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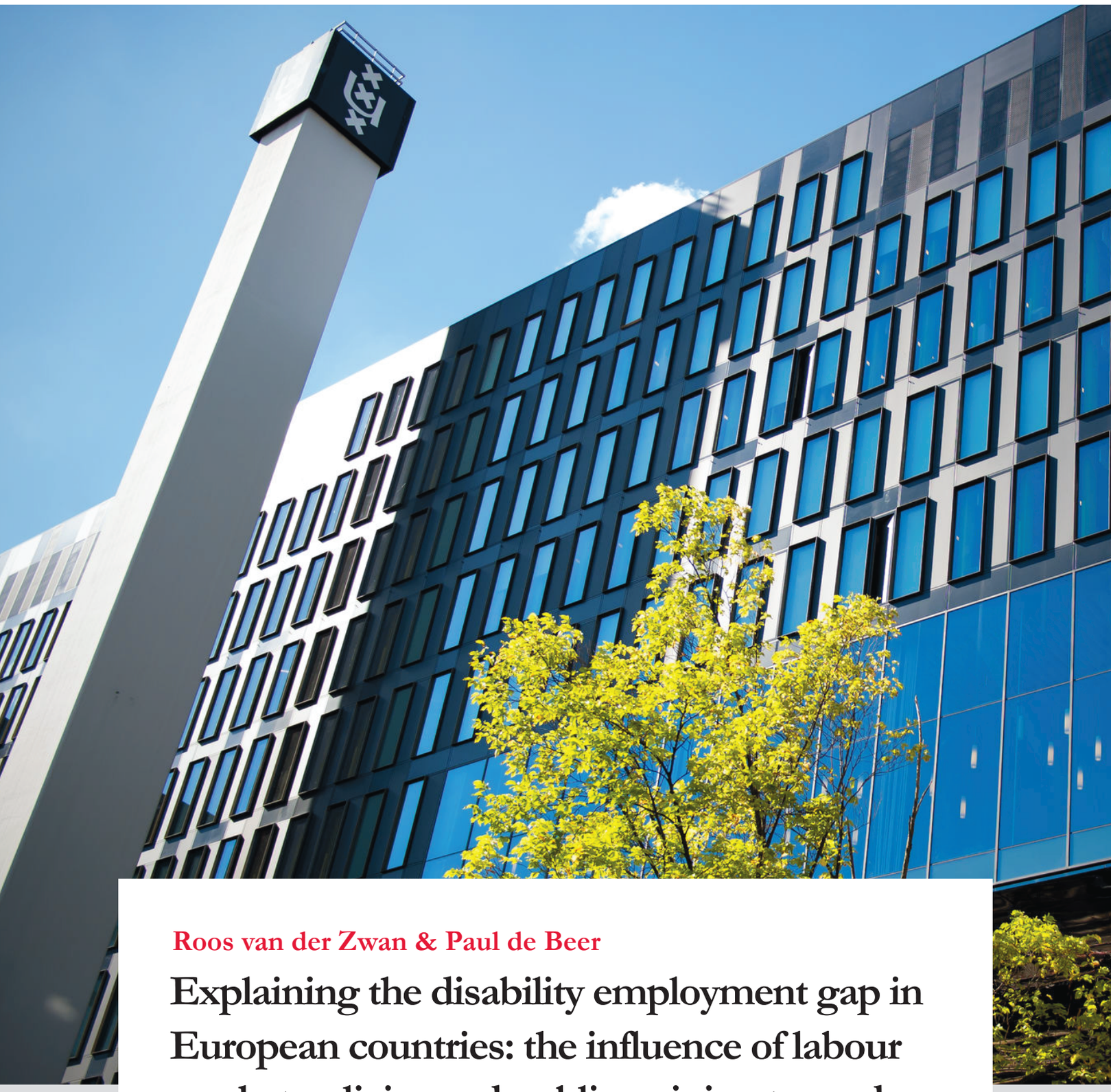

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Explaining the disability employment gap in European countries: the influence of labour market policies and public opinion towards people with a disability

Roos van der Zwan & Paul de Beer

Abstract

Despite the UN declaration on the Rights of Persons with Disabilities, the labour market participation of persons with a disability remains lower than that of persons without a disability, i.e. there is a disability employment gap. This research examines the disability employment gap for men and women separately and tests whether ratification of the CRPD has had an influence on the disability employment gap. Moreover, it tests the influence of labour market policies and presents a new theoretical perspective. Focusing on a cultural explanation, it examines if disability rates are affected by public opinion towards disabled people. If less people report that they are hampered by a disability in countries with more negative public opinion towards disabled people, this may be an additional explanation for differences in the disability employment gap between EU countries. Using the EU-SILC we show that Southern-European countries have the smallest disability employment gap. However, ratification of the CRPD did not increase the probability to have paid work for those with a disability. Moreover, whereas stricter employment protection legislation is beneficial for people with disabilities on the labour market, other labour market policies specifically relevant for this group do not affect their chances on the labour market. We do not find an influence of public opinion towards disabled people either.

1. Introduction

In 2008, the UN Convention on the Rights of Persons with Disabilities (CRPD) entered into force. The CRPD states that all persons with disabilities must enjoy human rights and fundamental freedoms. It focuses on a broad range of domains on which persons with disabilities should be equal to others in society; employment is one of these dimensions. However, the employment rate of persons with a disability is consistently lower than of those without a disability (Geiger, Van Der Wel, & Tøge, 2017; OECD, 2010). Disabled persons experience barriers on the labour market. Social barriers caused by society as well as impairments may result in difficulties in finding a job, for instance because of prejudice among employers, the accessibility of workplaces or the inability to work fulltime. Hence, finding and keeping a job is more difficult for disabled people than for non-disabled people. Moreover, quite likely it is even more difficult for those who are more severely limited by disabilities (Cregan, Kulik, & Bainbridge, 2017). A higher employment rate among disabled people is, however, not only a requirement of the CRPD; it also has economic benefits for society. It can help in diminishing labour supply shortages, it increases economic activity and it reduces dependency on social benefits. Moreover, employment is known to improve individuals' well-being (De Moortel, Vandenheede, & Vanroelen, 2014; Dean, Shogren, Hagiwara, & Wehmeyer, 2018; Robertson, Beyer, Emerson, Baines, & Hatton, 2019; Van Der Noordt, IJzelenberg, Droomers, & Proper, 2014) and is often considered to be key to social inclusion (Barnes & Mercer, 2005; Cregan et al., 2017).

Therefore, this study seeks to explain differences in the disability employment gap (DEG) in Europe, i.e. the difference in employment rates between people with and without a disability. Previous studies have already established that disability rates and the DEG vary between European countries (Geiger et al., 2017; Heggebø & Dahl, 2015; Jones, 2008, 2016; Kuznetsova & Yalcin, 2017; McAllister et al., 2015; Reeves, Karanikolos, Mackenbach, McKee, & Stuckler, 2014). Although previous studies have examined several labour market policies at the country level, they cannot fully explain differences in DEGs. Up to date, moreover, less attention has been paid to cultural explanations, such as the public opinion about people with a disability (but see: Kapteyn, Smith, & Soest, 2012; O'Brien, 2015). This study therefore tests the impact of both labour market policies and public opinion towards disabled people on the size of the employment gap. The main question we seek to answer is:

To what extent can labour market policies and the public opinion about persons with a disability explain differences in the size of the disability employment gap within Europe?

Variation between countries in the DEG is most likely due to country level or institutional factors, rather than demographic factors or differences in health (Börsch-Supan, 2007). Institutional factors can, for instance, refer to anti-discrimination laws, which are intended to prevent discrimination against persons with a disability (Nardodkar et al., 2016). However, the implementation of such laws seems to have little impact on the labour market situation of disabled persons (Clayton et al., 2012; Jones, 2008; Kuznetsova & Yalcin, 2017; Pope & Bambra, 2005). Another country characteristic that many studies have focused on in relation to health is the type of welfare state (Bambra, 2011; Bergqvist, Yngwe, & Lundberg,

2013; Bratsberg, Fevang, & Røed, 2010; Mackenbach, 2012; Tschanz & Staub, 2017; van der Wel, Dahl, & Thielen, 2011). From a welfare regime perspective, one can expect that a generous welfare state ensures better access to the labour market for marginalised groups and a safety net for those who cannot participate (Esping-Andersen, 1990; Korpi, 2010; van der Wel et al., 2011). Especially the Nordic countries, which combine a generous welfare state with a high overall employment rate, may be expected to perform well with regard to the employment of persons with a disability. Indeed, some studies show that in Scandinavian welfare regimes employment among chronically ill people is higher (Burström, Whitehead, Lindholm, & Diderichsen, 2000; Holland, Burström, et al., 2011; van der Wel, Dahl, & Thielen, 2016; Whitehead et al., 2009). However, studies also show that these countries have higher rates of benefit recipients and a relatively large DEG (Bratsberg et al., 2010; O'Brien, 2015). In this study we build on the existing literature, but we move beyond this rather broad welfare state perspective by focusing on more specific labour market policies that may be relevant for disabled people and study how these affect the DEG in European countries. The variation in DEGs between countries may not only be due to differences in policies but may also have a cultural aspect. If the general perception of persons with a disability varies, this may affect employer's willingness to hire disabled people and could therefore result in differences in the DEG. Yet, public opinion towards disabilities has not been tested as an explanation of differences in the employment rate of disabled and non-disabled people. For this reason, we have included public opinion about people with a disability as an explanatory variable in this study. Another contribution to the field is that most of the studies on the DEG have been carried out during or before the economic crisis, whereas we will also examine the period after the crisis (until 2017).

To examine differences in de DEG in Europe, we use the European Union Statistics on Income and Living Conditions (EU-SILC) for 23 countries. In our study, people who indicate that they are limited or strongly limited in activities because of long-standing health problems are identified as people with a disability. This is one of many ways to identify people with a disability (Molden & Tøssebro, 2010). Although several definitions of and approaches regarding disability exist, the definition in our study is quite similar to the one formulated in the CRPD. The definition of the CRPD is as follows: "Persons with disabilities include 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." Furthermore, a paragraph in the preamble adds the following: "e. Recognising that disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others" (UN, 2006). This definition is largely based on the social model, according to which disability is structured by social oppression, inequality and exclusion. However, the definition also includes aspects of the medical model, according to which disability is caused by illness and impairment and entails suffering and some social disadvantage (Barnes, 2012; Thomas, 2004).

2. Theoretical framework

Since the CRPD is the starting point of this study, we first investigate whether the ratification of the CRPD has had any effect on the DEG. The longer ago a country ratified the declaration, the more time they have had to implement policies to promote equal access to the labour market for disabled persons. Hence, we first test whether in countries that have ratified the UN declaration earlier, more disabled people have paid work:

The longer a country has ratified the CRPD, the more likely that people with a disability have paid work (H1).

2.1 Social investment vs welfare scepticism perspective

Social investment perspective

Ideas differ whether social policies are beneficial for the labour market position of people with a disadvantaged position or not. According to one perspective, a more generous welfare state is beneficial for the labour market participation of disadvantaged people (Midgley, 1999; van der Wel et al., 2011). This idea is based on the social investment perspective that social policies of the government may benefit economic growth if they provide people with the resources to find a job and offer protection in case of sickness. For instance, more generous benefits may give people the time to invest in human capital, which can eventually result in a higher employment rate (Holland, Nylén, et al., 2011; van der Wel et al., 2011). This perspective applies to the population in general, but also to specific disadvantaged groups on the labour market such as people with a disability. Based on this perspective, we can formulate expectations about the influence of several labour market policies on the likelihood that people with a disability have a paid job.

The first policy characteristic under study concerns countries' active labour market policies (ALMP). ALMP refer to policies aimed at increasing the access to the labour market for disadvantaged groups in society. In contrast to earlier studies, however, we only concentrate on those ALMP relevant for people with a disability (e.g. Holland, Burström, et al., 2011; McAllister et al., 2015; van der Wel et al., 2011). ALMP related to disability concern, amongst others, sheltered and supported employment and vocational rehabilitation and training (Waddington & Bell, 2016). Sheltered employment includes jobs that are created for people with disabilities – usually outside of the regular labour market – and vocational rehabilitation and training aims to improve relevant skills for the labour market (Waddington & Bell, 2016). Last, subsidised employment provides financial support to employers who hire a person with a disability. Employers are important for the employment opportunities of disabled people, since they may be hesitant to hire them. Reasons for this hesitation include fear for a high sickness rate, the costs of the adaption of the workplace or prejudice about the productivity of the disabled employee (Brouwers, 2016; Ellenkamp, Brouwers, Embregts, Joosen, & van Weeghel, 2016; Kaye, Jans, & Jones, 2011; Nelissen, 2018; Peck & Kirkbride, 2001; Sundar et al., 2018). If governments (partly) cover the costs of employing disabled persons, this can act as an incentive for employers to hire them (Holland, Burström, et al., 2011; Kaye et al., 2011). Hence, policies

aimed at removing such barriers could increase the employment rate of disabled people. The second hypothesis we formulate is:

The more countries spend on active labour market policies targeted towards disabled people, the more likely disabled people have paid work (H2).

Although not specifically aimed at the labour market participation of disabled persons, the flexibility of the labour market could also affect their chances of employment. Flexible labour markets are characterised by flexible rules concerning hiring and firing workers, higher shares of temporary contracts, and flexible working hours (Backhans, Mosedale, Bruce, Whitehead, & Burström, 2016; Holland, Burström, et al., 2011). Flexible contracts are, moreover, particularly common for low-pay, low-quality jobs (Green, Kler, & Leeves, 2010). In regulated labour markets, governments invest more in disadvantaged groups on the labour market. Less flexible labour markets also offer better protection for workers who become ill (Burström et al., 2000; McAllister et al., 2015). Based on this perspective, we could expect that on less flexible labour markets disabled persons are more likely to have paid work. We formulate the following hypotheses:

The lower the share of flexible jobs, the more likely disabled people have paid work (H3a).

The less flexible employment protection legislation, the more likely disabled people have paid work (H3b).

Welfare scepticism perspective

In contrast to the social investment perspective, the welfare scepticism view argues that a more generous welfare state has harmful effects for the disadvantaged in society (Midgley, 1999; Van den Noord, Girouoard, & André, 2006; van der Wel et al., 2011). The more a country spends on social policies, the more persons with a disadvantaged position on the labour market are offered an alternative source of income and therefore have less incentives to find paid employment (Holland, Nylén, et al., 2011; Prinz & Tompson, 2009). Although such social policies may be positive for the general well-being of people with a disability, it may hinder their labour market participation.

According to the social investment perspective, lower shares of flexible jobs and stricter EPL could result in higher employment rates among people with a disability. However, a contrasting expectation can be formulated based on the welfare scepticism perspective. Countries with a flexible labour market may provide more opportunities on the labour market for disabled people (Burström et al., 2000). The possibility to work part-time or to work outside regular office hours could be helpful for people with a disability who may perform better in an employment relation that offers such flexibility (Pagan, 2009). Additionally, from an employers' perspective, hiring a disabled person is less risky if it is easier to dismiss an employee or to hire a person on a temporary contract. If the disabled employee calls in sick often, or is less productive than expected, they can end the contract without much ado. It could therefore be expected that a more flexible labour market is related to higher employment rates of disabled people. We therefore propose a contrasting hypothesis:

The higher the share of flexible jobs, the more likely that disabled people have paid work (H3c).

The more flexible employment protection legislation, the more likely that disabled people have paid work (H3d).

Additionally, specific social policies for people with a disability may hamper the employment opportunities for this group. An example of such a policy concerns disability benefits. Based on the welfare scepticism perspective, we expect that in countries that spend less on disability benefits, the incentive to find paid work is higher and therefore the employment rates of people with a disability will be higher.

The less countries spend on disability benefits, the more likely disabled people have paid work (H4).

Social policies are not only aimed at people in a disadvantaged position but can also focus on employers. One such social policy measure that may impact the labour market position of people with a disability is continued payment in case of sickness. Employers' obligations regarding their employees in case of sickness may affect their willingness to hire disabled people. There is very little research on the influence of employer's sick pay on the labour market opportunities of people with disabilities. If employers have to continue paying employees for a long period of time in case of sickness, they could assess the financial risk of hiring a disabled worker too high (Koning, 2016). Although we cannot explicitly test this, we expect that employers fear that disabled people are sick more often which brings more financial risks in countries where employers are responsible for their employees in case of sickness for a longer period of time (Koning, 2016; Mittag et al., 2018). Although such polices could be beneficial for the re-integration of sick or disabled people, it may have negative effects on their likelihood to get hired. Hence, we also perform a cross-country test of the influence of employers' sick pay obligations on the employment opportunities of disabled people:

The lower the numbers of days of continued payment by the employer in case of sickness, the more likely disabled people have paid work (H5).

Cultural explanations for the DEG

Last, public opinion on disabled people might be related to the experience of discrimination on the labour market, which may result in a lower employment rate of disabled people (Ameri et al., 2018; Arrow, 1973; Nardodkar et al., 2016; Nelissen, 2018; Papakonstantinou & Papadopoulos, 2019; Phelps, 1972; Ren, Paetzold, & Colella, 2008). Employers take a risk when hiring a new employee. During the hiring process, the employer has to make a choice based on limited information about the expected productivity and qualifications of the job candidates. The time and means to obtain extensive information about candidates are often limited. This can result in statistical discrimination if employers base their opinion not only on objective characteristics of the candidate, but also on intrinsic prejudice. Irrespective of whether it happens consciously or not, existing ideas and prejudices about a group are often used to form an opinion about one member of that group (Arrow, 1973; Phelps, 1972). This theory has often been applied to ethnic minorities but can also concern other groups such as women or disabled

persons (e.g. Arai, Bursell, & Nekby, 2016; Dezso, Gaddis Ross, & Uribe, 2016; O'Hara, 2004; Thijssen, Lancee, Veit, & Yemane, 2019). As a consequence, when public opinion on disabled people is more negative, employers are likely to have a more negative attitude of disabled people as well and that may translate into intrinsic prejudice. It is possible that in countries with more unfavourable public opinion towards disabled persons, employers are less willing to hire them. The opposite may be true in countries with more positive public opinion about disabled people. Therefore, we expect that a more positive public opinion on disabled people can result in or is related to less prejudice among employers and therefore to a higher employment rate of disabled people. We formulate the last hypothesis as follows:

The more positive the public opinion towards disabled people, the more likely they have paid work (H6).

Since the labour market participation rates of men and women differ in many European countries, it is possible that not all macro-level factors have a similar effect on the employment rate of men and women. Moreover, existing studies show that in many European countries the male breadwinner model is still dominant and that the share of women and men working differs (Cahusac & Kanji, 2014; Trappe, Pollmann-Schult, & Schmitt, 2015; Warren, 2007). Moreover, their types of jobs also differ (Cregan et al., 2017). Additionally, women may face double barriers because of their gender and disability (Cregan et al., 2017; O'Hara, 2004; Werth, 2015). Therefore, we test all hypotheses separately for men and women.

3. Data and methods

For the analysis the European Union Statistics on Income and Living Conditions (EU-SILC) was used. We used all waves, from 2004-2017. EU-SILC is a cross-sectional dataset with a focus on income, poverty, social exclusion and living conditions including more than thirty countries in Europe. EU-SILC is carried out every year since 2004 among persons of 16 years or older. Persons living in collective households and institutions are usually excluded from the target population (more information about the data and data collection can be found on the website of Eurostat).[1] Data from all the waves of the EU-SILC were pooled. From this data set, we selected the working age population, i.e. respondents aged between 18 and 65. We only included countries for which macro data was available. After this selection, the dataset included a total of 3,575,967 respondents in 23 countries.[2]

[1] Countries decide about the sampling strategies, which has several strengths and limitations (more about the strengths and limitations of the EU-SILC, see (Iacovou, Olena, & Levy, 2012). Although the EU-SILC consists of a cross-sectional and a panel part, it is not possible to identify which respondents have participated in multiple waves. Hence, we cannot account for such clustering (Iacovou et al., 2012).

[2] The countries included are Austria, Belgium, Czechia, Germany, Denmark, Estonia, Spain, Finland, France, United Kingdom, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Sweden, Slovenia, Slovakia, and Latvia. See Appendix A for the years each country participated.

3.1 Disability status

This study focuses on the difference between persons with and without disabilities. Respondents were asked whether they are limited in activities because of health problems. Respondents could choose between yes, strongly limited; yes, limited, and no, not limited. For the descriptive statistics, a distinction is made between these three categories. However, in the multivariate analyses, the respondents that are strongly limited and limited in their activities due to health problems are combined, due to the relatively small number of respondents that are strongly limited. Hence, we distinguish between respondents limited in their activities because of health problems (1) and respondents that are not limited (0). The 94,453 respondents (2.6%) with a missing value on this item are excluded from the analysis, leaving a total of 3,481,514 respondents. In total, about 19% of the respondents stated to be limited in daily activities due to health problems.

3.2 Dependent variable

The dependent variable is whether respondents have paid work or not. The item basic activity status is recoded, where the unemployed, those in retirement and other inactive persons are combined in the no paid work category (0) and working people in the paid work category (1).

3.3 Individual level characteristics

We distinguished between three age categories. The first included those between 18 and 30 years of age, the second those aged 31 to 50 and the last category those between 51 and 65 years old. Second, we considered educational level using ISCED. Educational level included the following three categories: Pre-primary, primary, lower secondary (1), upper secondary (2), and post-secondary non-tertiary, tertiary education (reference category). Last, household type was included since there may be a difference between single and married people and between those with and without dependent children. Household type is measured using five categories: one-person household (reference category); two adult household, no dependent children (1); single parent household, one or more dependent children (2); two adults, one or more dependent children (3); other households (4).

3.4 Missing values

From the 3,481,514 respondents we excluded 45,749 (1.3%) due to missing values. In total, our dataset included 3,435,765 respondents, of which 1,650,714 men and 1,785,051 women. Table 1 provides general descriptive statistics of the EU-SILC data for men and women separately.

Table 1. Descriptive statistics individual-level characteristics (%)

	Men	Women
Disability status		
- No disability	81.9	79.5
Disability	18.1	20.5
Paid work		
- No	30.3	42.7
- Yes	69.7	57.3
Age		
- 18-30	23.9	21.9
- 31-50	43.0	43.6
- 51-65	33.1	34.4
Educational 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

3.5 Country level characteristics

First, we examine whether the ratification of the CRPD has had any influence on the employment opportunities of disabled persons. Therefore, we included the number of years since countries have ratified the CRPD. Second, the policy characteristics we considered are ALMP targeted at persons with disabilities, employment protection legislation (EPL), and expenditure on disability benefits.

