

# How do disability rates differ across the island of Ireland?

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# Policy Context

- Disability rates are increasing as populations age and as people live longer with health/medical issues.
- Both jurisdictions are facing significant pressure on their healthcare and social security systems
- In UK (2025) and Ireland (2024) we have seen potential changes to disability-related social security policy

# Background

- According to EU data, disability rates in the UK exceed those found in Ireland (Pérez-Hernández et al., 2019)
- Furthermore, the disability rate in Northern Ireland (NI) is much higher than GB (Devlin et al., 2023)
- Therefore, the differential between Ireland and NI is likely to be substantial
- However, in recent Censuses (2021 in NI and 2022 in Ireland) this was not the case with 22% in Ireland and 23% in NI reporting as having a disability.

# International Literature

- Well developed international literature which finds that disability rates are complex and a triangular relationship exists between health, labour market strength and disability
- Some studies find the labour market/business cycle to be the most significant determinant of disability rates
- Disability-related (and other) social security eligibility and generosity also play a role
- This relationship is reflective of the social model rather than the medical model which views disability as purely a medical issue.

# Local Literature

- Disability rates in NI higher than in England regardless of measure used (Devlin et al., 2023; French & Cruise, 2021)
- Labour market doesn't have the impact in NI the international literature would suggest
- The high rates of DLA receipt in NI amongst older adults are at least in part driven by exposure to the NI conflict (Devlin et al., 2025)
- IRE literature more focussed on the consequences of disability rather than the determinants e.g. more likely to be in poverty, less likely to be working etc.

# Data

- Using Census microdata for both jurisdictions we examine the determinants of disability to see how patterns might differ across the island
  - For NI: Census 2021 Comprehensive Microdata (whole Census)
  - For IRE: Census Longitudinal Dataset (10% sample)

# Methods

- Descriptive exercise of disability rates
  - By various characteristics
- Probit regression of the determinants of disability
  - Dependant variable, disability, is 1 if the respondent self reports as disabled “a little/to some extent” or “a lot/to a great extent”
  - We also split out these different levels of positive response

# Disability Measures

NI	IRE
<p>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?</p> <p>Yes, limited a lot Yes, limited a little No</p>	<p>Do you have any of the following long-lasting conditions or difficulties?</p> <p><i>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.</i></p> <p>Yes, to a great extent Yes, to some extent No</p>

# Comparability

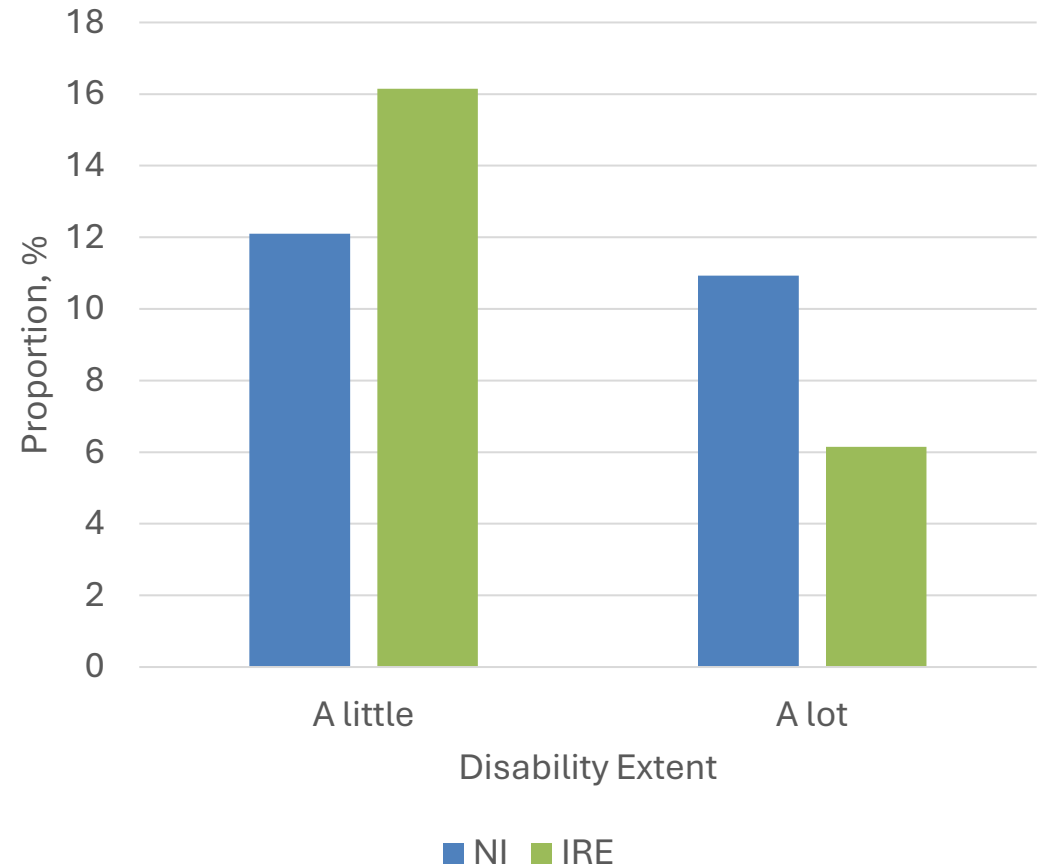
- While not identical these measures are more comparable than previous iterations of Census data
  - Irish Census 2022 provides additional options (Yes, to a great extent and Yes, to some extent) instead of just Yes/No options
  - Both include “long-lasting” which is crucial to deciphering between short-term health issues and disability. Disability by definition is long-term.
- It is possible that the Irish Census would determine someone as disabled who might not self-report as disabled themselves (as they might in the NI Census).
- Responding as having a condition to “a great extent” could imply that it impacts life.

