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Lifelong learning participation of foreign-born adults in European countries

Abstract

This paper demonstrates that foreign-born adults in Europe tend to participate less in adult lifelong learning activities compared to native-born adults living in the same country. However, this is mainly explained through the job-related nature of non-formal education. Foreign-born adults tend to participate more in formal adult education than native-born adults in a range of countries. Based on analyses using data from the OECD's Programme on the International Assessment of Adult Competencies (PIAAC), this paper shows that participation rates in European countries are mainly determined by adults' educational attainment and having a job and that countries with overall high participation rates have higher participation rates among foreign-born adults as well, which is known to correlate with existing welfare typologies – e.g. participation rates being higher in the Nordic social-democratic countries than in the Southern Mediterranean countries.

Exploring the lifelong learning participation of foreign-born adults in European countries is important as it is known that those adults perceive difficulties in finding a job and having their foreign credentials recognised in the new country context. Participation in adult lifelong learning might help them in learning new or maintaining their already existing skills.

Introduction

This paper reports on the lifelong learning participation of foreign-born adults in European countries, using data from the Survey of Adults Skills, part of the OECD's (the Organisation for Economic Co-operation and Development) Programme on the International Assessment of Adult Competencies – PIAAC. Nowadays, debates on migration are high on European policy agendas, and were highly visible within e.g. the Brexit debate, the Dutch and French elections. Outside Europe, migration has strongly influenced the presidential election debates in the United States of America. The recent refugee crisis affecting a wide range of European countries cannot remain unmentioned. Migration is known to be able to generate anxiety among the population, e.g. when locals perceive migrants as competitors for their jobs or when they feel their societal values and norms are being changed as a result of a broadened mix of people from different national, ethnic and religious backgrounds (see e.g. Papademetriou & Bogdan, 2016). Given the increase in the number of migrants in most European countries, it is essential to better understand the life situation of adults who were not born in their country of residence. This is needed to increase the knowledge base on this topic and to recommend specific policy measures aiming to strengthen migrants' integration. In the end, it is very important that migrants are able to contribute to the success and prosperity of the new country they live in. One way of doing this might be to offer lifelong learning opportunities to migrants so that they can learn new or maintain their existing skills.

Migration and lifelong learning

Common problems faced by migrants

Making sure that adults obtain an adequate level of knowledge and skills, enabling them to contribute to society through having a job, caring for others and fulfilling their civic duties, has been recognised as an important issue by leading international organisations such as the European Commission and the OECD (see e.g. European Commission, 2009; OECD, 2015 for a more detailed discussion in the International Migration Outlook). In Europe, benchmarks on education and training focus on the reduction of school drop-outs and the need to establish a highly skilled workforce (see European Commission, 2009). Specifically in relation to migrants, the OECD has analysed their numeracy and literacy skills as well as their over-qualification and under-employment (see Bonfanti & Xenogiani, 2014). Results indicate that highly educated migrants tend to have difficulties to find employment that matches their educational level as foreign qualifications are often not recognised in the new country context. This is likely leading to wage penalties. Furthermore, speaking another mother tongue than the dominant language in the country makes integration difficult as well. These findings were also mentioned in a literature review by Guo (2010), indicating that migrants are much more likely to be

employed in manual jobs and being paid less, even when they are highly educated. Johnston et al. (2015) focussed on this issue specifically in the European context, recognising the wage penalty highly educated adults from Eastern European countries pay when working in Western European countries. This problem is strongly related to the failure of recognition of foreign qualifications. Generally, the issue of over-qualification is becoming a key area of concern, also outside the migration debate. (see e.g. Battu & Sloane, 2002; Brynin & Longhi, 2009; Piracha et al., 2010; Aleksynka & Tritah, 2011). The difficult integration of migrants is also perceived to correlate with aspects of discrimination and preferential hiring strategies at the workplace, or with stereotypical knowledge of foreign nationals' educational qualifications (see e.g. Milburn, 1996; Zegers de Beijl, 2000; European Monitoring Centre on Racism and Xenophobia, 2003; Sheared et al., 2010; Costello & Freedland, 2014).

Lifelong learning is perceived as a mechanism to compensate for these weaknesses and disadvantages and to combat skills deficiencies in adult life, providing people with opportunities to climb educational, occupational and social ladders. While lifelong learning participation thus has the potential to support migrants in their integration process, large scale assessments of lifelong learning participation rates of migrants have received little attention to date, as acknowledge in the OECD publication on migrant skills by Bonfanti and Xenogiani (2014, p.302):

'... which has not been investigated in this chapter but is of great interest to policy makers is the access to training (both on the job and outside) and possible differences between migrants and natives.'

It is this knowledge gap this paper aims to fill. The research questions to be answered in this paper therefore are:

1. Do native- and foreign-born adults differ in their participation in adult lifelong learning activities?
2. Are the differences found in answer to RQ1 different among a selection of European countries?

Before discussing the methodological approaches undertaken to answer these research questions, a discussion is being presented on how countries in Europe differ in relation to migration and lifelong learning. It is important to understand these contextual factors in order to come to a sound level of interpretation of the data.

Migration in Europe

Immigration policy in the EU has been formalised in Articles 79 and 80 on the functioning of the European Union (see European Union, 2012), a note on Global Approaches to Migration and Policy (see European Commission, 2011), a European Agenda on Migration (see European Commission, 2015) and a recent 2016 Integration Action Plan (see European Commission, 2016), which mainly focusses on ‘third country nationals’. Both education and the labour market have been mentioned as two key areas in this new Action Plan. Integration can be supported through offering education in basic skills and language, but also in helping new people to understanding the dominant values and culture of the society they are settling in. Within the labour market, it is perceived as important to provide migrants with access to vocational training, but it is also needed to deal with the problem of over-qualification, often related to the failure to recognise foreign qualifications.