Our first policy characteristic is ALMP. Data on ALMP were derived from the OECD dataset on public expenditure and participants in labour market programmes (OECD, 2019a). We used public expenditure as a percentage of GDP on sheltered and supported employment and rehabilitation. Sheltered and supported employment refers to subsidies for the employment of people with a working disability.[3] Rehabilitation concerns vocational rehabilitation for persons with a reduced working capacity, this rehabilitation is intended to prepare these workers to move on to work or regular training. These data are not complete for all countries or years. First, there is no data on the year 2017. Moreover, information about ALMP is missing for the UK from 2012-2016, Spain in 2016, Italy in 2016, and France in 2016. For country-year combinations with missing values, the closest known values were used. Since the public expenditure on sheltered and supported employment and rehabilitation is relatively stable over the years for most countries, we do not expect that this results in large errors.

[3] The OECD database does not include expenditure on lifetime sheltered work where the subsidies cover 100% or more of the wages, this could also include administrative costs and is outside the scope of the dataset.

Three indicators were used to measure the flexibility of the labour market. The first indicator was the share of flexible jobs in a country. This is measured with Eurostat data on the share of temporary contracts (Eurostat, 2019). Temporary contracts are contracts with a limited duration. It concerns employees whose main job will terminate after a fixed period in advance or after a period not known in advance but defined by objective criteria such as the completion of an assignment. We included the share of temporary contracts for men and for women separately. From the OECD we derived a measure of EPL strictness focusing on two areas: protection of workers on regular contracts against individual dismissal and regulation of temporary forms of employment (OECD, 2019b). The measurement of EPL strictness consists of 14 items which are converted into a scale ranging from 0 to 6. A higher score on this scale indicates stricter regulations. Data on EPL are not complete. For most countries, 2013 is the latest year for which information is available. For Lithuania, there is no information from 2004-2014. For Estonia, Luxembourg, and Slovenia, data is missing from 2004-2007. No information is available for Latvia between 2004 and 2011. Again, the closest data available were used for these years that data are missing.

The third policy characteristic was the percentage of GDP spent on disability benefits. These data were derived from Eurostat and are defined as income maintenance and support in cash or in kind for persons with physical or mental disabilities to engage in economic and social activities. More specifically, disability benefits cover benefits that provide an income to people of working-age who cannot work due to a disability or impairment. It also concerns rehabilitation services specifically required by disabilities and goods and services other than medical care to disabled people.

Last, we included the number of days that employers have to continue to pay their employees in case of sickness. These data were available from the Mutual Information System on Social Protection from 2004-2017 (MISSOC, 2019). From these data we constructed a variable measuring the maximum number of days paid by the employer in case of a sick employee.

3.6 Cultural country-level variables

To measure public opinion on disabled people, we used data from the Eurobarometer. A special Eurobarometer and a flash Eurobarometer included questions measuring the public opinion towards disabled people (Eurobarometer, 2012a, 2012b). Both were collected in 2012 either by face-to-face survey (the special Eurobarometer) or by phone (the flash Eurobarometer). Since we are limited by data availability, we made the assumption that there are no significant changes in the opinion on disabled people in the time period under study.

From these Eurobarometer surveys we used four questions. The first is as follows: 'To what extent do you agree that people with disabilities should be able to participate in society like people without disabilities? This means for example that they should be able to go to school, get a job, to access shops and supermarkets.' The answer categories range from agree (0) to disagree (4). One of the items focuses specifically on job candidates with a disability: 'When a company wants to hire someone and has the choice between two candidates with

equal skills and qualifications, which of the following criteria may, in your opinion, put one candidate at a disadvantage? Disability.' From the last two items we created a scale (Cronbach's alpha is 0.67), the two items were: Could you please tell me whether, in your opinion, if discrimination on the basis of disability is very widespread, fairly widespread, fairly rare or very rare in (OUR COUNTRY)?' and 'Discrimination can happen outside working life. For example, in education, when people go shopping, visit restaurants/ bars, try to rent an accommodation or buy a property, go to a doctor or to a hospital. Could you please tell me whether, in your opinion, discrimination on the basis of disability outside working life is very widespread, fairly widespread, fairly rare or very rare in (OUR COUNTRY)?' This scale ranged from 0 to 4 where a higher score indicates that discrimination is more widespread in the country. For these three measurements of public opinion towards disabled people, we aggregated the scores to the country level. Hence, these measurements indicate the average public opinion in a country. Appendix A shows the descriptive statistics of all country-level variables and the mean scores on the items measuring public opinion towards people with a disability by country.

3.7 Country-level control variables

Additionally, several country level characteristics may affect the chances on paid work for the working population and were therefore included as control variables. A first control variable was the overall employment rate of a country. These data were derived from Eurostat and were available for men and women separately. We also controlled for the share of part-time work as a percentage of total employment. Again, these Eurostat data were available for men and women separately. Since the likelihood to have a job may also depend on the economic situation in a country, we took into account countries' GDP. More specifically, we included GDP per capita in Purchasing Power Standards (PPS) expressed in comparison to the average of the European Union, derived from Eurostat. Also derived from Eurostat was the share of persons employed in different sectors. It is possible that the share of people with disabilities in paid work differs between sectors (Houtenville & Kalargyrou, 2015). Hence, we distinguished between the following sectors: Agriculture, forestry and fishing (reference category); Industry and construction; Commercial services; and the non-profit sector.

4. Results

4.1 Methodology

To study the DEG in European countries and the extent to which labour market characteristics and public opinion can explain this gap, we used logistic regression analysis with robust standard errors. Logistic regression analysis is the appropriate method for dichotomous dependent variables, which in this study measures whether someone is in paid employment or not. To account for the nesting of individuals within countries, we used robust standard errors. We start the results section with general descriptive statistics followed by an examination of

the individual-level variables in Table 2. Subsequently, we investigate the DEG when sociodemographic characteristics are taken into account. In Tables 3-7 the influence of the country-level variables on the likelihood to have paid work for people with a disability is tested.

4.2 Descriptive Statistics

Figure 1 shows that disabled people are, on average, older than non-disabled people. This is the case in all countries, as shown in Figure 2.

Figure 1. Share of age categories by disability status (%)

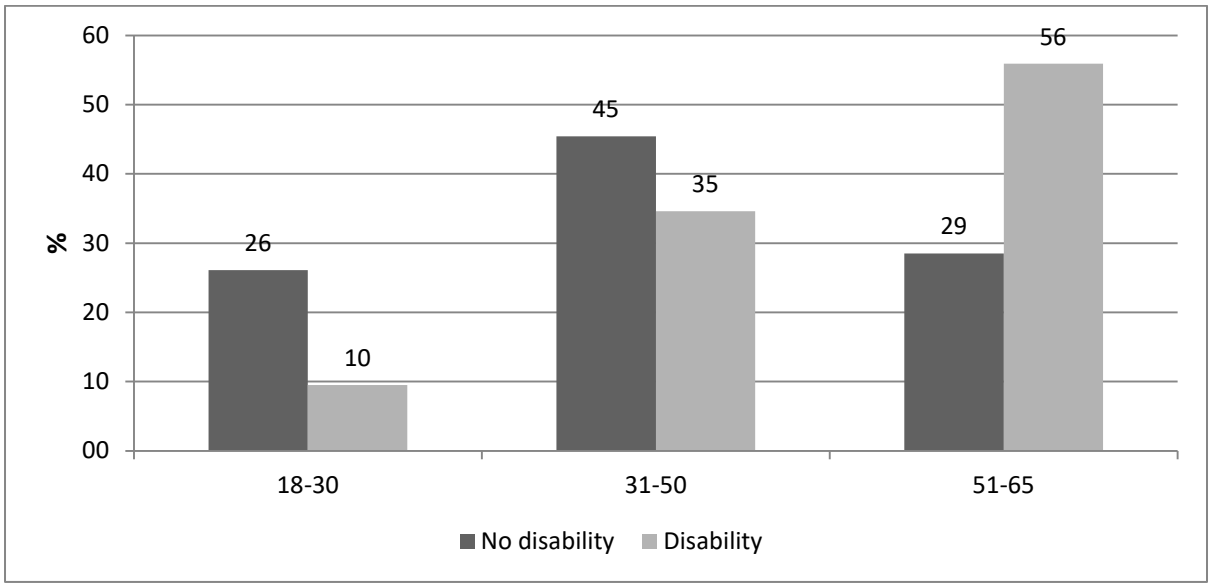


Figure 2. Average age by disability status and country

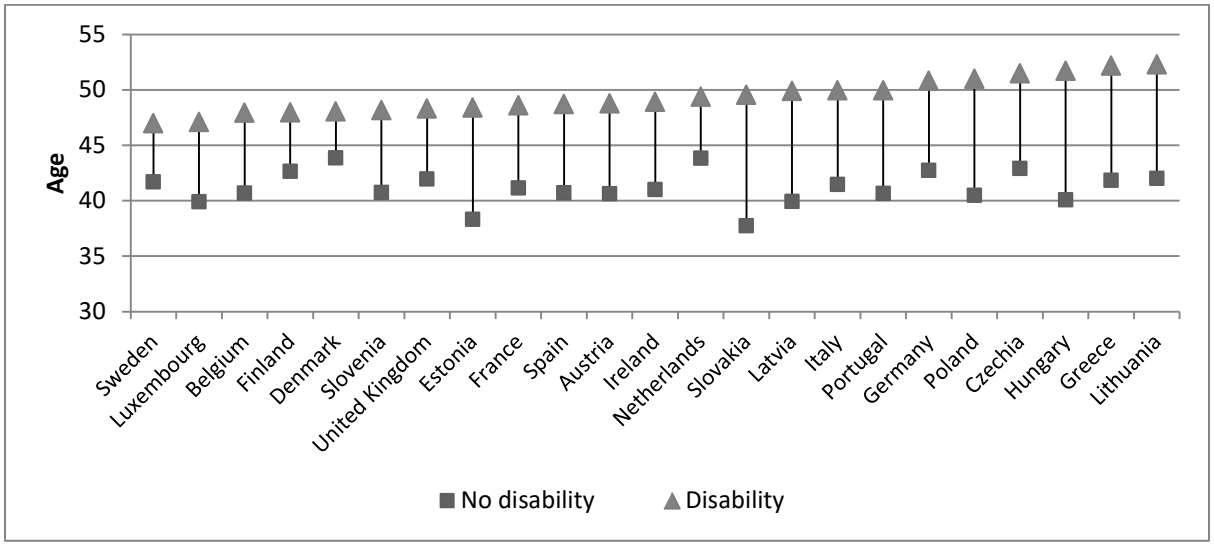
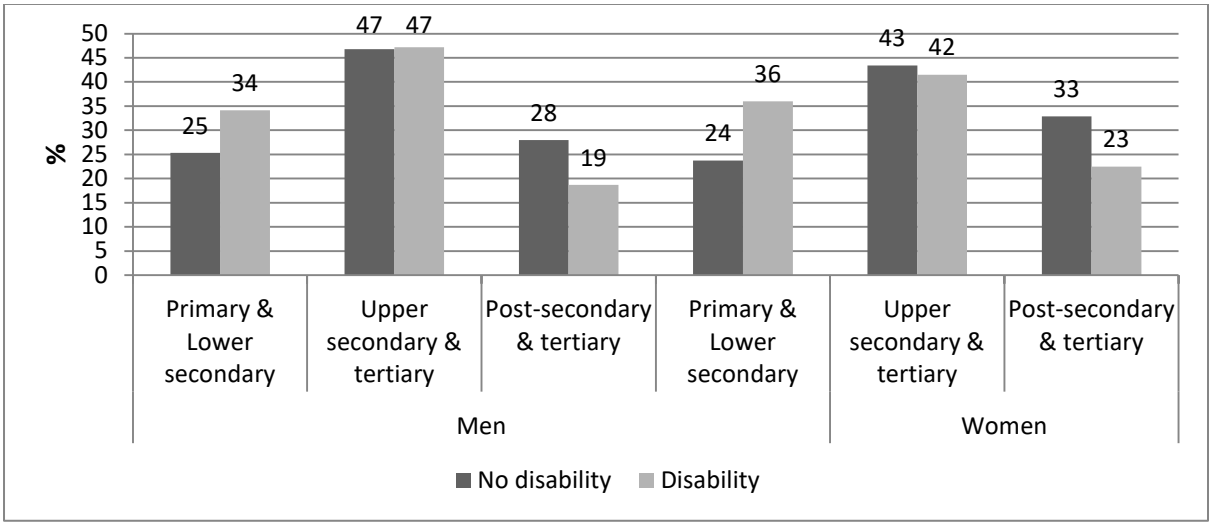


Figure 3 presents the educational level of both men and women by disability status. Again, there are no major differences in educational level between men and women. Regarding disability status, we see that disabled people have a lower educational level than non-disabled

people. They more often have primary or lower secondary education and are less often high educated compared to non-disabled people.

Figure 3. Share of educational levels by disability status and gender (%)



With regard to household type, Figure 4 shows that there are no large differences between men and women, except for single parents. Women are more often a single parent than men; this is the case for both disabled and non-disabled people. Figure 4 also makes clear that disabled persons more often have a one-person household or are part of a couple without children, whereas non-disabled persons more often have a household with children.

Figure 4. Share of household type by disability status and gender (%)

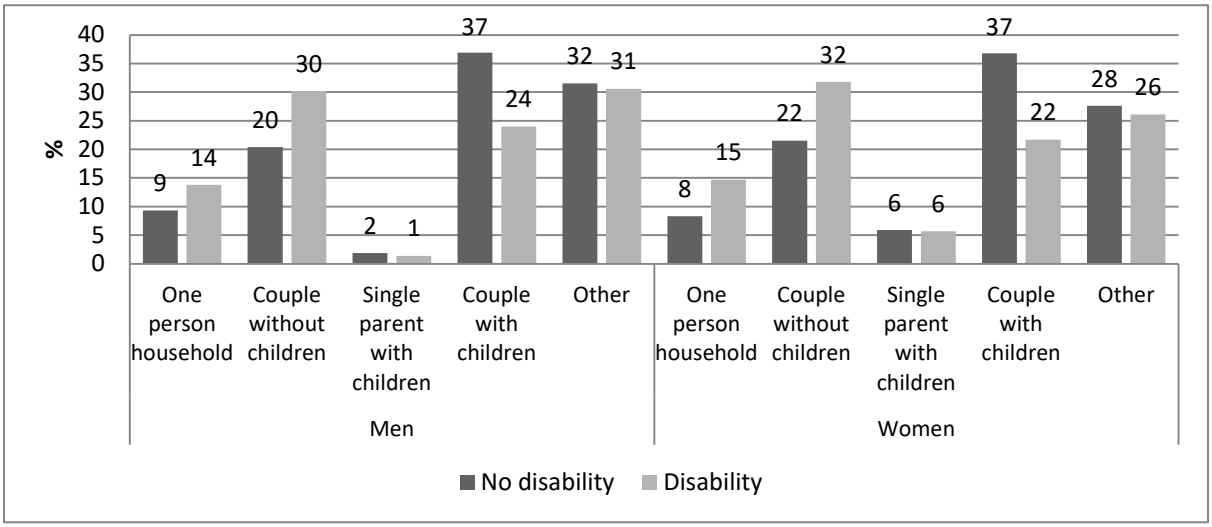


Figure 5 presents the general DEG. Persons with a disability have a much lower employment rate than persons without a disability, both among men and among women. We see that men more often have paid work than women, both among disabled and not-disabled persons. However, the DEG is also larger among men than among women. The DEG in different

countries is presented in Figure 6. In this figure we distinguish between persons that are not limited, limited and strongly limited. We find strong variation in the DEG between European countries. Some of the largest gaps are found in Eastern European and Anglo-Saxon countries, such as the UK, Ireland, and Hungary, and Poland. Among the countries with the smallest gaps are Slovenia, Luxembourg and Spain.

Figure 5. Employment rate by gender and disability (%)

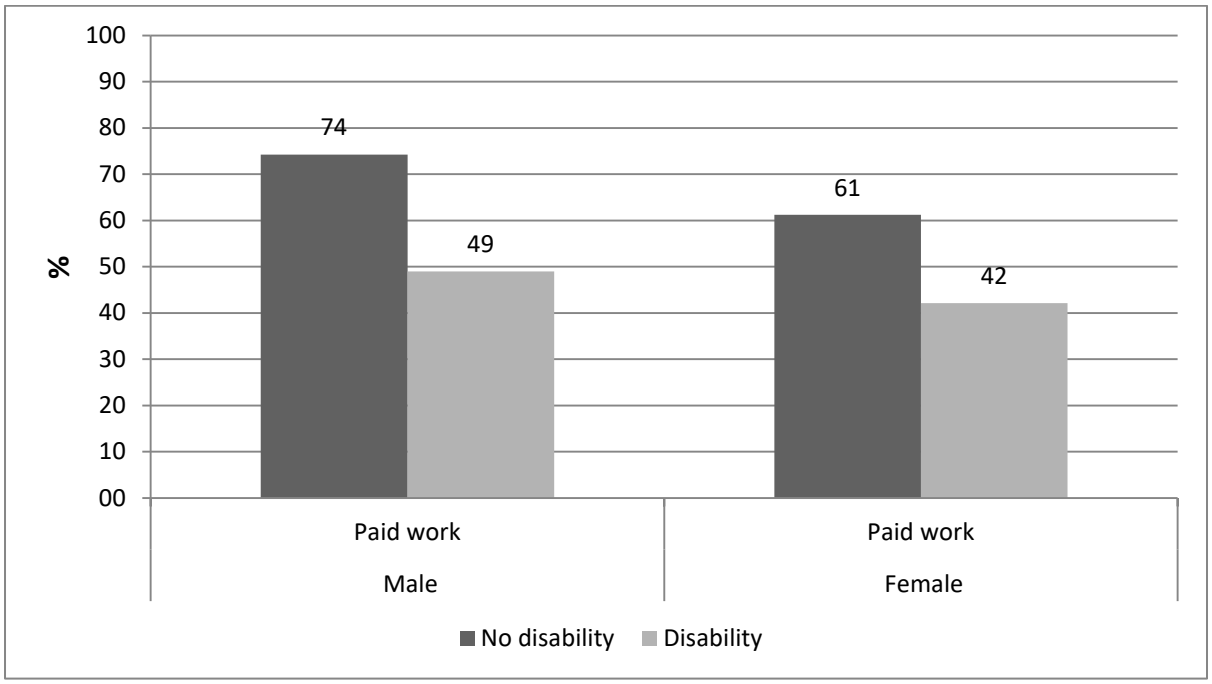
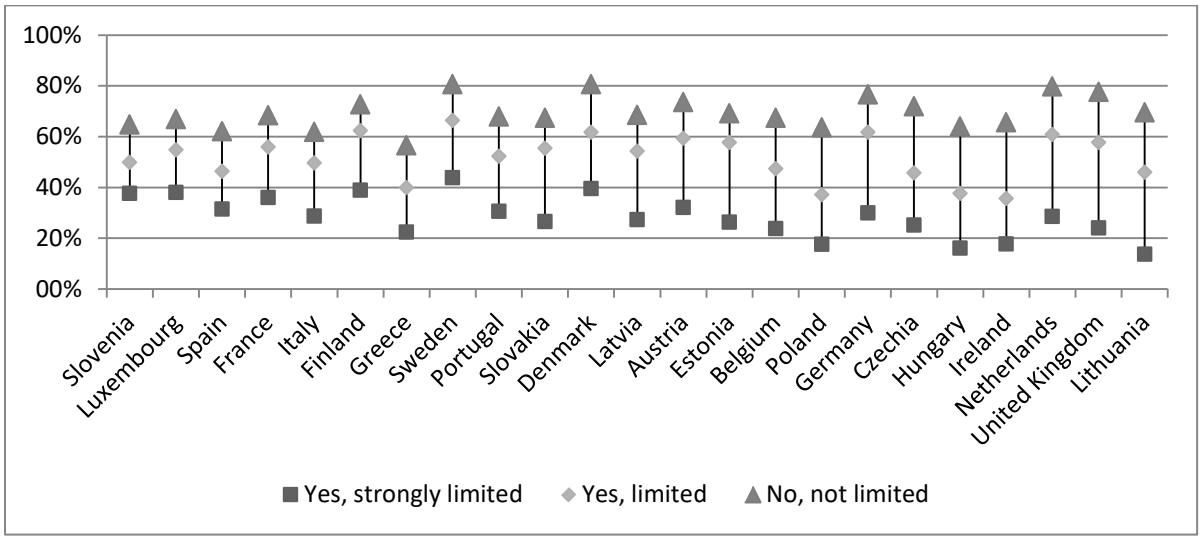


Figure 6. Disability employment gap, by country

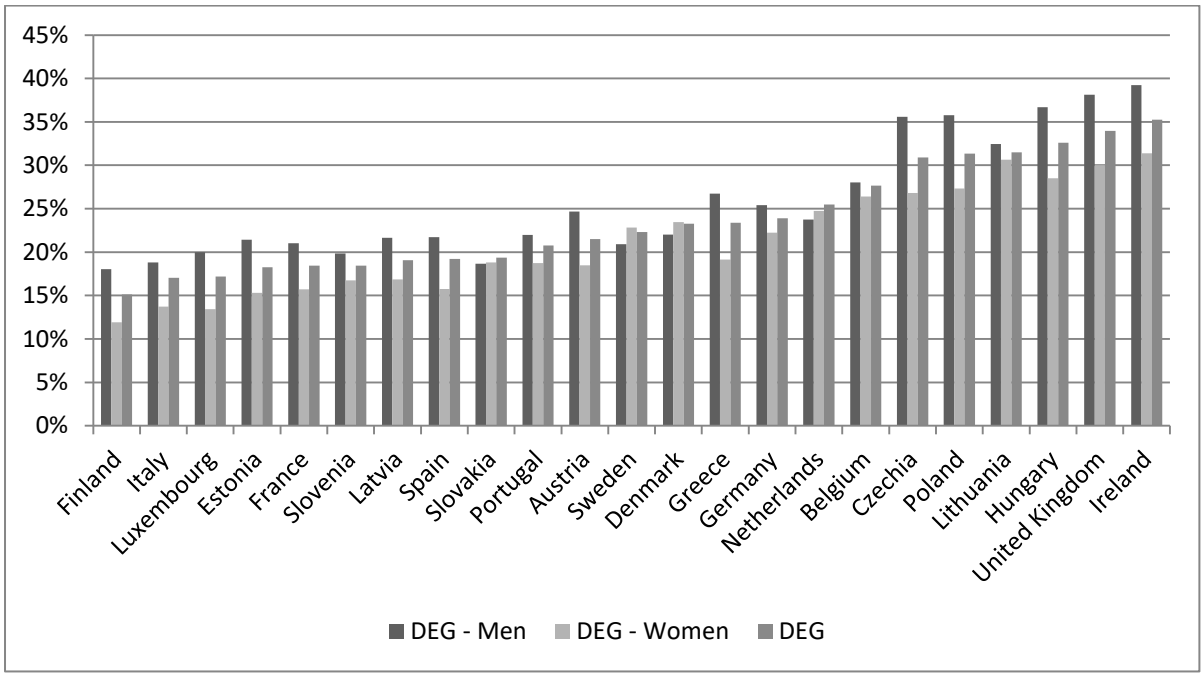


Note: This is calculated as the differences between the share of disabled and non-disabled people in paid work.

