduction is 15 percentage points. Conversely, whilst the probability of disability rises with age in both areas, the impacts of age on disability is much larger in NI; for example, being aged 60–69 relative to being aged 20–29 raises the likelihood of disability in NI by 38 percentage points compared to 16 percentage points in Ireland. While this may in part be a conflict effect in NI in line with Devlin et al. (2025a), the flatter relationship between age and disability in Ireland may be reflective of the Irish disability measure which picks up some conditions that may

or may not necessarily lead to someone reporting as disabled, e.g. the presence of a mental health condition. We find that being an unpaid carer raises the likelihood of disability in Ireland by 7 percentage points compared to just 1 percentage point in NI. We include caring as recent work by Public Health England has argued that caring should be considered a social determinant of health (2021) and carers are more likely to be disabled than non-carers (Carers UK, 2025). Carers UK find that in England and Wales, there are 1.4 million carers who are also disabled. There is no reason to believe this wouldn't hold in NI and Ireland and therefore has been underexamined. It is also worth noting that the share of individuals who report as having caring responsibilities has been increasing in NI (authors' calculation using 2021 and 2011 census) and in Ireland (Devlin et al., 2025b). In both jurisdictions, being Black, Asian or of mixed ethnicity lowers the likelihood of disability, while Catholics have somewhat lower probabilities of reporting disability. There are some impacts of local labour market characteristics on disability probabilities; however, the marginal effects of these variables are relatively small in both regions. The log of wages in particular in Ireland has a positive and statistically significant relationship with overall disability. The unemployment rate while correctly specified has a zero coefficient (rounded to 2 decimal places). This is in line with previous work for NI (Devlin et al., 2025a) but in sharp contrast to the international literature in this space. This is particularly interesting in light of very different social security systems and health systems in NI and Ireland. Finally, while females are 2 percentage points more likely to report disability in Ireland, they are somewhat less likely to do so in NI.

While the models for both severe and limited disability are both very similar to the results of the model for overall disability, there are some noticeable differences in the reported marginal effects in both models. In particular, the impact of age, gender, education and ethnicity on severe disability is much lower than is the case for overall disability in both jurisdictions. As was the situation with the general model, being in an older age category has a much stronger impact on the probability of severe disability in NI compared to Ireland. Finally, the results for the model on moderate disability follow similar patterns to those of general and severe disability. However, the impacts of age and education are lower for both regions. Age and education are more strongly correlated with disability in the more severe model, while the social variables such as ethnicity and religion are relatively stable across all the models.

Individuals who are Irish Travellers/Roma/other white have much higher disability prevalence all else being equal in NI, while the relationship is not as strong in Ireland. The numbers of Roma and Irish Travellers in NI are much lower than is the case in Ireland, which may impact specification, or it could be that on the basis of lower numbers, they are less integrated, which impacts on their health. Furthermore, it could be that the other white category plays a role in averaging out

some effects, which may be an issue more so in Ireland, as the poor health and related issues amongst the Traveller community have been well documented in Ireland (Kennedy et al., 2023).

In Table 5.2, we re-estimate the models for severe disability with added controls for type of condition. While these variables are coded differently in both census datasets, the results are still informative while not directly comparable. Within the NI model, physical and mobility conditions are the strongest predictors of severe disability; mobility conditions requiring wheelchair use raises the likelihood of reporting a severe disability in NI by 21 percentage points, while mobility conditions not requiring a wheelchair raises the probability of severe disability by 16 percentage points. In contrast, having conditions that limit physical activity increases the likelihood of severe disability in Ireland by 7 percentage points. On the other hand, reporting psychological, emotional or mental health conditions has the largest association with severe disability in Ireland, of all the health conditions. Having a psychological, emotional or mental health condition raises the probability of reporting a severe health condition in NI and Ireland by 7 and 10 percentage points respectively. Finally, having an intellectual disability increases the likelihood of a severe disability by 8 percentage points in NI and 7 percentage points in Ireland.

