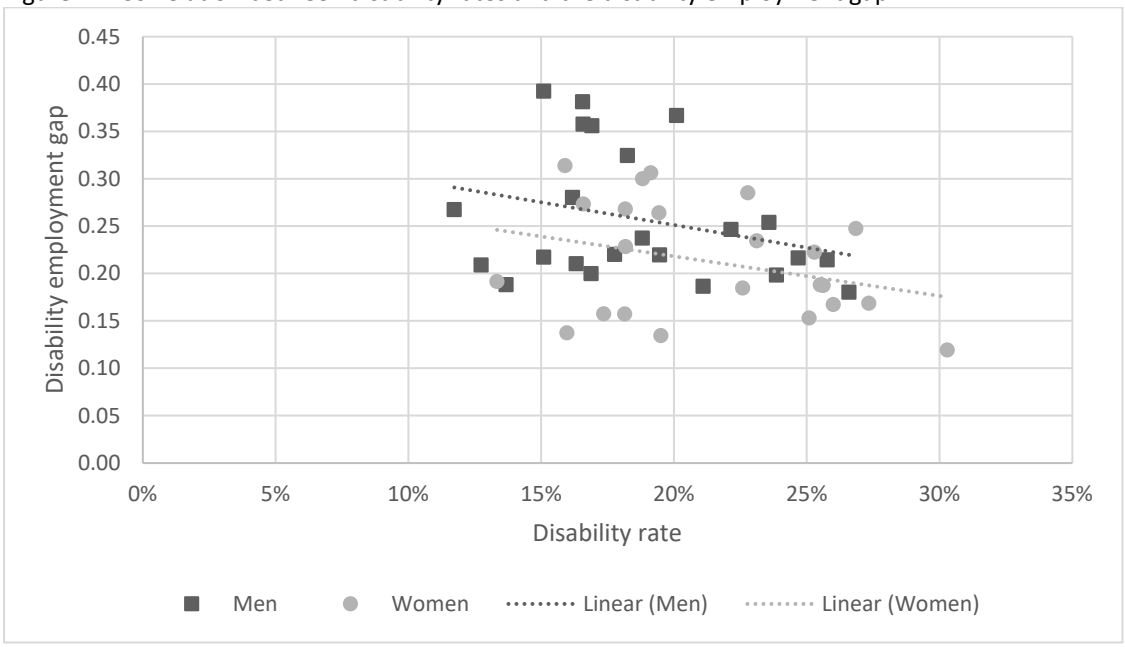
Appendices

Appendix A: Descriptive statistics

Table A.1 Countries in EU-SILC, by year

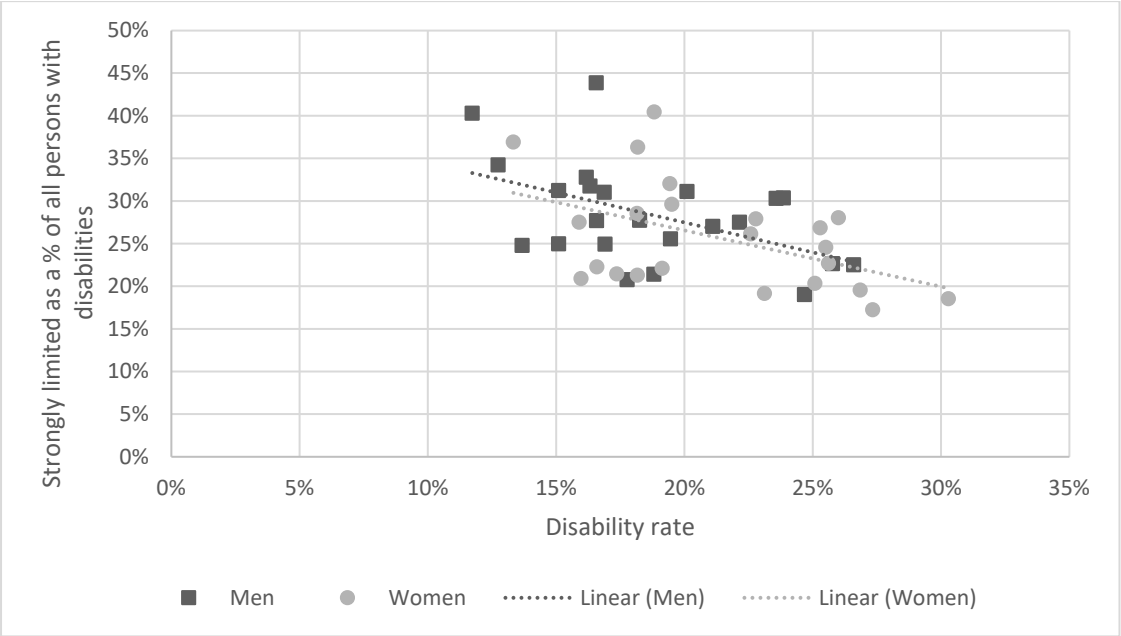
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1)	Austria	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2)	Belgium	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3)	Czechia		X	X	X	X	X	X	X	X	X	X	X	X	X
4)	Germany		X	X	X	X	X	X	X	X	X	X	X	X	X
5)	Denmark	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6)	Estonia	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7)	Spain	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8)	Finland	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9)	France	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10)	UK		X	X	X	X	X	X	X	X	X	X	X	X	
11)	Greece		X	X	X	X	X	X	X	X	X	X	X	X	X
12)	Hungary		X	X	X	X	X	X	X	X	X	X	X	X	X
13)	Ireland	X	X	X	X	X	X	X	X	X	X	X	X	X	
14)	Italy	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15)	Lithuania		X	X	X	X	X	X	X	X	X	X	X	X	X
16)	Luxembourg	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17)	Netherlands		X	X	X	X	X	X	X	X	X	X	X	X	X
18)	Poland		X	X	X	X	X	X	X	X	X	X	X	X	X
19)	Portugal	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20)	Sweden	X	X	X	X	X	X		X	X	X	X	X	X	X
21)	Slovenia		X	X	X	X	X	X	X	X	X	X	X	X	X
22)	Slovakia		X	X	X	X	X	X	X	X	X	X	X	X	X
23)	Latvia		X	X	X	X	X	X	X	X	X	X	X	X	X

Figure A.1 Correlation between disability rates and the disability employment gap



Note: the Pearson correlation for men is -0.13 and for women -0.08.

Figure A.2 Correlation between disability rates and persons who are strongly limited as a % of all persons with disabilities



Note: the Pearson correlation for men is -0.33 and for women -0.27.

Table A.3 Descriptive statistics, individual-level characteristics

	Men		Women	
	%		%	
Disability status				
- No disability	81.9		79.5	
Disability	18.1		20.5	
Paid employment				
- No	30.3		42.7	
- Yes	69.7		57.3	
Education level				
- Primary education/ Lower secondary	26.9		26.2	
- Upper secondary	46.9		43.0	
- Post-secondary non-tertiary/ Tertiary education	26.3		30.8	
Household type				
- One-person household	10.1		9.6	
- Couple without children	22.2		23.6	
- Single parent with children	1.8		5.8	
- Couple with children	34.6		33.7	
- Other	31.3		27.3	
	Mean	S.D.	Mean	S.D.
Age	42.42	13.63	43.06	13.46
Year of survey	2010.51	3.81	2010.53	3.80

