



# Access of mobile EU citizens to social protection

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## **SOCIAL SITUATION MONITOR**

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### **ACCESS OF MOBILE EU CITIZENS TO SOCIAL PROTECTION**

RESEARCH NOTE NO.10/2013

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## Abstract

This paper investigates how receipt of welfare benefits differs between natives and mobile EU citizens in EU countries, on the basis of data from EU-SILC 2011. The analysis focuses on differences in receipt of non-contributory benefits (such as family benefits, housing benefits, poverty relief, etc.), although differences in the receipt of unemployment benefit are also considered. A rough comparison shows welfare use to differ between natives and migrants in several cases. To sort out pure composition effects, multivariate statistical analysis (probit regressions) of benefit receipt (education, unemployment, disability, housing, family-related transfers and transfers to combat social exclusion) was carried out for 18 countries with specifications that controlled for age, gender, education, household type and labour-market status. The analysis shows that, for most benefits (unemployment, education, social exclusion), the differences between natives and mobile EU citizens are small and statistically insignificant in most of the countries. Higher benefit receipt among mobile EU citizens was found only in the case of housing benefit in a few countries. On the other hand, it seems that in most of the EU, being a mobile EU citizen is associated with a lower probability of receiving family and child-related benefits. The results contribute to a more balanced interpretation of the “welfare magnet” hypothesis, according to which generous welfare systems are important factors that substantially affect the numbers and composition of migrants.

## Introduction

This research note explores the evidence available on the access of mobile EU citizens to social welfare benefits in the event that they need income support. Successive enlargements of the EU have included countries with income levels substantially lower than those of the EU15 countries. Not only are countries of the EU15 characterized by higher wages than the rest of the EU, but many of them also operate generous welfare systems. This has raised the issue of whether mobile EU citizens are motivated to move to EU15 countries by welfare benefits that are more generous than in their country of origin.

The issue of welfare migration is a central question in the public perception of inward migration in the host countries. As a recent study argues, the main driver behind the negative perception of migration is concern about its fiscal impact (Boeri 2010). The same study finds increasing concern in European countries that migrants abuse the welfare state. The situation has worsened with the economic recession, which has hit countries like Ireland and Spain hard – countries that attracted many migrants during the years of economic growth.

According to the “welfare magnet” hypothesis, generous welfare systems are important factors that substantially affect the number and composition of migrants. The availability of generous welfare benefits might therefore act as an additional motivation in the decision to migrate, or might help migrants to remain in the country to which they have moved, even if they are unable to find a job – a situation that could potentially lead to the adverse selection of migrants (Giulietti and Wahba 2013).

This research note compares the receipt of benefits (most importantly non-contributory benefits) by mobile citizens and natives, taking into account compositional differences (in age, education level, household structure, etc.) between the two groups. It does not directly address the question of whether migration flows are influenced by the availability of generous welfare provisions in the potential destination countries. Instead it studies one potential consequence of such welfare migration, namely overuse of welfare benefits by migrants. It has to be remembered, however, that the study does not seek to analyse whether overuse of welfare benefits is a consequence of welfare migration or stems from other causes, such as the labour-market discrimination of migrants, for example.

## Literature review

According to the “welfare magnet” hypothesis, first put forward by Borjas (1999), generous welfare systems are important factors of migration that substantially affect the number and composition of migrants. Generous welfare systems can act as a “pull” factor in the decision to migrate, or may help migrants stay in their country of choice even in the face of adversity on the labour market. Razin and Wahba (2011) argue that policy mixes affecting migrants may be especially important in determining the composition of the arriving population. While a capital-abundant country with an open migration policy would attract both low-skilled and highly skilled migrants, a generous welfare system attracts rather more low-skilled immigrants, as they tend to gain more from welfare benefits, relative to what they contribute in the form of taxation.

The welfare-magnet hypothesis has been tested by studying the correlation between migration inflows and the welfare generosity of countries. Giulietti et al. (2013), for instance, study the effect of unemployment benefits on immigration flows in a sample of 19 European countries, over the period 1993–2008. The study concludes that migration flows do not follow changes in the generosity of unemployment benefit.

Other studies also find non-existent or weak effects of welfare generosity on migration flows (Giulietti and Kahanec 2013).<sup>1</sup>

If migrants are attracted by a generous welfare state, this could result in higher benefit receipt among migrants than among the native population. Studies like Borjas and Trejo (1991) showed for the US that later cohorts of migrants tend to use welfare benefits more intensively than their predecessors. These studies also revealed that longer stays are associated with an increasing use of the welfare system. Later, using data from the Survey of Income and Program Participation, Borjas and Hilton (1996) arrived at the result that, when all social transfers are considered, immigrant households may have a higher rate of benefit receipt than natives. It also highlighted the fact that differences in immigrant networks may lead to different welfare use, depending on country of origin.

Similar studies have been conducted on European samples. For example, using Swedish panel data from between 1990 and 1996, Hansen and Lofstrom (2003) find that, after controlling for observable characteristics, migrant welfare use is significantly higher than native use, although they also show that over time there is some assimilation out of welfare. Their 2001 work on the same database suggests, however, that the welfare dependency of immigrants may contain a much greater structural element that makes them far more dependent on transfers; this hints at the existence of a welfare trap. Analysing Turkish immigrant welfare use in Germany, Riphahn et al. (2010) find increased welfare use among second-generation Turkish migrants.

Using the EU-SILC data, Boeri (2010) finds that unskilled immigrants tend to be net recipients of non-contributory benefits, especially in Member States with more generous systems. In a similar endeavour, using data on migrants from selected non-European countries, Bratsberg et al. (2010) find that, in the case of Norway, there may be a disincentive effect in operation: the interaction of social benefits and the type of work usually available to migrants could reduce workforce participation in the longer term. Also, in analysing EU-SILC data from Ireland, Barrett and McCarthy (2008) find some evidence that those migrants who face a language barrier differ from other migrants and from natives in terms of welfare use.

Contrary to the results reviewed above, many studies do not find evidence of increased welfare use among migrants. On the basis of the 1970 and 1980 US censuses, Jensen (1988) found that, although they had on average lower income and higher poverty rates, migrants utilized public assistance options less than native families. Analysing German data, Castronova et al. (2001) found that, if other characteristics are controlled for, migrants are no more likely to use benefits than are natives. Riphahn (2004) drew similar conclusions, being unable to establish any proof of migrants assimilating into or out of welfare use. Recent studies examining the accession of the EU12 and migrant welfare-use patterns – for example Kahanec et al. (2009) – have shown that there may be some types of benefits that are received by migrants in particular, but there is no clear indication of general overutilization of welfare benefits by migrants. The work of Constant (2011) also ends with a similar conclusion, arguing that no proof can be found of excess welfare use. For the Italian case, what Pellizzari (2011) finds is that migrants adapt to the peculiarities of the local welfare system and, disregarding public health and education, the receipt of transfers by EU12 migrants does not differ markedly from receipt by the native population.

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<sup>1</sup> Although for example Jackson et al. (2012) present evidence that certain government programmes, such as health/education spending and unemployment compensation, have positive impacts on the migration flows.

To summarize, US results tend to imply more of a positive relationship between immigration and welfare opportunities, while the picture in Europe is more mixed (which, of course, is in line with what one might expect, given the greater heterogeneity). This highlights the need to analyse European countries within a unified framework, the better to compare differences. Such an exercise was undertaken by Zimmermann et al. (2012) on earlier EU-SILC data. They found that there was no sign of any significant difference between migrants and natives in their use of welfare, especially as regards intra-EU migrants. One difference they did detect, however, was in at-risk-of-poverty rates: their results indicated that being a migrant was likely to increase the risk in nearly all the countries analysed. Similar results were obtained in the case of non-economically active, intra-EU migrants by the recent ICF GHK (2013) study.<sup>2</sup>

## Data and descriptive analysis

Here we analyse differences between natives and mobile EU citizens in their receipt of welfare benefits. Theoretically, overuse of welfare benefits is most likely in the case of non-contributory benefits, since access to contributory benefits is very much constrained by the need to have been employed for a certain period of time beforehand, and so overuse is likely to be less of a problem.

### Data and measurement

The main part of the empirical analysis is based on data from the European Union's Statistics on Living and Income Conditions (EU-SILC), for the year 2011 (or 2010 in the case of Ireland). The focus is on the 18–64 age group.

### Measuring migration

There are two possibilities in EU-SILC to define immigrant status, since the study records both the citizenship and the country of birth of individuals. The first option would be to define immigrants as individuals resident in a country other than the country of which they are citizens. The problem with this definition is that it may be biased by cross-country differences in naturalization laws. The second option is to use information on country of birth, and to define as immigrants all those who currently reside in a country different from their country of birth. Here, the source of bias is misclassification as immigrants of "true nationals" born abroad for whatever reason. Here the second solution will be used, because it has less of a distorting effect on comparisons between countries.