Figure 6 shows the share of non-disabled people in paid work, compared with those limited and strongly limited by health in paid work. We also looked at the disability gap when the disabled limited and strongly limited are taken as one category. We examined this gap for men

and women separately, shown in Figure 7. From this figure we can derive that in all countries the DEG is larger for men than for women. The multivariate analyses have to point out to what extent the gap is influenced by sociodemographic characteristics, policy characteristics and public opinion towards people with a disability.

Figure 7. Disability employment gap, by gender.



Note: This is calculated as the differences between the share of disabled and non-disabled people in paid work.

4.3 Multivariate analyses

Table 2 shows that when we control for sociodemographic characteristics, disabled persons are less likely to have a paid job than those without a disability. This is the case for men (b=-1.166) and women (b=-0.714). Table 2 also shows that older people are more likely to have a paid job, and that both men and women with a lower educational level are less likely to have a job than the higher educated. Last, single parents are less likely to have a job than single people without children. Moreover, women in a relationship with children are less likely to have a job whereas men in a relationship with children are more likely to have a job in comparison to single people. Last, we found that the likelihood to have a job varies over the years, but this is more the case for men than for women. This first analysis shows that the DEG between persons with and without disabilities cannot be simply explained by differences in demographic characteristics (such as gender, age, educational attainment and household type) between these groups.

Previous studies have shown that (self-reported) disability rates can differ between countries due to differences in data collection and the formulation of the questions about disabilities. Moreover, the (interpretation of the) definition of disability differs between countries (Baumberg, Jones, & Wass, 2015; Geiger et al., 2017; Molden & Tøssebro, 2010).

Therefore, we did a sensitivity analysis to examine the reliability or our results. First, we tested if there were any outliers or influential cases. Model 1 in Table 2, with all individual-level variables included, was used as the base model. This outlier test was done for men and women separately, but the results of the first model are very similar without these outliers for both men and women. Moreover, there does not seem to be a strong correlation between disability rates and the DEG (see Figure B.3 in Appendix B). Detailed information about the sensitivity analysis can be found in Appendix B.

Table 2. Logistic regression with robust standard errors on paid work; individual characteristics

	Men		Women	
	Model 1		Model 1	
	b	OR	b	OR
Intercept	0.816***	2.262***	0.707***	2.028***
	(0.0929)	(0.210)	(0.0576)	(0.117)
Disabled (not disabled=ref.)	-1.166***	0.312***	-0.714***	0.490***
	(0.0694)	(0.0216)	(0.0680)	(0.0333)
Age (18-30=ref.)				
- 31-50	1.934***	6.919***	1.417***	4.125***
	(0.0633)	(0.438)	(0.0735)	(0.303)
- 51-65	0.661***	1.938***	0.297***	1.346***
	(0.0688)	(0.133)	(0.0722)	(0.0972)
Educational level (Upper secondary/ Tertiary=ref.)				
- Primary/lower secondary	-1.216***	0.296***	-1.568***	0.209***
	(0.103)	(0.0304)	(0.0910)	(0.0190)
- Upper secondary	-0.587***	0.556***	-0.762***	0.467***
	(0.0493)	(0.0274)	(0.0538)	(0.0251)
Household type (one-person household=ref.)				
- Couple without children	0.0925	1.097	-0.0631	0.939
	(0.0842)	(0.0924)	(0.0657)	(0.0617)
- Single parent with children	-1.005***	0.366***	-0.338***	0.713***
	(0.103)	(0.0378)	(0.0616)	(0.0440)
- Couple with children	0.248***	1.281***	-0.510***	0.601***
	(0.0674)	(0.0863)	(0.0746)	(0.0448)
- Other	0.315***	1.370***	-0.138	0.871
	(0.0931)	(0.128)	(0.0935)	(0.0815)
Year (2004=ref.)				
- 2005	-0.0942	0.910	0.0201	1.020
	(0.118)	(0.108)	(0.0764)	(0.0780)
- 2006	-0.0821	0.921	0.0409	1.042
	(0.0881)	(0.0811)	(0.0663)	(0.0691)
- 2007	-0.0284	0.972	0.0797	1.083
	(0.0851)	(0.0828)	(0.0724)	(0.0784)
- 2008	-0.00532	0.995	0.149**	1.161**
	(0.0787)	(0.0782)	(0.0691)	(0.0802)
- 2009	-0.216**	0.806**	0.0521	1.053
	(0.0899)	(0.0725)	(0.0688)	(0.0725)
- 2010	-0.299***	0.742***	0.0123	1.012
	(0.0993)	(0.0737)	(0.0737)	(0.0746)
- 2011	-0.301***	0.740***	0.0252	1.026
	(0.0996)	(0.0737)	(0.0778)	(0.0798)
- 2012	-0.331***	0.718***	0.00755	1.008
	(0.102)	(0.0733)	(0.0749)	(0.0755)
- 2013	-0.337***	0.714***	0.00638	1.006
	(0.105)	(0.0752)	(0.0814)	(0.0819)
- 2014	-0.301***	0.740***	0.0444	1.045
	(0.107)	(0.0788)	(0.0879)	(0.0919)
- 2015	-0.250**	0.779**	0.0630	1.065
	(0.107)	(0.0832)	(0.101)	(0.108)
- 2016	-0.216*	0.806*	0.0974	1.102
	(0.112)	(0.0904)	(0.112)	(0.124)
- 2017	-0.160	0.852	0.141	1.152
	(0.154)	(0.131)	(0.205)	(0.236)
N	1,650,714	1,650,714	1,785,051	1,785,051
Pseudo R2	0.164	0.164	0.131	0.131

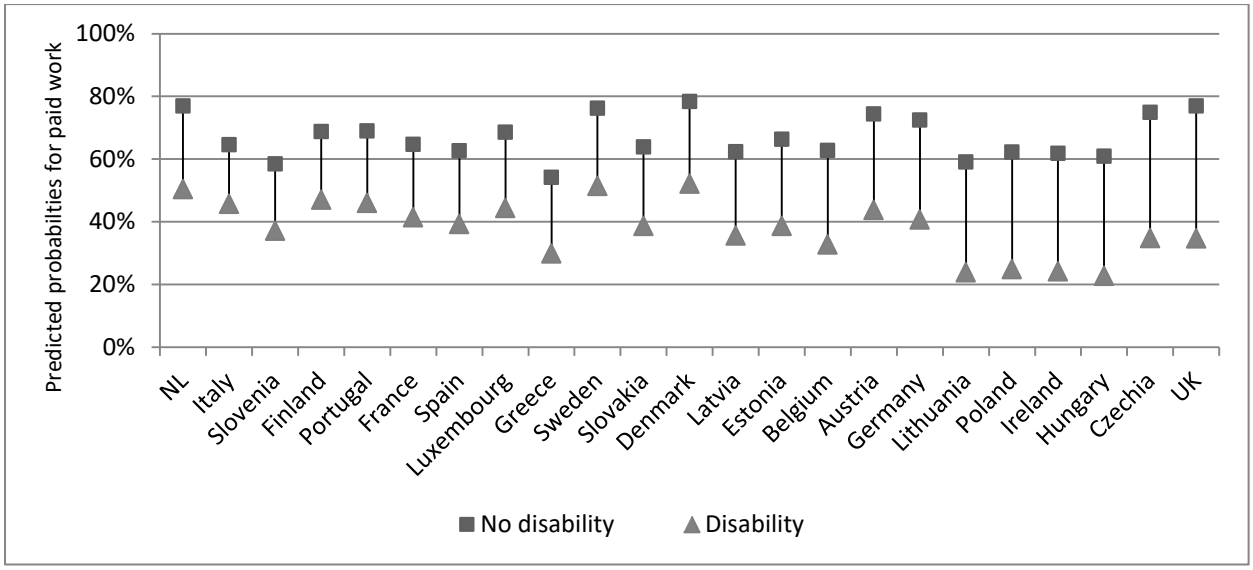
*Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.*

After the models with individual characteristics only, we estimated a model including country dummies and the interactions between disability status and country. With this model we calculated the DEG while taking into account sociodemographic characteristics.[4] From this model, we calculated predicted probabilities to ease interpretation, which are shown in Figures 8 and 9 (Models 2a and 2b can be found in Appendix C). We took the Netherlands as the reference country. The models show that the interaction effects of three countries did not significantly differ from the Netherlands: the interaction between disability status and Denmark for men; the interaction between disability and Poland and Sweden for women. For all the other interaction effects we find that the likelihood to have paid work for disabled people compared to persons without a disability is either significantly higher or lower than in the Netherlands. The likelihood to have paid work for people with a disability is significantly lower for men in Austria, Belgium, Czechia, Germany, the UK, Hungary, Ireland, Lithuania and Poland compared to men in the Netherlands. For women with a disability, the likelihood to have a paid job is significantly lower in Denmark, the UK, Ireland, and Lithuania than for women with a disability in the Netherlands. For the other countries, we find that the likelihood to have paid work for disabled compared to non-disabled people is higher than in the Netherlands.

The figures firstly show that the DEG exists in all countries and, moreover, demonstrate the variation in predicted probabilities of having paid work between disabled and non-disabled men and women. Based on these analyses, we see that the gap varies between 10 to 42 percentage points. The gap is the smallest for men in Italy, Slovenia, Finland and Portugal, whereas it is the largest for men in the UK, Czechia, Hungary and Ireland. For women, the gap is largest in Poland, the UK, Ireland and Lithuania. It is smallest in Italy, Luxembourg, Finland and Spain. Compared to Figure 6 from the descriptive statistics, there are some differences in the countries that have the largest and the smallest DEG. This indicates that sociodemographic characteristics partly explain different gaps founds in the European countries under study. In the following models, our aim is to test which country-level characteristics can explain the DEG.

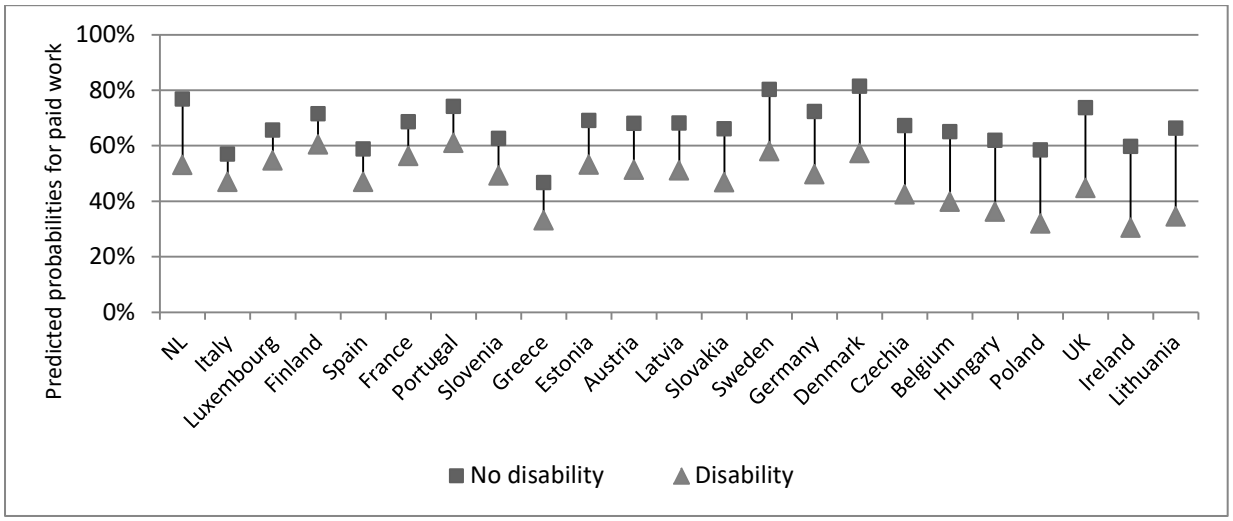
[4] To test the robustness of the results, we repeated the analysis in Table 2 using the European Social Survey (ESS). The outcome of this sensitivity analysis shows that there are some similarities, but also some differences between the countries with the smallest and largest DEG compared to the outcomes based on the EU-SILC. This analysis is presented in Appendix C.

Figure 8. Predicted probabilities of paid work for men



Note: Predicted probabilities are calculated based on Model 2b, which can be found in Table C.1 in the Appendix.

Figure 9. Predicted probabilities of paid work for women



Note: Predicted probabilities are calculated based on Model 2b, which can be found in Table C.1 in the Appendix.

Now that we have established that the DEG still varies between countries even when controlling for sociodemographic characteristics, we continue with the explanatory analysis. We expected that in countries that ratified the CRPD earlier, disabled persons would have a higher likelihood to have paid work. Models 3a and 3b in Table 3 show that this is not the case. Hence, ratifying the CRPD does not seem to influence the labour market position of people with a disability and we do not find support for the first hypothesis.

Table 3. Logistic regression with robust standard errors on paid work; CRPD

	Men				Women			
	Model 3a		Model 3b		Model 3a		Model 3b	
	b	OR	b	OR	b	OR	b	OR
Intercept	0.143	1.153	0.116	1.123	-0.798	0.450	-0.785	0.456
	(0.933)	(1.076)	(0.906)	(1.018)	(1.517)	(0.683)	(1.519)	(0.693)
Disabled	-1.199***	0.301***	-1.100***	0.333***	-0.786***	0.456***	-0.799***	0.450***
	(0.0691)	(0.0208)	(0.145)	(0.0483)	(0.0613)	(0.0279)	(0.159)	(0.0714)
Duration since ratification CRPD (0-5 years = ref.)								
- 6-9 years	-0.0103	1.068	0.0961	1.101	0.0265	1.027	0.0210	1.021
	(0.170)	(0.174)	(0.129)	(0.142)	(0.127)	(0.130)	(0.127)	(0.129)
- 10 or more years	0.0661	0.990	0.0186	1.019	0.0841	1.088	0.0818	1.085
	(0.162)	(0.168)	(0.133)	(0.135)	(0.132)	(0.144)	(0.136)	(0.148)
Disabled x 6-9 years			-0.107	0.898			0.0238	1.024
			(0.183)	(0.165)			(0.189)	(0.194)
Disabled x 10 or more years			-0.112	0.894			0.00834	1.008
			(0.183)	(0.164)			(0.188)	(0.190)
N	1,650,714	1,650,714	1,650,714	1,650,714	1,785,051	1,785,051	1,785,051	1,785,051
Pseudo R2	0.175	0.175	0.175	0.175	0.144	0.144	0.144	0.144

*Note: Robust standard errors in parentheses. In these models we controlled for: age, educational level, survey year and household type at the individual level and employment rate, part-time employment rate, GPD in PPS, share of different sectors at the country-level; full models can be found in the Appendix. *** p<0.01, ** p<0.05, * p<0.1.*

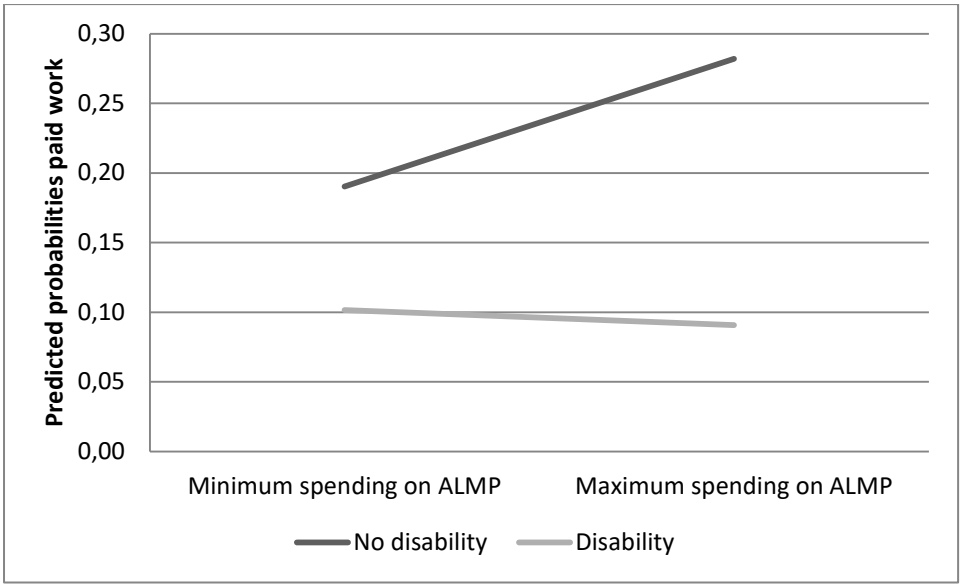
Recall that our second hypothesis was that more spending on ALMP would increase the likelihood to have paid work for disabled people according to the social investment perspective. Models 5a and b in Table 4 show the effects of money spent on ALMP specifically aimed at disabled people. For both non-disabled men and women, we find a positive and significant effect of the share of the GDP spent on ALMP on the likelihood to have paid work (b=0.441 for men and b=0.585 for women). However, this effect is weaker for disabled people (b=0.441+-0.236=0.205 for men and b=0.585+-0.726=-0.141 for women). For women this interaction effect is significant. Figure 9 shows that the probability to have a job compared to women without a disability slightly decreases for women with a disability in countries that have spent a larger share of GDP on ALMP. Hence, we do not find support for the second hypothesis that the more countries spend on ALMP targeted towards disabled people the higher the likelihood that people with a disability have paid work. Only for women, we find a small significant effect; this is, however, more in line with the welfare scepticism perspective than with the social investment perspective.

Table 4. Logistic regression with robust standard errors on paid work; ALMP and EPL[a]

	Men							
	Model 4a		Model 4b		Model 5a		Model 5b	
	b	OR	b	OR	b	OR	b	OR
Intercept	-0.405	0.667	-0.407	0.666	-1.551**	0.212**	-1.528**	-1.551**
	(0.917)	(0.612)	(0.919)	(0.612)	(0.612)	(0.130)	(0.607)	(0.612)
Disabled	-1.200***	0.301***	-1.201***	0.301***	-1.199***	0.302***	-1.196***	-1.199***
	(0.0679)	(0.0205)	(0.0666)	(0.0200)	(0.0685)	(0.0206)	(0.0488)	(0.0685)
% GDP on ALMP	0.379	1.461	0.441**	1.555**				
	(0.234)	(0.341)	(0.215)	(0.334)				
Disabled x % GDP on ALMP			-0.236	0.790				
			(0.439)	(0.346)				
% temporary contracts					0.00826***	1.008***	0.00969***	1.010***
					(0.00250)	(0.00252)	(0.00370)	(0.00374)
Disability x % temporary contracts							-0.00686	0.993
							(0.0118)	(0.0117)
EPL regular workers					0.153***	1.166***	0.119***	1.126***
					(0.0338)	(0.0394)	(0.0374)	(0.0422)
Disability x EPL regular							0.175*	1.191*
							(0.0958)	(0.114)
EPL temporary workers					-0.0431*	0.958*	-0.0853***	0.918***
					(0.0221)	(0.0212)	(0.0228)	(0.0209)
Disability x EPL temporary							0.183***	1.201***
							(0.0431)	(0.0517)
N	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714
Pseudo R2	0.175	0.175	0.175	0.175	0.176	0.176	0.177	0.177
	Women							
	Model 4a		Model 4b		Model 5a		Model 5b	
	b	OR	b	OR	b	OR	b	OR
Intercept	-1.353	0.258	-1.407	0.245	-2.208**	0.110**	-2.243**	0.106**
	(1.372)	(0.355)	(1.397)	(0.342)	(0.965)	(0.106)	(0.960)	(0.102)
Disabled	-0.787***	0.455***	-0.784***	0.457***	-0.789***	0.454***	-0.779***	0.459***
	(0.0611)	(0.0278)	(0.0587)	(0.0268)	(0.0614)	(0.0279)	(0.0442)	(0.0203)
% GDP on ALMP	0.388	1.474	0.585**	1.795**				
	(0.252)	(0.371)	(0.243)	(0.436)				
Disabled x % GDP on ALMP			-0.726***	0.484***				
			(0.260)	(0.126)				
% temporary contracts					0.00408	1.004	0.00363	1.004
					(0.00344)	(0.00345)	(0.00368)	(0.00369)
Disability x % temporary contracts							0.00260	1.003
							(0.00893)	(0.00895)
EPL regular workers					0.182***	1.200***	0.163***	1.177***
					(0.0525)	(0.0629)	(0.0534)	(0.0629)
Disability x EPL regular							0.112*	1.119*
							(0.0648)	(0.0726)
EPL temporary workers					-0.0370	0.964	-0.0759***	0.927***
					(0.0262)	(0.0252)	(0.0256)	(0.0237)
Disability x EPL temporary							0.185***	1.203***
							(0.0382)	(0.0459)
N	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051
Pseudo R2	0.144	0.144	0.145	0.145	0.145	0.145	0.146	0.146

*Note: [a]ALMP refers to active labour market policies and EPL refers to employment protection legislation. Robust standard errors in parentheses. In these models we controlled for: age, educational level, survey year, and household type at the individual level and employment rate, part-time employment rate, GPD in PPS, share of different sectors at the country-level; full models can be found in the Appendix. *** p<0.01, ** p<0.05, * p<0.1.*

Figure 10. Predicted probabilities for paid work for women, spending on ALMP[a]



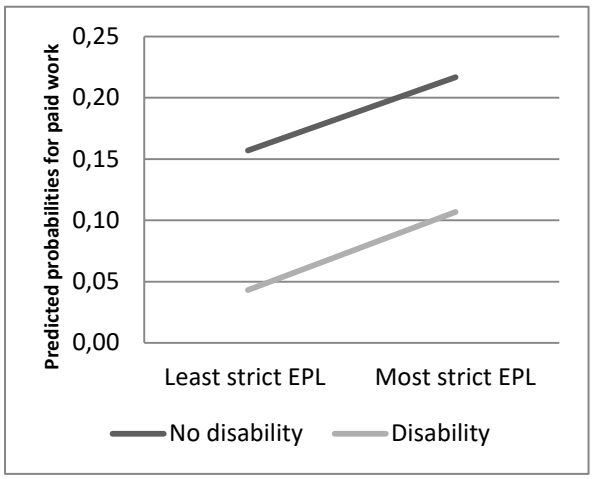
Note: [a] ALMP refers to active labour market policies. The predicted probabilities are calculated based on Model 6b.