# Descriptive Statistics

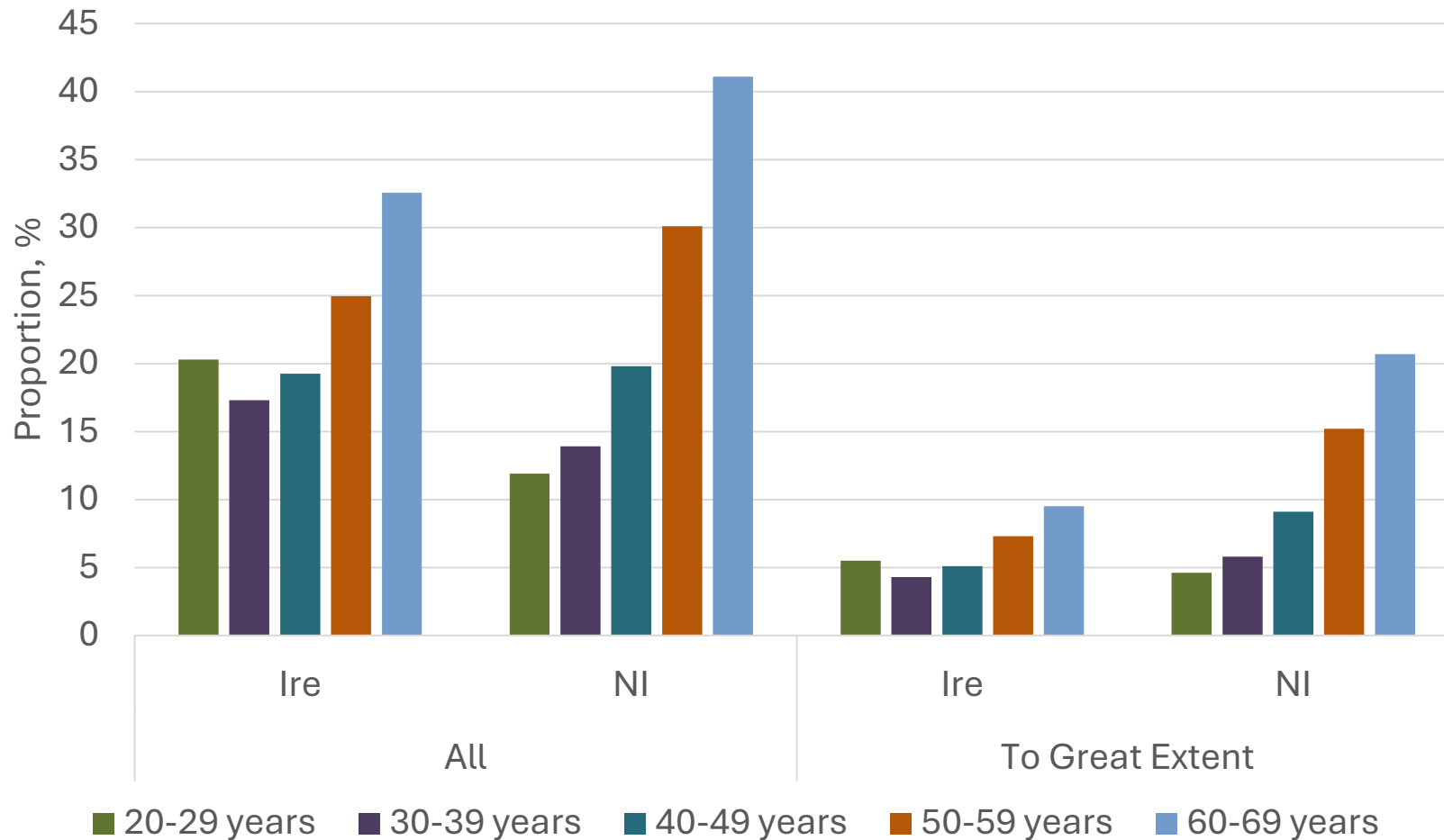
- Headline disability rate of 22% in IRE and 23% in NI in the age group examined (20-69 years of age)