An additional issue is that the EU-SILC data does not allow us to identify the exact country of birth of an individual. We know only if the individual is a native, was born in another EU country, or was born in a non-EU country. This is problematic, since motives to migrate are presumably different for individuals from the low-income countries of Eastern and South-eastern Europe than they are for people from high-income EU15 countries. Moreover, in some countries (Germany, Estonia, Latvia, Slovenia and Malta) the dataset does not even distinguish between migrants from inside and outside the EU. These countries were omitted from the analysis.<sup>3</sup>

Table A1 of the Annex shows the sample size of mobile EU citizens in the countries included in the analysis. In the case of six countries (Denmark, Finland, Greece, Portugal, Slovakia and Hungary), the sample size is small (lower than 300). Rather than further restricting country coverage, these countries were included in the

<sup>2</sup> Studies analysing the overall fiscal impact of migration – taking into account tax payments and benefit receipt of migrants – find that, in most countries, it tends to be very small in terms of GDP and is around zero on average across the OECD countries considered (OECD 2013).

<sup>3</sup> Data on citizenship does not help to increase country coverage, since the dataset for these countries draws no distinction between other EU and non-EU citizenship.

analysis. When comparing benefit receipt by natives and mobile EU citizens, the statistical significance of the differences observed is always shown.

Additional data was obtained from the EU Labour Force Survey (EU-LFS). The advantage of the Labour Force Survey is that information on country of birth is more detailed, in the sense that data can be obtained on whether individuals were born in an EU15 country, an EU12 country or outside the EU.

### **Measuring benefits**

EU-SILC includes data on several types of welfare benefit, but all these categories are aggregates of several benefits that operate in the different countries. This is a difficulty, in the sense that many of these aggregated categories of benefits include both non-contributory and contributory benefits. As our interest lies mainly in the receipt of non-contributory benefits, we do not analyse old-age benefits, survivor benefits or sickness benefits, which are contributory benefits in most of the countries. Unemployment benefits – or at least most of them – also fall into this category, but we still include them, because this is the only benefit recorded in EU-LFS that provides richer information on country of birth.

In the case of EU-SILC data, the focus is on receipt of family allowances, housing benefits, social exclusion benefits, disability benefits and education allowances. The first three were recorded at household level; the last two were recorded at individual level.

Family/child allowances provide financial support for households in bringing up children, or provide financial assistance to people who support relatives other than children. They include income maintenance benefit in the event of childbirth, birth grants, parental leave benefits, family or child allowances, alimony paid by government<sup>4</sup> and other family-related cash benefits.

Housing benefits refer to interventions by public authorities to help households meet the cost of housing. These are exclusively means-tested benefits, and include rent benefits and benefits for owner-occupiers.

Social exclusion benefits provide support in the main for those whose income falls below a minimum level, in some cases even after receipt of other benefits.

Disability benefits refer to benefits that provide an income for those of active age whose ability to work is impaired beyond a minimum level laid down by legislation on account of a physical or mental disability. It includes disability pension, early retirement in case of reduced ability to work, care allowance, allowances paid to disabled people when they undertake work or when they undergo vocational training, and other cash benefits.

Education allowances refer to grants, scholarships and other help with education that is received by students.

### **Descriptive statistics**

As data on mobile EU citizens is only available in aggregated form in the EU-SILC dataset used in the analysis, first we provide a more detailed picture of the origin of mobile citizens living in EU countries. Table 1 shows the composition of working-age population by country of birth, from the EU Labour Force Survey. The percentage of mobile EU citizens is largest in Luxembourg, where almost two-fifths of the population was born in another EU27 country. The percentage of non-natives born in EU countries is also high in Ireland and Cyprus where 13–14% of the population was born in some other country of the EU. The percentage of mobile EU citizens is also relatively high in Belgium, Austria, the UK, Sweden and Spain (5–7%). In some countries, like Belgium,

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<sup>4</sup> In some countries alimony is paid by the government if a parent fails to fulfil the obligation to pay.



Luxembourg and France, mobile EU citizens are predominantly from EU15 countries, and in Sweden and Denmark, too, non-natives from EU27 countries are mainly from Member States that joined the EU before 2004. On the other hand, in Italy and Greece a majority of non-natives born in other EU Member States are from the EU12 countries. In the case of Ireland, the UK, Austria, Cyprus and Spain, EU-born non-natives are more or less equally divided between those born in EU15 countries and those born in EU12 countries.

**Table 1 Division of working-age population by country of birth (15–64), 2012**

	<b>Native</b>	<b>Non-Native EU15</b>	<b>Non-Native EU10</b>	<b>Non-Native EU2</b>	<b>Non-Native Non-EU27</b>
BE	83.3	5.3	0.8	0.7	9.9
CZ	97.0	0.2	1.5	0.1	1.3
DK	88.0	2.4	0.9	0.4	8.2
EE	88.1	0.2	0.4	0.0	11.3
IE	80.0	7.5	5.8	0.5	6.1
EL	90.7	0.5	0.3	0.9	7.6
ES	83.0	2.4	0.2	2.4	12.0
FR	87.2	2.8	0.2	0.2	9.6
IT	87.6	1.0	0.4	2.6	8.5
CY	73.9	6.1	0.8	6.3	12.9
LV	88.4	0.1	0.9	0.0	10.5
LT	96.3	0.0	0.2	0.0	3.5
LU	51.7	36.9	1.6	0.7	9.0
NL	87.1	2.0	0.6	0.1	10.1
AT	81.9	3.3	2.3	1.1	11.4
PT	91.1	1.8	0.0	0.3	6.8
SK	99.5	0.0	0.3	0.0	0.2
FI	95.5	1.2	0.6	0.1	2.7
SE	81.7	3.3	1.3	0.4	13.2
UK	84.2	2.5	2.3	0.4	10.7
Total	86.5	2.2	0.9	1.0	9.3

*Note: EU10 are Member States that joined the EU in 2004; EU2 countries are Romania and Bulgaria.  
Source: EU-LFS.*

In the following, we present descriptive tables of welfare use by mobile EU citizens, based on data from the EU-SILC 2011 database. We selected countries that had significant migrant populations *and* where EU-SILC data allows a distinction to be drawn between individuals born inside and outside the borders of the European Union. That does not mean, though, that the size of these migrant populations is similar. With the notable exceptions of Ireland and Luxembourg, all EU15 countries have a higher share of migrants born outside the EU than inside, while in the EU12 countries it is more common to have a higher share of intra-EU migrants (here Estonia, Cyprus and Latvia are the exception).

### **Comparison of transfers received**

In the following section, benefit receipt is compared for natives and mobile EU citizens, to see whether there are initial differences in each case that warrant closer examination. The following figures are simple comparisons of the probability of receiving the given type of benefit; differences in the composition of the two groups are not taken into

account. There then follows a description of the composition of the native population and mobile EU citizens. Regression analysis (see below) was then used to compare benefit receipt in the two groups, taking into account the compositional differences.

First, the receipt of unemployment benefit among mobile EU citizens will be compared to receipt among natives in different countries. Although unemployment benefit is largely contributory, it is worth analysing it because here we can take advantage of the more detailed information available in the Labour Force Survey. The LFS contains more detailed information not only on country of birth, but also on whether the respondent was receiving assistance from the public employment office at the time of the interview. This differs from the EU-SILC data, where information on income refers to the year preceding the interview.

Based on EU-LFS data, the percentage of unemployment benefit recipients among the unemployed is shown in Table 2. Because of limitations in sample size, the table first compares benefit receipt among the native unemployed and among the unemployed born in other EU27 countries and non-EU countries. Then the last two columns give the percentage of benefit recipients among those born in the EU12 countries and the EU2 countries (where sample size allows). Table 2 shows that benefit receipt among non-natives from other EU27 countries is lower than for natives in the majority of the 18 countries where comparison is possible from the data. The most notable exceptions include Greece, Finland, Luxembourg, Portugal and Sweden.

**Table 2 Percentage of unemployment benefit recipients among the unemployed (15–64), 2011**

	Non-natives		Natives	Non-natives: EU12	Non-natives: EU2
	EU27	Non-EU			
AT	51.3	54.7	54.9	43.7	45.0
BE	55.3	55.6	71.5	26.5	17.9
CY	20.2	14.7	23.8	19.1	18.8
CZ	24.3	7.5	28.3	24.3	
DK	52.5	52.0	50.2	44.7	
EE		16.3	17.2		
EL	28.4	24.3	21.3	27.6	30.9
ES	37.5	36.6	38.1	33.3	33.2
FI	61.6	70.7	56.8		
FR	42.8	32.3	40.7		
HR	5.0	19.3	16.2		
HU	31.3	31.8	41.7	32.5	33.7
IT	6.4	7.9	6.4	6.6	6.6
LT	0.0	22.5	17.2		
LU	37.7	16.6	22.6		
LV	7.2	10.6	10.2		
MT		12.6	26.5		
PT	36.3	34.9	31.5		
SE	25.8	19.1	21.7	24.6	28.5
SI		37.2	32.8		
UK	27.8	34.1	43.3	22.5	

Note: EU10 are Member States that joined the EU in 2004; EU2 countries are Romania and Bulgaria.