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TABLE 5.1 RESULTS OF PROBIT REGRESSION ANALYSIS, MARGINAL EFFECTS, NORTHERN IRELAND AND IRELAND

	All				A lot/to a great extent				A little/to some extent			
	IRE		NI		IRE		NI		IRE		NI	
Female	0.02	***	-0.03	***	0.01	***	-0.01	***	0.02	***	-0.02	***
Education level (Ref: secondary or lower)												
Technical/vocational/higher	-0.03	***	-0.08	***	-0.02	***	-0.06	***	-0.01	***	-0.03	***
Degree plus	-0.07	***	-0.15	***	-0.05	***	-0.11	***	-0.04	***	-0.07	***
Age group (Ref: 20–29)												
30–39 years	<0.01		0.07	***	<0.01	**	0.05	***	<0.01		0.03	***
40–49 years	0.04	***	0.16	***	0.02	***	0.12	***	0.02	***	0.08	***
50–59 years	0.09	***	0.26	***	0.04	***	0.20	***	0.06	***	0.14	***
60–69 years	0.17	***	0.38	***	0.08	***	0.31	***	0.13	***	0.24	***
Married	-0.08	***	-0.12	***	-0.05		-0.08	***	-0.05	***	-0.06	***
Ethnicity (Ref: White Irish)												
Traveller/Roma/other white	0.07	***	0.21	***	0.06	***	0.16	***	0.04	***	0.12	***
Black	-0.06	***	-0.10	***	-0.02	***	-0.06	***	-0.04	***	-0.04	***
Asian	-0.07	***	-0.11	***	-0.03	***	-0.07	***	-0.04	***	-0.05	***
Other/mixed	-0.04	***	-0.01	**	-0.01	***	-0.02	***	-0.03	***	<0.01	
Religion (Ref: Roman Catholic)												
Protestant	0.04	***	<0.01	**	0.01		-0.01	***	0.03	***	<0.01	***
Other stated	0.03	***	0.10	***	0.02	***	0.06	***	0.03	***	0.06	***
No religion	0.08	***	0.01	***	0.02	***	<0.01	***	0.07	***	0.01	***
Unpaid carer	0.07	***	0.01	***	0.02	***	-0.03	***	0.06	***	0.04	***
Local labour market												
Log average median wages	0.02	**	0.01	**	-0.01	*	0.02	***	0.04	***	<0.01	
Unemployment	<0.01	***	<0.01	***	<0.01	***	<0.01	***	<0.01	***	<0.01	***
Border area	-0.01	**	<0.01	***	-0.01	***	<0.01		<0.01		<0.01	***
Pseudo R Squared	0.03		0.11		0.06		0.15		0.03		0.07	
N	272843		1139443		229265		1001568		257325		1014909	

Source: NI Census Microdata for NI and the Census Longitudinal Dataset for Ireland.
Notes: *** p<0.01, ** p<0.05, * p<0.1. <0.01 and >-0.01 denote marginal effects which are not detectable to 2 decimal places.

TABLE 5.2 SEVERE DISABILITY MODEL WITH CONTROLS FOR TYPE OF CONDITION

	Northern Ireland		Ireland		
Female	<0.01	***		<0.01	
Education level (Ref: secondary or lower)					
Technical/vocational/higher	-0.01	***		<0.01	***
Degree plus	-0.02	***		-0.01	***
Age group (Ref: 20–29)					
30–39 years	0.01	***		<0.01	***
40–49 years	0.01	***		<0.01	***
50–59 years	0.02	***		<0.01	***
60–69 years	0.02	***		<0.01	***
Married	-0.01	***		<0.01	***
Ethnicity (Ref: White Irish)					
Traveller/Roma/other white	0.05	***		<0.01	
Black	-0.01	***		<0.01	***
Asian	-0.01	***		-0.01	***
Other/mixed	<0.01	*		<0.01	
Religion (Ref: Catholic)					
Protestant	<0.01	***		<0.01	
Other religion	<0.01	*		<0.01	
No religion	<0.01	***		<0.01	**
Unpaid carer	-0.01	***		<0.01	***
Local labour market					
Average median wage	<0.01	***		-0.01	**
Unemployment	<0.01	***		<0.01	
Health condition					
Autism	0.06	***	Blind/vision impairment	0.02	***
Blind/vision impairment	0.03	***	Deaf/hearing impairment	0.05	***
Breathing	0.01	***	A difficulty with physical activities	0.07	***
Confusion/memory loss	0.05	***	Intellectual disability	0.07	***
Deaf/hearing impairment	->-0.01	***	Learning, remembering or concentrating difficulty	0.03	***
One of more conditions	0.07	***	Psychological/emotional/ mental health issue	0.10	***
Intellectual learning difficulty	0.08	***	Pain, breathing or other chronic illness	0.13	***
Learning difficulty	<0.01	***			
Long-term pain	0.04	***			
Psychological/emotional/ mental health issue	0.06	***			
Physical mobility	0.16	***			
Mobility, requires use of wheelchair	0.21	***			
Other	0.02	***			
N	1139443			257499	
Pseudo R2	0.58			0.44	

Source: NI Census Microdata for NI and the Census Longitudinal Dataset for Ireland.
Notes: *** p<0.01, ** p<0.05, * p<0.1. <0.01 and >-0.01 denote marginal effects which are not detectable to 2 decimal places.