# Disability Measure

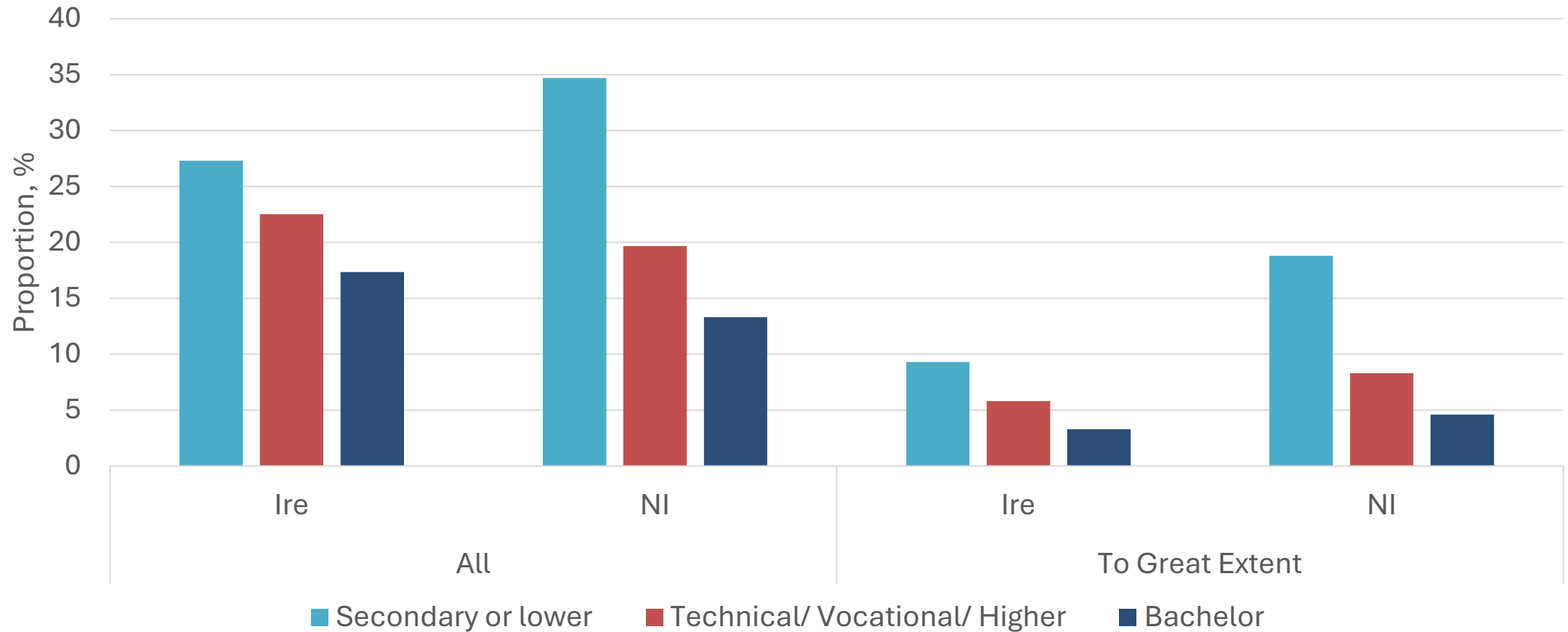
- Headline disability rate of 22% in IRE and 23% in NI
- Disability to a greater extent – 11% in NI and 6% in Ireland



