

Why is Disability Prevalence so High in Northern Ireland?

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Research question

- Why is work-limiting disability in Northern Ireland so high?



Background

- Historically high economic inactivity in Northern Ireland
- Largest component of economic inactivity in Northern Ireland is long-term sickness/disability (fig 1)
- Consistently included within Programme for Government as an area where improvement is needed
- Higher disability related benefit claimant rates than the other UK countries (fig 2)

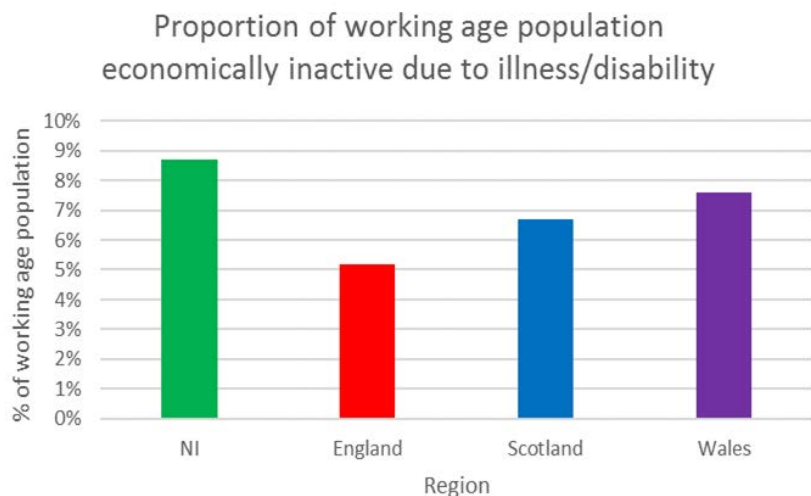


Figure 1. Source ONS data 2015

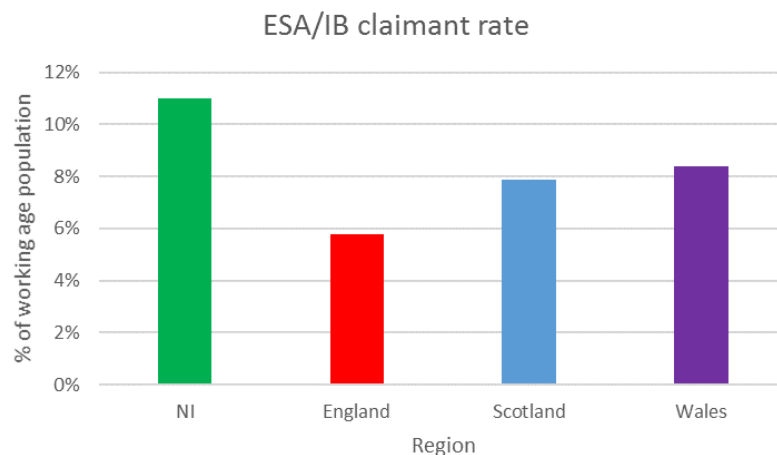


Figure 2. Source NI: DfC; GB: DWP

Literature

- Two main determinants of work disability in the literature
- Labour market literature argues that a weak labour market will lead to higher rates of work disability
 - Increases in disability rolls in areas following industrial decline (Beatty & Fothergill 2006;2015;2016)
 - A weak labour market will also mean lower wages making working less appealing compared to disability benefits (García-Gómez, 2011; Autor, 2011)
- Health literature argues that health determines labour supply - Bound et al., 1999; Disney et al., 2006; Jones et al., 2010; Pelkowski & Berger, 2004)
- Northern Ireland specific literature - Armstrong, 1999

Data

- First wave of Northern Ireland Cohort of Longitudinal Ageing (NICOLA)
- 8500 respondents and sampled to be representative of the over 50 population in Northern Ireland
- Face-to-face interview, self-completion questionnaire followed and an invite to a nurse visit
- Designed to be comparable with ELSA and other longitudinal studies of ageing (TILDA)
- For this research we solely look at those aged 50-64

Methodology

- Started with OLS regressions with work-limiting disability as the dependant variable and using self-reported health on the right hand side
- Possibility of endogeneity with self-reported health measures
- Access to more objective measures means can now use an IV model to solve the problem of endogeneity

