

# **MIGRANT WELFARE USE IN THE EU15 BEFORE AND AFTER THE FINANCIAL CRISIS - WHAT CAN CHANGE TELL US?**

By

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## **Disclaimer**

*This study is based on data from Eurostat, EU Statistics on Income and Living Conditions reference years 2005 and 2013. The responsibility for all conclusions drawn from the data lies entirely with myself.*

*The EU Statistics on Income and Living Conditions was made available for me by TÁRKI Társadalomkutatási Intézet Zrt., to be used in confidentiality and only in relation to my thesis work. For this I must convey my sincere gratitude.*

## **Abstract**

In my thesis I analyze changes in migrant welfare use between 2005 and 2013. I use the European Union Statistics on Income and Living Condition database for these two years, to analyze individual level data with probit estimation models to get a better picture of how having a migrant background affected relative benefit receipt before and after the financial and euro crises. After establishing, that by comparing simple background statistics and actual welfare use, conclusions are few and far, I move on to the mentioned probit estimations. My results show, that differences are especially persistent in the case of disability – where migrants' use is significantly lower – and housing and social exclusion related benefits – where migrants' use is significantly higher. Analyzing the larger picture arising from estimations, I conclude that these areas and the policy changes in Spain are the sub-fields, where future research might be especially useful in understanding how differences arise and persist.

## Acknowledgements

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## Table of Contents

|  |    |
|--|----|
| Introduction .....   | 1  |
| 1. Theory and Empirics of Migrant Welfare Use .....                            | 4  |
| 2. Data and Methods .....  | 9  |
| 2.1. About the European Union Statistics on Income and Living Conditions ..... | 9  |
| 2.2. Comparison of native population and migrants .....                        | 10 |
| 2.3. Comparison of benefits received.....                                      | 18 |
| 2.4. Methodology .....   | 25 |
| 2.4.1. Operationalization of variables .....                                   | 26 |
| 2.4.2. Estimation method used.....   | 28 |
| 3. Regression analysis results .....   | 30 |
| 3.1. Unemployment benefits.....  | 30 |
| 3.2. Education benefits .....  | 32 |
| 3.3. Disability benefits .....   | 34 |
| 3.4. Family and child related benefits .....                                   | 37 |
| 3.5. Housing benefits .....  | 39 |
| 3.6. Benefits to counter social exclusion.....                                 | 41 |
| 3.7. Policy considerations.....  | 43 |
| Conclusion.....  | 46 |
| References .....   | 48 |
| Appendix .....   | 50 |