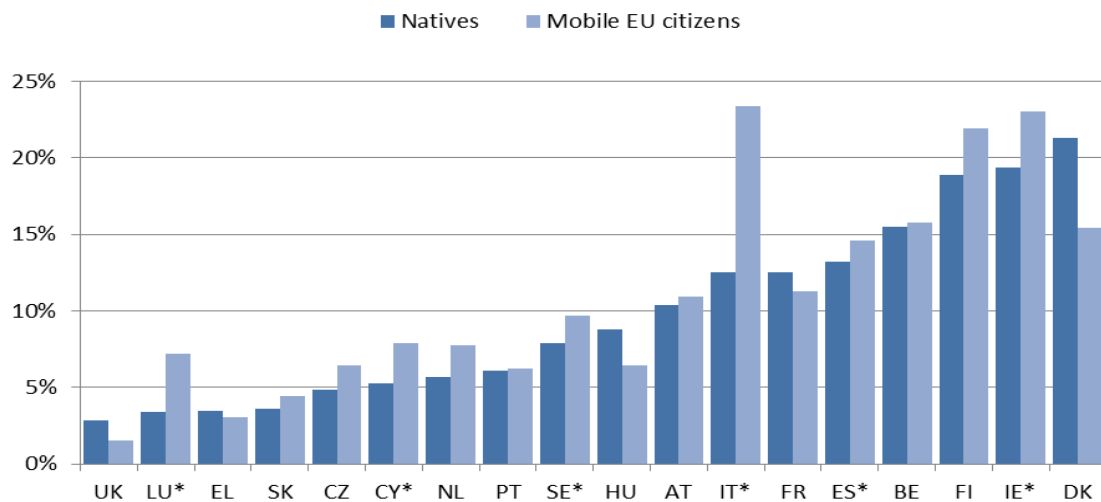
Source: EU-LFS 2011. Empty cells show cases where sample size is insufficient to carry out estimation.

In the case of countries where the data enables the unemployed born in the EU12 countries to be distinguished, we see higher benefit receipt among these people only in Greece and Sweden. In all other countries, benefit receipt among non-natives born in the New Member States is lower than among natives.

The following figures compare benefit receipt between natives and mobile EU citizens based on data from EU-SILC. As described above, people born in EU15 countries and the EU12 Member States cannot be differentiated on the basis of this dataset, and so natives are compared to mobile EU citizens in general. As the sample size for the migrant population is rather small in several countries (see Annex Table A1), benefit receipt is compared without further restrictions on the sample. The comparisons presented in the following figures are thus raw differences and have to be further examined by comparing natives and mobile EU citizens who are similar in socio-economic attributes that are relevant for the given benefit. This will be done in the regression analysis that follows.

Figure 1 compares receipt of unemployment benefit. It seems that the percentage of benefit recipients among natives is similar or higher than among mobile EU citizens in the majority of the countries. The exceptions are Luxembourg, Cyprus, Sweden, Italy and Ireland. In Italy, unemployment benefit receipt is 10 points higher among mobile citizens than among natives. In Luxembourg, the percentage is also significantly higher, but there mobile EU citizens are predominantly from EU15 countries, and so this does not reflect welfare migration from the EU12 countries. Countries where benefit receipt among mobile EU citizens is below that of natives include Hungary, Denmark and the UK, although these differences are not statistically significant. It is, of course, important to remember that the occurrence of unemployment differs between natives and mobile EU citizens. As Figure 11 (below) shows, the incidence of unemployment is higher among mobile EU citizens in half of the countries, but is roughly the same in the other half. The regression analysis below will provide a comparison of benefit receipt, taking such differences into account.

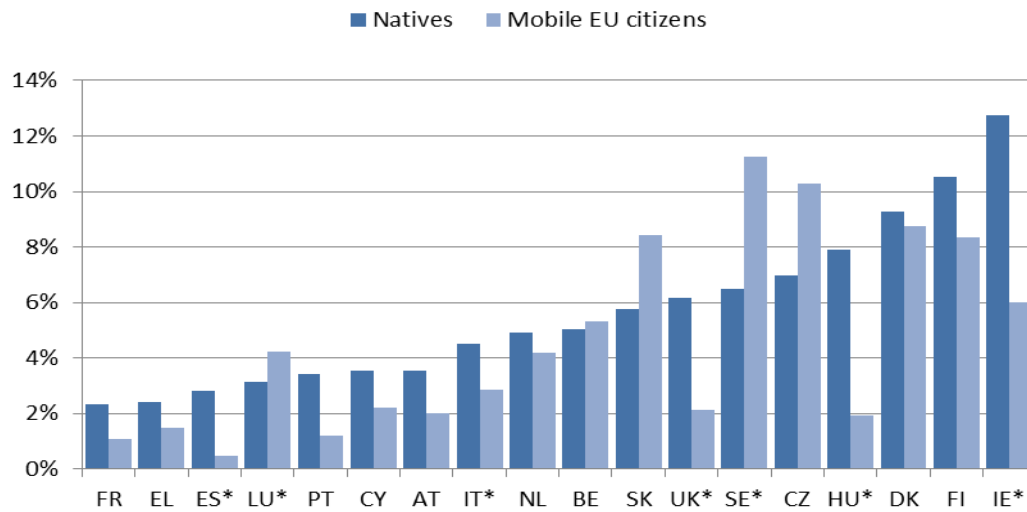
**Figure 1 Receipt of unemployment benefits among natives and mobile EU citizens (18–64), 2010**



*Note: Countries marked with an asterisk show a statistically significant difference between groups.*

*Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.*

**Figure 2 Receipt of disability support among natives and mobile EU citizens (18–64), 2010**

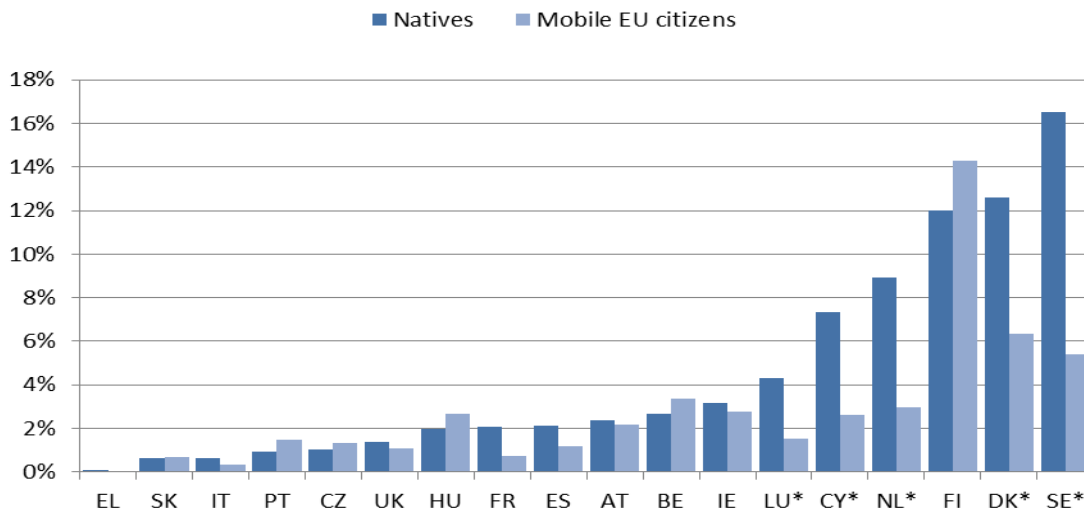


Note: Countries marked with an asterisk show a statistically significant difference between groups.  
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

Figure 2 compares receipt of disability support between natives and mobile EU citizens. In this case, benefit receipt is higher among natives in most of the countries. Mobile EU citizens receive disability support substantially more often than their native counterparts in only four countries: Sweden, Luxembourg, Slovakia and the Czech Republic, though the difference is statistically significant in only the first two. In these countries, mobile EU citizens are 30–50% more likely to apply and receive disability support than is the local population. In Ireland, Hungary, the United Kingdom, Italy and Spain, natives receive disability benefit more often than mobile EU citizens, and the difference is large and statistically significant in these cases. It is evident that disability benefits are most important for older age groups, and so the different age composition of the native population and mobile EU citizens should be taken into account. The regression analysis below will compare receipt of disability benefits, controlling for differences in the age composition of the two groups.

Figure 3 compares receipt of educational benefits. The results show a higher percentage of benefit recipients among natives than among mobile EU citizens in 12 of the 18 countries in the comparison. The biggest difference is observed in Sweden, which is the country where education-related benefits are the most important: over 16% of natives receive education-related benefits in this age group, while among mobile EU citizens the percentage is below 6%. The most important exceptions are Finland and Belgium, although here the difference is not statistically significant. In Finland, 14% of mobile EU citizens in the given age group receive education-related benefits, compared to only 12% of those born in the country. Of course, education-related benefits are most important for younger generations, and so the different age composition of the native population and mobile EU citizens distorts the picture. The regression analysis below compares receipt of educational benefits, controlling for differences in the age composition of the two groups.