Table A.2 Descriptive statistics, country-level characteristics

	Mean	Minimum	Maximum	Std. dev.
Active Labour Market Policies	0.07	0.00	0.88	0.12
Share of temporary contracts, men	9.86	1.60	24.50	5.71
Share of temporary contracts, women	12.07	1.10	30.90	6.52
EPL regular workers	2.37	1.10	4.42	0.52
EPL temporary workers	1.86	0.38	3.75	0.86
Share GDP on disability benefits	1.86	0.70	4.40	0.59
Employment rate, men	75.04	62.60	86.30	5.11
Employment rate, women	61.73	43.30	79.80	7.98
Part-time employment rate, men	6.32	1.00	22.60	3.42
Part-time employment rate, women	24.34	3.90	75.60	15.64
GDP per capita	24991.87	7510.00	84420.00	13781.40

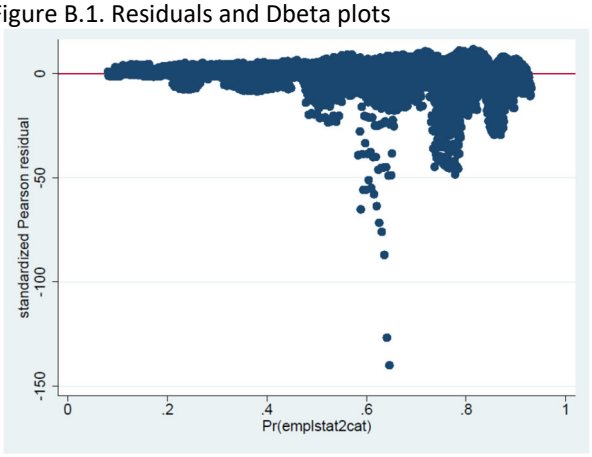
Appendix B: Outlier and influential case analysis

We did a robustness check to examine if there any outliers or influential cases in the first step of the analysis (Model 1). An examination of outliers is more difficult for logistic regression than for linear regression models, because the dependent variable has the value of either 0 or 1. That is why we look at a residuals plot using the standardised Pearson residual and plot them against predicted probabilities (Sakar, Midi & Rana, 2011). The residuals plots in Figures B1a and B1e show that for both men and women there are several large residuals. To further examine if there are outliers or influential cases, we use the Dbeta measure. Dbeta is a measure that examines the change in the value of the estimated coefficients when deleting an observation, this is similar to the Cook's D for linear regression (Long & Freese, 2006; Sakar et al., 2011). Large values of Dbeta indicate cases that are poorly fit. Figures B1b and B1f show the Dbeta values plotted against the predicted probabilities. The figures show that there are several large Dbeta values. The cases with these large Dbeta values were deleted, resulting in the Dbeta plots and the residuals plots in figures B1c, d, g and h. These plots show that there are no large residuals anymore and no large values of Dbeta.

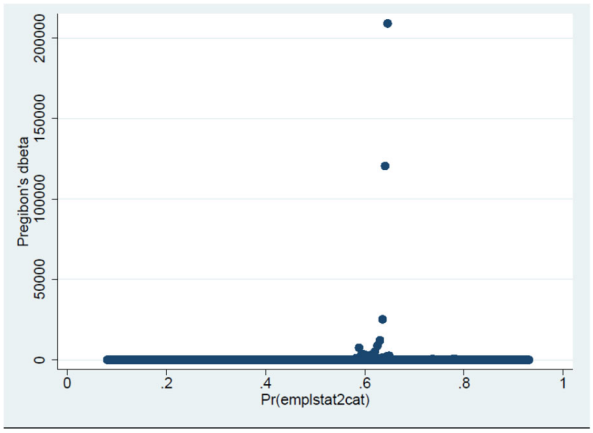
In the next step, we run the analysis without these influential cases. Model 1a, with all individual-level variables included, was used as the base model, presented in Table B1. This outlier test was done for men and women separately. For the male respondents, 44,268 (2.7%) cases were deleted. For Model 1a, however, this did not result in substantive changes. Based on these Dbeta values, a total of 14,726 (0.8%) female respondents were deleted. Again, the results of the first model are very similar without these outliers. The results based on this model are presented in the Dbeta model in Table B1.

A second test for outliers was based on descriptive figures. We examined the trend in disability status over the years for each country, as presented Figure B2. These figures show that there are unexpected changes in the share of respondents reporting that they have a disability in some years and countries. Most of these changes were due to a change in the question(s) about disability in that specific country. Changes that were abrupt were marked as outliers and a dummy variable of these outliers was created. Subsequently, we rerun the analysis with this dummy included and another one with these country-year combinations deleted (145,231 cases deleted; 8,8%). The model with the outlier dummy shows that this dummy is significant (b=0.148). However, there are no major changes in the effects. For the model in which the outliers are deleted, the effects are also very similar to Model 1a. For the female respondents, we also rerun the analysis with this dummy included and another one with these country-year combinations deleted (153,995 cases deleted; 8,6%). The dummy outlier is significant as well (b=0.226). Nevertheless, the effects of Model 1a are very similar to the model without the outlier dummy. Moreover, in the model in which the outlier respondents are deleted the results are also very similar to Model 1a. Hence, several robustness checks show that for male respondents, the results do not seem to be affected by outliers. For female respondents, the results do not seem to be largely influenced by the outliers either.