## List of Tables and Figures

|  |    |
|--|----|
| Table 1 – Share of migrants (by country of birth) as part of total population in the EU15 at January, 2014.....  | 2  |
| Figure 1 - Difference in average age of native population and migrants (18-64 years old).....  | 12 |
| Figure 2 - Percentage point difference in share of women among native population and migrants (18-64 years old).....   | 13 |
| Figure 3 - Percentage point difference in share of urban residents among native population and migrants (18-64 years old).....   | 14 |
| Figure 4 - Percentage point difference in share of those having upper secondary degree among native population and migrants (18-64 years old).....                             | 15 |
| Figure 5 - Percentage point difference in share of those in employment among native population and migrants (18-64 years old).....   | 16 |
| Figure 6 - Percentage point difference in share of those with experience of unemployment during the reference year among native population and migrants (18-64 years old)..... | 17 |
| Figure 7 - Percentage point difference in share of those at risk of poverty among native population and migrants (18-64 years old).....  | 18 |
| Figure 8 - Percentage point difference in share of those receiving unemployment benefits among those experiencing unemployment during the year (18-64 years old).....          | 20 |
| Figure 9 - Percentage point difference in share of those receiving education-related benefits among those aged 35 or less.....   | 21 |
| Figure 10 - Percentage point difference in share of those receiving disability support (18-64 years old).....  | 22 |
| Figure 11 - Percentage point difference in share of those receiving family assistance among those living in household with children (18-64 years old).....                     | 23 |
| Figure 12 - Percentage point difference in share of those receiving housing assistance (18-64 years old).....  | 24 |
| Figure 13 - Percentage point difference in share of those receiving benefits against social exclusion (18-64 years old).....   | 25 |
| Figure 14 - Estimated difference in unemployment benefit receipt of migrants compared to locals, 2005 (% points).....  | 31 |
| Figure 15 - Estimated difference in unemployment benefit receipt of migrants compared to locals, 2013 (% points).....  | 32 |
| Figure 16 - Estimated difference in education benefit receipt of migrants compared to locals 2005 (% points).....  | 33 |
| Figure 17 - Estimated difference in education benefit receipt of migrants compared to locals, 2013 (% points).....   | 34 |
| Figure 18 - Estimated difference in disability benefit receipt of migrants compared to locals, 2005 (% points).....  | 35 |
| Figure 19 - Estimated difference in disability benefit receipt of migrants compared to locals, 2013 (% points).....  | 36 |
| Figure 20 - Estimated difference in family/child allowances receipt of migrants compared to locals, 2005 (% points).....   | 37 |
| Figure 21 - Estimated difference in family/child allowances receipt of migrants compared to locals, 2013 (% points).....   | 38 |
| Figure 22 - Estimated difference in housing benefit receipt of migrants compared to locals, 2005 (% points).....   | 39 |
| Figure 23 - Estimated difference in housing benefit receipt of migrants compared to locals, 2013 (% points).....   | 40 |
| Figure 24 - Estimated difference in receipt of benefits against social exclusion of migrants compared to locals, 2005 (% points).....  | 41 |
| Figure 25 - Estimated difference in receipt of benefits against social exclusion of migrants compared to locals, 2013 (% points).....  | 42 |
| Table 2 – Change in relative migrant use across benefit types and countries.....   | 43 |

## Introduction

During the last couple of years, the number of refugees have exponentially increased inside the borders of the European Union that intensified a great deal of debates on how any kind of migrants should be perceived and treated inside the EU. The effect of increased numbers of refugees from the conflict zones neighboring Europe might be hard to estimate currently, as not only we are lacking raw data, but also does not really possess a clear understanding of future trends – especially concerning the security situation in the Middle East and North Africa.

This does not mean however, that debates should or will stop on drawing up possible futures for demographics in the EU. In such a situation, policy oriented research must try to utilize tools at its disposal, to provide at least some empirically relevant evidence, that at least to an extent would help grounding the raging debates about policy options and scenarios, in reality. For that reason in my thesis I would like to approach the question in a way, which is both theoretically correct and utilizes empirical data, to show how really migrant behavior and migrant related policy activity reacted to a changing Europe.

As we can see in Table 1, migrant population with roots from outside the European Union have been constituting a significant part of the population in the EU15 – a region that can be naturally characterized as a group of countries that would be the main targets of migration due to their established high level of socio-economic development. Their share in total population ranges from 3,5 percent in Finland and more than 10 in Sweden and Luxembourg. Many reasons can draw a migrant to a specific country, but what most critical people highlight as reason for migration - and give as a reason why migration is a burden on not just European society, but economy as well – is that they are looking for generous welfare systems to exploit. While this is only a part of the critique, and definitely at most is only a smaller part of reality, is a topic that should warrant serious examination.