The third hypothesis concerned several aspects of EPL.[5] The first aspect is the share of flexible jobs. Model 5b in Table 4 shows that the interaction between disability status and the share of temporary contracts is not significant for men or for women. This indicates that a higher share of temporary jobs is not related to the likelihood that disabled people have a job and that there is no support for hypotheses 3a and 3c. The second indicator of flexible labour markets is EPL for people with regular contracts. A stronger effect indicates stricter EPL which we interpret as an indicator of less flexible labour markets. In Model 5b we find a significant and positive effect of strictness of regular EPL on the likelihood of having paid work for men without a disability (b=0.119 for men and b=0.163 for women). For those with a disability, this effect of EPL strictness on the likelihood to have paid work is stronger (b=0.119+0.175=0.294 for men and b=0.163+0.112=0.275 for women). For EPL strictness for temporary contracts we find a similar effect for disabled people. The effect of EPL strictness for temporary workers is negative for the non-disabled (b=-0.085 for men and b=-0.076 for women), but positive and significant for disabled people (b=-0.085+0.183=0.098 for men and b=-0.076+0.185=0.109 for women). Figure 11 shows that the probability of a job for people with a disability is larger in countries with stricter EPL for both regular and temporary contracts. We find this effect for men and women with disabilities, although the effects are smaller for women with disabilities. These findings indicate that the stricter EPL and thus the less flexible the labour market, the more likely people with a disability have paid employment. This supports hypothesis 3b and suggests that employment protection of workers by the government can be beneficial for people with a disability.

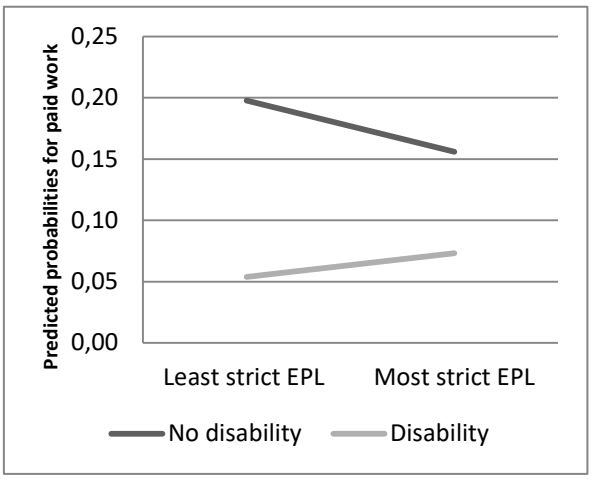
[5] *The items % temporary contracts, EPL regular workers, and EPL temporary workers included together in Models 5 were also run in separate models. The outcomes were very similar: only for men we found that the main effects of EPL temporary were not significant in Models 5a and 5b and that the main effect of % temporary workers was not significant in Model 5b. For women the only difference is that the main effect of EPL temporary contracts in Model 5b was not significant. Tables are available on request.*

Figure 11. Predicted probabilities for paid work; EPL strictness[a]

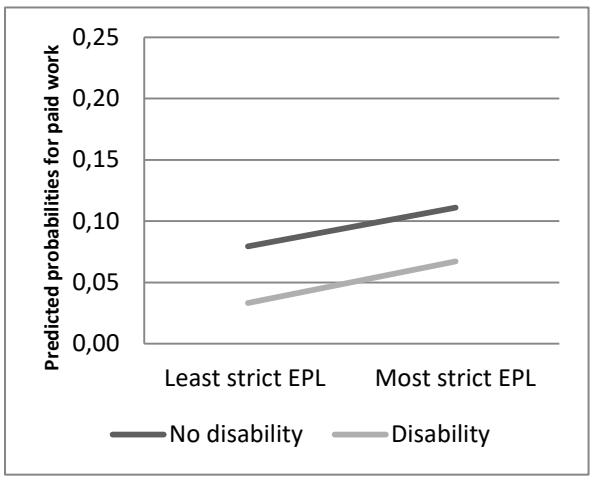
a. Regular contracts for men



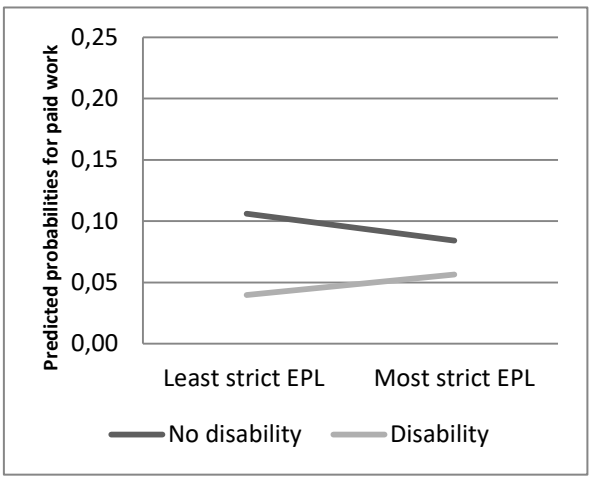
b. Temporary contracts for men



c. Regular contracts for women



d. Temporary contracts for women



Note: [a] EPL refers to Employment protection legislation. The predicted probabilities are calculated based on Model 5b.

The fourth hypotheses concerns spending on disability benefits. We expect that the more countries spend on disability benefits, the more likely that disabled people have paid work. Model 6b in Table 5 presents outcomes for the hypothesis on the spending on disability benefits. The main effect shows that the higher the share of the GDP spent on disability benefits, the more likely that people have paid work. However, the interaction effect between disability status and the share of the GDP spent on disability benefits is not significant. We do not find support for hypothesis 4; the findings indicate that the share of GDP countries have spent on disability benefits is not related to the likelihood of having a paid job for those with a disability.

Table 5. Logistic regression with robust standard errors on paid work; % GDP on disability benefits

	Men			
	Model 6a		Model 6b	
	b	OR	b	OR
Intercept	0.173	1.188	0.163	1.177
	(0.737)	(0.876)	(0.739)	(0.869)
Disabled	-1.205***	0.300***	-1.206***	0.299***
	(0.0686)	(0.0206)	(0.0690)	(0.0206)
% GDP on disability benefits	0.137***	1.146***	0.119***	1.126***
	(0.0450)	(0.0516)	(0.0419)	(0.0472)
Disabled x % GDP on disability benefits			0.0704	1.073
			(0.0684)	(0.0734)
N	1,650,714	1,650,714	1,650,714	1,650,714
Pseudo R2	0.176	0.176	0.176	0.176
	Women			
	Model 6a		Model 6b	
	b	OR	b	OR
Intercept	-0.915	0.400	-0.918	0.399
	(1.206)	(0.483)	(1.206)	(0.481)
Disabled	-0.789***	0.454***	-0.788***	0.455***
	(0.0616)	(0.0280)	(0.0615)	(0.0280)
% GDP on disability benefits	0.122***	1.130***	0.133***	1.142***
	(0.0421)	(0.0476)	(0.0468)	(0.0534)
Disabled x % GDP on disability benefits			-0.0434	0.957
			(0.0775)	(0.0742)
N	1,785,051	1,785,051	1,785,051	1,785,051
Pseudo R2	0.145	0.145	0.145	0.145

*Note: Robust standard errors in parentheses. In these models we controlled for: age, educational level, survey year, and household type at the individual level and employment rate, part-time employment rate, GPD in PPS, share of different sectors at the country-level; full models can be found in the Appendix. *** p<0.01, ** p<0.05, * p<0.1.*

The fifth hypothesis focused on the maximum number of days that employers have to pay in case of sickness of the employee. Model 7b in Table 6 shows no support for the hypothesis that the smaller the number of days of continued payment by the employer in case of sickness, the higher the likelihood that disabled people have paid work (H5).

Table 6. Logistic regression with robust standard errors on paid work; sickness days paid by employer

	Men			
	Model 7a		Model 7b	
	b	OR	b	OR
Intercept	-0.172	0.842	-0.193	0.825
	(0.829)	(0.698)	(0.834)	(0.688)
Disabled	-1.200***	0.301***	-1.198***	0.302***
	(0.0686)	(0.0207)	(0.0673)	(0.0203)
Employers' sick pay	0.000352	1.000	0.000279	1.000
	(0.000268)	(0.000268)	(0.000259)	(0.000259)
Disability x Employers' sick pay			0.000287	1.000
			(0.000438)	(0.000438)
N	1,650,714	1,650,714	1,650,714	1,650,714
Pseudo R2	0.175	0.175	0.175	0.175
	Women			
	Model 7a		Model 7b	
	b	OR	b	OR
Intercept	-1.236	0.291	-1.217	0.296
	(1.175)	(0.342)	(1.184)	(0.351)
Disabled	-0.789***	0.454***	-0.789***	0.454***
	(0.0614)	(0.0279)	(0.0618)	(0.0281)
Employers' sick pay	0.000537***	1.001***	0.000582***	1.001***
	(0.000140)	(0.000140)	(0.000146)	(0.000146)
Disability x Employers' sick pay			-0.000158	1.000
			(0.000353)	(0.000353)
N	1,785,051	1,785,051	1,785,051	1,785,051
Pseudo R2	0.145	0.145	0.145	0.145

*Note: Robust standard errors in parentheses. In these models we controlled for: age, educational level, survey year, and household type at the individual level and employment rate, part-time employment rate, GPD in PPS, share of different sectors at the country-level; full models can be found in the Appendix. *** p<0.01, ** p<0.05, * p<0.1.*

Table 7 presents the outcomes of the last hypothesis. We predicted that the more positive the public opinion towards disabled people, the more likely that they have paid work. We tested this hypothesis with three items. Only for the last interaction term we included we find a significant effect for men and women. The predicted probabilities of paid work are shown for both disabled and non-disabled men and women in Figure 12. This shows that we do not find support for our hypothesis. On the contrary, quite unexpectedly, the more discrimination is perceived to be widespread, the more likely disabled people have a job (H6).

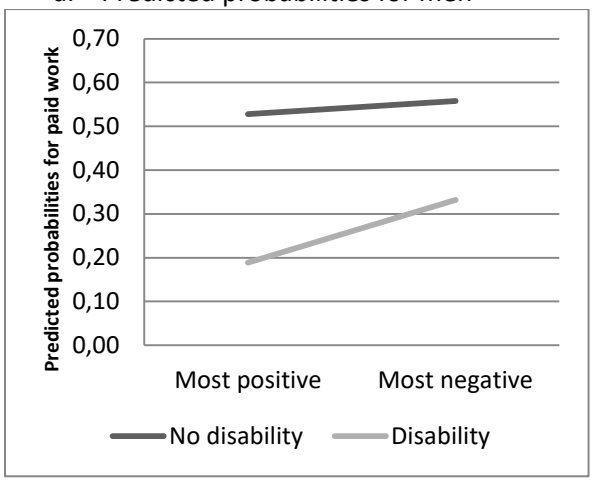
Table 7. Logistic regression with robust standard errors on paid work; public opinion towards disabled people

	Men											
	Model 8a		Model 8b		Model 9a		Model 9b		Model 10a		Model 10b	
	b	OR	b	OR	b	OR	b	OR	b	OR	b	OR
Intercept	0.107	1.113	0.127	1.135	-0.233	0.792	-0.244	0.783	0.181	1.199	0.182	1.200
	(0.838)	(0.933)	(0.827)	(0.939)	(0.818)	(0.648)	(0.823)	(0.645)	(0.905)	(1.084)	(0.889)	(1.067)
Disabled (not disabled=ref.)	-1.203***	0.300***	-1.201***	0.301***	-1.202***	0.301***	-1.200***	0.301***	-1.199***	0.302***	-1.195***	0.303***
	(0.0681)	(0.0205)	(0.0669)	(0.0201)	(0.0699)	(0.0210)	(0.0705)	(0.0212)	(0.0688)	(0.0207)	(0.0611)	(0.0185)
Disabled people should participate	0.255	1.291	0.322**	1.381**								
	(0.227)	(0.293)	(0.156)	(0.216)								
Disabled x Disabled people should participate			-0.252	0.777								
			(0.631)	(0.490)								
Disabled job candidate disadvantaged					-0.0551	0.946	0.00129	1.001				
					(0.532)	(0.504)	(0.455)	(0.456)				
Disabled x Disabled job candidate disadvantaged							-0.279	0.756				
							(1.210)	(0.915)				
Discrimination of disabled people widespread									0.280*	1.324*	0.133	1.142
									(0.163)	(0.215)	(0.157)	(0.179)
Disabled x Discrimination of disabled people widespread											0.690**	1.994**
											(0.305)	(0.609)
N	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714
Pseudo R2	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.176	0.176
	Women											
	Model 8a		Model 8b		Model 9a		Model 9b		Model 10a		Model 10b	
	b	OR	b	OR	b	OR	b	OR	b	OR	b	OR
Intercept	-0.566	0.568	-0.543	0.581	-1.093	0.335	-1.101	0.332	0.388	1.474	0.360	1.433
	(1.204)	(0.683)	(1.203)	(0.699)	(1.234)	(0.413)	(1.235)	(0.410)	(1.188)	(1.751)	(1.174)	(1.683)
Disabled (not disabled=ref.)	-0.791***	0.454***	-0.787***	0.455***	-0.788***	0.455***	-0.783***	0.457***	-0.789***	0.454***	-0.788***	0.455***
	(0.0614)	(0.0279)	(0.0600)	(0.0273)	(0.0619)	(0.0282)	(0.0614)	(0.0280)	(0.0615)	(0.0279)	(0.0567)	(0.0258)
Disabled people should participate	0.420*	1.522*	0.517**	1.676**								
	(0.216)	(0.328)	(0.247)	(0.414)								
Disabled x Disabled people should participate			-0.376	0.687								
			(0.456)	(0.313)								
Disabled job candidate disadvantaged					0.0851	1.089	0.190	1.209				
					(0.500)	(0.545)	(0.431)	(0.521)				
Disabled x Disabled job candidate disadvantaged							-0.583	0.558				
							(0.970)	(0.542)				
Discrimination of disabled people widespread									0.584***	1.793***	0.474***	1.606***
									(0.169)	(0.302)	(0.162)	(0.261)
Disabled x Discrimination of disabled people widespread											0.575**	1.777**
											(0.264)	(0.470)
N	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051
Pseudo R2	0.145	0.145	0.145	0.145	0.144	0.144	0.144	0.144	0.145	0.145	0.146	0.146

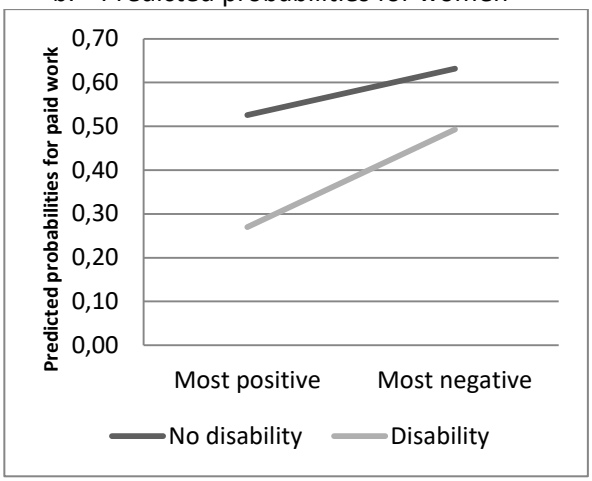
*Note: Robust standard errors in parentheses. In these models we controlled for: age, educational level, survey year, and household type at the individual level and, employment rate, part-time employment rate, GPD in PPS, share of different sectors at the country-level; full models can be found in the Appendix. *** p<0.01, ** p<0.05, * p<0.1.*

Figure 12. predicted probabilities for public opinion towards people with a disability

a. Predicted probabilities for men



b. Predicted probabilities for women



Note: the predicted probabilities are calculated based on Model 8b in Table 8.

5. Conclusion and discussion

The aim of this study was to examine the DEG in Europe and to look into explanations for this gap. Article 27 of the CRPD states that people with and without a disability should have equal opportunities in work and employment. Yet, persons without a disability continue to have a better position on the labour market than persons with a disability. The main goal of the current study was to determine to what extent labour market policies and the public opinion towards people with a disability could explain differences variation in the DEG in Europe. The most important finding is that most labour market policies, with the exception of employment protection legislation, do not affect the DEG; neither did the public opinion towards people with a disability.

In this investigation, we first assessed the DEG and how it differs between European countries. This study showed that, in line with earlier studies on this topic, European countries have varying sizes of the DEG; it varies between 10 to 42 percentage points. Most Scandinavian countries have a rather mediocre score; despite the generous welfare state, the employment rates of disabled people are still lower than those of non-disabled people in these countries. Among the countries with the smallest DEG, there are several Southern-European countries. Especially Italy, Spain and France seem to have smaller gaps for both men and women. The countries that perform the worst include the UK, Ireland and several Eastern-European countries such as Czechia, Hungary and Poland. Another interesting finding is that although there are differences in the DEG between men and women, they are not exceptionally large.

One unanticipated finding was that ratification of the CRPD did not affect the likelihood to have a job for persons with a disability. It is interesting to note that among the countries with the largest DEG, several have ratified the CRDP quite a long time ago. For instance, Hungary ratified the CRPD twelve years ago. Maybe that is why we did not find an

effect of the ratification of the CRPD. Nevertheless, ratifying the CRPD comes with responsibilities to advance the position of persons with a disability in society and on the labour market. The varying sizes of the DEG together with the outcome that ratification of the CRPD is not related to better employment opportunities for disabled people shows that greater effort is needed to ensure equality on the labour market for people with and without a disability in several European countries.

This study set out to examine explanations for the DEG and has shown that labour market policies specifically relevant for those with a disability, cannot explain these gaps. A noteworthy exception was that when employment protection regulations are stricter, the probability that people with a disability have a job is larger. This finding is in line with the theoretical perspective that social investments of the government are beneficial for people with a disadvantaged position on the labour market and thus does not support the welfare scepticism perspective. Interestingly, our study shows that the public opinion towards disabled people do not seem to offer an important explanation either. The current study found that in countries where discrimination towards people with a disability is perceived to be more widespread, the probability that disabled people are in paid employment is higher. This finding was unexpected. There are, however, several possible explanations for this result. A first explanation relates to the limitations of the data. We used Eurobarometer data to measure public opinion towards people with a disability from 2012. Although it is not very likely that public opinion in a country largely change from year to year, the results may have been different if we could have included public opinion towards disabled people from 2004 to 2017. Another possibility is that even though the public opinion in society may be positive, employers are not so much influenced by the public opinion but more by other, financial, factors when they are looking for new employees. In that case, perceived risks when hiring someone with a disability play a larger role in hiring decisions that public opinion towards people with disabilities.

Our study adds to the large body of literature on the labour market position of people with a disability. Labour market policies are often considered an explanation for the variation in DEGs. Nevertheless, whether a very broad approach is used (i.e. welfare state types) or a very specific approach (i.e. ALMP specifically relevant for disabled people), the results remain mixed. This raises questions about the type of policies – other than policies related to the labour market – countries should implement in order to reduce the DEG. It seems likely that other country-level characteristics than the labour market play a role in the DEG. We have tried to add an explanation by focusing on the public opinion towards disabled people. Even though we did not find the expected results, this is an approach worthwhile to examine in further detail. With other data or other measures that are culture-related, we might find that the culture in a country may have an influence on the DEG. Future studies might, for instance, explore the influence of employers in the DEG. Although this has been studied in specific countries or companies, cross-national studies on the role of employers, their attitudes and behaviour would be a fruitful area for further work.

We have examined the DEG in 23 European countries. The analysis focused on both Southern European, Northern European and Eastern European countries and therefore gives an overview of the differences between European countries. Nevertheless, this study is subject to certain limitations. Although the EU-SILC is a longstanding, well-established survey, countries are free to choose their own method of data collection. Moreover, the questionnaires are not harmonised. This means that the precise wording of the questions and the order may be different from country to country. This may affect the rate at which people indicate that they have a disability. Another issue related to the data is that we were limited in data resources measuring public opinion towards disabled people. Future studies could focus on the influence of attitudes among the general population as well as among employers. Last, this study used self-reports of disability. The number of people that perceive themselves as limited in their daily activities by a disability may differ from official numbers from governments. Such numbers are, for example, based on the number of people on disability benefits.

To conclude, we have shown that the DEG differs between European countries. Whereas one may expect that Nordic countries perform well in the employment of people with a disability, we find the smallest gaps in Southern European countries. Most European countries have labour market policies aimed at people with a disability to improve their position on the labour market. We did not find strong evidence that such policies have a positive impact. In the light of the CRPD, governments should try to focus on other types of policies that may have more impact.