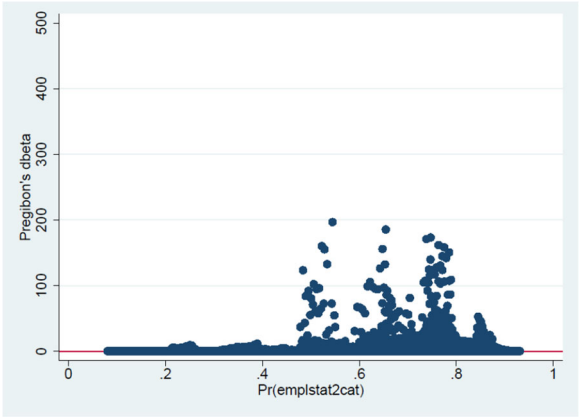
Figure B.1. Residuals and Dbeta plots



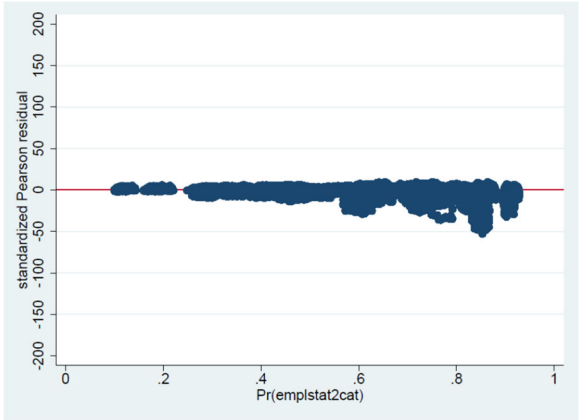
a. Residuals plot men



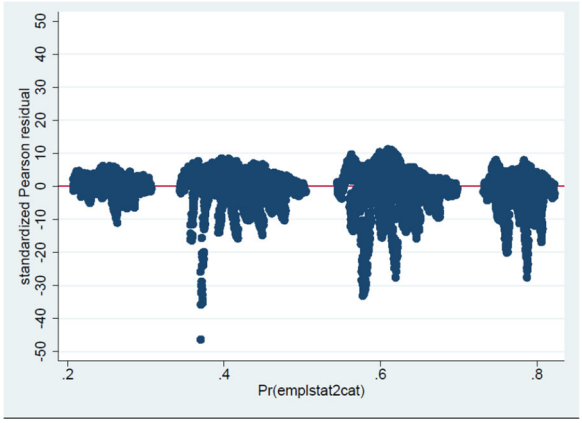
b. Dbeta plot men



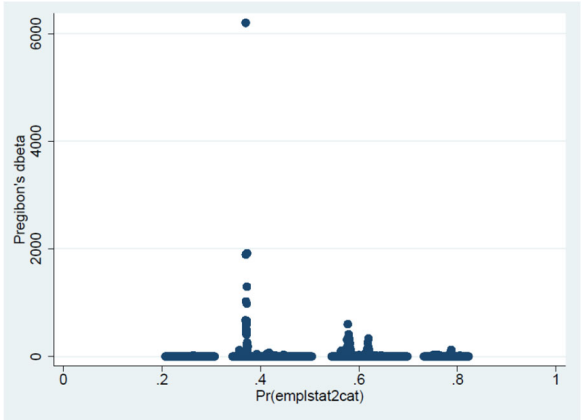
c. Dbeta plot men 2



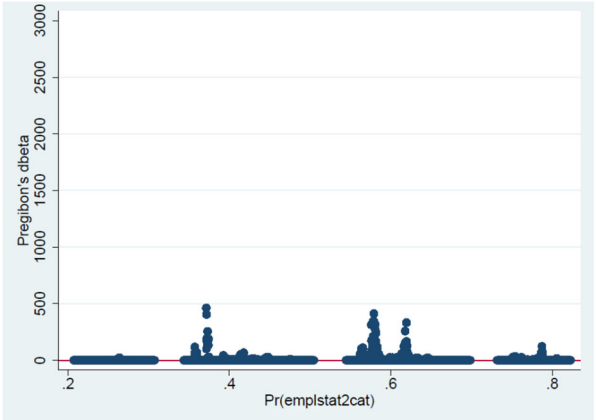
d. Residuals plot men 2



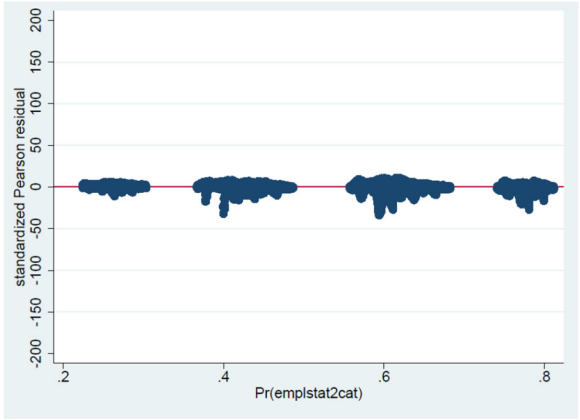
e. Residuals plot women



f. Dbeta plot women



g. Dbeta plot women 2



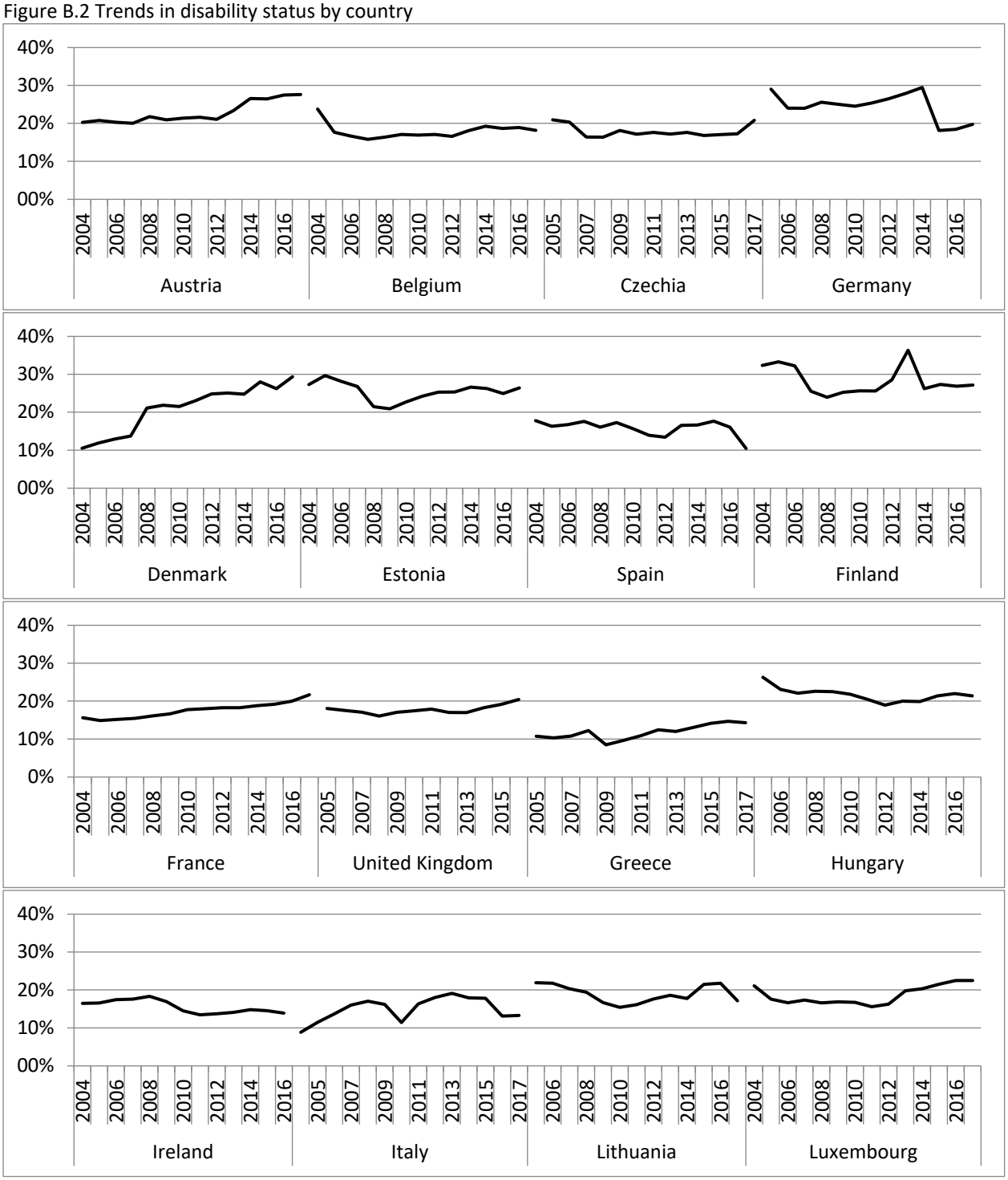
h. Residuals plot women 2

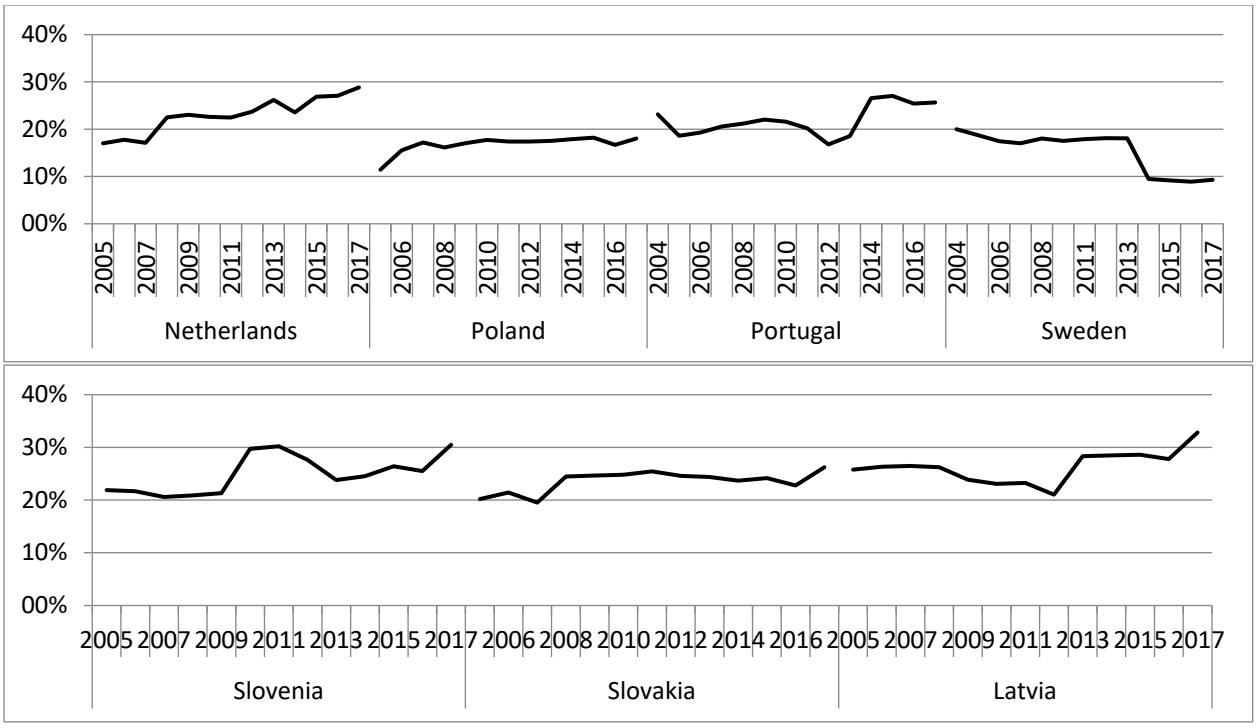
Table B.1 Logistic regression analysis with robust standard errors; outlier analysis