**Table 1 – Share of migrants (by country of birth) as part of total population in the EU15 at January, 2014**

|                            | Total migrants    |                         | Born outside the EU |                         |
|----------------------------|-------------------|-------------------------|---------------------|-------------------------|
|                            | Number (thousand) | Share in population (%) | Number (thousand)   | Share in population (%) |
| <b>Austria</b>             | 1410,9            | 16,6                    | 771,5               | 9,1                     |
| <b>Belgium</b>             | 1773,1            | 15,8                    | 937,7               | 8,4                     |
| <b>Germany</b>             | 9818              | 12,2                    | 5979,5              | 7,4                     |
| <b>Denmark</b>             | 569,6             | 10,1                    | 378                 | 6,7                     |
| <b>Greece</b>              | 1246,5            | 11,4                    | 912,2               | 8,4                     |
| <b>Spain</b>               | 5958,3            | 12,8                    | 3930,8              | 8,5                     |
| <b>Finland</b>             | 297,8             | 5,5                     | 188,9               | 3,5                     |
| <b>France</b>              | 7661,7            | 11,6                    | 5494,6              | 8,3                     |
| <b>Republic of Ireland</b> | 741,3             | 16,1                    | 269,6               | 5,9                     |
| <b>Italy</b>               | 5737,2            | 9,4                     | 3921,8              | 6,5                     |
| <b>Luxembourg</b>          | 237,8             | 43,3                    | 60,3                | 11                      |
| <b>Netherlands</b>         | 1953,4            | 11,6                    | 1445                | 8,6                     |
| <b>Portugal</b>            | 859,1             | 8,2                     | 637,5               | 6,1                     |
| <b>Sweden</b>              | 1532,6            | 15,9                    | 1023                | 10,6                    |
| <b>United Kingdom</b>      | 8035,6            | 12,5                    | 5229,3              | 8,1                     |

Source: Eurostat: Migration and migrant population statistics

Welfare systems have come under considerable strain in the European Union in the last decade, as all countries were seriously affected by the global financial crisis - that in the EU also gave way to the European debt crisis. Welfare expenditures were seriously reconsidered in many countries in line with governments trying to reestablish their countries financial stability and/or competitiveness. So migrants might find themselves at crossroads – social systems were and are under pressure to perform better and leaner, meanwhile in recent years hostility towards their participation increases.

To provide an account on how the crisis-related social policy changes affected migrant welfare use and what might follow in the future, in my thesis I analyze how having a migrant background might affect benefit receipt in six, mostly non-contributory benefit categories. I focus on first generation migrants born outside the European Union and said non-contributory benefits, to secure that my results are the potentially most appropriate in a debate, which focuses



on how potential new migrants would look at, and act on peculiarities of European Union welfare systems. My goal is to distinguish benefit type and country patterns, which would provide a basis in the future for closely analyzing migrant behavior in separate cases, and thus would be able to bring a deeper insight into the debate. I am looking to answer the question whether migrant behavior relative to native activity have changed much over the defined period or not. Answering this will provide me with the ability to pinpoint benefits system elements, that should be the focus of attention in the future, if we are to successfully answer all detailed questions raised by the general debate on welfare and migration and the economic policy related ones of the refugee crisis.

My thesis is organized as follows: Section 1 introduces the most important, primarily empirical economic research done on first generation migrant welfare use in relation to natives in developed countries. This includes the short introduction of the welfare magnet hypothesis, as a theoretically solid concept for analyzing the possibility of welfare systems effect on migration choices. Section 2 introduces the European Union Statistics on Income and Living Conditions (EU-SILC), that I will be using in my thesis as a data source for analyzing migrant welfare use differences before and after the financial crisis in Europe. This section also shows the differences of migrant and native citizen backgrounds, and later moves on to introduce the variables of interest, their operationalization and the method they are used in probit estimations. Section 3 shows regression model results and the main conclusions drawn from it for future policy focus. The last section provides a general overview of my thesis work and the concluding remarks.

## 1. Theory and Empirics of Migrant Welfare Use

In this section my goal is to introduce the reader to the broader background of how migrants' welfare system use differences have been approached and queried in the past. First I will introduce some of the important early developments, then I will move on to primarily the welfare magnet hypothesis and related research. While describing earlier results from empirical studies covering various parts of the developed world, in the latter part my focus moves towards studies of the European Union and especially on those that used similar data as I will in my thesis.

As the mature welfare state became more and more of a commonplace, immigrants were not only analyzed from a labor market perspective, and the focus from simply assessing their state of well-being (like Skone (1962) in the United Kingdom) also moved towards their participation in the relatively generous new order. One of the forerunners of this research was David R. Cox in Australia, theorizing that many migrant groups might underuse state provided social support and other welfare opportunities due to pre-existing ethnic or religious loyalties – places of support they would actually turn to, instead of tax-payer financed solutions (Cox, 1983). In the decade the focus from a policy viewpoint remained strong in Australia, with works like Jakubowicz (1989), arguing the low success rate of Australian welfare policy in integrating recent immigrants.