**Figure 3 Receipt of education-related benefits among natives and mobile EU citizens (18–64), 2010**

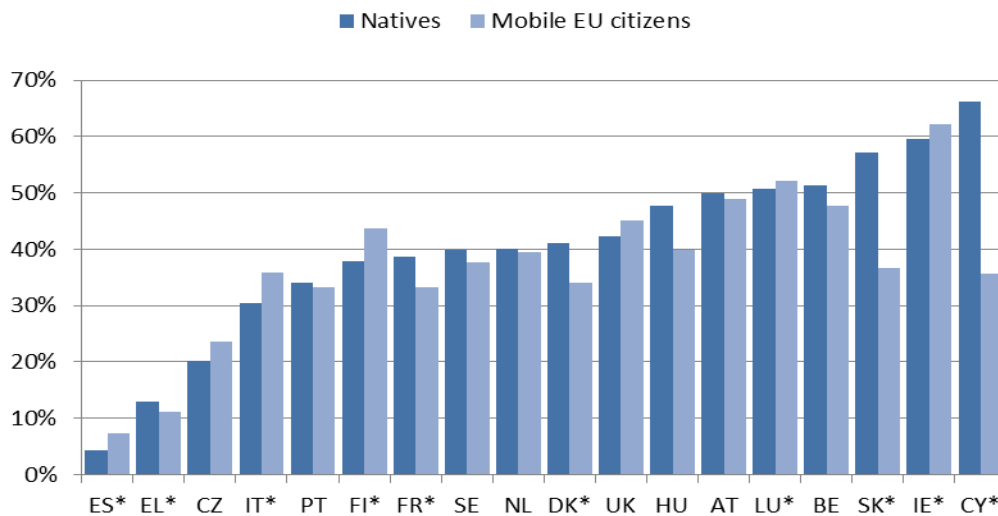


*Note: Countries marked with an asterisk show a statistically significant difference between groups.  
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.*

The next type of benefit studied is family and child-related allowances, and is recorded at the household level in the dataset. The data analysis continues to be undertaken at the individual level, however, since country of birth is an individual attribute. So in this case (and in the case of other benefits measured at the household level), the figure shows the percentage of individuals who live in households that receive the given transfer.<sup>5</sup> As was mentioned above, this group of benefits is quite heterogeneous, covering universal, insurance-based and means-tested transfers. As Figure 4 shows, in half of all cases, mobile EU citizens and natives have a similar likelihood of receiving family and child-related assistance from the respective authorities. A wide gap can be discerned between the treatment of natives and EU-born migrants in Cyprus and Slovakia, where it is much less likely that mobile EU citizens receive family benefits. In France and Denmark, it is a similar story, although the gap is narrower. Mobile EU citizens are more likely to receive family benefits in five countries: Ireland, Luxembourg, Finland, Italy and Spain. Differences in benefit receipt in these cases are in the order of 2–5 percentage points. Overall, no large differences in favour of EU mobile citizens can be seen in the case of family assistance benefits.

<sup>5</sup> The analysis focuses on the household in the case of family assistance benefits, since most of these benefits are conditional on the presence of children in the household, and thus it is impossible to assign these benefits to specific household members.

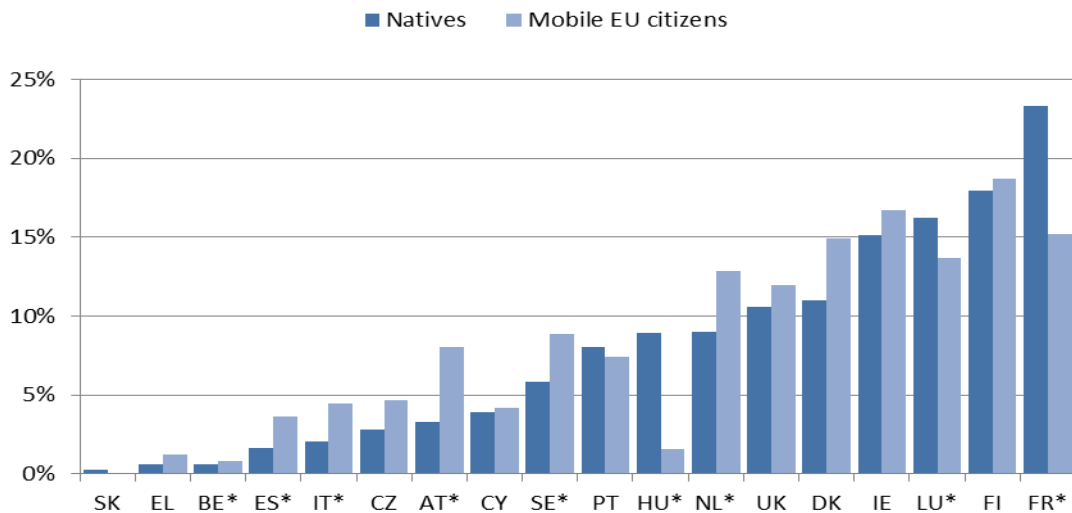
**Figure 4 Receipt of family assistance among natives and mobile EU citizens (18–64), 2010**



Note: Countries marked with an asterisk show a statistically significant difference between groups.  
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

Housing benefits are mostly non-contributory and means-tested in EU countries. Housing benefits are also recorded at the household level, and so Figure 5 shows the percentage of the population living in households that receive the benefit. In six of the 18 countries studied, mobile citizens are significantly more likely to receive housing assistance from the authorities, with the largest relative differences in Austria, Spain and Italy. In France, Luxembourg and Hungary, benefit receipt of this type is lower among mobile EU citizens, the difference being largest in Hungary.

**Figure 5 Receipt of housing assistance among natives and mobile EU citizens (18–64), 2010**

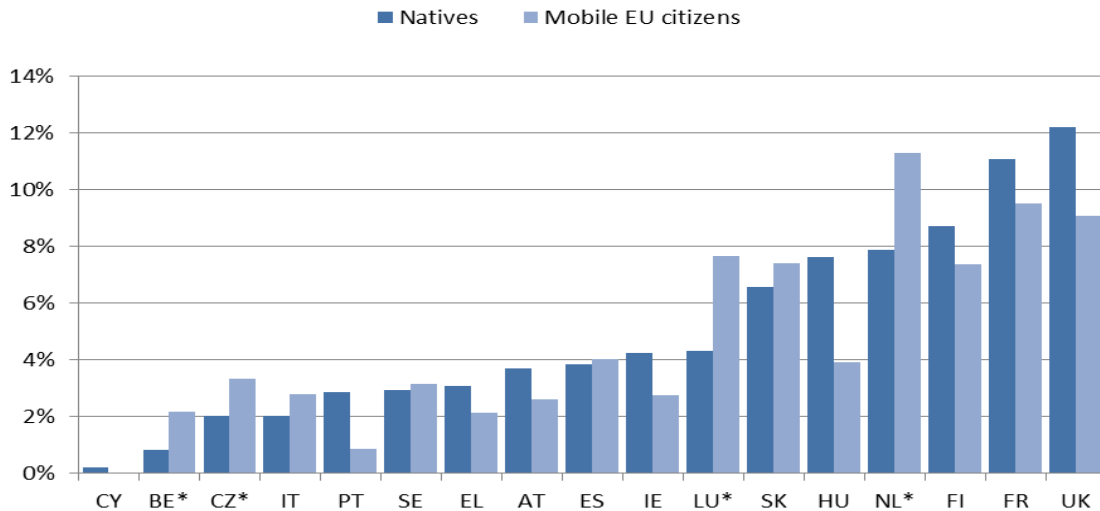


Note: Countries marked with an asterisk show a statistically significant difference between groups.  
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

Social exclusion benefits are means-tested in EU countries. These benefits are recorded at the household level, and so our figure shows the percentage of the population living in households that receive the benefit. Among natives and mobile citizens, the receipt of benefits to combat social exclusion is not significantly different in statistical terms in 14 of the 18 countries. There are only four countries where benefit receipt among mobile EU citizens significantly exceeds receipt among the

native population: Belgium, Luxembourg, the Netherlands and the Czech Republic. In relative terms, the difference is largest in Belgium; in absolute terms, it is greatest in the Netherlands and Luxembourg.