	Men				Women			
	Model 1a	Dbeta model	Model with outlier dummy	Model without outliers	Model 1a	Dbeta model	Model with outlier dummy	Model without outliers
	b	b	b	b	b	b	b	b
Intercept	0.851***	1.026***	0.839***	0.842***	-0.363***	-0.290***	-0.382***	-0.386***
	(0.0321)	(0.0310)	(0.0327)	(0.0337)	(0.0320)	(0.0331)	(0.0321)	(0.0329)
Disability	-1.115***	-1.141***	-1.114***	-1.123***	-0.695***	-0.698***	-0.695***	-0.692***
	(0.0216)	(0.0211)	(0.0215)	(0.0228)	(0.0193)	(0.0193)	(0.0193)	(0.0194)
Education level (Upper secondary =ref.)								
- Primary/lower secondary	1.276***	1.076***	1.276***	1.268***	1.653***	1.595***	1.653***	1.647***
	(0.0348)	(0.0313)	(0.0347)	(0.0367)	(0.0269)	(0.0268)	(0.0271)	(0.0285)
- Upper secondary/ Tertiary	0.643***	0.528***	0.642***	0.636***	0.831***	0.777***	0.829***	0.823***
	(0.0314)	(0.0288)	(0.0316)	(0.0337)	(0.0251)	(0.0253)	(0.0252)	(0.0267)
Household type (couple with children =ref.)								
- One person household	-0.523***	-0.813***	-0.528***	-0.514***	-0.00953	-0.0276	-0.0148	-0.000159
	(0.0218)	(0.0232)	(0.0221)	(0.0218)	(0.0297)	(0.0301)	(0.0301)	(0.0302)
- Couple without children	-0.643***	-0.888***	-0.644***	-0.641***	-0.121***	-0.140***	-0.123***	-0.113***
	(0.0120)	(0.0139)	(0.0120)	(0.0126)	(0.0197)	(0.0200)	(0.0197)	(0.0205)
- Single parent with children	-1.654***	-2.119***	-1.656***	-1.680***	0.0951***	0.0531**	0.0954***	0.0991***
	(0.0265)	(0.0316)	(0.0262)	(0.0277)	(0.0222)	(0.0229)	(0.0221)	(0.0229)
- Other	-0.422***	-0.791***	-0.421***	-0.413***	-0.0561***	-0.0932***	-0.0541***	-0.0387**
	(0.0206)	(0.0190)	(0.0205)	(0.0213)	(0.0183)	(0.0185)	(0.0183)	(0.0194)
Age	0.0150***	0.00347***	0.0150***	0.0150***	0.00658***	0.00469***	0.00657***	0.00645***
	(0.000904)	(0.000972)	(0.000903)	(0.000957)	(0.000845)	(0.000840)	(0.000845)	(0.000895)
Year	-0.0222***	-0.0203***	-0.0221***	-0.0240***	-0.00102	0.000312	-0.000917	-0.000287
	(0.00525)	(0.00527)	(0.00515)	(0.00571)	(0.00610)	(0.00614)	(0.00594)	(0.00650)
Outliers			0.148***				0.226***	
			(0.0474)				(0.0708)	
N	1,650,714	1,606,446	1,650,714	1,505,483	1,785,051	1,770,325	1,785,051	1,631,056
Pseudo R2	0.0879	0.0980	0.0881	0.0883	0.0804	0.0774	0.0811	0.0801

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

Figure B.2 Trends in disability status by country




40%
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Poland
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Portugal
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Slovenia
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Slovakia
2005 2007 2009 2011 2013 2015 2017
Latvia

Appendix C: Full models

Table C.1 Logistic regression with robust standard errors; disability employment gap