Descriptive statistics

	NI			England		
	Male	Female	Total	Male	Female	Total
Disability						
DLA/ PIP claimant rate (administrative figures)	17	20	19	8	9	9
ESA/IB/SDA claimant rate (administrative figures)	16	14	15	10	9	9
DLA/ PIP claimant rate (survey data)	17	17	17	7	6	7
ESA/IB/SDA claimant rate (survey data)	16	13	14	5	5	5
Activity limited	32	32	32	26	24	28
Work limited	29	27	28	18	21	20
Activity of daily living						
<i>Difficulty walking 100m</i>	14	13	13	7	8	8
<i>Difficulty sitting for 2 hours</i>	18	18	18	13	11	14
<i>Difficulty climbing several flights of stairs</i>	24	32	29	16	24	20
Long-term illness/disability	46	47	47	45	46	46
Health						
Self-reported health						
<i>Good health or better</i>	64	70	67	78	79	79
<i>Fair health</i>	21	18	19	15	14	14
<i>Poor health</i>	14	12	13	7	7	7

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	Male	Female	Total	Male	Female	Total
Socioeconomic & demographic factors						
Age						
<i>50-54</i>	30	33	32	19	22	21
<i>55-59</i>	36	34	35	30	34	32
<i>60-64</i>	34	33	33	51	44	47
Highest level of education completed						
<i>Up to and including primary</i>	13	9	11	22	22	22
<i>Secondary</i>	49	48	49	33	44	39
<i>Third level/Higher</i>	34	39	37	45	34	39
Employment rate	61	55	58	66	58	62
Economic inactivity rate	41	46	43	30	41	36
<i>Economic inactivity rate (excl retired)</i>	30	32	31	17	24	20
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Missing data

- Nurse visit measures
- Health behaviours
- Marital status
- Income
- Local labour market factors



Regression analysis

y= work disability

	1	2	3	4	5	6	RF	IV
	coef./s.e.	coef./s.e.	coef./s.e.	coef./s.e.	coef./s.e.	coef./s.e.	coef./s.e.	coef./s.e.
NIdummy	0.070*** (0.010)	0.070*** (0.010)	0.079*** (0.010)	0.079*** (0.010)	0.037*** (0.009)	0.032*** (0.009)	0.059*** (0.009)	-0.046*** (0.014)
Male		-0.001 (0.010)	-0.004 (0.010)	-0.007 (0.010)	-0.013 (0.009)	-0.008 (0.008)	-0.009 (0.009)	-0.027* (0.012)
55-59years			0.043*** (0.012)	0.033** (0.012)	0.028** (0.011)	0.027** (0.011)	0.012 (0.012)	0.016 (0.016)
60-64years			0.070*** (0.012)	0.054*** (0.012)	0.047*** (0.011)	0.046*** (0.010)	0.019 (0.012)	0.035* (0.016)
SecondaryEduc				-0.115*** (0.014)	-0.067*** (0.013)	-0.066*** (0.013)	-0.107*** (0.014)	0.028 (0.021)
HigherEduc				-0.243*** (0.015)	-0.152*** (0.014)	-0.148*** (0.014)	-0.218*** (0.015)	0.029 (0.023)
PoorHealth					0.672*** (0.013)	0.624*** (0.014)		2.009*** (0.100)
GPvisit						0.149*** (0.011)		
DrDiagnoses							0.218*** (0.009)	
Constant	0.212*** (0.007)	0.212*** (0.008)	0.167*** (0.011)	0.300*** (0.017)	0.214*** (0.015)	0.176*** (0.015)	0.181*** (0.016)	0.045 (0.024)
R2	0.007	0.007	0.011	0.043	0.250	0.274	0.099	.
N	7838	7838	7838	7838	7838	7838	7838	7838

* p<0.05. ** p<0.01. *** p<0.001



Limitations

- Self-reported Dr diagnoses data is considered a reliable health measure but still some critics
- Nurse visits for a smaller sample
- Labour market measures not included




Conclusion

- The NI differential falls when we add in self-reported health and GP visits
- Suggests self-reported health is driving the higher work limiting disability rates rather than any Northern Ireland effect
- When using more objective measures this seems to hold, in fact being from Northern Ireland controlling for health it is less likely you will report as work disabled



Further Research

- Investigate whether the 'Troubles' are having a legacy effect on work disability
 - Mental health is worse in Northern Ireland
 - Using the exposure to the 'Troubles' information from NICOLA and the CAIN archive we will examine how exposure to conflict is impacting work disability
 - Also the possibility of scarring on the labour market from the conflict
 - Examine if the impact of conflict on work disability in Northern Ireland is the same as in other post-conflict developed societies
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