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Appendices

Appendix A: Descriptive statistics

Table A.1 Countries in EU-SILC by year

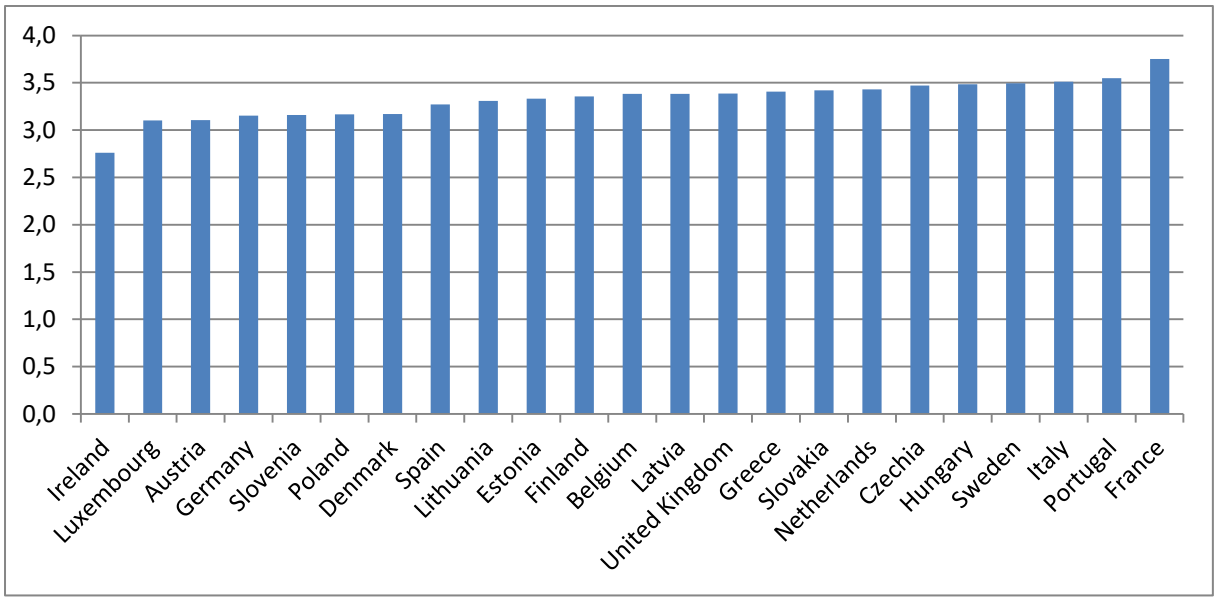
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1)	Austria	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2)	Belgium	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3)	Czechia		X	X	X	X	X	X	X	X	X	X	X	X	X
4)	Germany		X	X	X	X	X	X	X	X	X	X	X	X	X
5)	Denmark	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6)	Estonia	X	X	X	X	X	X	X	X	X	X	X	X	X	X
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

Table A.2. Descriptive statistics country-level characteristics

	Mean	Minimum	Maximum	Std. dev.
Ratification UN-declaration <5 years	0.09	0.00	1.00	0.28
Ratification UN-declaration 6-9 years	0.56	0.00	1.00	0.50
Ratification UN-declaration 10> years	0.35	0.00	1.00	0.48
Active Labour Market Policies	0.00	-0.07	0.81	0.12
EPL regular workers	0.00	-1.28	2.04	0.52
EPL temporary workers	0.01	-1.48	1.89	0.86
Share of temporary contracts	0.04	-10.97	18.83	6.52
Days paid by employer in case of sickness	0.40	-76.20	653.80	130.35
Share GDP on disability benefits	0.00	-1.16	2.54	0.59
Disabled people should participate	0.00	-0.12	0.36	0.12
Disabled job candidate disadvantaged	0.00	-0.21	0.13	0.08
Discrimination of disabled people widespread	0.00	-0.54	0.38	0.18
Employment rate	0.06	-18.43	18.07	7.94
Part-time employment rate	0.02	-20.44	51.26	15.77
GDP in PPS	0.03	-752473.40	2243613.00	771807.20
Agriculture, forestry and fishing sector	4.68	0.79	14.43	3.24
Industry and construction sector	34.42	20.45	52.01	7.54
Commercial services sector	36.52	25.47	51.77	5.58
Non-profit sector	24.38	16.01	35.10	4.27

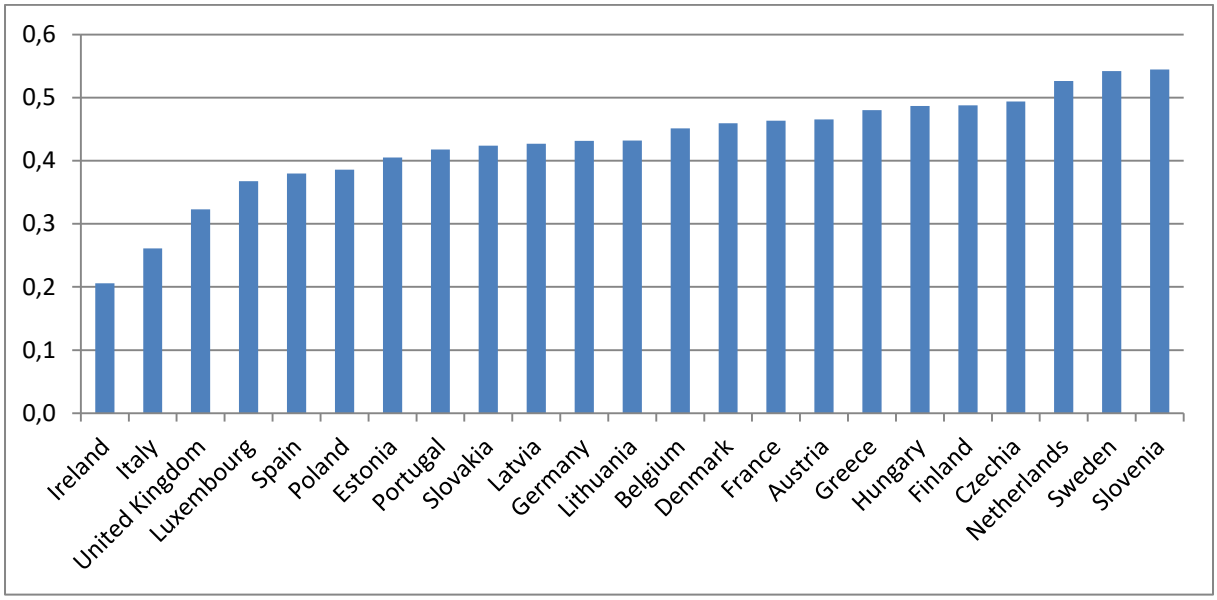
Note: all interval variables are centred on the mean

Figure A.1 Mean score on public opinion on participation by country (1-5; higher=disagree)



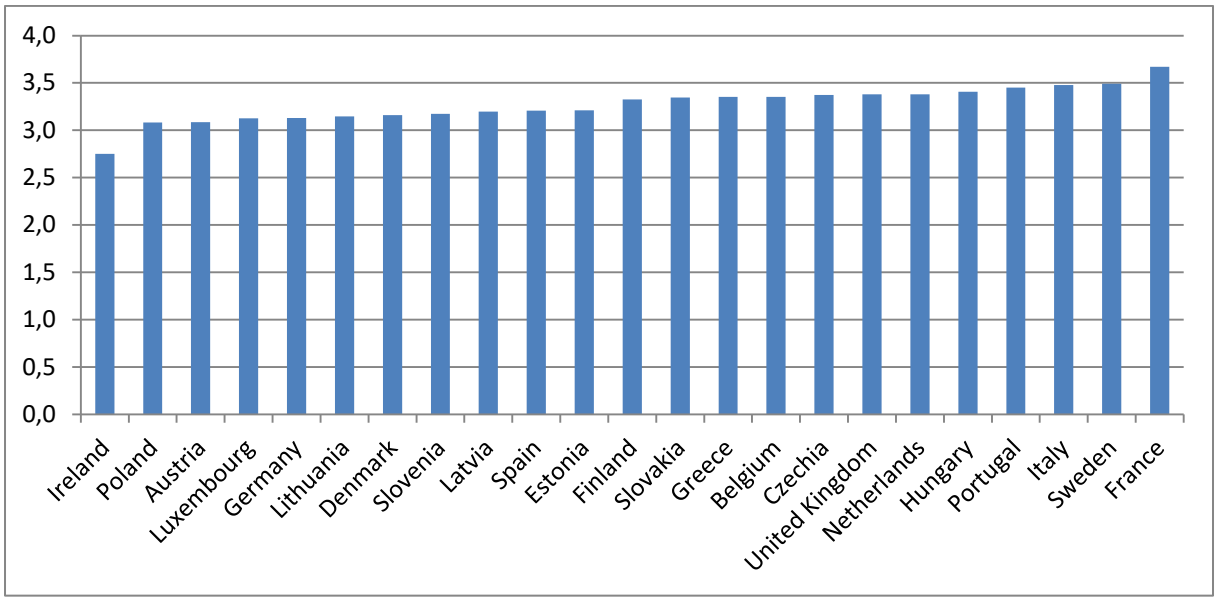
Source: Eurobarometer 2012a

Figure A.2 Mean score on public opinion about job candidate by country (0-1; higher=more disadvantaged)



Source: Eurobarometer 2012b

Figure A.3 Mean score on perceived discrimination in society by country (1-5; higher=more widespread)



Source: Eurobarometer 2012b

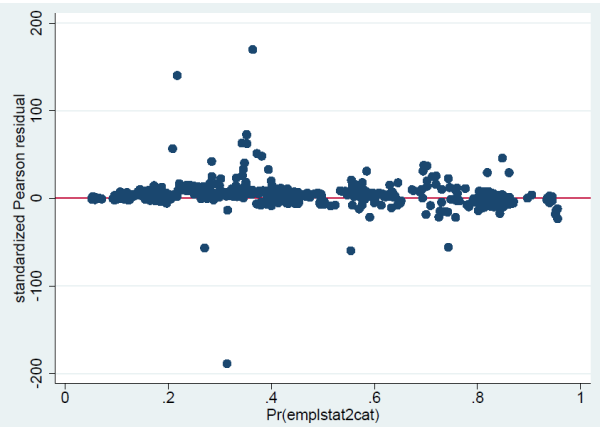
Appendix B: Outlier and influential case analysis

We did a robustness check to examine if there any outliers or influential cases. 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 lots in figures B1c and d and B1g. These plots show that there are no large residuals anymore and no large values of Dbeta.

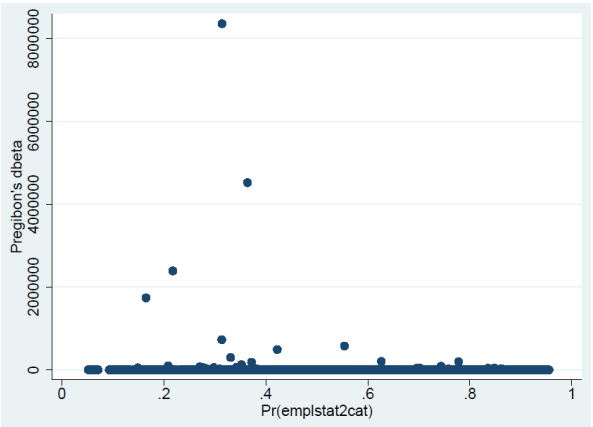
In the next step, we run the analysis without these influential cases. Model 1 with all individual-level variables included, was used as the base model, presented in Table B1. This outlier test was done for men and women separately. For the male respondents, 45,986 (2.8%) cases were deleted. For Model 1, however, this did not result in substantive changes. Based on these Dbeta values, a total of 28,941 (1.6%) 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. 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 (153,995 cases deleted; 8,8%). The model with the outlier dummy shows that this dummy is significant (b=0.152). 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=0.247). Nevertheless, the effects of Model 1 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 1. 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. We also ran Model 3 with the interaction between country dummies and disability status and find no substantive changes either (models available on request).

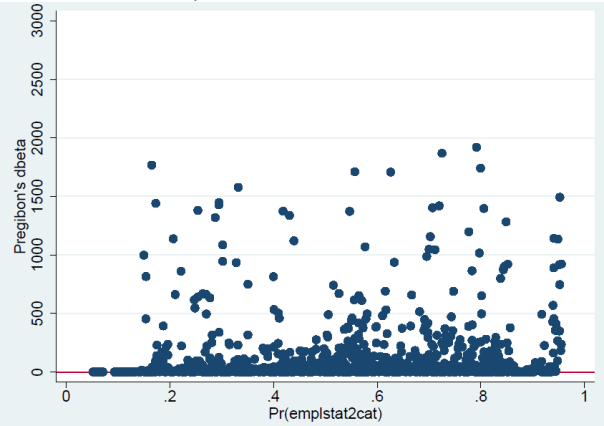
Figure B.1. Residuals and Dbeta plots



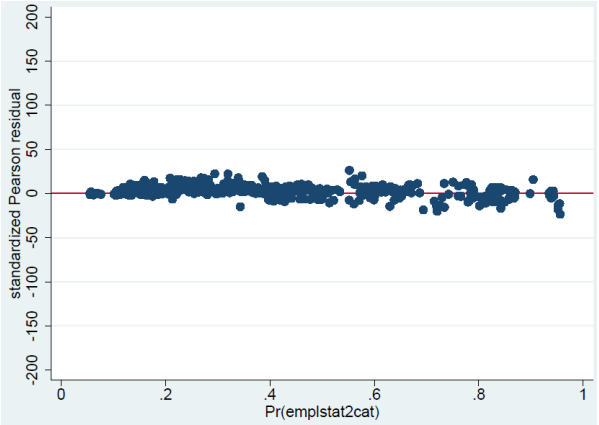
a. Residuals plot men



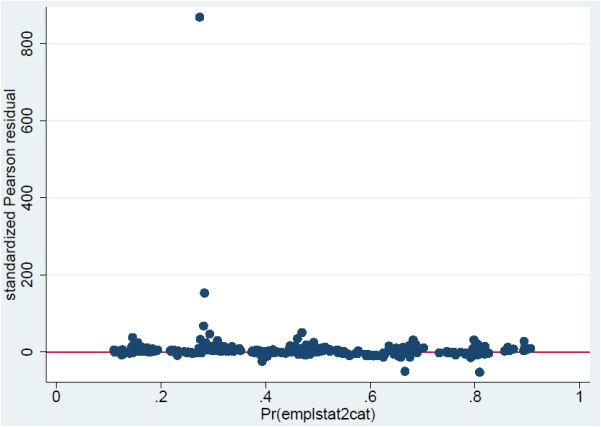
b. Dbeta plot men



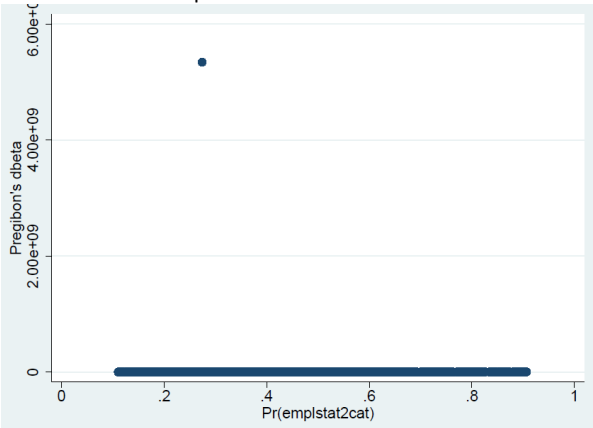
c. Dbeta plot 2 men



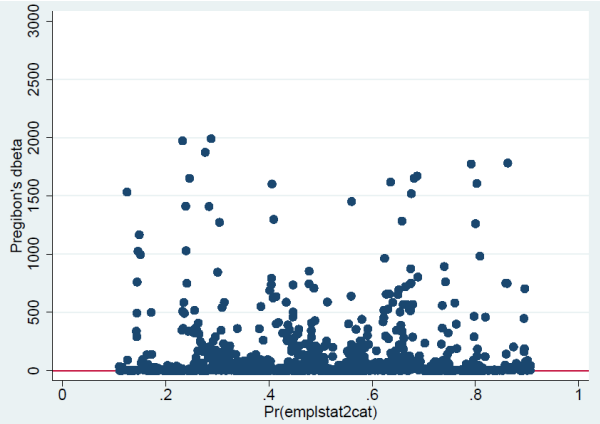
d. Residuals plot 2 men



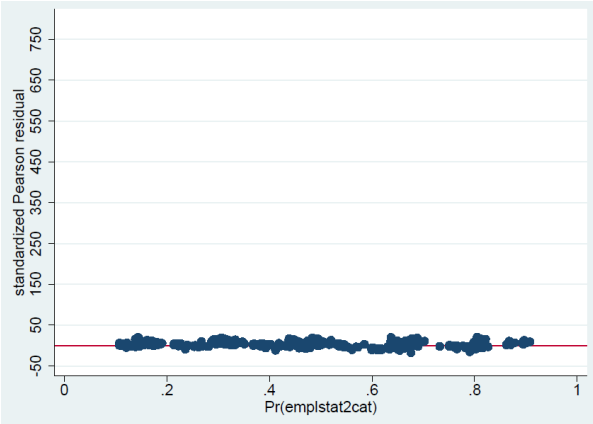
e. Residuals plot women



f. Dbeta plot women



g. Dbeta plot 2 women



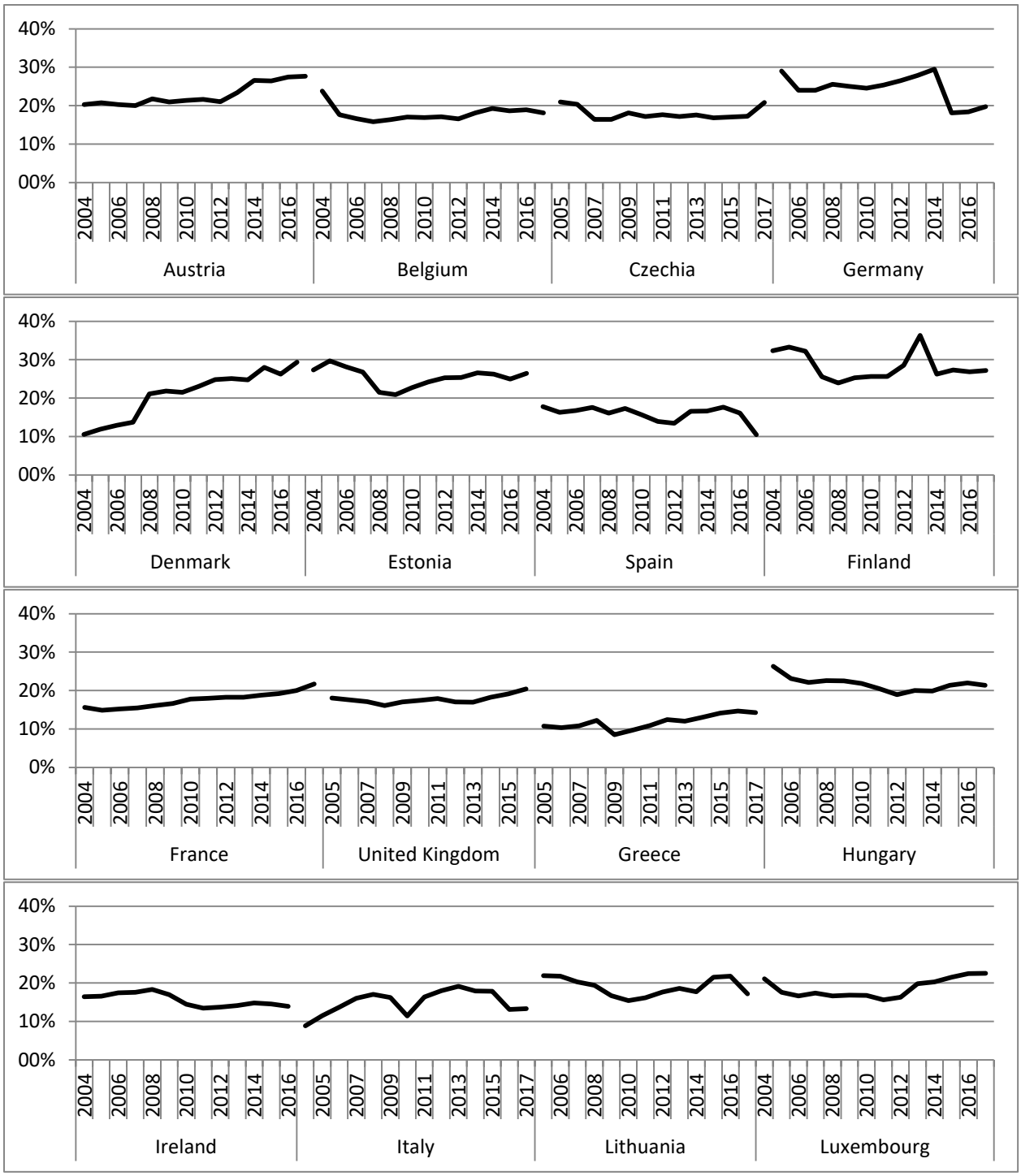
h. Residuals plot 2 women

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

	Men				Women			
	Model 1	Dbeta model	Model with outlier	Model without outliers	Model 1	Dbeta model	Model with outlier	Model without outliers
	b	b	b	b	b	b	b	b
Intercept	0.816***	0.787***	0.797***	0.795***	0.707***	0.714***	0.679***	0.659***
	(0.0929)	(0.0972)	(0.0942)	(0.0964)	(0.0576)	(0.0594)	(0.0542)	(0.0562)
Disabled	-1.166***	-1.187***	-1.165***	-1.174***	-0.714***	-0.727***	-0.714***	-0.710***
	(0.0694)	(0.0710)	(0.0693)	(0.0720)	(0.0680)	(0.0679)	(0.0679)	(0.0662)
Outliers			0.152*				0.247**	
			(0.0924)				(0.112)	
Age (18-30=ref.)								
- 31-50	1.934***	1.972***	1.935***	1.925***	1.417***	1.428***	1.418***	1.406***
	(0.0633)	(0.0649)	(0.0631)	(0.0625)	(0.0735)	(0.0733)	(0.0736)	(0.0734)
- 51-65	0.661***	0.708***	0.661***	0.656***	0.297***	0.292***	0.296***	0.287***
	(0.0688)	(0.0719)	(0.0689)	(0.0739)	(0.0722)	(0.0729)	(0.0725)	(0.0783)
	Educational level (Upper secondary/ Tertiary=ref.)							
- Primary/lower secondary	-1.216***	-1.234***	-1.216***	-1.210***	-1.568***	-1.579***	-1.568***	-1.561***
	(0.103)	(0.102)	(0.102)	(0.107)	(0.0910)	(0.0917)	(0.0915)	(0.0918)
- Upper secondary	-0.587***	-0.577***	-0.589***	-0.588***	-0.762***	-0.761***	-0.764***	-0.765***
	(0.0493)	(0.0501)	(0.0486)	(0.0511)	(0.0538)	(0.0540)	(0.0536)	(0.0571)
	Household type (one-person household=ref.)							
- Couple without children	0.0925	0.0644	0.0959	0.0829	-0.0631	-0.0642	-0.0590	-0.0650
	(0.0842)	(0.0856)	(0.0849)	(0.0770)	(0.0657)	(0.0663)	(0.0666)	(0.0606)
- Single parent with children	-1.005***	-0.858***	-1.002***	-1.040***	-0.338***	-0.310***	-0.332***	-0.341***
	(0.103)	(0.0979)	(0.104)	(0.0937)	(0.0616)	(0.0635)	(0.0618)	(0.0648)
- Couple with children	0.248***	0.251***	0.252***	0.237***	-0.510***	-0.524***	-0.504***	-0.518***
	(0.0674)	(0.0650)	(0.0693)	(0.0615)	(0.0746)	(0.0722)	(0.0759)	(0.0711)
- Other	0.315***	0.322***	0.321***	0.312***	-0.138	-0.132	-0.130	-0.130
	(0.0931)	(0.0900)	(0.0942)	(0.0857)	(0.0935)	(0.0916)	(0.0946)	(0.0884)
Year (2004=ref.)								
- 2005	-0.0942	-0.0909	-0.101	-0.0868	0.0201	0.0128	0.00698	0.00876
	(0.118)	(0.121)	(0.116)	(0.127)	(0.0764)	(0.0766)	(0.0739)	(0.0731)
- 2006	-0.0821	-0.0990	-0.0866	-0.0641	0.0409	0.0371	0.0310	0.0506
	(0.0881)	(0.0893)	(0.0860)	(0.0906)	(0.0663)	(0.0659)	(0.0637)	(0.0625)
- 2007	-0.0284	-0.0630	-0.0289	-0.00525	0.0797	0.0775	0.0751	0.106
	(0.0851)	(0.0876)	(0.0826)	(0.0845)	(0.0724)	(0.0716)	(0.0679)	(0.0688)
- 2008	-0.00532	-0.0205	0.00687	0.0351	0.149**	0.145**	0.167***	0.206***
	(0.0787)	(0.0816)	(0.0751)	(0.0771)	(0.0691)	(0.0688)	(0.0630)	(0.0675)
- 2009	-0.216**	-0.219**	-0.204**	-0.180**	0.0521	0.0465	0.0694	0.106*
	(0.0899)	(0.0931)	(0.0868)	(0.0894)	(0.0688)	(0.0687)	(0.0592)	(0.0637)
- 2010	-0.299***	-0.309***	-0.300***	-0.284***	0.0123	-0.00414	0.00871	0.104
	(0.0993)	(0.102)	(0.0850)	(0.0921)	(0.0737)	(0.0736)	(0.0614)	(0.0855)
- 2011	-0.301***	-0.311***	-0.285***	-0.268***	0.0252	0.0183	0.0491	0.0813
	(0.0996)	(0.102)	(0.0969)	(0.0994)	(0.0778)	(0.0777)	(0.0659)	(0.0700)
- 2012	-0.331***	-0.339***	-0.325***	-0.287***	0.00755	-0.000249	0.0144	0.0476
	(0.102)	(0.104)	(0.103)	(0.106)	(0.0749)	(0.0752)	(0.0713)	(0.0778)
- 2013	-0.337***	-0.346***	-0.332***	-0.313***	0.00638	-0.000825	0.0134	0.0367
	(0.105)	(0.106)	(0.106)	(0.111)	(0.0814)	(0.0815)	(0.0785)	(0.0852)
- 2014	-0.301***	-0.306***	-0.287***	-0.275**	0.0444	0.0384	0.0649	0.0920
	(0.107)	(0.109)	(0.105)	(0.109)	(0.0879)	(0.0881)	(0.0777)	(0.0837)
- 2015	-0.250**	-0.251**	-0.245**	-0.244**	0.0630	0.0489	0.0686	0.0831
	(0.107)	(0.109)	(0.102)	(0.110)	(0.101)	(0.101)	(0.0907)	(0.0956)
- 2016	-0.216*	-0.218*	-0.226**	-0.219*	0.0974	0.0804	0.0781	0.143
	(0.112)	(0.115)	(0.101)	(0.118)	(0.112)	(0.112)	(0.101)	(0.126)
- 2017	-0.160	-0.165	-0.170	-0.185	0.141	0.133	0.122	0.121
	(0.154)	(0.156)	(0.145)	(0.160)	(0.205)	(0.205)	(0.194)	(0.215)
N	1,650,714	1,604,728	1,650,714	1,505,483	1,785,051	1,756,110	1,785,051	1,631,056
Pseudo R^2	0.164	0.163	0.164	0.164	0.131	0.132	0.132	0.130