While migration is a current issue in the whole of Europe, it is important to understand that different countries have different traditions of immigration. Countries like Belgium, The Netherlands, France and Germany have a long tradition of immigration, but mainly tend to receive lower educated ‘guest workers’ undertaking employment in less favourable working conditions (see e.g. Chin’s work on guest workers in Germany (Chin, 2009) and Caestecker & Bade (2001) for the situation of guest workers in Belgium). Often, these adults have passed on these social and educational disadvantages towards their children, as demonstrated by e.g. Reichl Luthra (2010, p.47) exploring the continued lagging behind of children from guest workers in Germany. Other parts of continental Europe have a shorter tradition of immigration. The Nordic countries are now welcoming a range of new and humanitarian migrants, of which the last group is struggling to integrate as they tend to lack skills in Scandinavian languages as discussed by Bevelander (2013), whose work is focussing on population changes in Scandinavia. Southern European countries like Italy and Spain nowadays receive foreign-born workers from lower income countries who then mainly end up in low skilled jobs. An overview of migration dynamics in Southern Europe can be found in Baumeister and Sala (2015, p.139). Although a Southern European country, the situation is different in Cyprus as it has received a higher number of highly educated migrants in the last two decades, visible in the OECD Indicators of Immigrant Integration (OECD, 2015, p.28). Immigration can also be recognised in Central and Eastern European countries, of which most have joined the European Union in 2004. However, migration is mainly a result of the fall of the Iron curtain and the change of borders, and migrants are therefore mainly found in the older age groups, described by the OECD as ‘Countries with immigrant population shaped by border changes and/or by national minorities’ (OECD, 2015, p.28). Among younger people in these countries, there is a stronger trend of native-born young adults leaving the country instead of receiving new young foreign-born people. Within the European Union, there is free movement of people, which means that every citizen of a European member state has the rights to live and work in another member state. This situation has been highly debated in the context of Brexit in

the United Kingdom, a country with a long migration tradition, but with a high influx of continental Europeans in the last decade, with many of them coming from Eastern Europe e.g. nowadays, around 800,000 Polish people live in the UK.

The relevance of country groupings in relation to lifelong learning

The discussion of countries and their migration context above has been provided in easy to recognise groups, e.g. the Western continental countries, the Scandinavian ones, the Eastern European and the Southern ones, the United Kingdom. It is known from previous research in the field of education and training that these grouping of countries also make sense in relation to the study of lifelong learning. In fact, they demonstrate strong overlaps with existing welfare typologies as discussed in the literature (see e.g. Esping-Andersen, 1989; Fenger, 2007; Saar et al., 2013; Blossfeld et al., 2014; Busemeyer, 2014). Based on levels of ‘stratification’ and ‘decommodification’, Esping-Andersen (1989) classified Anglo-Saxon countries like the United Kingdom as ‘liberal welfare states’, while Nordic countries were labelled as social democratic welfare states that strive towards inclusion. Based on Varieties of Capitalism Approaches, Hall and Soskice (2001) would label these countries respectively as Liberal versus Coordinated Market Economies. Western European countries like Belgium, The Netherlands and Germany are also Coordinated Market Economies, but have stronger stratified systems, with weaker protection for the most vulnerable in society. It is also in these countries that migrants tend to be low educated and employed in low skilled jobs. While the situation in Eastern Europe has traditionally not been studied in a very in-depth way, contributions to the further understanding of this region have been made in recent years, e.g. through labelling them as countries ‘catching up’ with the rest of Western Europe in terms of the economy, labour market and education (see e.g. Fenger, 2007; Riddell et al., 2012; Saar et al., 2013).

Understanding why adults do or do not participate in adult lifelong learning activities can thus be partially explained by the country in which adults reside (see e.g. Groenez, 2007). However, within countries, determinants of lifelong learning at the level of people’s socio-economic and socio-demographic characteristics are rather similar. It is clear from previous empirical research that those with high levels of educational attainment, employed in white-collar jobs and those who are in the first half of their career receive more opportunities to participate than those who are unemployed or in elementary occupations, regardless from where they live (see e.g. Rubenson et al., 2006; Desjardins, 2015). Older adults also tend to receive fewer opportunities for lifelong learning because the period they can benefit from the outcomes is shorter than for their younger colleagues (see e.g. Gaillard & Desmette, 2010; Finsden & Formosa, 2011 for a discussion on lifelong learning in later life). However, countries do significantly differ from each other as participation rates in e.g. Scandinavian countries are much higher than those in Southern and Eastern European countries and the degree to

which inequalities between different socio-economic groups exists is known to vary as well, e.g. in countries with high participation rates, inequalities between groups tend to be smaller. Given the differences in participation rates between countries, it is thus clear that there should be something at the country level that determines participation rates as well, e.g. the way in which education and labour market policies and educational offers are being implemented in countries relate to the uptake of lifelong learning activities (see e.g. Blossfeld et al., 2014; Desjardins, 2017). Examples include the strong levels of union density (see e.g. Brunello, 2001; Coulombe & Tremblay, 2007; Dieckhoff et al.; 2007), higher expenditure on Research & Development in a country (see e.g. Bassanini et al., 2005), higher levels of labour market flexibility (see e.g. Almeida & Aterido, 2008), a general positive correlation with Gross Domestic Product (see e.g. Groenez et al., 2007), but also the characteristics of the education and lifelong learning systems themselves (see e.g. Dammrich et al., 2014). It will be clear from the results presented below, that participation rates indeed significantly differ across countries.

Methodological approach

This paper analyses data from the Survey of Adults Skills, part of PIAAC, the Programme on the International Assessment of Adult Competencies. Data are collected both in OECD countries and a number of partner countries. The first round of PIAAC took place in 2011/12 and was carried out in Australia, Austria, Belgium (Flanders), Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Japan, Korea, The Netherlands, Norway, Poland, the Russian Federation, the Slovak Republic, Spain, Sweden, the United Kingdom (England and Northern Ireland) and the United States. A second round of data collection took place in 2014 in Chile, Greece, Indonesia, Israel, Lithuania, New Zealand, Singapore, Slovenia and Turkey. At the time of carrying out the analyses for this paper, data from the first and second round were available. This paper will use European data only and investigate differences between European countries. Details about sampling procedures and response rates can be found in the ‘Technical Report of the Survey of Adult Skills’ (OECD, 2013).

Migrants in the Survey of Adult Skills

The Survey of Adult Skills has created different options to identify the group of immigrants, information available based on data collected using the Background Questionnaire. It is possible to distinguish between ‘first’ and ‘second’ generations of immigrants as well as those who are non-immigrants, although separate information is available for those with one parent born abroad. Information is also available on the ‘crossing’ between whether a respondent is born in the country and whether they speak the country’s language. As such, four groups can be distinguished: (1) born in

the country and speaks the native language, (2) born in the country but does not speak the native language, (3) born in a foreign country but speaks the native language and (4) born in a foreign country and does not speak the native language. In all European countries, native born adults who speak the native language of the country are the vast majority.