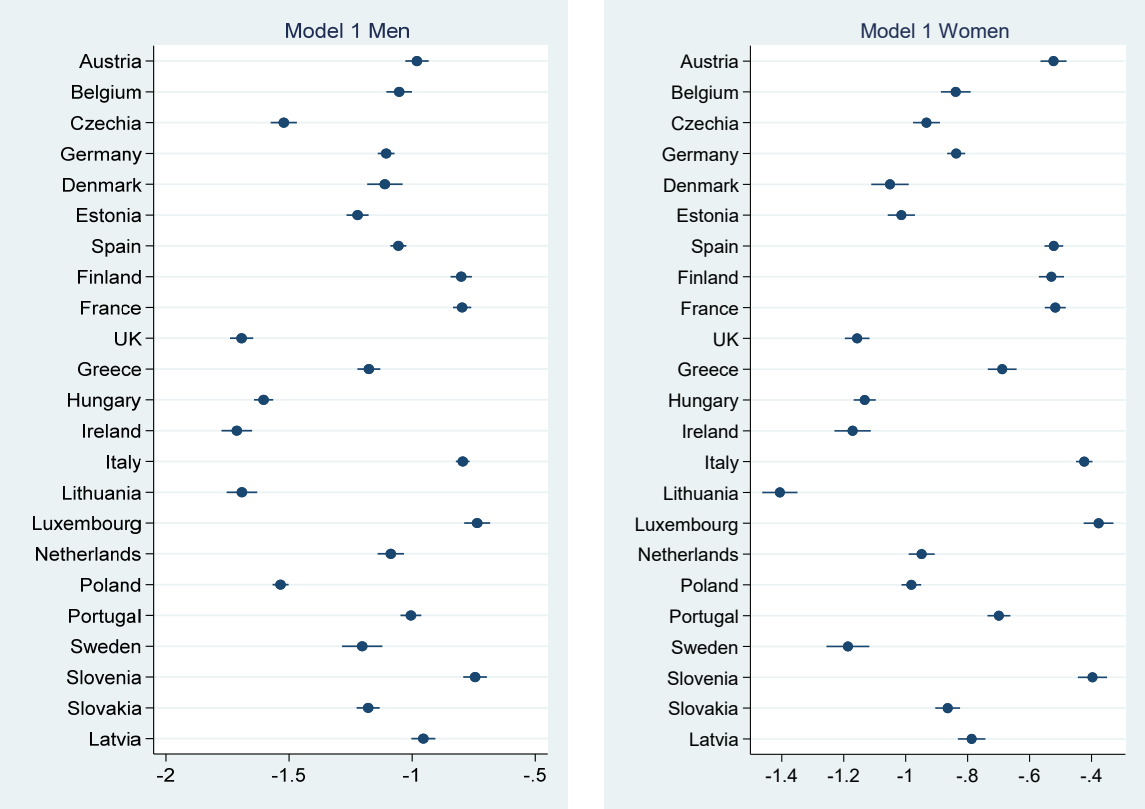
	Men			Women		
	Model 1a	Model 1b	Model 1c	Model 1a	Model 1b	Model 1c
	b	b	b	b	b	b
Intercept	1.363***	1.373***	1.282***	0.142***	0.222***	-0.369**
	(0.0315)	(0.0363)	(0.131)	(0.0279)	(0.0306)	(0.185)
Disability	-1.130***	-1.189***	-1.193***	-0.764***	-1.038***	-1.047***
	(0.0219)	(0.0306)	(0.0322)	(0.0180)	(0.0269)	(0.0301)
Country (Netherlands=ref.)						
Austria	-0.188***	-0.170***	-0.219**	-0.309***	-0.421***	-0.232**
	(0.0354)	(0.0366)	(0.108)	(0.0362)	(0.0399)	(0.106)
Belgium	-0.686***	-0.706***	-0.507***	-0.574***	-0.633***	-0.118
	(0.0286)	(0.0307)	(0.111)	(0.0256)	(0.0295)	(0.119)
Czechia	-0.277***	-0.154***	-0.421**	-0.440***	-0.477***	0.138
	(0.0449)	(0.0513)	(0.173)	(0.0326)	(0.0369)	(0.256)
Germany	-0.344***	-0.301***	-0.435***	-0.222***	-0.261***	-0.156
	(0.0553)	(0.0761)	(0.105)	(0.0452)	(0.0584)	(0.108)
Denmark	0.00767	-0.00699	-0.126	0.203***	0.210***	0.151
	(0.0537)	(0.0617)	(0.0990)	(0.0524)	(0.0570)	(0.132)
Estonia	-0.550***	-0.599***	-0.612***	-0.368***	-0.491***	-0.229
	(0.0773)	(0.0824)	(0.167)	(0.0448)	(0.0467)	(0.259)
Spain	-0.548***	-0.608***	-0.380***	-0.648***	-0.784***	0.0686
	(0.0760)	(0.0786)	(0.139)	(0.0389)	(0.0416)	(0.196)
Finland	-0.395***	-0.511***	-0.418***	-0.164***	-0.350***	-0.237
	(0.0312)	(0.0330)	(0.110)	(0.0352)	(0.0378)	(0.186)
France	-0.588***	-0.657***	-0.543***	-0.327***	-0.469***	-0.0783
	(0.0256)	(0.0289)	(0.122)	(0.0229)	(0.0262)	(0.155)
United Kingdom	-0.164***	-0.0266	-0.183*	-0.180***	-0.183***	-0.0215
	(0.0422)	(0.0494)	(0.101)	(0.0316)	(0.0360)	(0.131)
Greece	-0.888***	-0.914***	-0.613***	-1.121***	-1.223***	0.105
	(0.0756)	(0.0806)	(0.156)	(0.0635)	(0.0669)	(0.238)
Hungary	-0.846***	-0.757***	-0.496***	-0.700***	-0.723***	0.189
	(0.0520)	(0.0553)	(0.183)	(0.0327)	(0.0353)	(0.270)
Ireland	-0.765***	-0.714***	-0.624***	-0.784***	-0.817***	-0.344**
	(0.0888)	(0.0978)	(0.0984)	(0.0543)	(0.0562)	(0.139)
Italy	-0.439***	-0.513***	-0.343**	-0.712***	-0.848***	0.252
	(0.0287)	(0.0331)	(0.134)	(0.0241)	(0.0274)	(0.173)
Lithuania	-0.954***	-0.904***	-0.644***	-0.628***	-0.603***	-0.234
	(0.0644)	(0.0685)	(0.168)	(0.0363)	(0.0395)	(0.268)
Luxembourg	-0.381***	-0.448***	-0.582**	-0.402***	-0.560***	-0.191
	(0.0364)	(0.0385)	(0.246)	(0.0398)	(0.0408)	(0.184)
Poland	-0.778***	-0.715***	-0.488***	-0.836***	-0.873***	0.0181
	(0.0650)	(0.0707)	(0.178)	(0.0301)	(0.0321)	(0.265)
Portugal	-0.254***	-0.320***	-0.240	0.0292	-0.0971**	0.382
	(0.0598)	(0.0674)	(0.153)	(0.0358)	(0.0398)	(0.240)
Sweden	-0.0978***	-0.131***	-0.300***	0.158***	0.124***	-0.0919
	(0.0371)	(0.0440)	(0.0839)	(0.0287)	(0.0335)	(0.119)
Slovenia	-0.732***	-0.827***	-0.720***	-0.543***	-0.689***	-0.231
	(0.0386)	(0.0379)	(0.149)	(0.0355)	(0.0416)	(0.242)
Slovakia	-0.627***	-0.689***	-0.629***	-0.510***	-0.596***	0.245
	(0.0361)	(0.0409)	(0.178)	(0.0315)	(0.0382)	(0.273)
Latvia	-0.636***	-0.691***	-0.480***	-0.380***	-0.484***	-0.0726
	(0.0944)	(0.0935)	(0.175)	(0.0531)	(0.0523)	(0.272)
Interactions disability status x country						
Disability x Austria		-0.0515	-0.0490		0.377***	0.378***
		(0.0424)	(0.0432)		(0.0417)	(0.0424)

Disability x Belgium		0.0860	0.0932		0.133**	0.145**
		(0.0603)	(0.0612)		(0.0595)	(0.0621)
Disability x Czechia		-0.510***	-0.502***		0.00273	0.0106
		(0.0537)	(0.0554)		(0.0429)	(0.0450)
Disability x Germany		-0.121*	-0.109		0.105*	0.122**
		(0.0715)	(0.0717)		(0.0590)	(0.0585)
Disability x Denmark		0.0485	0.0670		-0.0523	-0.0135
		(0.0600)	(0.0568)		(0.0568)	(0.0562)
Disability x Estonia		0.173***	0.161***		0.410***	0.414***
		(0.0481)	(0.0471)		(0.0385)	(0.0399)
Disability x Spain		0.323***	0.303***		0.589***	0.596***
		(0.0469)	(0.0477)		(0.0361)	(0.0388)
Disability x Finland		0.356***	0.366***		0.563***	0.576***
		(0.0515)	(0.0532)		(0.0447)	(0.0453)
Disability x France		0.323***	0.328***		0.564***	0.578***
		(0.0531)	(0.0539)		(0.0305)	(0.0334)
Disability x UK		-0.549***	-0.545***		-0.118***	-0.109***
		(0.0436)	(0.0444)		(0.0326)	(0.0351)
Disability x Greece		0.161***	0.188***		0.437***	0.474***
		(0.0523)	(0.0499)		(0.0451)	(0.0425)
Disability x Hungary		-0.421***	-0.423***		-0.0302	-0.0256
		(0.0428)	(0.0451)		(0.0376)	(0.0395)
Disability x Ireland		-0.332***	-0.369***		-0.100*	-0.0980*
		(0.0504)	(0.0485)		(0.0535)	(0.0542)
Disability x Italy		0.411***	0.425***		0.625***	0.638***
		(0.0559)	(0.0581)		(0.0402)	(0.0425)
Disability x Lithuania		-0.256***	-0.289***		-0.262***	-0.268***
		(0.0505)	(0.0492)		(0.0478)	(0.0480)
Disability x Luxembourg		0.302***	0.308***		0.646***	0.654***
		(0.0544)	(0.0556)		(0.0334)	(0.0358)
Disability x Poland		-0.357***	-0.384***		-0.0534	-0.0571
		(0.0356)	(0.0435)		(0.0378)	(0.0436)
Disability x Portugal		0.290***	0.284***		0.436***	0.445***
		(0.0598)	(0.0593)		(0.0406)	(0.0428)
Disability x Sweden		0.144**	0.164***		0.0523	0.0614
		(0.0658)	(0.0629)		(0.0537)	(0.0555)
Disability x Slovenia		0.350***	0.357***		0.503***	0.522***
		(0.0353)	(0.0358)		(0.0373)	(0.0396)
Disability x Slovakia		0.246***	0.250***		0.270***	0.282***
		(0.0443)	(0.0455)		(0.0500)	(0.0519)
Disability x Latvia		0.200***	0.167***		0.329***	0.325***
		(0.0378)	(0.0379)		(0.0338)	(0.0359)
Individual level control variables						
Age	0.0150***	0.0152***	0.0152***	0.00721***	0.00725***	0.00727***
	(0.000923)	(0.000926)	(0.000936)	(0.000884)	(0.000892)	(0.000892)
Education level (Upper secondary=ref.)						
- Primary/lower secondary	1.290***	1.292***	1.306***	1.650***	1.657***	1.664***
	(0.0347)	(0.0347)	(0.0349)	(0.0240)	(0.0240)	(0.0238)
- Upper secondary/ Tertiary	0.678***	0.684***	0.696***	0.836***	0.843***	0.849***
	(0.0326)	(0.0324)	(0.0326)	(0.0217)	(0.0216)	(0.0214)
Household type (Couple with children=ref.)						
- One person household	-0.608***	-0.600***	-0.606***	-0.0837***	-0.0744**	-0.0774**
	(0.0250)	(0.0252)	(0.0254)	(0.0322)	(0.0327)	(0.0326)
Couple without children	-0.671***	-0.666***	-0.674***	-0.163***	-0.161***	-0.163***
	(0.0114)	(0.0115)	(0.0114)	(0.0193)	(0.0194)	(0.0193)