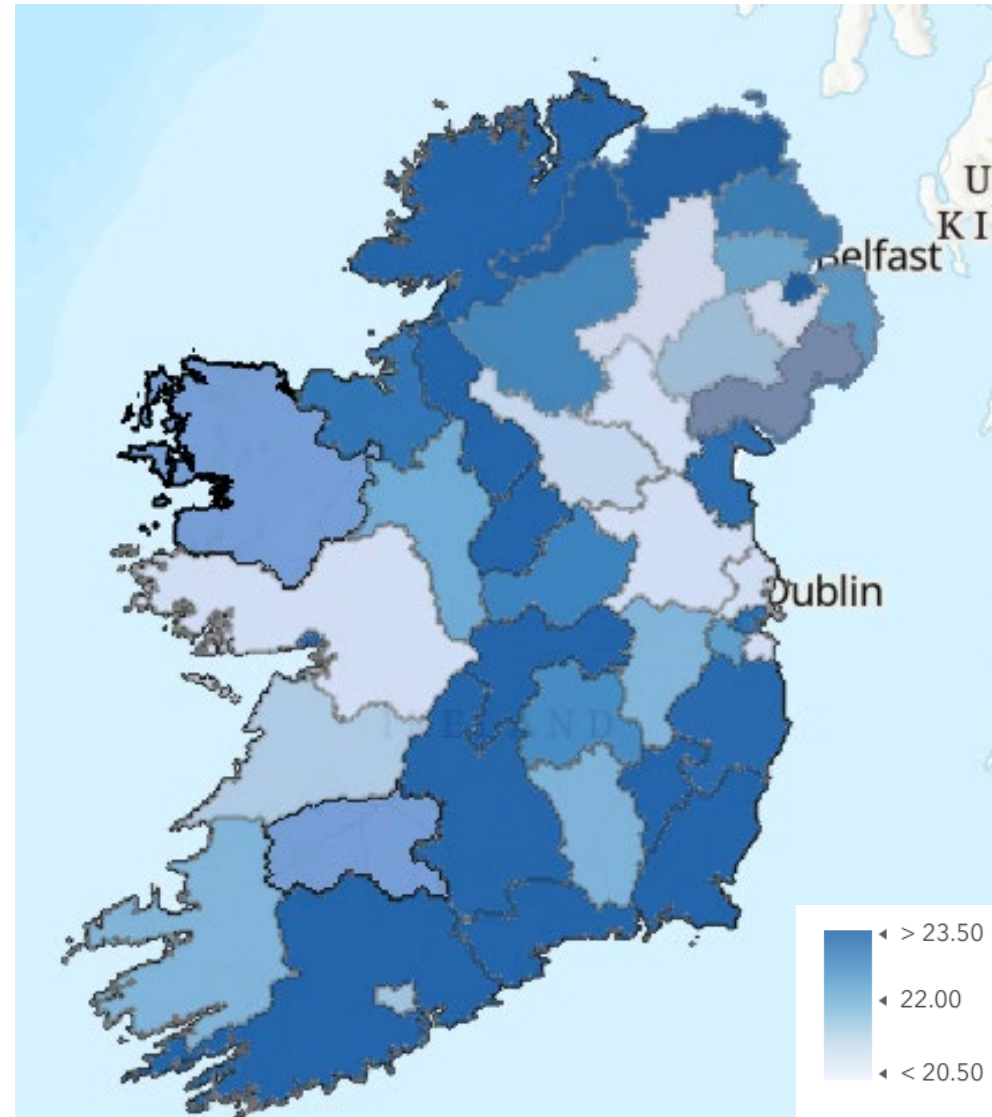
# Disability rate by Age Group



# Disability rate by Education Level



# Disability rates across the island



# Econometric Analysis

	RoI	NI
<b>Female</b>	0.02***	-0.03***
<b>Education Level (Ref: Secondary or Lower)</b>		
Technical/ Vocational/ Higher	-0.02***	-0.08***
Degree plus	-0.07***	-0.15***
<b>Age Group (Ref: 20-29)</b>		
30-39 years	0.00	0.07***
40-49 years	0.04***	0.16***
50-59 years	0.09***	0.26***
60-69 years	0.16***	0.38***
<b>Married</b>	-0.08***	-0.12***
<b>Ethnicity (Ref: White Irish for RoI and White Irish/British for NI)</b>		
Traveller/Roma/Other white	-0.02***	0.21***
Black	-0.06***	-0.10***
Asian	-0.07***	-0.11***
Other/ Mixed	-0.04***	-0.01**
<b>Religion (Ref: Roman Catholic)</b>		
Protestant (Col only for RoI)	0.04***	0.00**
Other Stated	0.04***	0.10***
No Religion	0.08***	0.01***
<b>Unpaid Carer</b>	0.07***	0.01***
<b>Local Labour Market</b>		
Log Average Median wages	0.03**	0.01**
Unemployment	0.00***	0.00****
<b>Border Area</b>	-0.01**	0.00****
<b>Pseudo R-Squared</b>	0.03	0.11
<b>N</b>	272843	1139443