In order to work with a good range of data for which sound interpretations can be made, it has been decided to take out Polish data as only 23 observations represent foreign-born adults. Further analyses will be presented for foreign-born versus native-born adults, although language will be controlled for in multivariate models in relation to lifelong learning participation and the use of skills. The final selection of countries and the distinction between native-born and foreign-born adults can be found in Table 1.

Table 1: native- and foreign-born adults in PIAAC – divided by language

	Native born Native language	Native born Foreign language	Foreign born Native language	Foreign born Foreign language
FIRST ROUND				
Austria	4247	100	188	489
Belgium	4416	160	150	197
Cyprus	3896	7	288	199
Czech Republic	5859	7	78	103
Denmark	5727	46	139	1368
Estonia	6510	150	798	121
Finland	5136	92	65	79
France	5979	126	344	455
Germany	4624	94	162	495
Ireland	4726	45	708	485
Italy	4064	97	94	331
Netherlands	4580	41	133	328
Norway	4254	56	56	574
Poland	9229	108	19	4
Slovak Republic	5251	327	64	60
Spain	5019	159	461	323
Sweden	3626	101	89	650
United Kingdom	7758	95	453	479
SECOND ROUND				
Greece	4473	16	228	119
Lithuania	4583	290	102	75
Slovenia	4683	75	100	434

Lifelong learning participation in the Survey of Adult Skills

Participation in lifelong learning activities refers to participation in formal adult education and training and/or non-formal education and training activities. This is also the definition used by the European Commission when referring to the benchmark adult lifelong learning participation which expresses the need for member states to have 15 percent of the adult population to participate in at least one ‘lifelong learning’ activity by 2020 measured on a four weeks basis (see Eurydice, 2011). Previously, lifelong learning was often referred to as adult education, recurrent education, continuing education or permanent education, but the term lifelong learning is now used most to represent the ‘from cradle to grave’ approach of learning. Furthermore, the term “education” has been replaced by learning to recognise that learning can take place in wider settings than the traditional educational school context. Generally, the literature mentions three forms of adult lifelong learning, which are formal, non-formal and informal (for a detailed discussion about these terms see Colley, Hodkinson & Malcolm, 2003). Formal learning takes place in institutionalised setting and upon successful completion, adults will receive an officially recognised qualification. It therefore tends to mirror the structure of initial education, but adapted towards the needs of adults, and represents the typical ladder structure, ranging from primary to tertiary education. Non-formal education also takes place in institutionalised settings, but despite the organisational character, officially recognised qualifications are not granted. Sometimes certificates of attendance will be provided, but they do not have a similar ‘civil’ value to qualifications obtained in the formal education system. The vast majority of non-formal adult learning happens in the workplace (see Eraut & Hirsch, 2009; Fuller & Unwin, 2011). Informal learning is also referred to as at random learning, incidental or accidental learning and is supposed to happen on a daily basis in work and social settings. Because of its’ broad character, benchmarks and indicators in the field of lifelong learning therefore tend to focus on participation in formal and non-formal learning settings only.

It is possible in the dataset to distinguish these two forms of lifelong learning from each other. Within the PIAAC project, the adult population has been defined as those between the ages of 16 and 65. However, not everyone in education and training does automatically belong to the group of ‘adult learners’, which is especially the case for younger adults who are still in initial education. Although they are included as part of the PIAAC project, exclusion rules for the definition of ‘adult learners’ have been put in place. This refers to ISCED 3 (upper secondary education) or higher for those 16-19 and ISCED 4 (post-secondary non-tertiary) or higher for those 20-24 as they are supposed to be in the regular initial education cycle, including higher education. Whenever these situations apply for respondent between the age of 16 and 24, they will not be included in analyses on formal lifelong learning activities. Young people participating in lower levels of formal education (e.g. those undertaking basic education at ISCED levels 1 and 2) were included as adult learners in formal education and training as they were supposed to have finished this level of education at an earlier age,

but possibly did not (Desjardins, 2015). Information is also available on participation in non-formal education and training activities. A general non-formal participation variable is available. In fact, this is a combination of four separately measured variables. These are (1) open or distance education, (2) on-the-job training or training by supervisors or co-workers, (3) seminars or workshops and (4) courses or private lessons, not otherwise reported. Analyses on non-formal lifelong learning therefore represent participation in at least one of these four activities.

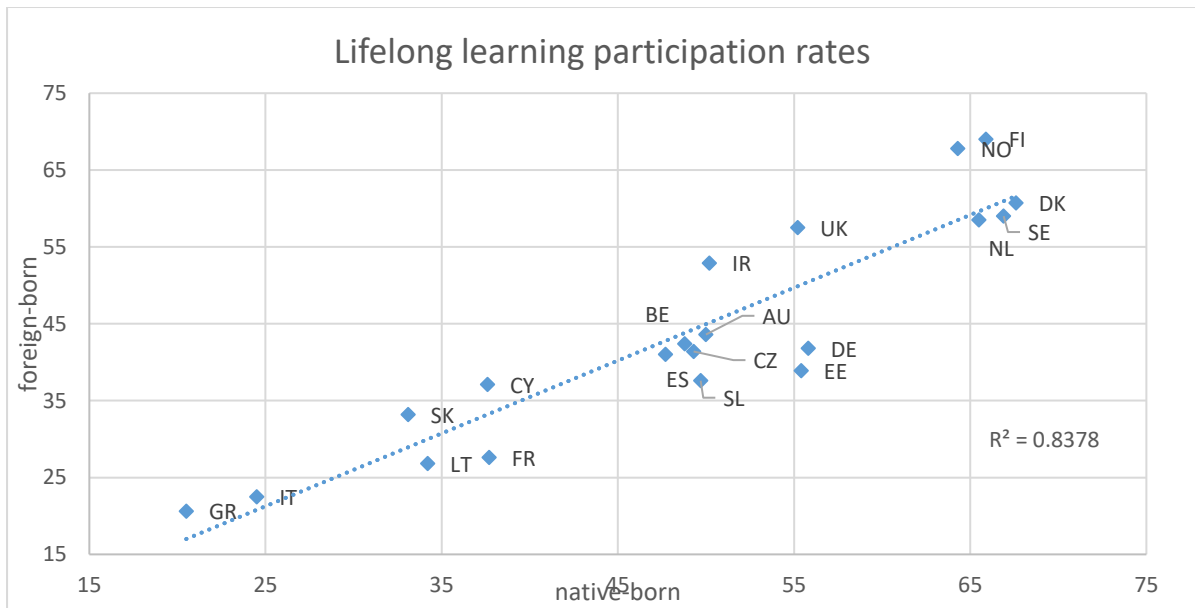
This paper will explore differences in the participation rates in lifelong learning between native-born and foreign-born. This will give us the opportunity to find out whether some countries seem to be more inclusive towards foreign-born adults than others. As explained before, adult lifelong learning is nowadays an umbrella term for participation in both formal and non-formal learning activities and is one of the current benchmarks in education and training in the European Union, with the aim that more adults get the chances to increase and maintain their knowledge and skills, which they then can put into productive use.