**Figure 6 Receipt of benefits against social exclusion (18–64), 2010**



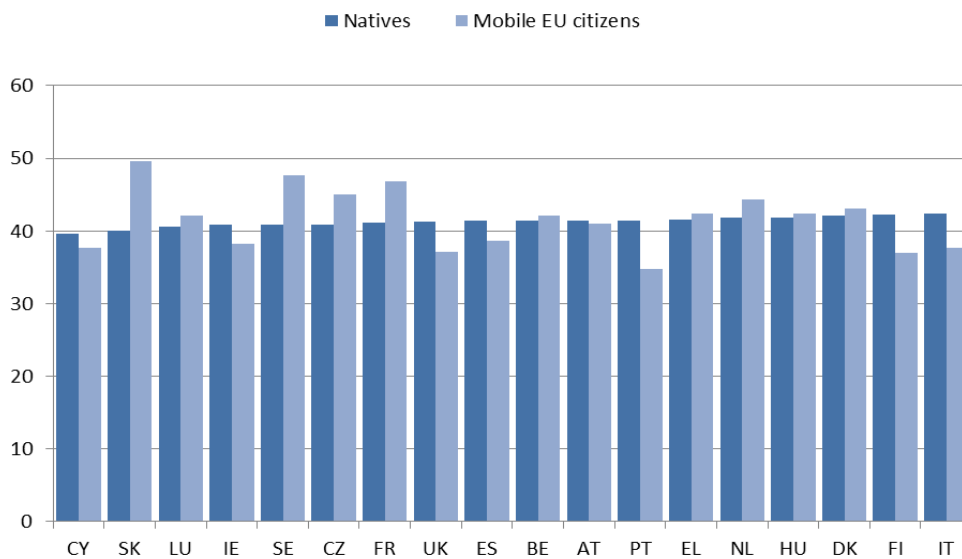
Note: Countries marked with an asterisk show a statistically significant difference between groups.  
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

### Comparison of native population and mobile EU citizens

The differences in benefit receipt detected in the previous section might be related to differences in the composition of the native population and mobile EU citizens in terms of characteristics that are related to eligibility for certain benefits. In this section, the composition of the two groups will be compared.

EU countries vary in terms of age differences between the native population and mobile EU citizens (Figure 7).

**Figure 7 Average age of native population and mobile EU citizens (18–64), 2010**



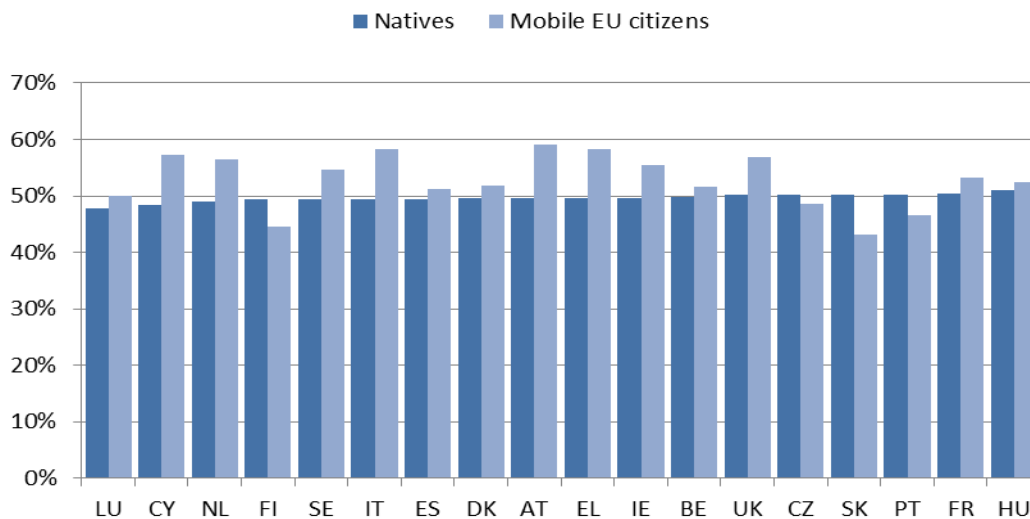
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

In Spain, Portugal, Italy, the UK, Finland and Ireland, mobile EU citizens tend to be younger than the native population, whereas in Slovakia, Sweden, the Czech Republic, the Netherlands and France they are markedly older. In Austria, Belgium and

Hungary, the average age of the native population and of mobile EU citizens is remarkably similar within the 18–64 age group, which is the focus of this study. Altogether, the difference between average ages remains below two years in seven of the 18 countries included in the comparison.

As Figure 8 shows, in the majority of countries the percentage of women is higher among mobile EU citizens than among natives. The most important differences can be seen in Austria, Cyprus, Greece, Italy and the Netherlands. The country where the percentage of women in the native population exceeds the percentage of women in the migrant population most is Slovakia.<sup>6</sup>

**Figure 8 Percentage of women among native population and mobile EU citizens (18–64), 2010**



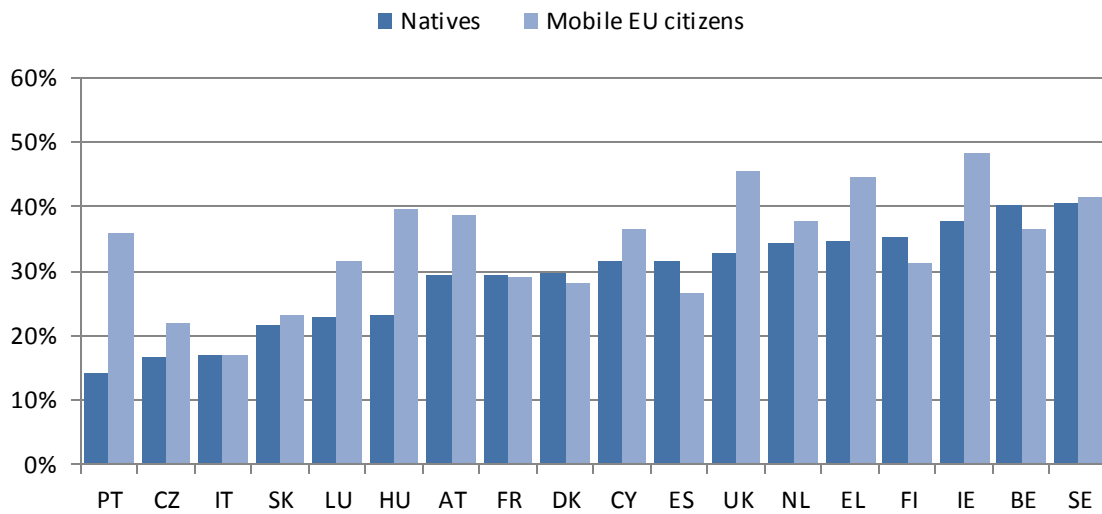
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

Figure 9 compares the percentage of those with tertiary education in the native population to the percentage among mobile citizens. The data shows that, in the majority of countries, the share of those with tertiary education is higher among mobile EU citizens. The difference is most important in Portugal, where 32% of mobile EU citizens have tertiary education, compared to 14% among native Portuguese. The percentage of those with university education is also considerably larger among mobile EU citizens in Luxembourg, Austria, Greece, United Kingdom, Ireland and Hungary.

<sup>6</sup> It is interesting to compare these results with those from the Labour Force Survey, which provides a larger sample to analyse these issues. As with the EU-SILC data, the percentage of women is higher among mobile citizens in Italy, Greece, the Netherlands and Austria. In some cases, however, the results are different. For example, in Cyprus, the LFS data does not show a large difference in the gender composition of the two groups, while in Slovakia the LFS shows a higher percentage of women among mobile EU citizens, unlike EU-SILC.



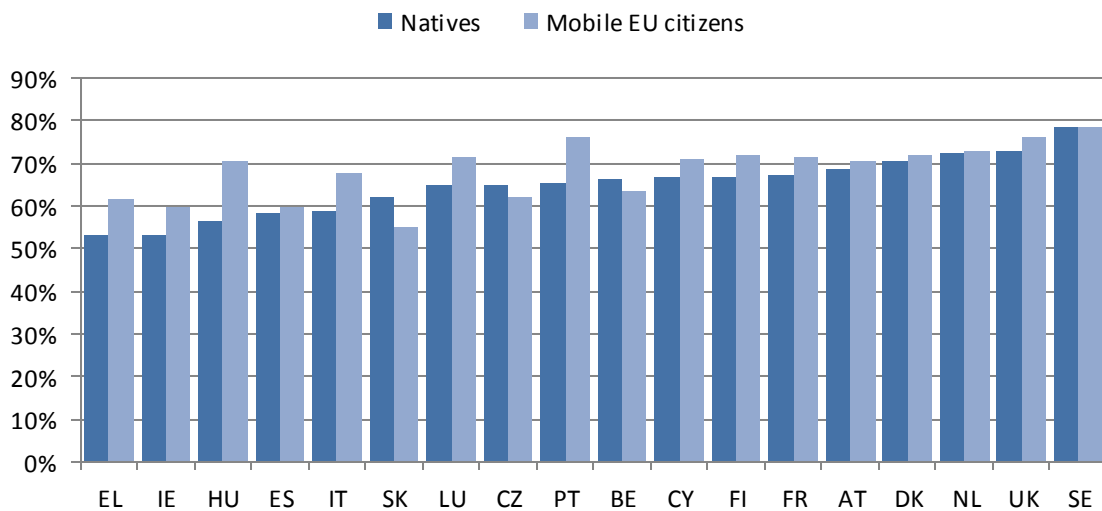
**Figure 9 Percentage of those with tertiary education among the native population and mobile EU citizens (18–64), 2010**



Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

As Figure 10 shows, the percentage of those in employment is generally higher among mobile EU citizens than in the native population (i.e. the employment rate). The most important difference can be seen in Hungary, where 70% of mobile EU citizens are in employment, compared to 57% among the native population. Other countries with an important difference in the employment rate of mobile citizens and the native population are Portugal, Luxembourg, Italy, Greece and Ireland. Exceptions to the general trend are Slovakia, Belgium and the Czech Republic, where the percentage of those in employment is 3–7 percentage points higher among the native population.