-	Single parent with children	-1.698***	-1.699***	-1.701***	0.0442**	0.0456**	0.0491**
		(0.0240)	(0.0240)	(0.0241)	(0.0214)	(0.0214)	(0.0216)
-	Other	-0.373***	-0.374***	-0.380***	0.0254	0.0244	0.0231
		(0.0221)	(0.0222)	(0.0222)	(0.0181)	(0.0181)	(0.0181)
Year		-0.0185***	-0.0191***	-0.0067***	0.000766	0.000397	-0.0164***
		(0.00374)	(0.00378)	(0.00231)	(0.00195)	(0.00198)	(0.00152)
Country-level control variables							
Employment rate				0.0457***			0.0463***
				(0.00224)			(0.00248)
Part-time employment rate				-0.0189***			0.00394
				(0.00711)			(0.00303)
GDP per capita				6.13e-07			2.86e-06
				(4.82e-06)			(4.22e-06)
N		1,650,714	1,650,714	1,650,714	1,785,051	1,785,051	1,785,051
Pseudo R2		0.0965	0.0989	0.103	0.0942	0.0961	0.0974

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

Figure C.1 Step one logistic regression analysis; 23 countries: effect of disability on employment



Appendix D: Robustness checks

As a robustness check we ran the models using two alternative estimation methods. First, we used logistic regression analysis with robust standard errors. Second, we took a random sample (10%; due to the large dataset) and re-estimated the models using multilevel logistic regression analysis. The tables in Appendix D therefore compare:

- The outcomes of the original model from the main text (two-step multilevel analysis)
- The outcomes using logistic regression with robust (country-year) standard errors
- The outcomes using a random sample and multilevel logistics regression

There are no (cross-level) interaction effects in the models that were estimated with the two-step multilevel approach. However, since the logit coefficients of the effect of disability on employment are regressed on the policy characteristics, the coefficients of the policy characteristics of step two, can be compared with the interaction effects in the logistic regression models (only considering the direction of the effects and significance).

The results are quite robust, with the exception of the effect of ALMP for men. In Table D1, the effect of ALMP is positive, but not significant (b=0.028) for men. However, the interaction effects in the logistic regression using robust SEs and multilevel logistic regression are negative and significant (b=-0.231 and -0.386). We expected a positive effect of ALMP on the employment of persons with disabilities, hence, despite the difference here, it does not affect the outcome of the hypotheses. Other than that, the effect of the share of temporary contracts seems to be less robust. For men, this effect is not significant using the two-step estimation approach, but it is significant using the two other methods of analysis. For women, the effect of the share of temporary contracts is not significant using logistic regression with robust standard errors, but it is positive and significant using the other two estimation methods.

Table D.1 Logistic regression with robust standard errors of employment, ALMP; robustness checks

	Two-step multilevel analysis	Logistic regression with robust SE	Logistic multilevel analysis
Men	b	b	b
Intercept	-1.161***	0.893***	0.832***
	(0.017)	(0.0306)	(0.0296)
Disability		-1.146***	-1.150***
		(0.0213)	(0.0145)
% GDP on ALMP	0.028	0.219***	0.431**
	(0.133)	(0.0775)	(0.171)
Disability x % GDP on ALMP		-0.231*	-0.386***
		(0.131)	(0.122)
N		1,650,714	165,112
N country			23
Pseudo R^2	0.1772	0.0981	
Women	b	b	b
Intercept	-0.794***	-0.308***	-0.388***
	(0.015)	(0.0252)	(0.0432)
Disability		-0.755***	-0.767***
		(0.0173)	(0.0132)
% GDP on ALMP	-0.437***	0.308***	0.171
	(0.103)	(0.0819)	(0.201)
Disability x % GDP on ALMP		-0.608***	-0.826***
		(0.0931)	(0.105)
N	308	1,785,051	178,528
N countries			23
Pseudo R^2	0.2835	0.0920	

*Note: (Robust) standard errors in parentheses. In these models we controlled for age, education level, household type, and survey year at the individual level and employment rate, part-time employment rate, and GPD per capita. Full models available on request. *** p<0.01, ** p<0.05, * p<0.1.*

Table D.2 Logistic regression with robust standard errors of employment, EPL; robustness checks

	Two-step multilevel analysis	Logistic regression	Logistic multilevel analysis (random sample)
Men	b	b	b
Intercept	-1.155***	0.875***	0.836***
	(0.014)	(0.0290)	(0.0304)
Disability		-1.140***	-1.147***
		(0.0173)	(0.0146)
% temporary contracts	0.002	0.00657***	4.90e-05
	(0.003)	(0.00107)	(0.00415)
Disability x % temporary contracts		-0.00793**	-0.00669***
		(0.00352)	(0.00256)
EPL regular workers	0.241***	0.105***	0.0937***
	(0.026)	(0.0187)	(0.0311)
Disability x EPL regular		0.151***	0.146***
		(0.0338)	(0.0276)
EPL temporary workers	0.084***	-0.0622***	-0.0166
	(0.020)	(0.0109)	(0.0257)
Disability x EPL temporary		0.189***	0.193***
		(0.0165)	(0.0169)
N	308	1,650,714	165,112
N country			23
Pseudo R^2	0.4552	0.0997	
Women	b	b	b
Intercept	-0.783***	-0.328***	-0.389***
	(0.013)	(0.0211)	(0.0441)
Disability		-0.749***	-0.760***
		(0.0140)	(0.0132)
% temporary contracts	0.010***	0.00151	-0.00180
	(0.002)	(0.00121)	(0.00395)
Disability x % temporary contracts		0.00200	0.104***
		(0.00265)	(0.0247)
EPL regular workers	0.133***	0.147***	-0.0282
	(0.024)	(0.0183)	(0.0348)
Disability x EPL regular		0.0849***	0.104***
		(0.0231)	(0.0247)
EPL temporary workers	0.077***	-0.0580***	0.00875
	(0.017)	(0.0111)	(0.0269)
Disability x EPL temporary		0.184***	0.183***
		(0.0122)	(0.0156)
N	308	1,785,051	178,528
N countries			23
Pseudo R^2	0.4626	0.0937	