Participation rates comparing foreign-born and native-born adults

General lifelong learning participation

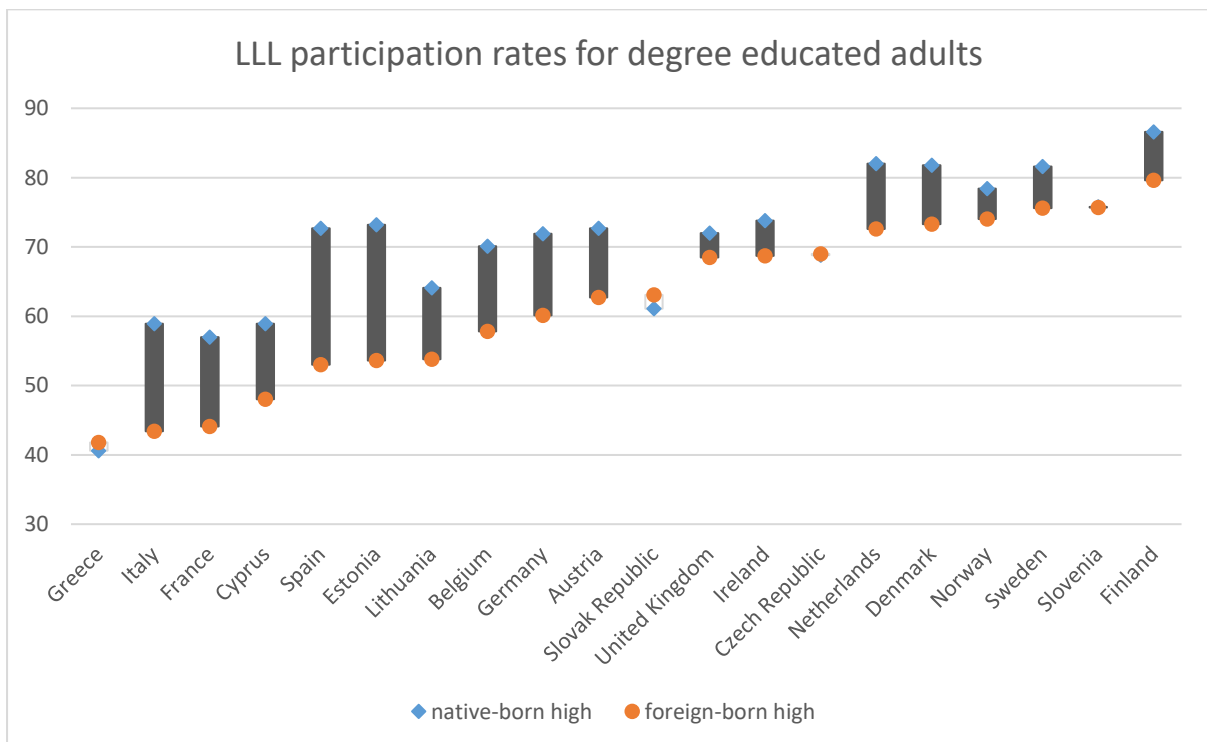
It is common knowledge in the lifelong learning literature that participation rates overlap with the dominant welfare state typologies (see Rubenson & Desjardins, 2009; Riddell et al., 2012; Saar et al., 2013; Desjardins, 2015). Adults in social-democratic Nordic countries tend to participate most, followed by those in liberal Anglo-Saxon countries. Participation rates in Western European continental countries are rather average and the lowest rates can be found in Eastern and Southern Europe. Figure x represents these findings well and further calculations have demonstrated there is strong correlation between country-level participation rates of the two distinct groups ($R\text{-square} = .8378$). Foreign-born adults, as well as native-born adults, in Nordic countries participate more than in other countries, but in general foreign-born adults are less prone to participate in lifelong learning activities than native-born adults. In a minority of countries, participation rates of foreign-born adults are a fraction higher than those of native-born adults, which we find in Finland (69%), Norway (67.8%), the United Kingdom (57.5%), Ireland (52.9%) the Slovak Republic (33.2%) and Greece (20.6%). In general, the differences between the two groups are very small and it would be overambitious to say that foreign-born adults experience strong advantages in these countries. The results of the two groups are closer to 'similar' than 'different'. Differences above 10 percentage points are present in Germany, Estonia and Slovenia. Although gaps in other countries are smaller, they do exist.

Figure 1: Lifelong learning participation rates of foreign- versus native-born adults