**Figure 10 Percentage of those in employment among the native population and mobile EU citizens (18–64), 2010**



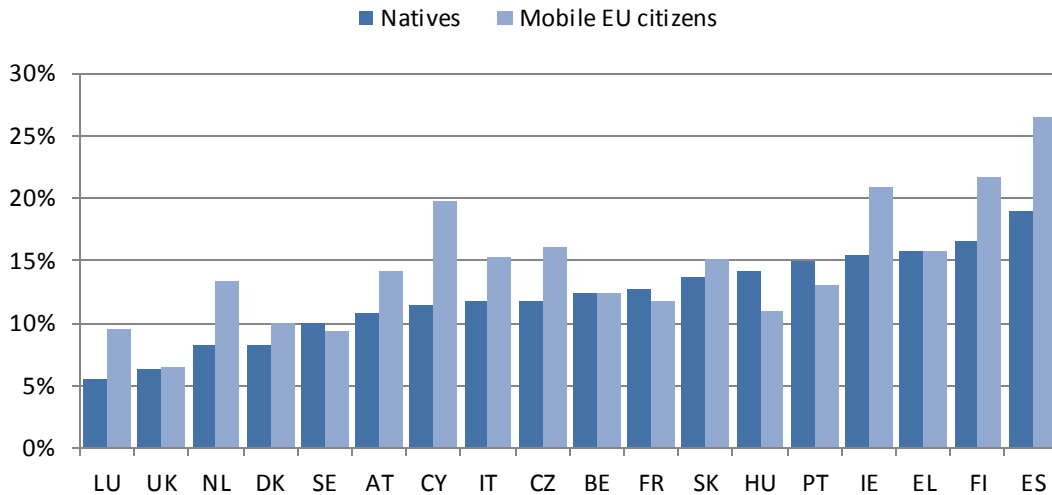
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

Despite the higher employment rates, unemployment is also generally higher among mobile EU citizens, as Figure 11 shows. The percentage of those who had experienced unemployment during the reference year is higher among mobile EU citizens in 12 countries.<sup>7</sup> The most important differences can be seen in the Republic of Ireland,

<sup>7</sup> The EU-SILC database records the main activity of respondents in every month during the reference year, which is the calendar year preceding the survey for most countries. Thus respondents having experience of

Spain, the Netherlands, Finland and Cyprus, where the proportion of those with experience of unemployment is 5–8 percentage points higher among mobile EU citizens. Economic inactivity is generally lower among mobile EU citizens than in the native population. This suggests that while migrants tend to be more vulnerable in the labour market, they also tend to be more actively seeking work.

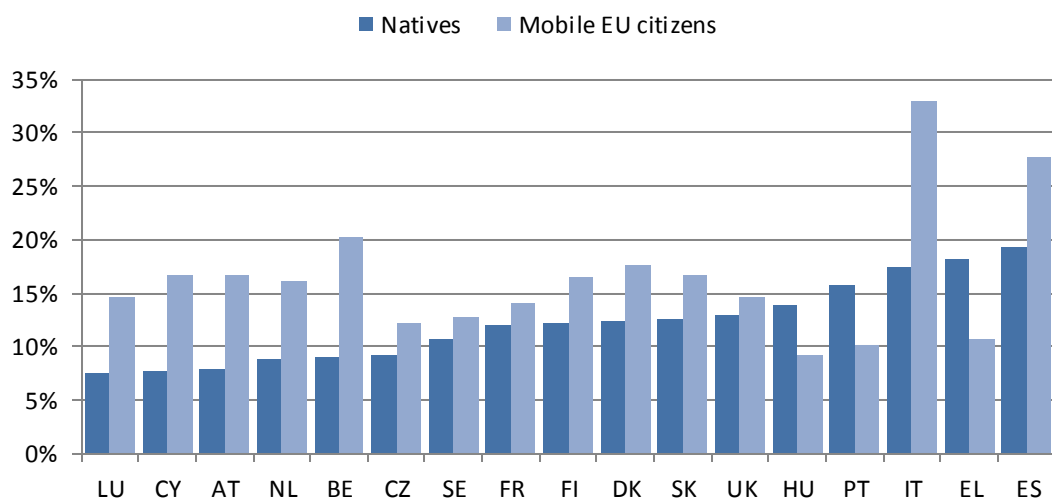
**Figure 11 Percentage of those with experience of unemployment during the reference year among the native population and mobile EU citizens (18–64), 2010**



Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

Figure 12 shows how mobile EU citizens fare in terms of at-risk-of-poverty rates in the countries in question. In most of the countries, mobile EU citizens have a higher at-risk-of-poverty rate than the native population. Mobile EU citizens have a lower at-risk-of-poverty level than natives in only three countries: Hungary, Portugal, and Greece. The highest rates of income poverty (above 25%) among mobile EU citizens are to be found in Italy and Spain, but Belgium is not far behind. In all countries – with the exception of Hungary – at least 10% of mobile EU citizens have income below the poverty threshold.

**Figure 12 At-risk-of-poverty rate among natives and mobile EU citizens (18–64), 2010**



Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

unemployment were defined as those whose main activity was unemployment for at least one month during the reference year.

## Results of regression analysis

### Variables in question and regression specifications

In the previous section, we showed raw comparisons of benefit receipt between natives and mobile EU citizens. Further analysis also showed that the native populations and mobile EU citizens are different in many respects that might affect comparisons of benefit receipt. The aim of this section is to compare benefit receipt, taking into account differences in population composition. Regression analysis is performed in order to control for socio-economic variables that affect eligibility for benefits: age, household structure, employment status and household income. Age is important, since education-related benefits concern mostly the young, while disability benefits are mainly important for older age groups. Household structure, and especially the number of children, is important in determining eligibility for family allowances. Employment status and the experience of unemployment determine eligibility for unemployment benefits, while household income determines eligibility for means-tested benefits, such as housing benefits and benefits to combat social exclusion.

For our estimations, we use probit regressions, which are the usual solution when the dependent variable is of binary nature, such as whether or not an individual or a household receives a certain transfer. Among the independent variables, we included, of course, our main variable of interest, country of birth, which has three categories: being a native of the given country; being a non-native born in some other EU country; or being a non-native born outside the EU.

In case of benefits measured at the individual level (educational benefits, unemployment benefits and disability support) the following control variables were included in the model:

- gender, age (years)
- household type (four categories: adults without children; single adult with children; two or more adults, one or two children; two or more adults, three or more children)
- education (three categories: primary and lower secondary education; upper secondary education; tertiary education)
- employment status (three categories: employed, self-employed, not working), separate dummy variable for the case if the individual was unemployed for one month in the previous year
- household income: defined on the basis of the distribution of household market income (three categories: lower than 50% of median; between 50% and 80% of median; above 80% of median).

In the case of family allowance, housing benefits and benefits to combat social exclusion, we used a slightly different set to accommodate the fact that data for these variables was originally collected at the household level. The control variables used in this case are similar in nature to the earlier case, only here the characteristics (gender, age, education, employment status) of the household head were used for each individual in the household. Household headship was defined on a demographic basis:

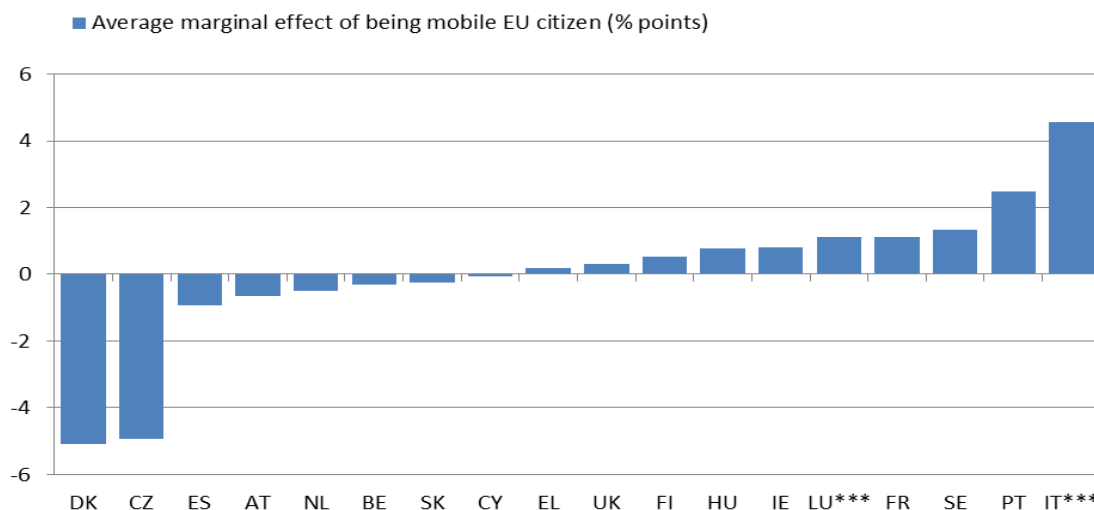
1. The household head is the oldest active-age male in the household.
2. If that is not applicable, then it is the oldest active-age female.
3. Failing that, it is the oldest active-age inactive male.
4. Otherwise it is the oldest active-age inactive female.
5. If even that does not apply, then it is the oldest male, and then the oldest female, if necessary.