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

Figure B.2 Trends in disability status by country



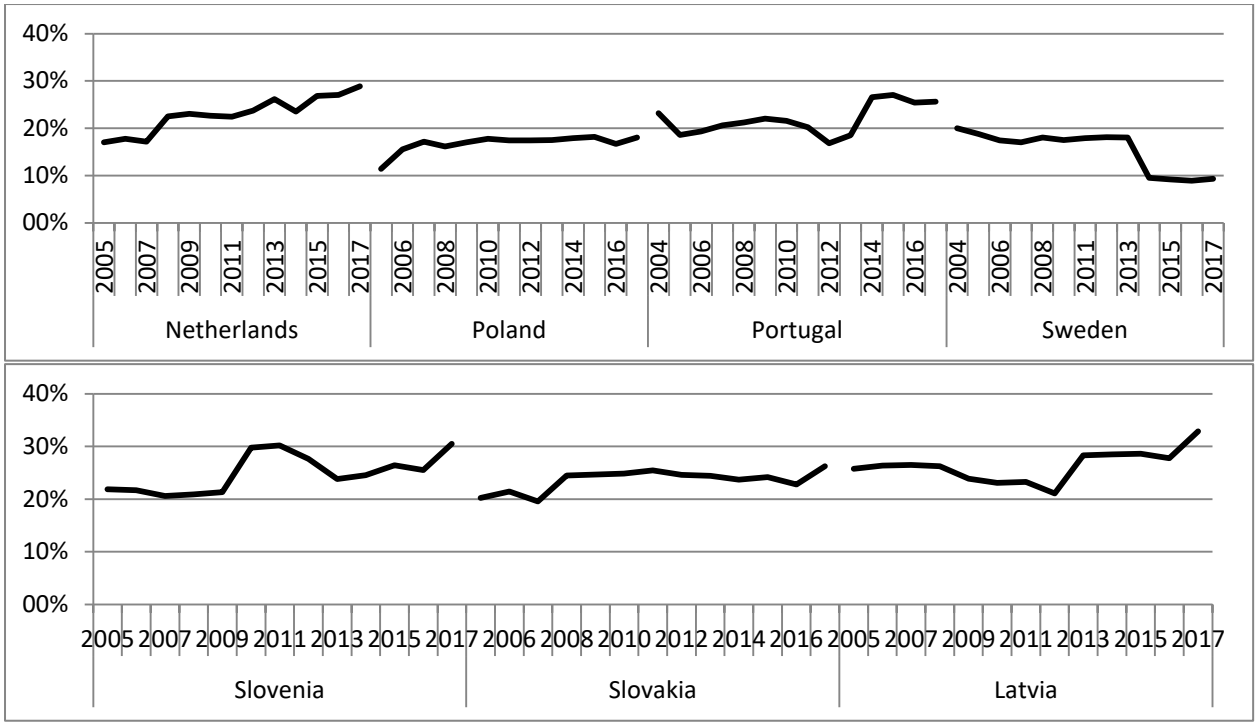
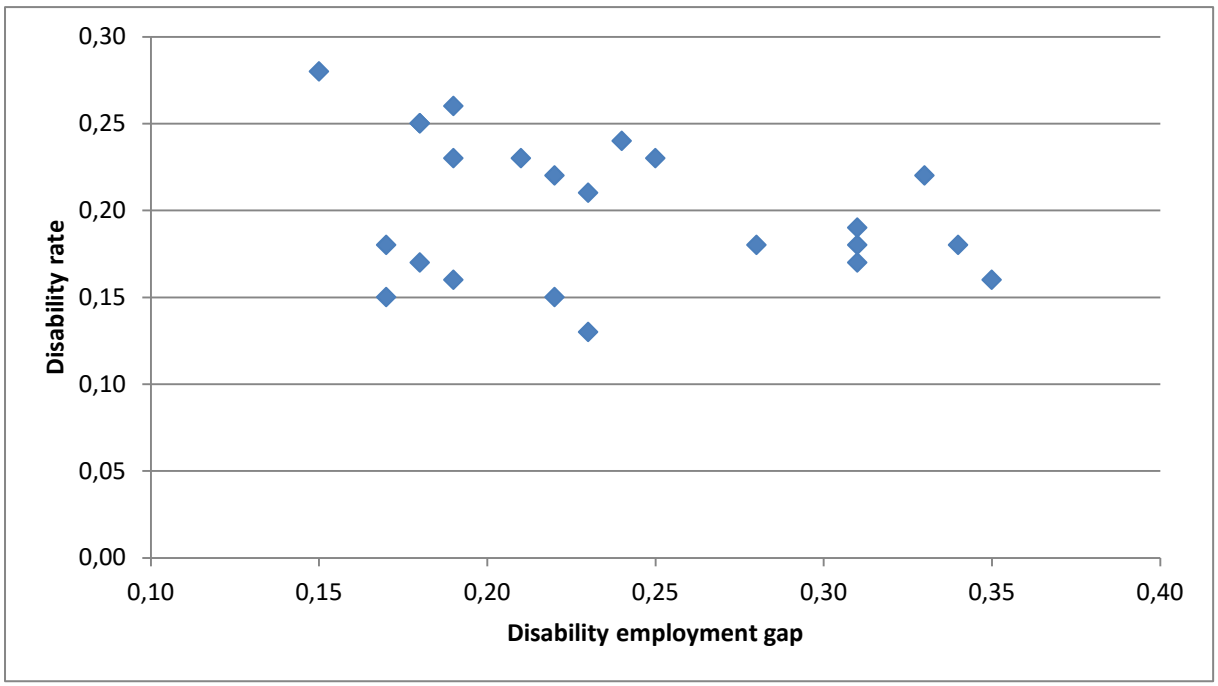


Figure C.3. Correlation between disability rates and the disability employment gap



Note: the Pearson correlation is -0.10.

Appendix C. Full models

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

	Men			Women		
	Model 2a	Model 2b	Model 2c	Model 2a	Model 2b	Model 2c
	b	b	b	b	b	b
Intercept	1.224***	1.229***	2.542	1.092***	1.197***	3.590**
	(0.0947)	(0.0833)	(1.691)	(0.0885)	(0.0984)	(1.450)
Disabled (not disabled=ref.)	-1.194***	-1.188***	-1.190***	-0.793***	-1.074***	-1.084***
	(0.0695)	(0.0160)	(0.0208)	(0.0625)	(0.0129)	(0.0133)
Country (Netherlands=ref.)						
Austria	-0.204***	-0.165***	-0.402*	-0.329***	-0.440***	-0.405**
	(0.0217)	(0.0217)	(0.224)	(0.0167)	(0.0132)	(0.193)
Belgium	-0.720***	-0.708***	-0.540***	-0.536***	-0.578***	-0.163
	(0.0212)	(0.0171)	(0.202)	(0.0206)	(0.0150)	(0.204)
Czechia	-0.264***	-0.132***	-0.896**	-0.432***	-0.478***	-0.218
	(0.0243)	(0.0195)	(0.355)	(0.0221)	(0.0159)	(0.410)
Germany	-0.313***	-0.259***	-1.253***	-0.197***	-0.234***	-0.776***
	(0.0177)	(0.0190)	(0.269)	(0.0111)	(0.01000)	(0.264)
Denmark	0.0544***	0.0585***	0.0298	0.256***	0.279***	0.148
	(0.0141)	(0.0184)	(0.194)	(0.00737)	(0.00765)	(0.259)
Estonia	-0.539***	-0.551***	-0.844***	-0.272***	-0.394***	-0.433
	(0.0306)	(0.0310)	(0.319)	(0.0225)	(0.0220)	(0.375)
Spain	-0.672***	-0.710***	-0.886***	-0.702***	-0.841***	-0.383
	(0.0358)	(0.0325)	(0.240)	(0.0387)	(0.0298)	(0.302)
Finland	-0.348***	-0.443***	-0.474*	-0.0840***	-0.276***	-0.397
	(0.00845)	(0.00661)	(0.268)	(0.00593)	(0.00710)	(0.334)
France	-0.578***	-0.624***	-0.964***	-0.273***	-0.413***	-0.506*
	(0.0211)	(0.0162)	(0.253)	(0.0174)	(0.0103)	(0.284)
UK	-0.187***	-0.0249	-0.570***	-0.172***	-0.164***	-0.338*
	(0.0179)	(0.0179)	(0.185)	(0.0164)	(0.0110)	(0.205)
Greece	-1.041***	-1.057***	-0.845**	-1.218***	-1.329***	-0.356
	(0.0389)	(0.0294)	(0.332)	(0.0423)	(0.0313)	(0.405)
Hungary	-0.891***	-0.781***	-0.900**	-0.677***	-0.709***	-0.202
	(0.0337)	(0.0315)	(0.354)	(0.0238)	(0.0196)	(0.413)
Ireland	-0.823***	-0.747***	-0.740***	-0.775***	-0.803***	-0.466*
	(0.0273)	(0.0233)	(0.203)	(0.0300)	(0.0214)	(0.248)
Italy	-0.557***	-0.624***	-1.092***	-0.772***	-0.918***	-0.360
	(0.0329)	(0.0295)	(0.267)	(0.0341)	(0.0240)	(0.335)
Lithuania	-0.934***	-0.859***	-0.898***	-0.545***	-0.520***	-0.554
	(0.0363)	(0.0320)	(0.331)	(0.0282)	(0.0235)	(0.390)
Luxembourg	-0.414***	-0.451***	-0.523**	-0.397***	-0.552***	0.0376
	(0.0253)	(0.0228)	(0.243)	(0.0273)	(0.0210)	(0.204)
Poland	-0.809***	-0.728***	-1.130***	-0.813***	-0.855***	-0.634
	(0.0396)	(0.0336)	(0.396)	(0.0355)	(0.0264)	(0.434)
Portugal	-0.377***	-0.424***	-0.649**	-0.00443	-0.140***	-0.0926
	(0.0391)	(0.0369)	(0.329)	(0.0367)	(0.0329)	(0.387)
Sweden	-0.0513***	-0.0661***	-0.245	0.228***	0.206***	-0.168
	(0.0111)	(0.00636)	(0.226)	(0.00992)	(0.00748)	(0.270)
Slovenia	-0.799***	-0.886***	-1.189***	-0.525***	-0.679***	-0.586
	(0.0318)	(0.0293)	(0.349)	(0.0264)	(0.0233)	(0.395)
Slovakia	-0.616***	-0.655***	-0.975***	-0.441***	-0.529***	0.00422
	(0.0485)	(0.0463)	(0.347)	(0.0318)	(0.0303)	(0.417)
Latvia	-0.699***	-0.724***	-0.735**	-0.325***	-0.438***	-0.340
	(0.0321)	(0.0314)	(0.307)	(0.0198)	(0.0209)	(0.372)
Interactions disability status x country						
Disabled x Austria		-0.126***	-0.124***		0.368***	0.370***
		(0.00950)	(0.00849)		(0.0100)	(0.00913)
Disabled x Belgium		-0.052***	-0.0463***		0.0408***	0.0527***
		(0.0115)	(0.00766)		(0.00955)	(0.00788)
Disabled x Czechia		-0.535***	-0.532***		0.0517***	0.0586***

		(0.0124)	(0.0133)		(0.0114)	(0.00960)
Disabled x Germany		-0.159***	-0.156***		0.101***	0.118***
		(0.0109)	(0.0114)		(0.0114)	(0.00854)
Disabled x Denmark		-0.0170	-0.000234		-0.107***	-0.067***
		(0.0196)	(0.0117)		(0.00829)	(0.0102)
Disabled x Estonia		0.0472***	0.0344**		0.400***	0.403***
		(0.0141)	(0.0143)		(0.0179)	(0.0165)
Disabled x Spain		0.236***	0.215***		0.597***	0.606***
		(0.0131)	(0.00954)		(0.0161)	(0.0137)
Disabled x Finland		0.283***	0.286***		0.578***	0.588***
		(0.00855)	(0.00987)		(0.00916)	(0.00834)
Disabled x France		0.235***	0.233***		0.545***	0.555***
		(0.00699)	(0.00612)		(0.0126)	(0.0119)
Disabled x UK		-0.649***	-0.647***		-0.171***	-0.163***
		(0.0149)	(0.00872)		(0.00760)	(0.00599)
Disabled x Greece		0.167***	0.207***		0.501***	0.544***
		(0.0121)	(0.0135)		(0.0173)	(0.0165)
Disabled x Hungary		-0.478***	-0.475***		0.0195	0.0269*
		(0.0149)	(0.0110)		(0.0173)	(0.0149)
Disabled x Ireland		-0.435***	-0.480***		-0.147***	-0.144***
		(0.0195)	(0.0132)		(0.0107)	(0.00804)
Disabled x Italy		0.412***	0.417***		0.673***	0.685***
		(0.0112)	(0.0110)		(0.0164)	(0.0145)
Disabled x Lithuania		-0.341***	-0.374***		-0.245***	-0.251***
		(0.0112)	(0.0112)		(0.0147)	(0.0118)
Disabled x Luxembourg		0.186***	0.194***		0.617***	0.627***
		(0.00794)	(0.00706)		(0.0118)	(0.0108)
Disabled x Poland		-0.414***	-0.444***		-0.0222*	-0.0215
		(0.00891)	(0.0108)		(0.0114)	(0.0132)
Disabled x Portugal		0.228***	0.231***		0.467***	0.485***
		(0.0113)	(0.0117)		(0.0174)	(0.0174)
Disabled x Sweden		0.0822***	0.0899***		-0.00399	0.00305
		(0.0153)	(0.00850)		(0.0128)	(0.0107)
Disabled x Slovenia		0.320***	0.327***		0.526***	0.548***
		(0.00752)	(0.00965)		(0.0121)	(0.0115)
Disabled x Slovakia		0.158***	0.155***		0.277***	0.289***
		(0.0135)	(0.0142)		(0.0175)	(0.0173)
Disabled x Latvia		0.0933***	0.0683***		0.357***	0.359***
		(0.0104)	(0.0120)		(0.0152)	(0.0141)
Individual-level control variables						
Age (18-30=ref.)						
- 31-50	1.955***	1.958***	1.967***	1.459***	1.461***	1.463***
	(0.0631)	(0.0641)	(0.0635)	(0.0730)	(0.0727)	(0.0722)
- 51-65	0.669***	0.674***	0.676***	0.321***	0.321***	0.322***
	(0.0699)	(0.0699)	(0.0716)	(0.0760)	(0.0765)	(0.0767)
Educational level (Upper secondary/ Tertiary=ref.)						
- Primary/lower secondary	-1.200***	-1.202***	-1.216***	-1.539***	-1.546***	-1.553***
	(0.108)	(0.108)	(0.108)	(0.0772)	(0.0772)	(0.0756)
- Upper secondary	-0.570***	-0.565***	-0.568***	-0.752***	-0.752***	-0.754***
	(0.0388)	(0.0390)	(0.0391)	(0.0501)	(0.0500)	(0.0499)
Household type (one-person household=ref.)						
- Couple without children	0.157*	0.153	0.152	-0.0272	-0.0352	-0.0336
	(0.0940)	(0.0941)	(0.0945)	(0.0721)	(0.0734)	(0.0734)
- Single parent with children	-0.961***	-0.971***	-0.964***	-0.323***	-0.331***	-0.325***
	(0.107)	(0.108)	(0.110)	(0.0662)	(0.0671)	(0.0667)
- Couple with children	0.351***	0.343***	0.349***	-0.437***	-0.447***	-0.444***
	(0.0825)	(0.0827)	(0.0842)	(0.0852)	(0.0866)	(0.0864)
- Other	0.480***	0.471***	0.472***	0.0315	0.0211	0.0234
	(0.122)	(0.123)	(0.124)	(0.108)	(0.110)	(0.110)
Year (2004=ref.)						
- 2005	-0.0663	-0.0697	0.0284	0.0216	0.0163	-0.00821

	(0.0904)	(0.0904)	(0.0351)	(0.0384)	(0.0410)	(0.0263)
- 2006	-0.0431	-0.0463	9.65e-05	0.0402	0.0344	-0.0430
	(0.0682)	(0.0646)	(0.0332)	(0.0321)	(0.0351)	(0.0318)
- 2007	-0.00128	-0.00585	0.00770	0.0731*	0.0657	-0.0451
	(0.0686)	(0.0637)	(0.0401)	(0.0425)	(0.0454)	(0.0331)
- 2008	0.0184	0.0134	0.0247	0.127***	0.121***	-0.0188
	(0.0631)	(0.0568)	(0.0486)	(0.0415)	(0.0459)	(0.0430)
- 2009	-0.170**	-0.176**	0.00772	0.0560	0.0495	-0.0448
	(0.0825)	(0.0764)	(0.0540)	(0.0405)	(0.0435)	(0.0434)
- 2010	-0.242***	-0.247***	0.00863	0.0234	0.0179	-0.0567
	(0.0904)	(0.0857)	(0.0630)	(0.0460)	(0.0481)	(0.0472)
- 2011	-0.254***	-0.262***	-0.00872	0.0217	0.0148	-0.0631
	(0.0911)	(0.0853)	(0.0660)	(0.0392)	(0.0410)	(0.0533)
- 2012	-0.288***	-0.297***	-0.0140	-0.00207	-0.00989	-0.0985
	(0.100)	(0.0945)	(0.0663)	(0.0389)	(0.0410)	(0.0609)
- 2013	-0.288***	-0.299***	0.00935	0.00405	-0.00555	-0.0926
	(0.104)	(0.0985)	(0.0775)	(0.0424)	(0.0442)	(0.0636)
- 2014	-0.251**	-0.261***	0.0202	0.0483	0.0394	-0.0858
	(0.104)	(0.0992)	(0.0863)	(0.0448)	(0.0459)	(0.0745)
- 2015	-0.190*	-0.200**	0.0462	0.0814*	0.0716	-0.0951
	(0.0975)	(0.0928)	(0.0925)	(0.0450)	(0.0469)	(0.0785)
- 2016	-0.153	-0.161*	0.0435	0.123***	0.116**	-0.0948
	(0.0984)	(0.0943)	(0.104)	(0.0471)	(0.0484)	(0.0816)
- 2017	-0.0558	-0.0660	0.0356	0.174***	0.165***	-0.0975
	(0.107)	(0.104)	(0.104)	(0.0579)	(0.0595)	(0.0892)
Country-level control variables						
Employment rate			0.0422***			0.0451***
			(0.00455)			(0.00609)
Part-time employment rate			-0.0180			0.00250
			(0.0135)			(0.00504)
GDP (in pps)			3.12e-07***			2.29e-07**
			(1.10e-07)			(9.84e-08)
Sector (Agriculture = ref.)			0.00113			-0.0203
Industry & Construction sector			(0.0177)			(0.0170)
			-0.0178			-0.0349***
Commercial services sector			(0.0187)			(0.0132)
			-0.0240			-0.0215
Non-profit sector			(0.0185)			(0.0197)
N	1,650,714	1,650,714	1,650,714	1,785,051	1,785,051	1,785,051
Pseudo R^2	0.173	0.175	0.179	0.146	0.148	0.149

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

Table C.2 Logistic regression analysis with robust standard errors; full models labour market characteristics for men