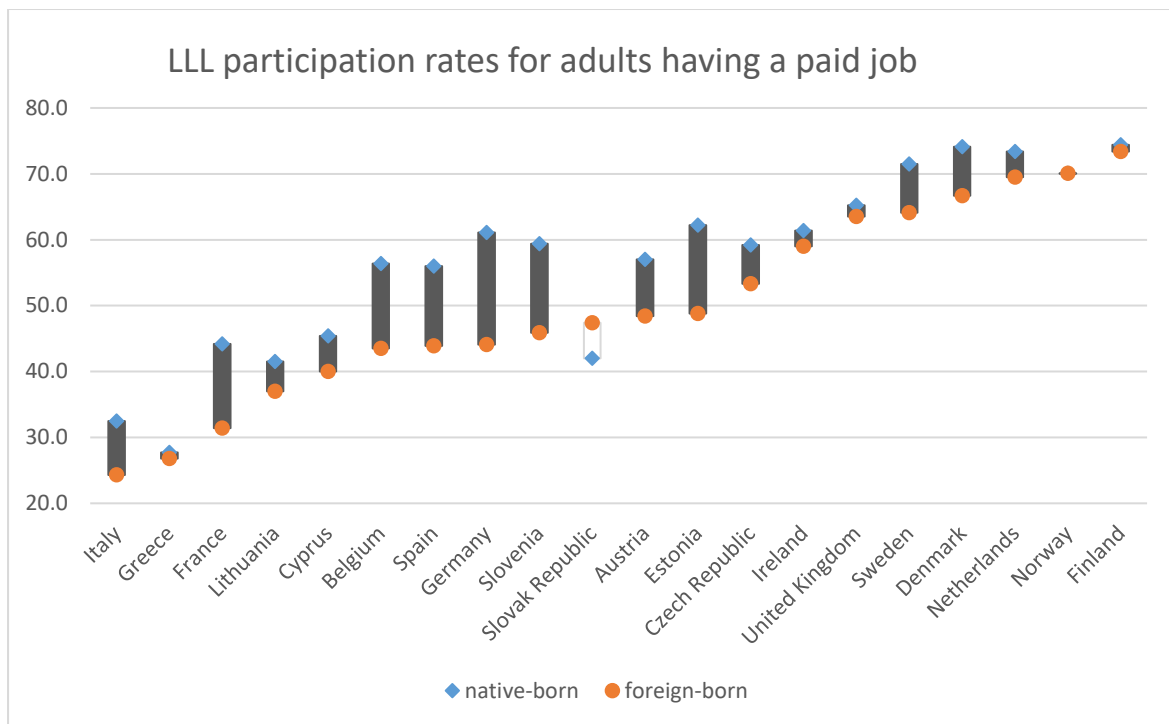
Source: PIAAC data

Figure 2: Participation rates for degree educated adults



Source: PIAAC data

Figure 3: Participation rates for adults having a paid job during the past 12 months



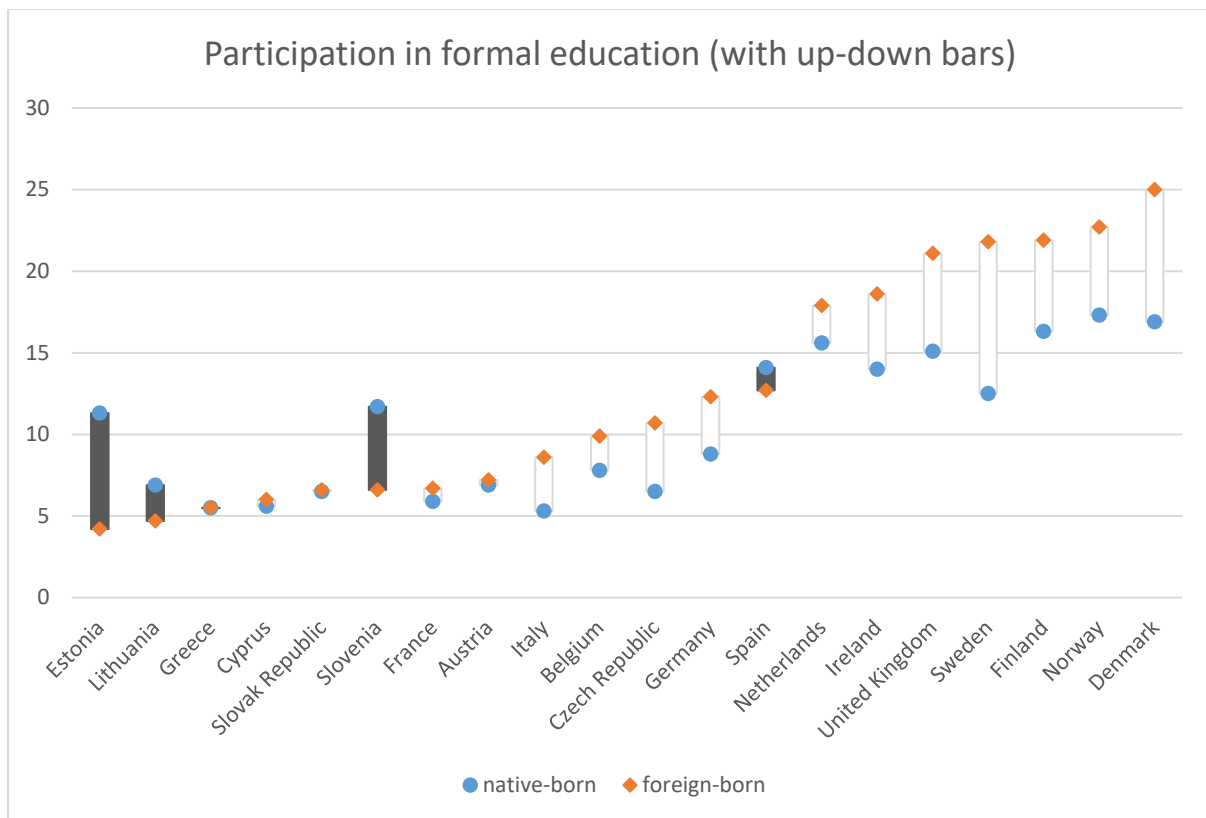
Source: PIAAC data

Participation in formal learning activities

The majority of lifelong learning participation tends to come from participation in non-formal education and training. However, participation in formal learning activities can provide adults a pathway to obtain officially recognised qualifications and is often perceived as a second chance route for those who did not finish their qualifications at an earlier age. It is also available for those who want to gain additional qualifications on top of the ones they already have.

Figure x demonstrates that participation in formal learning activities tend to be highest in the Nordic countries, followed by the liberal Anglo-Saxon countries and also by The Netherlands. Furthermore, it is interesting to see that foreign-born adults participate more in formal learning activities compared to those who are native-born. These differences also exist in the other Western European continental countries such as Germany, Belgium and France. Participation rates are lowest in Eastern European countries, and clear differences between foreign- and native-born adults exist in Estonia and Slovenia.