The following figures show the effect of being a mobile citizen (rather than a native of the given country) on the probability of an individual receiving the welfare benefit in question.<sup>8</sup>

### Differences in benefit receipt: results of regression analysis

In the case of unemployment benefits, the regression results show a remarkable similarity in terms of benefit receipt among natives and mobile EU citizens. Statistically significant differences between the two groups are found in only two of the countries (Figure 13). In Italy and Luxembourg, mobile EU citizens have a higher probability of being recipients of unemployment benefit. The estimated difference is larger in Italy, where on average unemployment benefit receipt is 4 percentage points higher in the case of mobile EU citizens. In Luxembourg the difference is only 1 percentage point. It can also be seen that in Denmark and the Czech Republic benefit receipt is lower among mobile EU citizens. The difference, however, though relatively large is not statistically significant.

**Figure 13 Estimated difference in unemployment benefit receipt between mobile EU citizens and natives (percentage points)**



Notes: Average marginal effect of mobile citizenship from probit model of unemployment benefit receipt. For example, in the case of Italy the result shows that mobile EU citizens are over 4 percentage points more likely to receive unemployment benefits than are natives with similar characteristics.

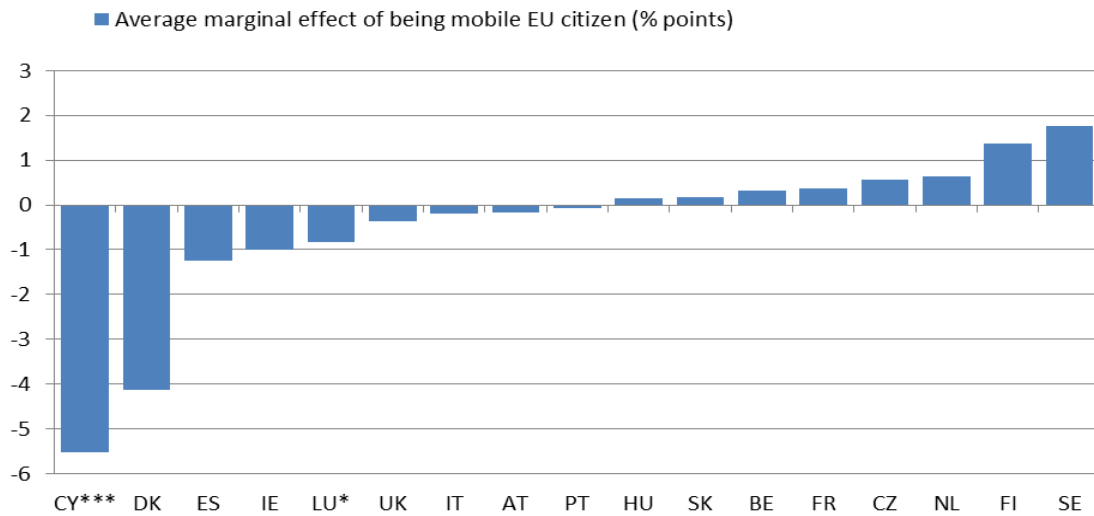
\*\*\* denotes statistically significant at the 1% level; \*\* denotes statistically significant at the 5% level; \* denotes statistically significant at the 10% level.

Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

Figure 14 shows results in the case of educational benefit receipt. We again see broadly similar benefit receipt in 14 countries, and the estimated difference is higher than 2 percentage points in only two cases. The results suggest that the receipt of educational support is significantly lower among mobile EU citizens in Cyprus (5 percentage points) and (though to a lesser extent and robustness) in Luxembourg, while in Denmark, Spain and Ireland the difference is not statistically significant from zero. The estimates show higher benefit receipt among mobile EU citizens in the case of Finland and Sweden, although the effect is not statistically significant from zero.

<sup>8</sup> Probit models are non-linear, multivariate statistical models, and in these cases estimated coefficients are not as easily interpreted as in linear regressions. In non-linear models, the effect of an explanatory variable varies with the level of other explanatory variables. One way to summarize the effect of a given variable is to calculate the so-called average marginal effect: that is the average of the effects of all combinations of other explanatory variables that can be found in the sample.

**Figure 14 Estimated difference in educational benefit receipt between mobile EU citizens and natives (percentage points)**

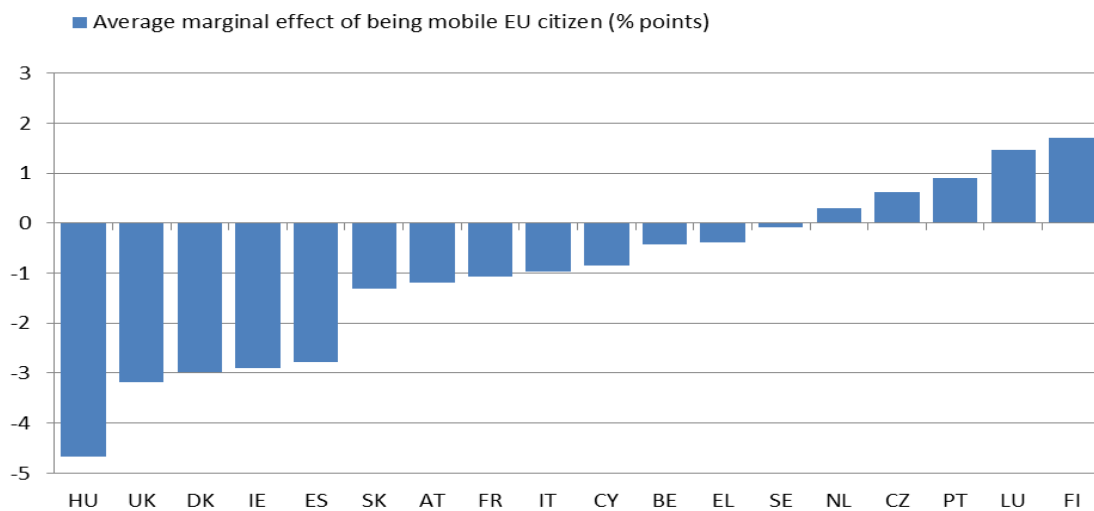


Notes: Average marginal effect of mobile citizenship from probit model of educational benefit receipt. Greece omitted due to no transfers to migrants.

\*\*\* denotes statistically significant at the 1% level; \*\* denotes statistically significant at the 5% level; \* denotes statistically significant at the 10% level.

Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

**Figure 15 Estimated difference in disability benefit receipt between mobile EU citizens and natives (percentage points)**



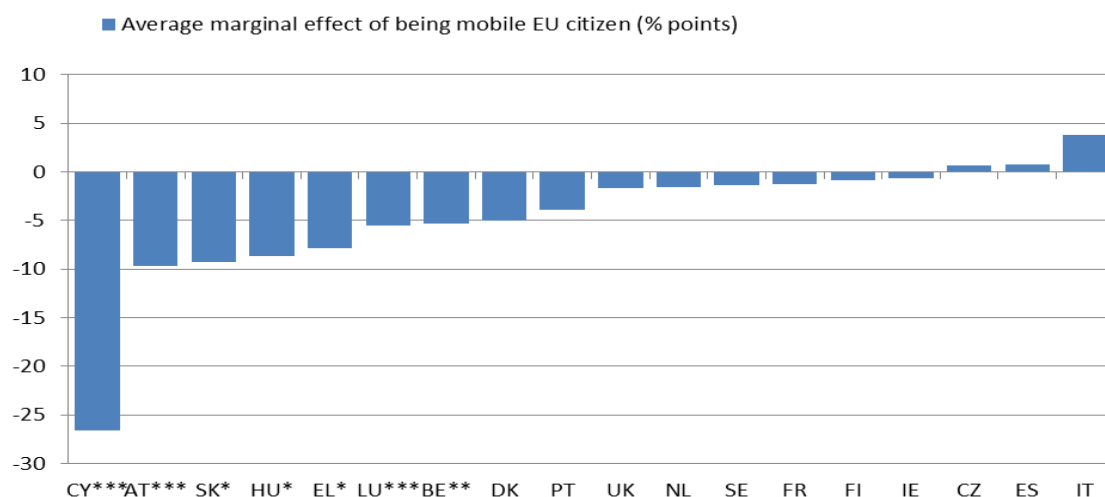
Note: Average marginal effect of mobile citizenship from probit model of disability benefit receipt.

Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

In the case of disability support, mobile EU citizens have a lower probability of benefit receipt in the majority of countries (Figure 15). Although there are five countries where being a mobile EU citizen is associated with a somewhat higher probability of benefit receipt, in the other 13 the picture is less favourable for mobile EU citizens. The estimated difference is highest in Hungary, where mobile EU citizens are 4 percentage points less likely to be recipients of benefits; slightly lower effects were detected in the United Kingdom, Denmark and Ireland. None of these effects is statistically significant, however.