CHAPTER 6
Conclusions

Disability rates are a pertinent issue in many developed countries as we continue to see ageing populations as well as negative health shocks in the wake of the COVID-19 pandemic. Both the UK and Ireland have proposed reform to disability-related social security in response to their concerns around sustainability of disability rolls. The island of Ireland presents an interesting case study to examine disability rates across jurisdictions as while the border is porous and the jurisdictions are intertwined socially and economically, social security and health care both differ considerably. Furthermore, the Troubles conflict also plays an identifiable role in determining levels of disability rates in the North.

Bearing in mind the caveats discussed previously about the differences in the questions and possible responses, we find that in overall terms, disability prevalence is broadly similar across Ireland and Northern Ireland, with rates of 23 per cent in Northern Ireland and 22 per cent in Ireland. However, severity differs. Northern Ireland has a higher proportion of individuals with severe limitations, with 10.9 per cent of individuals reporting they are 'limited a lot' compared to 6.2 per cent in Ireland who report being limited 'to a great extent'. This suggests that while the headline rates appear similar, the intensity of disability is much higher in Northern Ireland and thus the impacts are likely to differ, with more severe rates of disability likely to require more interaction with the health system, for example. Although the definitions differ somewhat, the higher levels of disability in Northern Ireland are consistent with its weaker economic performance, higher levels of deprivation, and the lasting effects of the conflict, underscoring the value of using this more refined measure (Devlin et al., 2023; Devlin et al., 2025a).

With respect to the results from our modelling exercise, differences in observable characteristics, such as age, education, etc. explain much more of the variation in NI disability rates compared to Ireland, and this is particularly the case for severe disability. This suggests that unobservable factors, such as underlying health that isn't measured, play a much more significant role in explaining the Irish disability probabilities relative to NI. From a policy perspective, higher levels of unobserved heterogeneity in the determination of disability rates, which is the case for Ireland, make it more problematic to design appropriate policy responses tailored for specific cohorts.

In all of our models, we find that the probability of disability increases with age and declines with educational attainment. However, we find substantial differences in the influences of these variables between regions across the island and according

to the severity of disability. Significant differences also occur with respect to religious background, ethnicity and local labour market characteristics across both jurisdictions on the island. This may be reflective of a range of differences across the island; migration in particular differs considerably North and South. While health care, social care, social security systems, and the local labour market all differ across the island, these are likely to interact in context-specific ways and impact how disability manifests.

In the model for overall disability (moderate or severe), the coefficients for age, education, and marital status carry the same signs across both jurisdictions, but the marginal effects are typically larger in Northern Ireland. For example, holding a third-level qualification reduces the probability of disability by around 7 percentage points in Ireland, compared with a 15-point reduction in Northern Ireland relative to the reference category. Similarly, although the likelihood of disability increases with age in both regions, the effect is far stronger in Northern Ireland: being aged 60–69 raises the probability of disability by 38 percentage points there, compared with 16 points in Ireland relative to those who are 20–29 years of age.

Unpaid caregiving also shows contrasting impacts, increasing the likelihood of disability by 7 percentage points in the South but only 1 point in Northern Ireland. This is particularly important as the relationship between social security and disability does not account for those with disabilities also being carers and vice versa. In both jurisdictions, individuals identifying as Black, Asian or of mixed ethnicity are less likely to report disability, as are those why identify as Catholic. Local labour market conditions exert some influence, but the marginal effects of these variables are relatively small in both regions. This is considerably different to what is found in the international literature on disability but is in line with previous findings for Northern Ireland (Devlin et al., 2023). This is interesting that this holds in both jurisdictions despite very different health and social care systems. Finally, gender differences are apparent between the jurisdictions. Women are 2 percentage points more likely to report disability in the South, whereas in Northern Ireland they are slightly less likely to do so. This is interesting and may be due to differences in how gender interacts with labour market or other relevant policies, or the conflict effect in NI may lead to higher rates of disability amongst men.