	Model 3a	Model 3b	Model 4a	Model 4b	Model 5a	Model 5b	Model 5c	Model 5d	Model 5e	Model 5f	Model 5g	Model 5h	Model 6a	Model 6b	Model 7a	Model 7b
	b	b	b	b	b	b	b	b	b	B	b	b	b	b	B	b
Intercept	0.143	0.116	-0.405	-0.407	-0.744	-0.753	-0.234	-0.192	-0.798	-0.805	-1.551**	-1.528**	-0.172	-0.193	0.173	0.163
	(0.933)	(0.906)	(0.917)	(0.919)	(0.734)	(0.738)	(0.812)	(0.804)	(0.724)	(0.719)	(0.612)	(0.607)	(0.829)	(0.834)	(0.737)	(0.739)
Disabled	-	-	-	-	-	-	-	-	-1.201***	-	-1.199***	-1.196***	-1.200***	-1.198***	-	-
	1.199***	1.100***	1.200***	1.201***	1.200***	1.200***	1.202***	1.197***		1.201***					1.205***	1.206***
	(0.0691)	(0.145)	(0.0679)	(0.0666)	(0.0692)	(0.0616)	(0.0682)	(0.0585)	(0.0676)	(0.0685)	(0.0685)	(0.0488)	(0.0686)	(0.0673)	(0.0686)	(0.0690)
Duration ratification UN-declaration (0-5 years = ref.)																
- 6-9 years	-0.0103	0.0186														
	(0.170)	(0.133)														
- 10 or more years	0.0661	0.0961														
	(0.162)	(0.129)														
Disabled x 6-9 years		-0.107														
		(0.183)														
Disabled x 10 or more years		-0.112														
		(0.183)														
% GDP on ALMP			0.379	0.441**												
			(0.234)	(0.215)												
Disabled x % GDP on ALMP				-0.236												
				(0.439)												
% temporary contracts men									0.00639**	0.00569	0.00826**	0.00969**				
									(0.00291)	(0.00399)	(0.00250)	(0.00370)				
Disability x % temporary contracts men										0.00336		-0.00686				
										(0.0148)		(0.0118)				
EPL regular workers					0.134***	0.0885*					0.153***	0.119***				
					(0.0406)	(0.0529)					(0.0338)	(0.0374)				
Disability x EPL regular						0.203*						0.175*				
						(0.114)						(0.0958)				
EPL temporary workers							0.0185	-0.0226			-0.0431*	-0.0853***				
							(0.0256)	(0.0249)			(0.0221)	(0.0228)				
Disability x EPL temporary								0.179***				0.183***				
								(0.0463)				(0.0431)				
% GDP on disability benefits															0.137***	0.119***
															(0.0450)	(0.0419)
Disabled x % GDP on disability																0.0704

benefits																
Employers' sick pay													0.000352 (0.000268)	0.000279 (0.000259)		
Disability x Employers' sick pay s														0.000287 (0.000438)		(0.0684)
Individual level control variables																
Age (18-30=ref.)																
- 31-50	1.965***	1.965***	1.968***	1.968***	1.965***	1.966***	1.968***	1.968***	1.968***	1.968***	1.963***	1.963***	1.968***	1.968***	1.970***	1.971***
	(0.0629)	(0.0626)	(0.0629)	(0.0629)	(0.0627)	(0.0631)	(0.0629)	(0.0629)	(0.0635)	(0.0635)	(0.0633)	(0.0636)	(0.0625)	(0.0629)	(0.0628)	(0.0626)
- 51-65	0.671***	0.671***	0.671***	0.671***	0.671***	0.670***	0.673***	0.674***	0.673***	0.673***	0.670***	0.671***	0.672***	0.672***	0.673***	0.674***
	(0.0709)	(0.0707)	(0.0704)	(0.0704)	(0.0711)	(0.0710)	(0.0707)	(0.0707)	(0.0710)	(0.0712)	(0.0715)	(0.0714)	(0.0707)	(0.0705)	(0.0704)	(0.0703)
Educational level (Upper secondary/ Tertiary=ref.)																
- Primary/lower secondary	1.174***	1.174***	1.165***	1.165***	1.186***	1.184***	1.167***	1.170***	-1.173*** (0.107)	1.173*** (0.107)	-1.193*** (0.106)	-1.195*** (0.105)	-1.169*** (0.107)	-1.170*** (0.107)	1.165*** (0.107)	1.164*** (0.107)
- Upper secondary	0.557***	0.557***	0.562***	0.562***	0.558***	0.557***	0.558***	0.558***	-0.558*** (0.0399)	0.558*** (0.0398)	-0.558*** (0.0394)	-0.556*** (0.0394)	-0.564*** (0.0382)	-0.564*** (0.0382)	0.562*** (0.0399)	0.561*** (0.0398)
	(0.0383)	(0.0381)	(0.0392)	(0.0391)	(0.0387)	(0.0388)	(0.0393)	(0.0396)								
Household type (one-person household=ref.)																
- Couple without children	0.148 (0.0941)	0.148 (0.0944)	0.148 (0.0937)	0.147 (0.0944)	0.150 (0.0927)	0.147 (0.0928)	0.147 (0.0936)	0.144 (0.0930)	0.147 (0.0943)	0.147 (0.0942)	0.150 (0.0935)	0.145 (0.0932)	0.149 (0.0930)	0.150 (0.0922)	0.153 (0.0954)	0.154 (0.0961)
- Single parent with children	0.969***	0.968***	0.970***	0.971***	0.970***	0.971***	0.971***	0.976***	-0.971*** (0.106)	0.971*** (0.106)	-0.969*** (0.105)	-0.975*** (0.106)	-0.969*** (0.105)	-0.969*** (0.105)	0.965*** (0.108)	0.964*** (0.108)
	(0.107)	(0.108)	(0.105)	(0.106)	(0.105)	(0.106)	(0.106)	(0.106)								
- Couple with children	0.348***	0.349***	0.347***	0.347***	0.347***	0.345***	0.346***	0.342***	0.345***	0.345***	0.348***	0.343***	0.348***	0.348***	0.354***	0.355***
	(0.0820)	(0.0822)	(0.0806)	(0.0810)	(0.0802)	(0.0807)	(0.0812)	(0.0810)	(0.0811)	(0.0811)	(0.0807)	(0.0810)	(0.0807)	(0.0802)	(0.0831)	(0.0832)
- Other	0.475***	0.475***	0.476***	0.475***	0.476***	0.473***	0.475***	0.470***	0.472***	0.472***	0.474***	0.467***	0.476***	0.477***	0.488***	0.488***
	(0.121)	(0.121)	(0.120)	(0.120)	(0.120)	(0.120)	(0.120)	(0.120)	(0.120)	(0.120)	(0.120)	(0.120)	(0.120)	(0.119)	(0.122)	(0.123)
Year (2004=ref.)																
- 2005	-0.00133	-0.000770	-0.0108	-0.0115	0.0117	0.0110	-0.000422	0.00196	-0.00172	-0.00102	0.00693	0.00802	0.00506	0.00449	-0.0274	-0.0258
	(0.0441)	(0.0435)	(0.0441)	(0.0439)	(0.0440)	(0.0431)	(0.0445)	(0.0443)	(0.0401)	(0.0409)	(0.0409)	(0.0399)	(0.0480)	(0.0475)	(0.0474)	(0.0464)
- 2006	-0.0538	-0.0533	-0.0578	-0.0585	-0.0399	-0.0412	-0.0531	-0.0516	-0.0544	-0.0538	-0.0439	-0.0439	-0.0449	-0.0455	-0.0651	-0.0632
	(0.0471)	(0.0462)	(0.0484)	(0.0478)	(0.0474)	(0.0459)	(0.0491)	(0.0491)	(0.0444)	(0.0443)	(0.0447)	(0.0426)	(0.0536)	(0.0528)	(0.0443)	(0.0434)
- 2007	-0.0422	-0.0416	-0.0509	-0.0516	-0.0307	-0.0322	-0.0418	-0.0417	-0.0447	-0.0443	-0.0364	-0.0378	-0.0338	-0.0346	-0.0527	-0.0508
	(0.0563)	(0.0551)	(0.0558)	(0.0549)	(0.0548)	(0.0531)	(0.0571)	(0.0569)	(0.0540)	(0.0541)	(0.0532)	(0.0508)	(0.0615)	(0.0606)	(0.0528)	(0.0521)
- 2008	-0.0262	-0.0256	-0.0393	-0.0399	-0.0147	-0.0166	-0.0267	-0.0257	-0.0295	-0.0290	-0.0206	-0.0216	-0.0173	-0.0184	-0.0383	-0.0366
	(0.0584)	(0.0574)	(0.0574)	(0.0567)	(0.0569)	(0.0551)	(0.0583)	(0.0580)	(0.0554)	(0.0558)	(0.0553)	(0.0527)	(0.0632)	(0.0620)	(0.0563)	(0.0556)
- 2009	-0.0744	-0.0736	-0.0861	-0.0867	-0.0755	-0.0766	-0.0741	-0.0729	-0.0750	-0.0747	-0.0817	-0.0819	-0.0621	-0.0633	-0.0955*	-0.0937*
	(0.0591)	(0.0577)	(0.0573)	(0.0567)	(0.0599)	(0.0580)	(0.0591)	(0.0591)	(0.0549)	(0.0554)	(0.0569)	(0.0548)	(0.0645)	(0.0633)	(0.0525)	(0.0518)
- 2010	-0.0777	-0.0769	-0.0920*	-0.0927*	-0.0801	-0.0804	-0.0786	-0.0777	-0.0832	-0.0830	-0.0914	-0.0911*	-0.0655	-0.0665	-0.0972**	-0.0955**

	(0.0576)	(0.0558)	(0.0543)	(0.0535)	(0.0585)	(0.0571)	(0.0569)	(0.0572)	(0.0533)	(0.0536)	(0.0566)	(0.0550)	(0.0649)	(0.0639)	(0.0488)	(0.0480)
- 2011	-0.0972*	-0.0964*	-0.107**	-0.108**	-0.0933	-0.0943*	-0.0971*	-0.0973*	-0.104**	-0.103*	-0.106*	-0.108**	-0.0803	-0.0811	-0.112**	-0.110**
	(0.0571)	(0.0556)	(0.0541)	(0.0532)	(0.0575)	(0.0558)	(0.0572)	(0.0574)	(0.0525)	(0.0529)	(0.0548)	(0.0528)	(0.0666)	(0.0657)	(0.0486)	(0.0478)
- 2012	-0.111*	-0.110**	-0.120**	-0.121**	-0.101*	-0.102*	-0.112**	-0.112**	-0.116**	-0.116**	-0.110**	-0.111**	-0.0915	-0.0925	-	-
															0.125***	0.123***
	(0.0569)	(0.0556)	(0.0533)	(0.0524)	(0.0559)	(0.0544)	(0.0555)	(0.0557)	(0.0510)	(0.0513)	(0.0530)	(0.0511)	(0.0670)	(0.0660)	(0.0465)	(0.0458)
- 2013	-0.104	-0.104	-0.110*	-0.110*	-0.0849	-0.0859	-0.105*	-0.106*	-0.109*	-0.108*	-0.0913	-0.0933*	-0.0819	-0.0827	-0.113**	-0.112**
	(0.0648)	(0.0638)	(0.0595)	(0.0586)	(0.0603)	(0.0586)	(0.0600)	(0.0603)	(0.0567)	(0.0571)	(0.0584)	(0.0563)	(0.0736)	(0.0728)	(0.0500)	(0.0497)
- 2014	-0.114	-0.113	-0.116*	-0.117*	-0.0914	-0.0925	-0.114*	-0.116*	-0.120*	-0.120*	-0.100	-0.103	-0.0888	-0.0893	-0.117**	-0.115**
	(0.0726)	(0.0715)	(0.0677)	(0.0667)	(0.0658)	(0.0645)	(0.0672)	(0.0676)	(0.0650)	(0.0654)	(0.0646)	(0.0629)	(0.0826)	(0.0821)	(0.0568)	(0.0561)
- 2015	-0.0949	-0.0941	-0.0949	-0.0956	-0.0750	-0.0756	-0.0949	-0.0977	-0.102	-0.102	-0.0854	-0.0885	-0.0670	-0.0676	-0.0952	-0.0930
	(0.0711)	(0.0701)	(0.0686)	(0.0679)	(0.0659)	(0.0646)	(0.0675)	(0.0679)	(0.0658)	(0.0661)	(0.0653)	(0.0637)	(0.0830)	(0.0824)	(0.0587)	(0.0581)
- 2016	-0.110	-0.109	-0.109	-0.110	-0.0901	-0.0903	-0.110	-0.113	-0.117	-0.116	-0.0987	-0.102	-0.0799	-0.0803	-0.105*	-0.103
	(0.0744)	(0.0739)	(0.0749)	(0.0744)	(0.0709)	(0.0700)	(0.0731)	(0.0733)	(0.0714)	(0.0718)	(0.0709)	(0.0695)	(0.0904)	(0.0900)	(0.0633)	(0.0628)
- 2017	-0.125*	-0.125*	-0.122*	-0.122*	-0.108	-0.110*	-0.122*	-0.124*	-0.128*	-0.128*	-0.119*	-0.121*	-0.0954	-0.0963	-0.122*	-0.120*
	(0.0695)	(0.0690)	(0.0741)	(0.0738)	(0.0668)	(0.0658)	(0.0739)	(0.0749)	(0.0734)	(0.0737)	(0.0698)	(0.0686)	(0.0909)	(0.0903)	(0.0622)	(0.0617)
Country- level control variables																
Employment rate	0.0559***	0.0559***	0.0534***	0.0533***	0.0525***	0.0526***	0.0555***	0.0555***	0.0554***	0.0553***	0.0516***	0.0517***	0.0552***	0.0552***	0.0527***	0.0528***
	(0.00429)	(0.00432)	(0.00539)	(0.00541)	(0.00387)	(0.00391)	(0.00482)	(0.00477)	(0.00491)	(0.00490)	(0.00365)	(0.00356)	(0.00479)	(0.00480)	(0.00424)	(0.00425)
Part-time employment rate	0.00524	0.00532	-0.000398	-0.000350	0.00357	0.00295	0.00937	0.00904	0.00447	0.00446	-0.00630	-0.00730	-0.00293	-0.00324	0.00145	0.00138
	(0.00999)	(0.00974)	(0.00837)	(0.00841)	(0.00632)	(0.00637)	(0.00641)	(0.00657)	(0.00655)	(0.00655)	(0.00602)	(0.00604)	(0.0117)	(0.0117)	(0.00783)	(0.00786)
GDP (in pps)	-3.42e-09	-3.31e-09	2.02e-08	2.02e-08	-8.00e-09	-8.62e-09	8.80e-09	1.27e-08	-1.13e-08	-1.16e-08	-3.62e-08	-3.32e-08	-7.40e-09	-6.74e-09	4.33e-08	4.28e-08
	(3.63e-08)	(3.57e-08)	(3.76e-08)	(3.78e-08)	(3.55e-08)	(3.66e-08)	(3.65e-08)	(3.60e-08)	(4.01e-08)	(4.00e-08)	(3.63e-08)	(3.68e-08)	(2.79e-08)	(2.83e-08)	(4.41e-08)	(4.41e-08)
Sector (agriculture = ref.)																
Industry & Construction	0.00390	0.00388	0.0108	0.0108	0.0127	0.0127	0.00979	0.00918	0.0145*	0.0146*	0.0186***	0.0180***	0.00804	0.00828	0.00608	0.00615
	(0.0104)	(0.0102)	(0.0102)	(0.0102)	(0.00836)	(0.00841)	(0.00929)	(0.00919)	(0.00793)	(0.00786)	(0.00680)	(0.00673)	(0.00934)	(0.00945)	(0.00826)	(0.00829)
Commercial services	-0.000879	-0.000822	0.00715	0.00727	0.00981	0.00973	0.00293	0.00295	0.00928	0.00935	0.0192***	0.0193***	0.000331	0.000438	0.00484	0.00489
	(0.00928)	(0.00911)	(0.0105)	(0.0105)	(0.00671)	(0.00672)	(0.00852)	(0.00851)	(0.00747)	(0.00737)	(0.00534)	(0.00517)	(0.00924)	(0.00927)	(0.00819)	(0.00818)
Non-profit sector	0.0125	0.0123	0.0148	0.0147	0.0215**	0.0219**	0.0152	0.0146	0.0224**	0.0225**	0.0326***	0.0326***	0.0184*	0.0188*	0.00102	0.00108
	(0.0107)	(0.0105)	(0.0100)	(0.0101)	(0.00979)	(0.00988)	(0.00985)	(0.00987)	(0.00975)	(0.00969)	(0.00934)	(0.00951)	(0.0105)	(0.0105)	(0.00959)	(0.00954)
N	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714
Pseudo R2	0.175	0.175	0.175	0.175	0.176	0.176	0.175	0.176	0.175	0.175	0.176	0.177	0.175	0.175	0.176	0.176

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

Table C.3 Logistic regression analysis with robust standard errors; full models labour market characteristics for women

	Model 3a	Model 3b	Model 4a	Model 4b	Model 5a	Model 5b	Model 5c	Model 5d	Model 5e	Model 5f	Model 5g	Model 5h	Model 6a	Model 6b	Model 7a	Model 7b
	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b
Intercept	-0.798	-0.785	-1.353	-1.407	-1.692*	-1.761**	-1.036	-0.991	-1.403	-1.398	-2.208**	-2.243**	-1.236	-1.217	-0.915	-0.918
	(1.517)	(1.519)	(1.372)	(1.397)	(0.881)	(0.882)	(1.244)	(1.251)	(1.140)	(1.126)	(0.965)	(0.960)	(1.175)	(1.184)	(1.206)	(1.206)
Disabled	-	-	-	-	-	-	-	-	-	-	-	-	-0.789***	-0.789***	-	-
	0.786***	0.799***	0.787***	0.784***	0.789***	0.791***	0.787***	0.775***	0.787***	0.784***	0.789***	0.779***			0.789***	0.788***
	(0.0613)	(0.159)	(0.0611)	(0.0587)	(0.0615)	(0.0569)	(0.0614)	(0.0486)	(0.0610)	(0.0586)	(0.0614)	(0.0442)	(0.0614)	(0.0618)	(0.0616)	(0.0615)
Duration ratification UN-declaration (0-5 years = ref.)																
- 6-9 years	0.0265	0.0210														
	(0.127)	(0.127)														
- 10 or more years	0.0841	0.0818														
	(0.132)	(0.136)														
Disabled x 6-9 years		0.0238														
		(0.189)														
Disabled x 10 or more years		0.00834														
		(0.188)														
% GDP on ALMP			0.388	0.585**												
			(0.252)	(0.243)												
Disabled x % GDP on ALMP				-												
				0.726***												
				(0.260)												
% temporary contracts men									0.00391	0.00126	0.00408	0.00363				
									(0.00422)	(0.00444)	(0.00344)	(0.00368)				
Disability x % temporary contracts men										0.0128		0.00260				
										(0.00958)		(0.00893)				
EPL regular workers					0.167***	0.133**					0.182***	0.163***				
					(0.0560)	(0.0625)					(0.0525)	(0.0534)				
Disability x EPL regular						0.161**						0.112*				
						(0.0817)						(0.0648)				
EPL temporary workers							0.0132	-0.0264			-0.0370	-				
												0.076***				
							(0.0237)	(0.0246)			(0.0262)	(0.0256)				
Disability x EPL temporary								0.188***				0.185***				
								(0.0348)				(0.0382)				
% GDP on disability benefits															0.122***	0.133***
															(0.0421)	(0.0468)
Disabled x % GDP on disability benefits																-0.0434
																(0.0775)

Days paid by employer in case of sickness													0.000537***	0.000582***		
													(0.000140)	(0.000146)		
Disability x Days paid by employer in case of sickness														-0.000158		
														(0.000353)		
Individual level control variables																
Age (18-30=ref.)																
- 31-50	1.458***	1.458***	1.459***	1.459***	1.457***	1.457***	1.460***	1.460***	1.459***	1.461***	1.455***	1.456***	1.460***	1.460***	1.460***	1.460***
	(0.0721)	(0.0720)	(0.0727)	(0.0726)	(0.0719)	(0.0719)	(0.0724)	(0.0722)	(0.0724)	(0.0725)	(0.0716)	(0.0715)	(0.0728)	(0.0728)	(0.0724)	(0.0724)
- 51-65	0.313***	0.313***	0.311***	0.309***	0.314***	0.313***	0.313***	0.314***	0.313***	0.315***	0.313***	0.314***	0.312***	0.311***	0.314***	0.314***
	(0.0747)	(0.0746)	(0.0748)	(0.0745)	(0.0753)	(0.0755)	(0.0747)	(0.0749)	(0.0751)	(0.0762)	(0.0754)	(0.0764)	(0.0752)	(0.0752)	(0.0747)	(0.0746)
Educational level (Upper secondary/ Tertiary=ref.)																
- Primary/lower secondary	-	-	-	-	-	-	-	-	-	-	-	-	-1.484***	-1.484***	-	-
	1.488***	1.488***	1.481***	1.482***	1.510***	1.510***	1.483***	1.487***	1.487***	1.489***	1.514***	1.519***			1.486***	1.487***
	(0.0847)	(0.0849)	(0.0911)	(0.0912)	(0.0786)	(0.0785)	(0.0883)	(0.0877)	(0.0869)	(0.0860)	(0.0780)	(0.0767)	(0.0900)	(0.0899)	(0.0896)	(0.0896)
- Upper secondary	-	-	-	-	-	-	-	-	-	-	-	-	-0.738***	-0.738***	-	-
	0.731***	0.731***	0.735***	0.736***	0.734***	0.733***	0.731***	0.732***	0.732***	0.732***	0.735***	0.735***			0.737***	0.737***
	(0.0486)	(0.0485)	(0.0486)	(0.0485)	(0.0485)	(0.0485)	(0.0495)	(0.0495)	(0.0493)	(0.0493)	(0.0484)	(0.0481)	(0.0488)	(0.0488)	(0.0498)	(0.0498)
Household type (one-person household=ref.)																
- Couple without children	-0.0320	-0.0321	-0.0298	-0.0320	-0.0286	-0.0306	-0.0308	-0.0350	-0.0306	-0.0315	-0.0274	-0.0331	-0.0265	-0.0271	-0.0289	-0.0292
	(0.0714)	(0.0721)	(0.0715)	(0.0721)	(0.0712)	(0.0715)	(0.0716)	(0.0718)	(0.0716)	(0.0717)	(0.0717)	(0.0723)	(0.0715)	(0.0709)	(0.0721)	(0.0724)
- Single parent with children	-	-	-	-	-	-	-	-	-	-	-	-	-0.331***	-0.331***	-	-
	0.335***	0.335***	0.332***	0.333***	0.325***	0.326***	0.334***	0.340***	0.333***	0.334***	0.323***	0.329***			0.326***	0.326***
	(0.0682)	(0.0688)	(0.0671)	(0.0671)	(0.0662)	(0.0667)	(0.0676)	(0.0682)	(0.0677)	(0.0679)	(0.0667)	(0.0674)	(0.0670)	(0.0669)	(0.0668)	(0.0668)
- Couple with children	-	-	-	-	-	-	-	-	-	-	-	-	-0.433***	-0.434***	-	-
	0.436***	0.436***	0.435***	0.436***	0.436***	0.438***	0.437***	0.441***	0.437***	0.438***	0.433***	0.440***			0.431***	0.432***
	(0.0842)	(0.0846)	(0.0843)	(0.0844)	(0.0839)	(0.0843)	(0.0848)	(0.0856)	(0.0841)	(0.0843)	(0.0848)	(0.0858)	(0.0843)	(0.0838)	(0.0853)	(0.0855)
- Other	0.0328	0.0326	0.0356	0.0339	0.0362	0.0341	0.0337	0.0285	0.0327	0.0319	0.0371	0.0303	0.0382	0.0377	0.0404	0.0401
	(0.107)	(0.107)	(0.107)	(0.107)	(0.107)	(0.107)	(0.107)	(0.107)	(0.107)	(0.107)	(0.108)	(0.108)	(0.107)	(0.106)	(0.108)	(0.108)
Year (2004=ref.)																
- 2005	-0.00270	-0.00246	-0.00984	-0.0106	0.0206	0.0210	0.00216	0.00405	0.00425	0.00554	0.0161	0.0194	0.00220	0.00255	-0.0170	-0.0176
	(0.0373)	(0.0371)	(0.0395)	(0.0395)	(0.0285)	(0.0284)	(0.0362)	(0.0359)	(0.0374)	(0.0370)	(0.0287)	(0.0282)	(0.0399)	(0.0397)	(0.0411)	(0.0412)
- 2006	-0.0394	-0.0392	-0.0422	-0.0428	-0.0181	-0.0179	-0.0335	-0.0328	-0.0318	-0.0311	-0.0225	-0.0207	-0.0336	-0.0331	-0.0409	-0.0415
	(0.0375)	(0.0373)	(0.0413)	(0.0415)	(0.0287)	(0.0282)	(0.0370)	(0.0368)	(0.0372)	(0.0368)	(0.0289)	(0.0281)	(0.0407)	(0.0404)	(0.0385)	(0.0386)
- 2007	-0.0340	-0.0338	-0.0438	-0.0447	-0.0178	-0.0174	-0.0272	-0.0281	-0.0283	-0.0287	-0.0252	-0.0252	-0.0351	-0.0345	-0.0348	-0.0353
	(0.0405)	(0.0400)	(0.0411)	(0.0410)	(0.0295)	(0.0289)	(0.0389)	(0.0384)	(0.0402)	(0.0400)	(0.0301)	(0.0287)	(0.0427)	(0.0423)	(0.0412)	(0.0412)
- 2008	-0.00729	-0.00706	-0.0230	-0.0235	0.00856	0.00827	-0.000947	-0.00125	-0.00316	-0.00301	-0.000786	0.000583	-0.0119	-0.0110	-0.00845	-0.00873
	(0.0416)	(0.0413)	(0.0403)	(0.0403)	(0.0295)	(0.0291)	(0.0382)	(0.0376)	(0.0419)	(0.0416)	(0.0305)	(0.0290)	(0.0430)	(0.0425)	(0.0435)	(0.0436)