In the case of family and child-related allowances, the results show lower benefit receipt among mobile EU citizens in almost all countries (Figure 16). In Cyprus, mobile EU citizens are 25 percentage points less likely to receive family allowances, and the difference is also close to 10 percentage points in Austria, Slovakia and Hungary. Overall, significantly lower benefit receipt among mobile EU citizens is found in seven countries. Italy is an exception, since the marginal effect of being a mobile EU citizen is positive on such benefit receipt, although the difference is not statistically different from zero.

**Figure 16 Estimated difference in family/child allowances receipt between mobile EU citizens and natives (percentage points)**

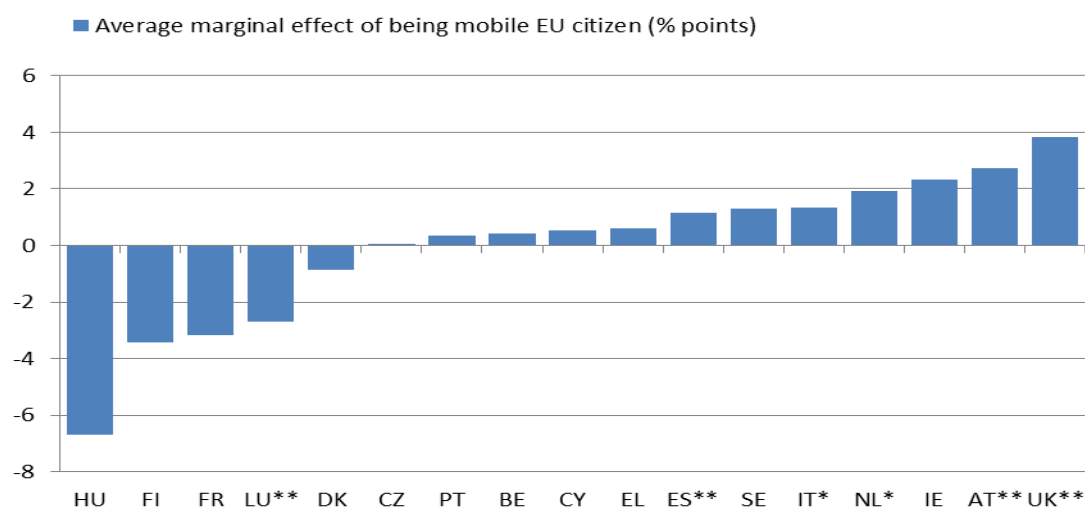


Notes: Average marginal effect of mobile citizenship from probit model of family/child benefit receipt. \*\*\* denotes statistically significant at the 1% level; \*\* denotes statistically significant at the 5% level; \* denotes statistically significant at the 10% level.  
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

The case of housing benefit is the only instance where the marginal effect of being a mobile EU citizen is positive in most European cases (Figure 17). Negative effects were detected in only five cases – Hungary, France and Finland are the leaders of that group, but the only statistically significant effect is for Luxembourg. In the other 13 cases – of those, five show statistically significant results – our estimates show a higher probability of benefit receipt among mobile EU citizens, with the United Kingdom, Austria, Ireland and the Netherlands leading this group of countries.<sup>9</sup>

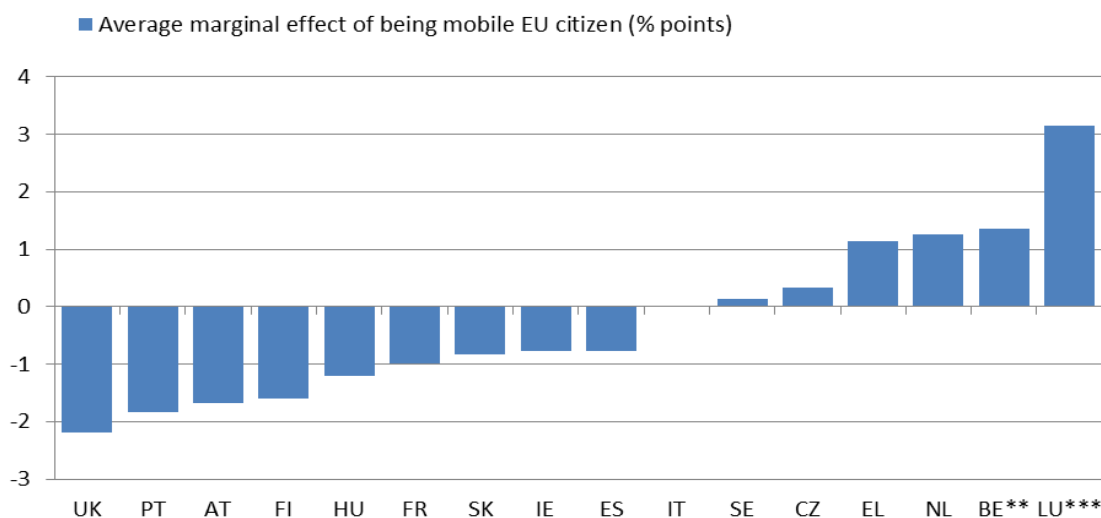
<sup>9</sup> Data presented by Wadsworth (2012) show that in the UK immigrants are, on average, less likely to be in social housing than are natives. This, however, does not contradict our results, since here we focus on mobile EU citizens rather than on all immigrants, and we compare receipt of housing-related cash benefits rather than social housing.

**Figure 17 Estimated difference in housing benefit receipt between mobile EU citizens and natives (percentage points)**



Notes: Average marginal effect of mobile citizenship from probit model of housing benefit receipt  
\*\*\* denotes statistically significant at the 1% level; \*\* denotes statistically significant at the 5% level; \* denotes statistically significant at the 10% level.  
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

**Figure 18 Estimated difference in receipt of benefits against social exclusion between mobile EU citizens and natives (percentage points)**



Notes: Average marginal effect of mobile citizenship from probit model of social exclusion benefit receipt. No data for Cyprus and Denmark.  
\*\*\* denotes statistically significant at the 1% level; \*\* denotes statistically significant at the 5% level; \* denotes statistically significant at the 10% level.  
Source: Own calculations based on EU-SILC 2011, EU-SILC 2010 for the Republic of Ireland.

Finally, the results for social exclusion benefits (Figure 18) show a more mixed picture across the continent, with nine countries showing a lower probability of benefit receipt among mobile EU citizens, and six showing a higher probability than among the native population. The differences are small and not statistically significant in most cases. An exception is Luxembourg, where benefit receipt among mobile EU citizens is 3 percentage points higher than among natives, which is a statistically significant difference. Belgium also shows a significant effect, although in this case the difference barely exceeds 1 percentage point. The largest negative effects are seen in the UK, Portugal and Austria, but these differences are not statistically significant from zero.

## Concluding remarks

The mobility of people is not only a core value of the European Union, but it also represents factor mobility, which is necessary for the European market to function properly and to adjust to regional changes and shocks. This means that migration, and especially intra-EU migration, should be of prime importance to the functioning of the Union.

Since migration is so important to the EU, considerable effort has been devoted to understanding the motives behind it. National governments are concerned that aside from economic prosperity and better labour-market prospects, more generous welfare provisions also play a role in attracting migrants. These concerns gave rise to a research programme to analyse the welfare-magnet hypothesis, which tries to find out whether migrants may be attracted to states with more generous welfare systems. In an earlier section, we summarized the literature on this, referring to the evidence provided by a number of empirical studies.

This paper does not study migration motives directly, but it does investigate differences in the receipt of welfare benefits by natives and mobile EU citizens. The empirical analysis was carried out using the most recent EU-SILC data available, from 2011. A rough comparison showed that welfare use differed between natives and migrants in several cases. To investigate these differences further, regression analysis was undertaken to see whether the same differences hold when variations in the characteristics of migrants and natives are specifically allowed for.

Probit regressions of benefit receipt (education, unemployment, disability, housing, family-related transfers and transfers to tackle social exclusion) were carried out for 18 countries with specifications that controlled for age, gender, education, household type and labour-market status. While statistically significant results were not found in all cases, some patterns did emerge. For most benefits (unemployment, education, social exclusion), the differences between natives and mobile EU citizens were small in most of the countries. Higher benefit receipt among mobile EU citizens was only found in the case of housing benefit in a few countries. On the other hand, it seems that in most of the EU, being a mobile EU citizen is associated with a lower probability of receiving family and child-related benefits.



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## Annex

**Table A1. Sample size in the two groups studied**

	Natives	Mobile EU citizens
AT	7333	571
BE	7436	645
CY	6156	663
CZ	13308	323
DK	7583	191
EL	8371	192
ES	20092	699
FI	13545	232
FR	14989	510
HU	19317	130
IE	5982	859
IT	26263	1111
LU	5049	3595
NL	14011	344
PT	8439	194
SE	8582	416
SK	10665	106
UK	9790	482

Source: Own calculation EU-SILC 2011, except for Ireland where EU-SILC 2010 has been used.