- Education a greater protector against disability in NI than in IRE
  - Although in the context of different levels of educational attainment North & South
- Age a bigger driver of disability in NI than IRE
  - Potentially a range of reasons for this – health systems, social security systems, weaker local labour market, legacy of the conflict?
- Local labour market doesn't have much of a role in either jurisdiction which is in line with previous work for NI but not with the international literature
- No relationship between being a border area and disability rates but this might already be picked up in local labour market factors

# Econometric Analysis by Extent

	All		A lot/to a great extent		A little/to some extent	
	Rol	NI	Rol	NI	Rol	NI
<b>Female</b>	0.02 ***	-0.03***	0.01***	-0.01***	0.02***	-0.02***
<b>Education Level (Ref: Secondary or Lower)</b>						
Technical/ Vocational/ Higher	-0.02 ***	-0.08***	-0.02***	-0.06***	-0.01 ***	-0.03***
Degree plus	-0.07 ***	-0.15***	-0.05***	-0.11***	-0.04***	-0.07***
<b>Age Group (Ref: 20-29)</b>						
30-39 years	0.00	0.07***	0.00**	0.05***	0.00	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	0.16 ***	0.38***	0.08***	0.31***	0.13***	0.24***
<b>Married</b>	-0.08 ***	-0.12***	-0.05***	-0.08***	-0.05***	-0.06***
<b>Ethnicity (Ref: White Irish for Rol and White Irish/British for NI)</b>						
Traveller/Roma/Other white	-0.02 ***	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***	0.00
<b>Religion (Ref: Roman Catholic)</b>						
Protestant (Col only for Rol)	0.04 ***	0.00**	0.01***	-0.01***	0.03***	0.00***
Other Stated	0.04 ***	0.10***	0.02***	0.06***	0.03***	0.06***
No Religion	0.08 ***	0.01***	0.02***	0.00***	0.07***	0.01***
<b>Unpaid Carer</b>	0.07 ***	0.01***	0.02***	-0.03***	0.06***	0.04***
<b>Local Labour Market</b>						
Log Average Median wages	0.03 **	0.01**	-0.01*	0.02***	0.04***	0.00
Unemployment	0.00 ***	0.00****	0.00***	0.00***	0.00***	0.00***
<b>Border Area</b>	-0.01 **	0.00****	-0.01***	0.00	0.00	0.00***
<b>Pseudo R-Squared</b>	0.03	0.11	0.06	0.15	0.03	0.07
<b>N</b>	272843	1139443	229265	1001568	257326	1014909

- Regressions for the lower severity of disability are more similar N and S
- For more severe disabilities we find the previous findings hold
  - Age a greater predictor in NI, in fact age doesn't have much of a relationship with being disabled to a great extent in IRE
  - Higher levels of education reduce the probability of reporting as disabled.

# Health Conditions & Limitations

- 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
  - 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
- Whereas, reporting psychological, emotional or mental health conditions has the largest association with severe disability in Ireland, of all the health conditions

# Conclusions

- While overall disability rates in NI and IRE were 22% and 23% respectively there are differences when we break it down further with people in NI more likely to report a more severe level of disability
- Regression analysis finds a steeper age gradient in NI with regards disability which may reflect different healthcare systems, differing social security systems or a conflict effect, or a combination of all of these
  - It may also point to differences in how disability is measured with the IRE measure picking up conditions which people could have a long-time or from birth and who may not necessarily report themselves as having a disability
  - Could also be something in how people report as being impacted to a great extent in IRE? A reluctance to do so?
- Education is a protector against disability, but this relationship is stronger in NI than in IRE
  - But NI also has lower levels of education than IRE (Smyth et al., 2022).

# Conclusions

- Pseudo R-squared is larger for NI models which suggests that the variables included in the models explain more of the variance in the probability of reporting as disabled than is the case in Rol
- Rol measure picking up health conditions more broadly so perhaps picks up people who wouldn't necessarily consider themselves as disabled or picks up conditions which have been from birth and potentially less likely to be impacted by socioeconomics
- Also could be that the Rol measure as it is more specific (conditions rather than disability generally) is more accurate and disability in Rol is more random.
- Or perhaps less likely to be influenced by justification bias or social stigma?

# Further Research

- Ireland follows the UN, WHO and EU norms in utilising a social model of disability. Updating census wording could better reflect this and improve information on the population which policy targets
- 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.
- The island of Ireland provides a natural case study for differing policy landscapes and better data would support the analysis of this

# Thank you!

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