*Note: (Robust) standard errors in parentheses. In these models we controlled for age, education level, household type, and survey year at the individual level and employment rate, part-time employment rate, and GPD per capita. Full models available on request. *** p<0.01, ** p<0.05, * p<0.1.*

Table D.3 Logistic regression with robust standard errors of employment, disability benefits; robustness checks

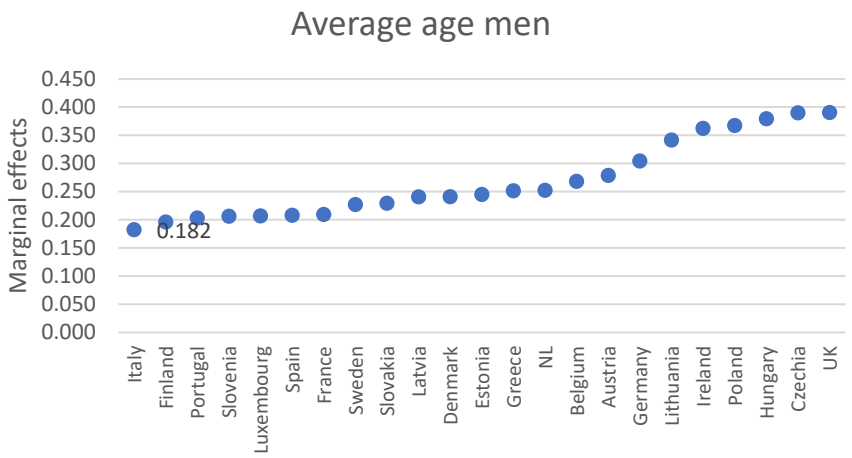
	Two-step multilevel analysis	Logistic regression	Logistic multilevel analysis (random sample)
Men	b	b	b
Intercept	-1.165***	0.895***	0.827***
	(0.016)	(0.0306)	(0.0295)
Disability		-1.150***	-1.151***
		(0.0216)	(0.0146)
% GDP on disability benefits	0.079***	0.0522***	0.0761***
	(0.025)	(0.0182)	(0.0273)
Disability x % GDP on disability benefits		0.0797***	0.0831***
		(0.0256)	(0.0232)
N	308	1,650,714	165,112
Pseudo R^2	0.1987	0.0983	
Women	b	b	b
Intercept	-0.795***	-0.306***	-0.392***
	(0.015)	(0.0248)	(0.0425)
Disability		-0.759***	-0.768***
		(0.0178)	(0.0132)
% GDP on disability benefits	-0.011	0.0867***	0.0297
	(0.024)	(0.0212)	(0.0265)
Disability x % GDP on disability benefits		-0.0143	-0.0236
		(0.0240)	(0.0210)
N	308	1,785,051	178,528
Pseudo R^2	0.2418	0.0920	

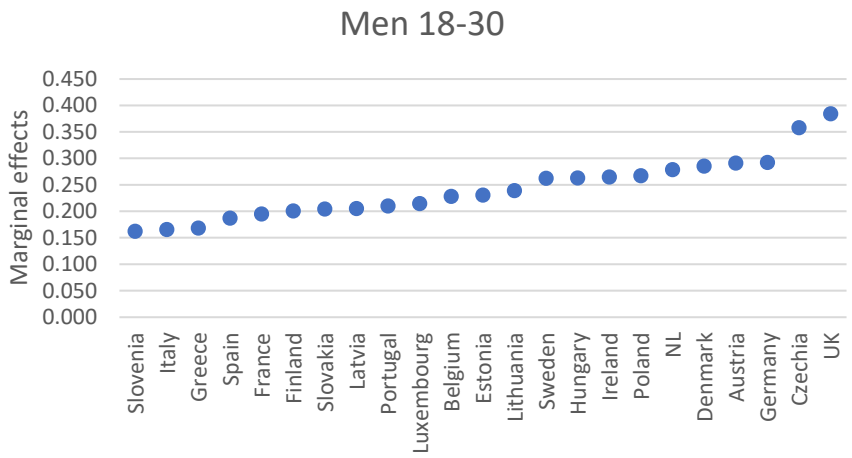
*Note: (Robust) standard errors in parentheses. In these models we controlled for age, education level, household type, and survey year at the individual level and employment rate, part-time employment rate, and GPD per capita. Full models available on request. *** p<0.01, ** p<0.05, * p<0.1.*

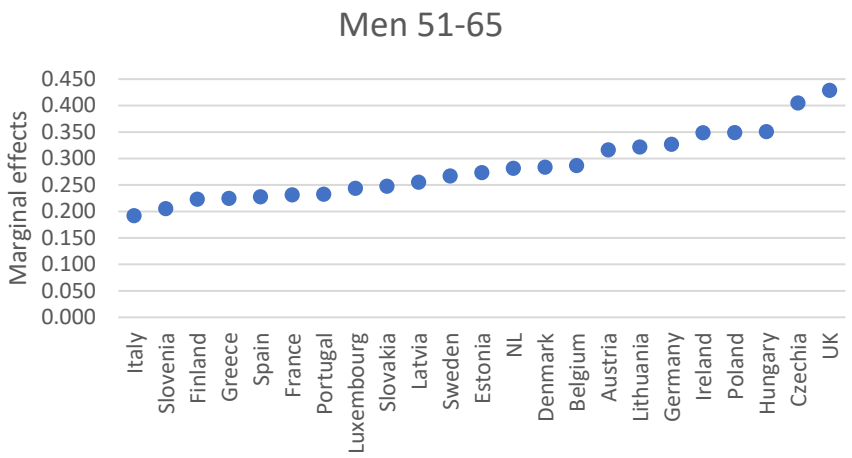
Compare DEG by age categories.

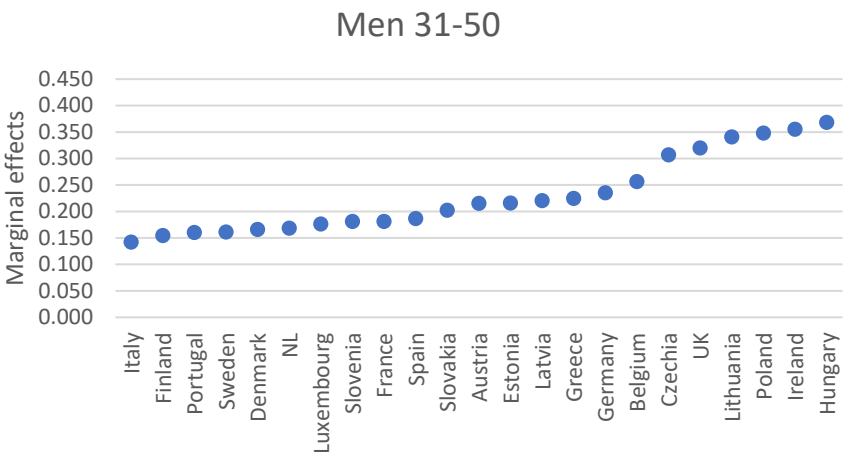
In the main text of the article, the average age was used in the figures of the DEG. Additionally, we examined if this differs by age category. To do so, we calculated marginal effects at representative values. The figures (1 and 2) in the main text show predicted probabilities. The difference in these predicted probabilities are the marginal effects at the means (MEMS). For instance, for Italy, the MEMS is (0.703 – 0.520=) 0.182. This means that the predicted probability to be employed is 0.182 greater for men without a disability than for men with a disability. This is the marginal effect for men with an average age (42). Now, we calculated marginal effects for different age groups, as the marginal effects may differ for different age groups: 18-30; 31-50; and 51-65. These figures show that the effects do differ somewhat depending on the age group. One interesting finding is that Italy as the country with the smallest marginal effects is quite robust. Moreover, the countries with the lowest marginal effects are mostly the same for each age group, and similarly, the countries with the largest marginal effects are also very similar across age groups.