Figure 4: Participation in formal adult education



Source: PIAAC data

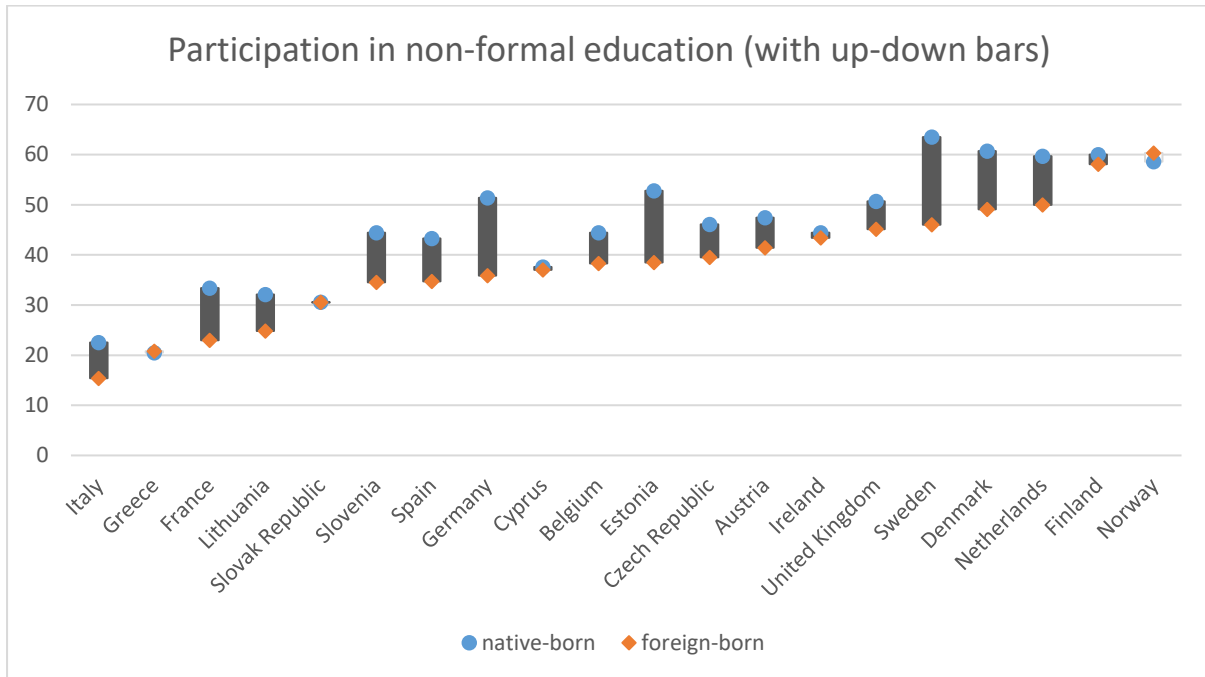
Participation in non-formal learning activities

As expected, Nordic and Anglo-Saxon countries, together with The Netherlands have the highest participation rates in non-formal education and training activities (see Figure 4.3). Compared to the situation regarding participation in formal learning activities, foreign-born adults now do clearly participate less than native-born adults, although they keep a slight advantage in Norway. The difference in Norway is not very big, but clearly visible in Sweden and Denmark. As mentioned before, the bulk of non-formal learning usually consists of workplace learning or on-the-job training. From previous analyses presented in the earlier section of this working paper, we do know that foreign-born adults are more likely to be employed in blue collar jobs in a wide range of countries. This is likely affecting their chances for participation in non-formal learning activities.

Participation in non-formal education is also known to have a strong vocational orientation. As can be seen from the results presented in Figure 4.4, job-related motives are strongly present in all 23 selected countries. For native-born adults, percentages across countries range from 76.7 percent till 89.4 percent. The range for foreign-born adults is slightly bigger, from 73.1 percent till 92.3 percent,

although in the majority of countries, a smaller proportion of foreign-born adults have indicated to participate because of job-related reasons.

Figure 5: Participation rates in non-formal education



Source: PIAAC data

Types of non-formal learning activities

As explained before, participation in non-formal learning is in fact a newly constructed variables based on four distinct types of non-formal learning activities. In the following part of the text, an overview will be provided on the participation rates in these different activities, comparing native-born and foreign-born adults.

The first type of activity is participation in open or distance education. Participation rates in this type of education and training is not very high and considerable variation across countries exists (see Figure 4.5). In 14 out of 23 countries, participation is higher for native-born adults than foreign-born ones. Clear advantages for foreign-born adults are present in Norway, Estonia and Ireland. The United States and Lithuania have generally higher participation rates in this form of education and training than other countries, but foreign-born adults in these countries participate less in them than native-born adults. Spain, as well as Sweden and Finland also have lower participation rates for foreign-born adults.

The second type of non-formal learning is on-the-job training and this is expected to be a large proportion of the overall participation rate in non-formal learning and general lifelong learning as such (see Figure 4.6). Again, considerable variation exists, ranging from 7.1 percent of foreign-born adults participating in Greece versus 41.6 percent of them participating in New Zealand. In the majority of countries, foreign-born adults are less likely to receive on-the-job training than native-born adults. Cyprus is an exception, which is likely the result of the highly educated foreign-born population. Across countries, there is variation in the gap between native- and foreign-born adults. In the Nordic countries, differences between the two groups are much smaller in Finland and Norway than in Sweden and Denmark. Differences in New Zealand are also rather small.

The third type is seminars and workshops and clear variation does exist as well (see Figure 4.7). Participation rates are highest in New Zealand (40.4%) and very low in Italy (3.1%). New Zealand and the Slovak Republic (12.9%) are the only two countries in which foreign-born adults participate more in seminars and workshops than native-born adults. Similar to on-the-job training, differences between the two groups are clearly visible in countries like Sweden (20.2%), Denmark (20.3%) and Germany (12.8). While participation in seminars and workshops is just below 25 percent for native-born adults in Germany, participation rates for foreign-born adults are much lower. The gap is also more than 8 percentage points in Austria (19.9%). Although it is possible that seminars and workshops can be attended because of both job- and non-job related reasons, the majority of non-formal education and training takes place in the job-related context and so do seminars and workshops. Given the stronger presence of foreign-born adults in blue collar jobs, it is unsurprising to see their lower participation in this type of education and training in most countries.

The fourth type consists of participation in private lessons and represents a smaller proportion of all participation in non-formal learning activities (see Figure 4.8). The four Nordic countries represent the highest participation rates on this dimension of non-formal learning, although foreign-born adults participate more than native-born adults in Denmark (21%) and Norway (22.5%), but not in Finland (14.3%) and Sweden (19.9%). It tends to be low in Southern and Eastern European countries. The Anglo-Saxon countries are presented in the middle of the Figure 4.8. In the United Kingdom (10.2%) and Ireland (10.6%), foreign-born adults seem to participate slightly more in private lessons than native-born adults. Austria (14.1%), Germany (11.6%) and The Netherlands (11.9%) have participation rates between 10 and 15 percent for both native- and foreign-born adults, but with a slight advantage for foreign-born ones.