The models for severe and moderate disability broadly mirror the results of the overall disability model, though some differences emerge in the marginal effects. In particular, the influence of age, gender and education on severe disability is smaller than in the overall disability model across both jurisdictions. As with overall disability, older age categories exert a stronger effect in Northern Ireland than in the South. The moderate disability model also follows similar patterns, but the impacts of age and education are weaker in both jurisdictions compared with the general and severe disability models. This weaker relationship may be due to

better employment opportunities in Ireland regardless of education level (Devlin et al., 2023) or differences in social norms around reporting lower levels of disability.

In Northern Ireland, physical and mobility conditions have the strongest relationship with severe disability. Mobility limitations requiring wheelchair use increase the probability of reporting severe disability by 21 percentage points, while mobility issues not requiring a wheelchair raise it by 16 points. By contrast, in the Republic of Ireland, conditions restricting physical activity increase the likelihood of severe disability by 7 points. Psychological, emotional, or mental health conditions raise the probability of severe disability by 7 points in Northern Ireland and 10 points in the South. Finally, intellectual disability increases the likelihood of severe disability by 8 percentage points in Northern Ireland and 7 points in Ireland. This raises a number of research/policy questions which would warrant further examination, as despite the differences in data collection that the strongest associations between health conditions and disabilities differs across the island suggests stark differences in how disability manifests. That mobility conditions have the strongest association in NI and not in Ireland may suggest that accessibility and inclusivity policies have had a role to play. Other relevant policies may play a role when considering the other conditions associated with disability. Further examination of this is outside the remit of this study and may require qualitative analysis.

In summary, while disability prevalence is broadly similar across Ireland and Northern Ireland, the severity and underlying factors associated with disability differ substantially. Observable characteristics explain much of the variation in NI, whereas unobserved factors play a larger role in Ireland, complicating policy design. These findings underscore the importance of tailoring disability-related social security and health interventions to local contexts, particularly in regions where historical and structural factors shape outcomes. Identical questions and timing of the relevant censuses would be a helpful addition in terms of the data available for studies of disability as well as studies of other important outcomes which shape people's lives.

These results have significant policy implications across the island at a time when disability rates are topical in both jurisdictions. Not only is the age gradient steeper in NI than in Ireland but the age–disability relationship is also stronger in NI for the most severe levels of disability, while the opposite is true in Ireland. The steeper age gradient may be further evidence of a conflict legacy on disability in NI as was found in Devlin et al. (2025a). Conflict-proofing policy and considering the NI-specific context is crucial in relevant policymaking. It is also possible there is a spillover from the conflict to Ireland and while this is an area for further research, it may also be prudent to consider a conflict impact in Ireland, given the levels of mobility across the border. That the age–disability relationship is weaker in Ireland

for the more severe outcome variable provides an area for further thought. It may be that the measure used for disability is more helpful in picking up lower levels of disability, as we suggested earlier that the definition could perhaps lead to an overestimate and pick up some milder health conditions which aren't necessarily life-limiting. It may also be reflective of differences in living standards perhaps given the stronger standards of living in Ireland (Bergin and McGuinness, 2021). The most severe levels of disability tend to arise from health conditions or limitations which aren't age-specific, i.e. those which are present from birth. It may also reflect better health care outcomes in Ireland relative to NI, which could mean earlier diagnosis and thus less severe health conditions, as well as better chances of successful treatment; shorter waiting lists in Ireland compared to NI have been documented in previous research (FactCheckNI, 2023). Or as may be more likely, it could be a combination of factors relating to the method of data collection as well as health care and other systematic differences.

There is also a gender differential in the level of reported disability North and South, which implies differences in how gender interacts with relevant labour market, social care and health care policies in each jurisdiction. Given ongoing increases in labour force participation amongst women in both jurisdictions, this may also be evolving.

Given Ireland has clearly adopted the social model of defining and understanding disability, as per the UN, the WHO, and the EU, it would be useful if this was applied to the wording of the census question, which would enable the data to better reflect any population that policy will target. Furthermore, as is often the case in North–South research, enhancing the comparability of datasets would be beneficial, particularly in the area of the census over which each jurisdiction has full autonomy (unlike many other datasets for which Ireland has to align with EU statistical and data collection approaches). In a similar vein, it is also noteworthy to reiterate the impact Brexit has had on the data infrastructure in NI. Up-to-date EU-SILC data for NI and Ireland would have provided a more comparable option for this study as well as being conducted more frequently than the census. This would also have allowed for the analysis of pandemic changes in light of the ongoing debates in this area.

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