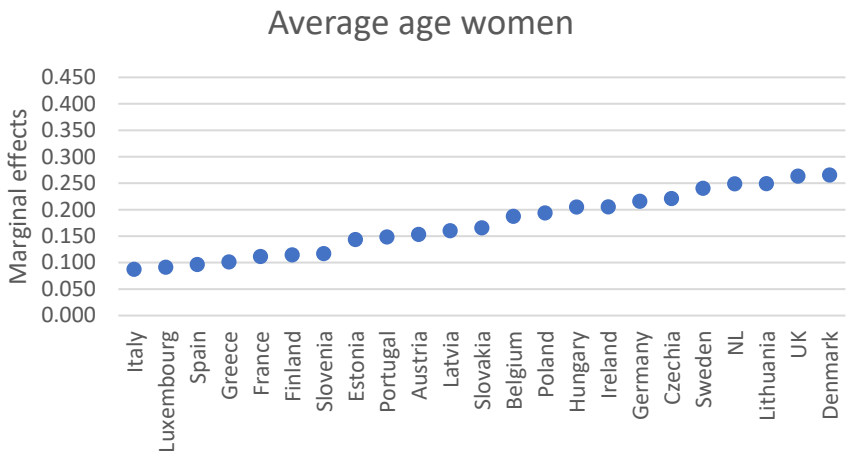
Figure D.1 Marginal effects at representative values

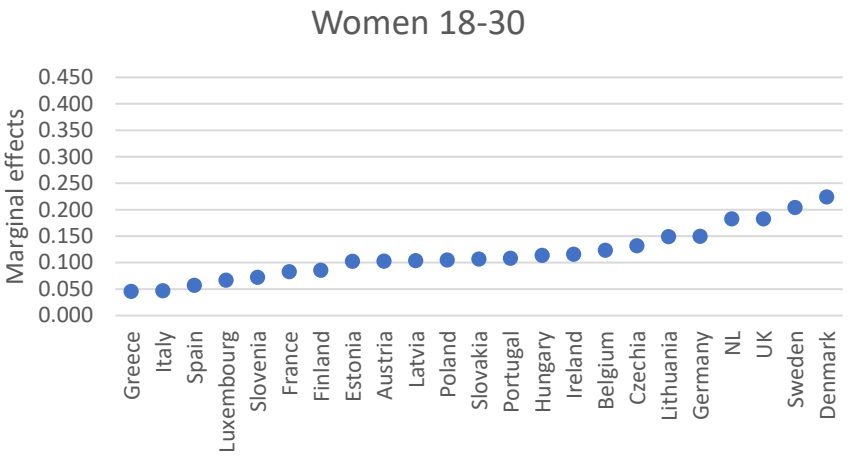


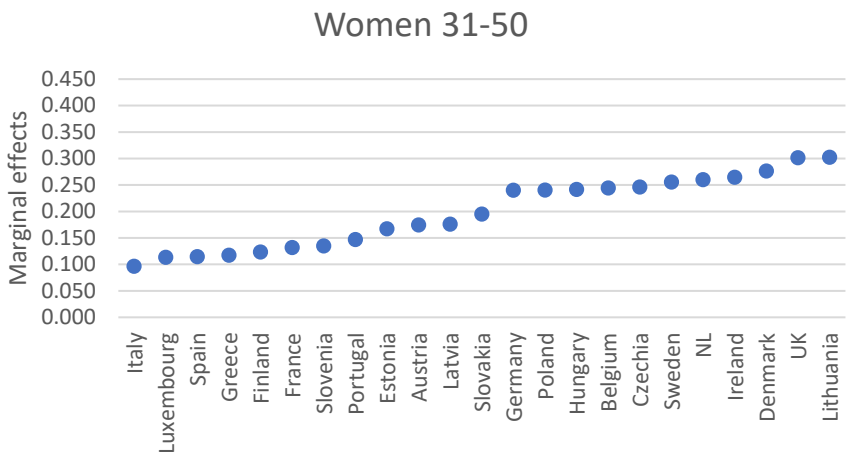


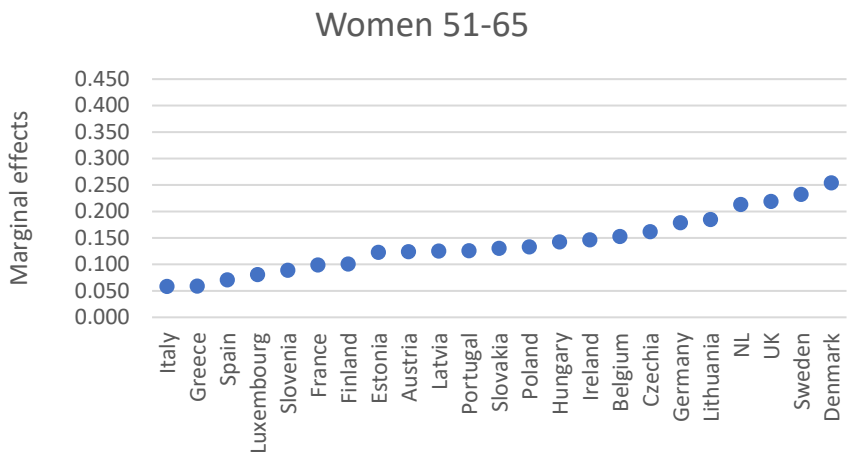

Men 51-65
Marginal effects
0.450
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
0.000
Italy
Slovenia
Finland
Greece
Spain
France
Portugal
Luxembourg
Slovakia
Latvia
Sweden
Estonia
NL
Denmark
Belgium
Austria
Lithuania
Germany
Ireland
Poland
Hungary
Czechia
UK


Men 31-50
Marginal effects
0.450
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
0.000
Italy
Finland
Portugal
Sweden
Denmark
NL
Luxembourg
Slovenia
France
Spain
Slovakia
Austria
Estonia
Latvia
Greece
Germany
Belgium
Czechia
UK
Lithuania
Poland
Ireland
Hungary


Average age women
Marginal effects
0.450
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
0.000
Italy
Luxembourg
Spain
Greece
France
Finland
Slovenia
Estonia
Portugal
Austria
Latvia
Slovakia
Belgium
Poland
Hungary
Ireland
Germany
Czechia
Sweden
NL
Lithuania
UK
Denmark


Women 18-30
Marginal effects
0.450
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
0.000
Greece
Italy
Spain
Luxembourg
Slovenia
France
Finland
Estonia
Austria
Latvia
Poland
Slovakia
Portugal
Hungary
Ireland
Belgium
Czechia
Lithuania
Germany
NL
UK
Sweden
Denmark


Women 31-50
Marginal effects
0.450
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
0.000
Italy
Luxembourg
Spain
Greece
Finland
France
Slovenia
Portugal
Estonia
Austria
Latvia
Slovakia
Germany
Poland
Hungary
Belgium
Czechia
Sweden
NL
Ireland
Denmark
UK
Lithuania


Women 51-65
Marginal effects
0.450
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
0.000
Italy
Greece
Spain
Luxembourg
Slovenia
France
Finland
Estonia
Austria
Latvia
Portugal
Slovakia
Poland
Hungary
Ireland
Belgium
Czechia
Germany
Lithuania
NL
UK
Sweden
Denmark