Table 2: Participation rates in different types of non-formal education

	open or distance education		on-the-job training		seminars or workshops		private lessons	
	<i>native-born</i>	<i>foreign-born</i>	<i>native-born</i>	<i>foreign-born</i>	<i>native-born</i>	<i>foreign-born</i>	<i>native-born</i>	<i>foreign-born</i>
Austria	5.5	4.5	22.4	16.8	28.4	19.9	11.2	14.1
Belgium	5.4	6.3	28.6	20.6	19.3	14.6	8.3	8.5
Cyprus	9.5	8.7	16.2	20	26	23.2	8.7	6.8
Czech Republic	4.7	5.4	37.4	31.9	12.9	8.1	9.3	7.7
Denmark	12.6	10.6	38.8	25.4	29.4	20.3	19.4	21
Estonia	8.5	11.1	37.1	24.2	22.5	15.1	14.1	10.8
Finland	13.7	8.7	43.8	40.8	20.2	15	16.8	14.3
France	2	1.3	17.8	9.4	10.6	8.1	12.5	8.2
Germany	5.3	4.8	36.6	21.5	24.5	12.8	11.3	11.6
Greece	3.7	4.3	8.2	7.1	13.8	14.8	4	3.1
Ireland	4.9	7.3	30	26.2	23.1	21.5	8.2	10.6
Italy	5.8	3.2	13.5	9.6	7.8	3.1	3.6	2.4
Lithuania	15.2	13.1	23	19.3	15.9	12.4	5.5	6.2
Netherlands	14.2	14.2	42.6	31	27.7	21.3	10.7	11.9
Norway	5.1	8.9	33.1	33.2	32.1	28.7	17.3	22.5
Slovak Republic	3.2	2.9	21.2	21.9	11.1	12.9	6.4	3.5
Slovenia	3.9	1.7	24.8	17.2	27.2	20.1	9.3	8.3
Spain	16.2	10.9	26.4	17.5	12.8	8.5	9.2	9.4
Sweden	14.4	10.4	34.6	21.1	33.4	20.2	25.2	19.9
United Kingdom	7.3	7.5	37.6	31	27.1	21.2	7.5	10.2

Controlling for the dominant determinants of lifelong learning

Logistic regression models have been fitted to estimate the chances for adults to participate in lifelong learning activities. Regression analyses have been fitted for each country, presenting them in clusters of countries. These clusters represent groups of countries as discussed in the welfare typology literature, discussed in relation to education by e.g. Desmedt et al. (2006), Busemeyer (2014), Riddell

et al. (2012) and Saar et al., 2013 and are known to correlate with participation rates in lifelong learning. For each country, regression analyses have been fitted in three steps. The first model analyses lifelong learning participation in relation to being native- versus foreign-born. The second one includes speaking the native language of the country versus a foreign language. The third and final model additionally controls for (1) gender, (2) age, (3) educational attainment, (4) parental educational attainment, (5) having paid work and (6) literacy score. The analyses has been limited to literacy score because of its' high correlation with other direct skills measurement and therefore to avoid multicollinearity.

The first group to explore consists of the Nordic countries, the region in the world with the highest participation rates in adult lifelong learning (Desjardins, 2015). A first conclusion to make is that both model 1 and model 2 in all four countries have very low scores for their Nagelkerke R-square statistic. This very low result indicates that country of birth and speaking the native language of the country of residence (or not) are in fact weak predictors for explaining the variance in lifelong learning participation. In all Nordic countries, the Nagelkerke R-square makes a clear jump when controlling for other socio-demographic and socio-economic variables, as well as literacy score. Exploring the final models, integrating being native- or foreign-born, language and control factors, it is clear that foreign-born adults in Denmark, Norway and Sweden have fewer chances to participate in adult lifelong learning activities while those speaking a foreign language have increased chances (see Figure 6 for a visual representation). The opposite is true for Finland. This result might indicate a strong second language provision in the first three countries. Based on the coefficients and the change of the Nagelkerke R-square in the final model, it is clear that major predictors of participation relate to being highly educated and having a job, and generally coming from a strong socio-economic background. For purposes of space limit, the specific odd-ratio's for control variables are not being presented, but all of the them are above 1 compared to the reference categories 'no or low educational attainment', 'no or low parental educational attainment', 'oldest age group', 'no paid job', 'low literacy levels'.

The second group represents the Anglo-Saxon countries. These countries have lower participation rates than in the Nordic countries, but still higher ones than those in other regions of the world (Desjardins, 2015). Similar to the findings in relation to the Nordic countries, the Nagelkerke R-squares are again low for models 1 and 2, but make an increase within model 3. Looking at the foreign-born status compared to the native-born status, odd-ratio in the UK is slightly above 1 in the final model, but below 1 in Ireland. Speaking another language than the native language in the country also reduced the chances to be a participant in both countries. In general, major determinants relate to the socio-economic characteristics of the adults, with all control variables having odds-ratio's above 1 compared to the reference categories.

The third group represents the Continental Western European countries. Similar to the findings in the previous two groups, a similar pattern appears. Nagelkerke R-squares are low for models 1 and 2 but increase in the final model. Those who are highly educated, who do have a job and who are younger have more chances to participate and combining these elements means that young highly educated adults with a job are on the top of the participation rankings. Women have a slight advantage as well, although not in Germany. Looking at those coming from other countries, based on the final models, chances decrease in all countries. However, in the Dutch speaking countries (Belgium and The Netherlands), odd-ratios are above 1 for those who do not speak the native language, although below 1 for those in the German speaking countries (Germany and Austria) (see Figure 6). In general, these countries confirm the major determinants of adult lifelong learning participation, but foreign-born adults keep on experience lower chances, even when they are young, highly educated and in a job – measured through the control variables. The odds-ratio's above 1 for those speaking another language in Belgium and The Netherlands might again indicate a strong level of second language courses.

The next group consists of the Eastern European countries. Although these countries have been included in the analyses, it is important to be careful as the proportion of migrants in these countries is generally lower than in the other groups of countries. Looking at the results of the regression analyses, it is clear that similar determinants of lifelong learning participation appear, with low Nagelkerke R-squares for models 1 and 2. Based on the control factors, we know that younger adults, those who come from stronger educational backgrounds and those in jobs have far more chances to participate in lifelong learning than those who are in weaker positions, with again, all odds-ratio's above 1 compared to the reference categories. In Estonia, including both being a foreign-born adult and speaking another language than the dominant country one reduces the chances of being a lifelong learning participant. Being foreign-born has an odd-ratio below 1 in the Czech Republic, but above 1 in Slovakia. Directions for the inclusion of language are opposite. Taking both elements into account, being foreign-born or either speaking a foreign-language disadvantages the situation of adults in these countries.