-	2009	-0.0607	-0.0604	-0.0716*	-0.0722*	-0.0529*	-0.0530*	-0.0516	-0.0520	-0.0521	-0.0526	-0.0630**	-0.0631**	-0.0610	-0.0601	-0.0683	-0.0688
		(0.0422)	(0.0419)	(0.0400)	(0.0399)	(0.0319)	(0.0313)	(0.0372)	(0.0367)	(0.0394)	(0.0391)	(0.0321)	(0.0304)	(0.0411)	(0.0406)	(0.0421)	(0.0420)
-	2010	-0.0772*	-0.0770*	-0.0886**	-0.0896**	-0.0682**	-0.0677**	-0.0684*	-0.0690*	-0.0695*	-0.0703*	-0.0792**	-0.0790**	-0.0774*	-0.0766*	-0.0814*	-0.0819*
		(0.0415)	(0.0413)	(0.0393)	(0.0391)	(0.0325)	(0.0320)	(0.0376)	(0.0373)	(0.0398)	(0.0398)	(0.0334)	(0.0322)	(0.0407)	(0.0402)	(0.0429)	(0.0428)
-	2011	-0.0781**	-0.0779**	-0.0873**	-0.0882**	-0.0629**	-0.0633**	-0.0673*	-0.0683**	-0.0698*	-0.0701*	-0.0760**	-0.0766**	-0.0762**	-0.0752**	-0.0789**	-0.0795**
		(0.0393)	(0.0391)	(0.0372)	(0.0369)	(0.0317)	(0.0310)	(0.0350)	(0.0346)	(0.0360)	(0.0360)	(0.0325)	(0.0307)	(0.0387)	(0.0380)	(0.0382)	(0.0379)
-	2012	-0.109***	-0.109***	-0.118***	-0.118***	-0.0855***	-0.0854***	-0.0983***	-0.100***	-0.0995***	-0.0999***	-0.0964***	-0.0971***	-0.106***	-0.105***	-0.109***	-0.109***
		(0.0387)	(0.0388)	(0.0338)	(0.0335)	(0.0278)	(0.0274)	(0.0339)	(0.0337)	(0.0335)	(0.0334)	(0.0271)	(0.0259)	(0.0368)	(0.0363)	(0.0353)	(0.0353)
-	2013	-0.108***	-0.108***	-0.115***	-0.116***	-0.0729**	-0.0734**	-0.0961***	-0.0988***	-0.0979***	-0.0981***	-0.0838***	-0.0855***	-0.104***	-0.103***	-0.103***	-0.103***
		(0.0390)	(0.0391)	(0.0369)	(0.0368)	(0.0289)	(0.0286)	(0.0343)	(0.0337)	(0.0353)	(0.0349)	(0.0290)	(0.0277)	(0.0379)	(0.0372)	(0.0369)	(0.0369)
-	2014	-0.0962**	-0.0960**	-0.103**	-0.104**	-0.0619**	-0.0621**	-0.0836**	-0.0869**	-0.0870**	-0.0872**	-0.0750**	-0.0772**	-0.0941**	-0.0932**	-0.0872**	-0.0876**
		(0.0469)	(0.0467)	(0.0442)	(0.0440)	(0.0297)	(0.0293)	(0.0403)	(0.0398)	(0.0424)	(0.0422)	(0.0309)	(0.0290)	(0.0453)	(0.0447)	(0.0424)	(0.0422)
-	2015	-0.0920*	-0.0919*	-0.0992**	-0.0990**	-0.0645*	-0.0642*	-0.0786*	-0.0831**	-0.0833*	-0.0840*	-0.0792**	-0.0825**	-0.0888*	-0.0878*	-0.0816*	-0.0819*
		(0.0488)	(0.0487)	(0.0467)	(0.0467)	(0.0357)	(0.0356)	(0.0431)	(0.0423)	(0.0459)	(0.0458)	(0.0373)	(0.0355)	(0.0459)	(0.0453)	(0.0455)	(0.0455)
-	2016	-0.0835	-0.0833	-0.0929*	-0.0924*	-0.0598	-0.0589	-0.0696	-0.0736	-0.0754	-0.0762	-0.0760*	-0.0786*	-0.0823	-0.0812	-0.0693	-0.0694
		(0.0544)	(0.0543)	(0.0535)	(0.0535)	(0.0405)	(0.0401)	(0.0481)	(0.0472)	(0.0523)	(0.0522)	(0.0428)	(0.0403)	(0.0517)	(0.0508)	(0.0489)	(0.0488)
-	2017	-0.0672	-0.0669	-0.0788	-0.0764	-0.0554	-0.0555	-0.0520	-0.0538	-0.0600	-0.0624	-0.0761	-0.0779	-0.0697	-0.0684	-0.0559	-0.0557
		(0.0628)	(0.0632)	(0.0550)	(0.0556)	(0.0485)	(0.0491)	(0.0579)	(0.0586)	(0.0604)	(0.0595)	(0.0510)	(0.0498)	(0.0570)	(0.0563)	(0.0538)	(0.0538)
Country-level control variables																	
Employment rate		0.0362***	0.0362***	0.0352***	0.0349***	0.0351***	0.0349***	0.0357***	0.0358***	0.0358***	0.0359***	0.0346***	0.0345***	0.0370***	0.0370***	0.0336***	0.0335***
		(0.00530)	(0.00532)	(0.00529)	(0.00538)	(0.00360)	(0.00361)	(0.00516)	(0.00513)	(0.00516)	(0.00515)	(0.00319)	(0.00314)	(0.00441)	(0.00441)	(0.00489)	(0.00490)
Part-time employment rate		0.000939	0.000952	-0.00116	-0.00113	-0.00103	-0.00112	0.00131	0.00132	0.000664	0.000555	-0.00250	-0.00263	-0.00281	-0.00277	-0.000536	-0.000529
		(0.00286)	(0.00286)	(0.00203)	(0.00210)	(0.00191)	(0.00192)	(0.00226)	(0.00235)	(0.00219)	(0.00215)	(0.00213)	(0.00209)	(0.00173)	(0.00174)	(0.00262)	(0.00263)
GDP (pps)		-9.49e-09 (3.87e-08)	-9.46e-09 (3.88e-08)	2.59e-08 (3.24e-08)	2.42e-08 (3.34e-08)	-7.67e-09 (3.42e-08)	-8.05e-09 (3.47e-08)	9.22e-11 (3.36e-08)	2.84e-09 (3.36e-08)	-8.50e-09 (3.14e-08)	-7.04e-09 (3.16e-08)	-1.55e-08 (3.10e-08)	-1.35e-08 (3.08e-08)	5.63e-09 (2.25e-08)	4.81e-09 (2.27e-08)	3.22e-08 (3.75e-08)	3.20e-08 (3.76e-08)
Sector (agriculture = ref.)																	
Industry & Construction		0.0152	0.0151	0.0219	0.0224	0.0226**	0.0234**	0.0194	0.0188	0.0226*	0.0226*	0.0264***	0.0266***	0.0207*	0.0205*	0.0185	0.0186
		(0.0170)	(0.0170)	(0.0143)	(0.0145)	(0.0100)	(0.00998)	(0.0129)	(0.0129)	(0.0119)	(0.0117)	(0.0102)	(0.0102)	(0.0123)	(0.0124)	(0.0127)	(0.0126)
Commercial services		0.0110	0.0109	0.0203	0.0210	0.0231***	0.0237***	0.0132	0.0132	0.0179	0.0180	0.0301***	0.0308***	0.0152	0.0151	0.0174	0.0174
		(0.0142)	(0.0142)	(0.0150)	(0.0152)	(0.00867)	(0.00874)	(0.0123)	(0.0124)	(0.0117)	(0.0114)	(0.0108)	(0.0107)	(0.0117)	(0.0118)	(0.0121)	(0.0121)

Non-profit sector	0.0214	0.0213	0.0233	0.0240	0.0312***	0.0322***	0.0238	0.0232	0.0274**	0.0272**	0.0371***	0.0375***	0.0274**	0.0272*	0.0141	0.0143
	(0.0178)	(0.0178)	(0.0147)	(0.0151)	(0.0101)	(0.0102)	(0.0151)	(0.0152)	(0.0136)	(0.0135)	(0.0101)	(0.0100)	(0.0139)	(0.0140)	(0.0147)	(0.0148)
N	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051
Pseudo R^2	0.144	0.144	0.144	0.145	0.145	0.145	0.144	0.145	0.144	0.145	0.145	0.146	0.145	0.145	0.145	0.145

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

Table C.4 Logistic regression analysis with robust standard errors; full models public opinion towards disabled people

	Men						Women					
	Model 8a	Model 8b	Model 9a	Model 9b	Model 10a	Model 10b	Model 8a	Model 8b	Model 9a	Model 9b	Model 10a	Model 10b
	b	b	b	b	b	b	b	b	b	b	b	b
Intercept	0.107	0.127	-0.233	-0.244	0.181	0.182	-0.566	-0.543	-1.093	-1.101	0.388	0.360
	(0.838)	(0.827)	(0.818)	(0.823)	(0.905)	(0.889)	(1.204)	(1.203)	(1.234)	(1.235)	(1.188)	(1.174)
Disabled (not disabled=ref.)	-1.203***	-1.201***	-1.202***	-1.200***	-1.199***	-1.195***	-0.791***	-0.787***	-0.788***	-0.783***	-0.789***	-0.788***
	(0.0681)	(0.0669)	(0.0699)	(0.0705)	(0.0688)	(0.0611)	(0.0614)	(0.0600)	(0.0619)	(0.0614)	(0.0615)	(0.0567)
Disabled people should participate	0.255	0.322**					0.420*	0.517**				
	(0.227)	(0.156)					(0.216)	(0.247)				
Disabled x Disabled people should participate		-0.252						-0.376				
		(0.631)						(0.456)				
Disabled job candidate disadvantaged			-0.0551	0.00129					0.0851	0.190		
			(0.532)	(0.455)					(0.500)	(0.431)		
Disabled x Disabled job candidate disadvantaged				-0.279						-0.583		
				(1.210)						(0.970)		
Discrimination of disabled people widespread					0.280*	0.133					0.584***	0.474***
					(0.163)	(0.157)					(0.169)	(0.162)
Disabled x Discrimination of disabled people widespread						0.690**						0.575**
						(0.305)						(0.264)
Individual-level control variables												
Age (18-30=ref.)												
- 31-50	1.968***	1.968***	1.968***	1.968***	1.966***	1.968***	1.460***	1.460***	1.460***	1.460***	1.460***	1.461***
	(0.0629)	(0.0630)	(0.0617)	(0.0621)	(0.0626)	(0.0629)	(0.0724)	(0.0724)	(0.0727)	(0.0726)	(0.0724)	(0.0723)
- 51-65	0.672***	0.672***	0.673***	0.673***	0.671***	0.673***	0.312***	0.312***	0.313***	0.313***	0.314***	0.315***
	(0.0706)	(0.0707)	(0.0708)	(0.0709)	(0.0709)	(0.0705)	(0.0747)	(0.0747)	(0.0749)	(0.0749)	(0.0752)	(0.0753)
Educational level (Upper secondary/ Tertiary=ref.)												
- Primary/lower secondary	-1.165***	-1.166***	-1.166***	-1.166***	-1.176***	-1.178***	-1.483***	-1.483***	-1.481***	-1.481***	-1.505***	-1.507***
	(0.107)	(0.107)	(0.107)	(0.107)	(0.106)	(0.106)	(0.0892)	(0.0889)	(0.0902)	(0.0904)	(0.0818)	(0.0819)
- Upper secondary	-0.560***	-0.560***	-0.558***	-0.558***	-0.567***	-0.566***	-0.735***	-0.735***	-0.732***	-0.732***	-0.749***	-0.749***
	(0.0394)	(0.0395)	(0.0391)	(0.0394)	(0.0385)	(0.0387)	(0.0498)	(0.0499)	(0.0493)	(0.0495)	(0.0484)	(0.0484)
Household type (one-person household=ref.)												
- Couple without children	0.149	0.148	0.147	0.147	0.149	0.149	-0.0256	-0.0262	-0.0300	-0.0305	-0.0265	-0.0268
	(0.0947)	(0.0952)	(0.0934)	(0.0933)	(0.0928)	(0.0932)	(0.0720)	(0.0724)	(0.0720)	(0.0729)	(0.0713)	(0.0718)
- Single parent with children	-0.968***	-0.968***	-0.970***	-0.970***	-0.970***	-0.971***	-0.330***	-0.331***	-0.334***	-0.334***	-0.327***	-0.328***
	(0.108)	(0.109)	(0.106)	(0.106)	(0.105)	(0.105)	(0.0676)	(0.0677)	(0.0667)	(0.0664)	(0.0659)	(0.0663)
- Couple with children	0.350***	0.350***	0.347***	0.347***	0.348***	0.347***	-0.428***	-0.428***	-0.435***	-0.435***	-0.431***	-0.432***
	(0.0833)	(0.0837)	(0.0814)	(0.0814)	(0.0806)	(0.0809)	(0.0855)	(0.0858)	(0.0848)	(0.0856)	(0.0834)	(0.0839)
- Other	0.480***	0.480***	0.475***	0.475***	0.476***	0.475***	0.0448	0.0442	0.0356	0.0353	0.0436	0.0423
	(0.122)	(0.123)	(0.121)	(0.121)	(0.119)	(0.120)	(0.108)	(0.108)	(0.109)	(0.109)	(0.107)	(0.107)
Year (2004=ref.)												
- 2005	-0.0105	-0.0109	-0.00412	-0.00503	-0.00566	-0.00838	-0.0152	-0.0155	-0.00487	-0.00618	-0.0133	-0.0152
	(0.0455)	(0.0452)	(0.0511)	(0.0480)	(0.0476)	(0.0468)	(0.0394)	(0.0393)	(0.0378)	(0.0370)	(0.0318)	(0.0315)
- 2006	-0.0621	-0.0627	-0.0560	-0.0572	-0.0590	-0.0612	-0.0487	-0.0494	-0.0402	-0.0420	-0.0528	-0.0547
	(0.0495)	(0.0492)	(0.0564)	(0.0528)	(0.0517)	(0.0498)	(0.0405)	(0.0405)	(0.0390)	(0.0382)	(0.0351)	(0.0343)

- 2007	-0.0527	-0.0535	-0.0435	-0.0448	-0.0529	-0.0556	-0.0453	-0.0462	-0.0344	-0.0365	-0.0586	-0.0606
	(0.0585)	(0.0584)	(0.0653)	(0.0611)	(0.0607)	(0.0584)	(0.0433)	(0.0433)	(0.0417)	(0.0402)	(0.0416)	(0.0407)
- 2008	-0.0395	-0.0403	-0.0293	-0.0307	-0.0363	-0.0393	-0.0211	-0.0218	-0.00791	-0.00962	-0.0298	-0.0326
	(0.0604)	(0.0601)	(0.0690)	(0.0645)	(0.0627)	(0.0604)	(0.0436)	(0.0435)	(0.0428)	(0.0417)	(0.0408)	(0.0404)
- 2009	-0.0829	-0.0838	-0.0774	-0.0788	-0.0784	-0.0808	-0.0685*	-0.0695*	-0.0597	-0.0614	-0.0673*	-0.0696*
	(0.0590)	(0.0585)	(0.0684)	(0.0634)	(0.0631)	(0.0611)	(0.0412)	(0.0410)	(0.0423)	(0.0408)	(0.0380)	(0.0373)
- 2010	-0.0879	-0.0891	-0.0819	-0.0829	-0.0796	-0.0811	-0.0873**	-0.0885**	-0.0768*	-0.0777*	-0.0776**	-0.0793**
	(0.0564)	(0.0561)	(0.0682)	(0.0648)	(0.0626)	(0.0612)	(0.0409)	(0.0409)	(0.0425)	(0.0418)	(0.0392)	(0.0387)
- 2011	-0.108*	-0.109*	-0.101	-0.102	-0.102	-0.104*	-0.0890**	-0.0905**	-0.0767*	-0.0779**	-0.0820**	-0.0847**
	(0.0565)	(0.0563)	(0.0681)	(0.0639)	(0.0626)	(0.0605)	(0.0387)	(0.0386)	(0.0409)	(0.0393)	(0.0395)	(0.0385)
- 2012	-0.121**	-0.123**	-0.115*	-0.116*	-0.117*	-0.118**	-0.121***	-0.122***	-0.107***	-0.109***	-0.115***	-0.118***
	(0.0558)	(0.0558)	(0.0666)	(0.0622)	(0.0618)	(0.0595)	(0.0380)	(0.0382)	(0.0372)	(0.0358)	(0.0386)	(0.0375)
- 2013	-0.113*	-0.114*	-0.107	-0.109	-0.109	-0.110*	-0.117***	-0.118***	-0.105***	-0.107***	-0.108***	-0.110***
	(0.0613)	(0.0614)	(0.0723)	(0.0673)	(0.0672)	(0.0652)	(0.0375)	(0.0375)	(0.0387)	(0.0368)	(0.0376)	(0.0366)
- 2014	-0.123*	-0.124*	-0.117	-0.118	-0.119	-0.121*	-0.105**	-0.106**	-0.0927**	-0.0940**	-0.0981**	-0.100**
	(0.0701)	(0.0706)	(0.0788)	(0.0745)	(0.0749)	(0.0731)	(0.0454)	(0.0455)	(0.0448)	(0.0430)	(0.0450)	(0.0440)
- 2015	-0.103	-0.104	-0.0970	-0.0986	-0.103	-0.105	-0.0981**	-0.0992**	-0.0876*	-0.0887*	-0.0981**	-0.101**
	(0.0703)	(0.0705)	(0.0782)	(0.0736)	(0.0740)	(0.0721)	(0.0466)	(0.0467)	(0.0469)	(0.0453)	(0.0476)	(0.0468)
- 2016	-0.119	-0.120	-0.112	-0.113	-0.122	-0.123	-0.0899*	-0.0908*	-0.0784	-0.0789	-0.0965*	-0.0988*
	(0.0759)	(0.0759)	(0.0834)	(0.0799)	(0.0784)	(0.0771)	(0.0515)	(0.0514)	(0.0530)	(0.0520)	(0.0547)	(0.0540)
- 2017	-0.138*	-0.139*	-0.125	-0.126	-0.142*	-0.142*	-0.0789	-0.0793	-0.0634	-0.0633	-0.0965	-0.0977
	(0.0758)	(0.0759)	(0.0829)	(0.0801)	(0.0756)	(0.0752)	(0.0570)	(0.0572)	(0.0583)	(0.0582)	(0.0617)	(0.0616)
Country-level control variables												
Employment rate	0.0560***	0.0560***	0.0553***	0.0553***	0.0565***	0.0568***	0.0355***	0.0355***	0.0351***	0.0350***	0.0398***	0.0398***
	(0.00503)	(0.00505)	(0.00484)	(0.00492)	(0.00483)	(0.00481)	(0.00482)	(0.00481)	(0.00548)	(0.00550)	(0.00425)	(0.00422)
Part-time employment rate	0.00529	0.00522	0.00638	0.00661	0.0115**	0.0111**	0.00127	0.00126	0.000949	0.00108	0.00355**	0.00353**
	(0.00681)	(0.00676)	(0.00720)	(0.00754)	(0.00528)	(0.00531)	(0.00159)	(0.00159)	(0.00218)	(0.00231)	(0.00143)	(0.00141)
GDP (in pps)	2.59e-08	2.58e-08	6.38e-09	6.40e-09	2.85e-09	5.63e-09	2.65e-08	2.60e-08	4.75e-09	3.34e-09	-8.21e-09	-5.86e-09
	(3.61e-08)	(3.62e-08)	(5.04e-08)	(5.06e-08)	(2.83e-08)	(2.82e-08)	(3.24e-08)	(3.24e-08)	(4.22e-08)	(4.35e-08)	(2.59e-08)	(2.64e-08)
Sector (agriculture = ref.)												
Industry & Construction	0.00509	0.00481	0.00903	0.00922	0.00585	0.00590	0.0141	0.0137	0.0196	0.0198	0.00664	0.00705
	(0.00962)	(0.00944)	(0.00931)	(0.00945)	(0.00980)	(0.00963)	(0.0127)	(0.0127)	(0.0132)	(0.0132)	(0.0119)	(0.0117)
Commercial services	0.00162	0.00144	0.00293	0.00305	0.00158	0.00152	0.0115	0.0113	0.0143	0.0142	0.00442	0.00476
	(0.00863)	(0.00852)	(0.00876)	(0.00881)	(0.00858)	(0.00848)	(0.0114)	(0.0114)	(0.0124)	(0.0125)	(0.0104)	(0.0102)
Non-profit sector	0.0101	0.00998	0.0163*	0.0164*	0.00626	0.00637	0.0151	0.0151	0.0245*	0.0248*	-0.00233	-0.00213
	(0.00912)	(0.00908)	(0.00972)	(0.00975)	(0.0123)	(0.0121)	(0.0150)	(0.0150)	(0.0145)	(0.0145)	(0.0175)	(0.0175)
N	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,650,714	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051	1,785,051
Pseudo R2	0.175	0.175	0.175	0.175	0.175	0.176	0.145	0.145	0.144	0.144	0.145	0.146

Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0

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