Finally, the Southern European countries are presented as well. Again, and unsurprisingly, including the control factors in the third model boosts the predictive power of the model. In Cyprus, the odd-ratio for foreign-born adults is below 1, but the reference category for educational attainment is 'low' and it is clear from the descriptive analyses that those Cyprus has a large proportion of highly educated foreign-born adults. The opposite is appearing in the Italian data, where there are more low educated adults, who, for which it was seen that foreign-born participate more than the lower educated ones. Foreign-born adults in France and Spain seem to have a disadvantage, while adding language in the mix demonstrates an odd-ratio above 1 in both countries. Again, all odds-ratio's for the control variables are above 1 compared to the reference categories, mainly indicating that having a job and being highly educated are the major determinants of lifelong learning in these countries.

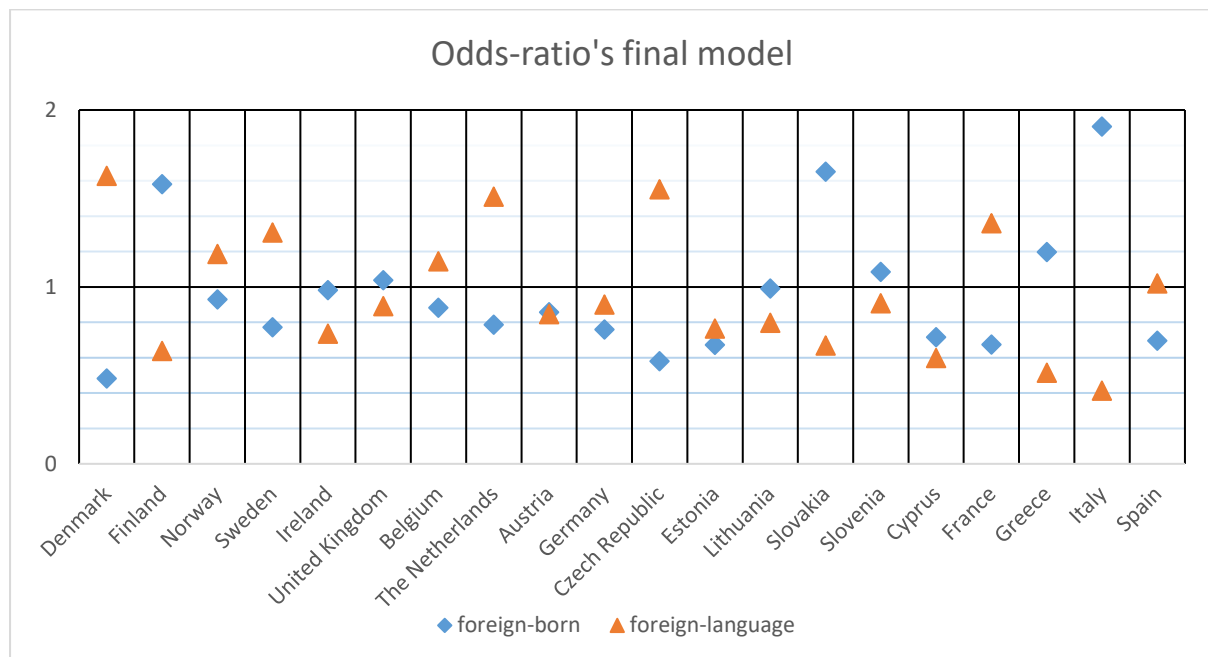
TABLE 3: Nagelkerke R-squares for the three models (dependent = participation in LLL)

COUNTRIES	FOREIGN-BORN	FOREIGN LANGUAGE	CONTROL FACTORS
<i>Scandinavian countries</i>			
Denmark	.003	.004	.229
Finland	.000	.003	.297
Norway	.000	.000	.212
Sweden	.005	.005	.184
<i>Anglo-Saxon countries</i>			
Ireland	.001	.002	.227
United Kingdom	.000	.000	.267
<i>Conservative Continental countries</i>			
Belgium	.001	.001	.234
The Netherlands	.003	.003	.268
Austria	.004	.007	.209
Germany	.015	.016	.204
<i>Eastern European countries</i>			
Czech Republic	.001	.002	.234
Estonia	.020	.021	.268
Lithuania	.001	.004	.274
Slovakia	.000	.008	.266
Slovenia	.008	.009	.270
<i>Southern European countries</i>			
Cyprus	.000	.004	.216
France	.009	.010	.173
Greece	.000	.003	.243
Italy	.000	.006	.242
Spain	.003	.003	.223

In general, looking at the results across countries, it is clear that control factors included in the analyses – age, gender, educational attainment, having a job – are stronger determinants of participation than being foreign-born or speaking a foreign language. However, despite the lower Nagelkerke R-squares in the models including foreign-born adults and foreign-language speakers, countries do differ towards the extent these groups are included in the lifelong learning system. Overall, Nordic countries seem more inclusive than e.g. the Anglo-Saxon countries or the German-

speaking continental countries such as Germany and Austria. In Eastern European countries, participation rates are generally low and migration rates are also rather low so it is harder to draw strong conclusions. Southern European countries also have lower participation rates and tend to disadvantage either those who come from other countries or those who speak another language than the native one in the host country.

Figure 6: Odds-ratio's for foreign-born and foreign-language in final regression model



Conclusions

Going back to the original research questions to be answered in this paper, we can now conclude that foreign-born adults in a range of different European countries, belonging to different welfare types, tend to have lower participation rates in adult lifelong learning, although participation in formal adult education seemed to be more advantageous for foreign-born adults compared to native-born adults in a wide range of countries. Their lower participation rates are mainly explained through the strong job-related nature of lifelong learning as a whole.

Participation rates in different European countries widely differ and tend to correlate with welfare typologies, with Nordic social-democratic countries having the highest participation rates. However, as could be seen from the regression models, determinants of participation

were mainly explained through the control factors, not the migration and language status. Additionally, the high correlation between participation rates for native-born and foreign-born adults indicate that countries who want to be more inclusive towards foreign-born adults are most likely in need of a shift in their education and labour market policies in general, making sure the right infrastructure and funding regimes exist.

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