Around the same time in the United States of America the 1976 Survey of Income and Education provided a rich data source for the ascent of empirical analysis of differences between migrant and native welfare use. Simon (1984) focused on both tax-paying and welfare use and showed using a cross-section analysis that first-generation migrants can be considered as a good investment for the country taking them in, as their tax-welfare benefit ratio is significantly positive, partly because new entrants tend to underuse welfare services in the 14 years of living in the country. Using the same dataset, Blau (1984) also concluded that if we

control for basic household characteristics (particularly prominent in her case was household head age), migrants significantly underuse welfare. In 1988, Jensen comes to similar conclusion for the US, using census data from 1970 and 1980 with a logit model, showing that while migrant poverty rates are higher than native, their welfare use tend to reach only similar levels as their locally born counterparts.

Signs of discontent however appeared in the work of Borjas and Trejo (1991), using the same data as Jensen, showing that different immigrant waves use welfare differently, mostly based on composition of country of origin. That sounded alarm bells, as the results showed that more recent immigrant waves in the US were composited as more welfare-prone. Also, their results indicated that the passing of time and integration of migrants only increased their relative level of use - above the habits of the natively born. Continuing this body of work Borjas and Trejo (1993) showed that if think of welfare systems as a potential insurance against labor market difficulties, a certain level of self-selection can arise based on the strength of the safety net provided.

Taking this further, Borjas created the concept of welfare magnet in his paper labeled Immigration and Welfare Magnets (1999), arguing further (supplemented by new data from 1990), that sorting of migrants inside the United States are in line with how states are offering more generous benefits. This sorting would then cause migrant benefit levels to be higher, as they are converging on specific areas. Borjas's paper was published however in 1999, and by that time legal changes in the US significantly curtailed the possibilities of large migrant groups' uptake of benefits –causing a sharp fall (Fix and Passel, 1999).

In Europe, this comprehensive approach was also taking foothold. Still thorough accolades of migrant integration challenges were published, that included analyzing migrant welfare use as part of the bigger picture (see Kurthen et al., 1998), but steps were taken to move the European level of research in this topic closer to results in the US. Bird et al. (1999) used data

from the German Socio-Economic panel, to analyze the reasons behind differences in migrant welfare use. Their results showed, that only by looking at basic data, one could theorize that migrants are both at advantage in being eligible and actually using benefits. But by taking a closer look and using socio-economic control variables available in their data, they concluded that their take-up rates were likely to be similar to native Germans. This was also contrary to earlier analysis of migrants resident in Germany, like Voges et al. (1998).

However, on the turn of the millennia, not all European results were that positive. Hansen and Lofstrom (1999, 2001) conducted research on Swedish panel data for the period between 1990 and 1996, showing that in that case, even after controlling for socioeconomic characteristics, migrants benefit use was more likely than comparable natives'. Their results also had implications, that migrants might be trapped in dependency on welfare benefits, as they tended to be long-term users of available options. However with greater time spent in the country, differences between locals and migrants tended to get smaller. Using data from the European Community Household Panel and probit models, Brücker et al (2001) arrive to partially similar conclusions, warning that due to increasing trends in migration, some parts of the EU – especially those with relatively more supportive benefit systems – might experience a significant fiscal challenge. Positive differences in migrant welfare use not only put direct strain on public finances, but they might also lead to challenges in successful labor market participation – as Bratsberg et al. (2010) finds, that it disincentivizes them from applying to jobs, typically available for migrants.

For this very reason, Barrett and McCarthy (2008) compare migrant behavior in the United Kingdom and the Republic of Ireland, and argue against the magnetic effect of welfare, rather focusing in the labor market characteristics themselves. They also highlight, that classical entry barrier problems like language differences might hinder welfare use more, than actual labor market activity. This however underlines a point already made by Borjas, that historical

background of migrants should be considered. When arriving to conclusion, Zimmermann et al. (2012) also highlight difference between intra-EU and non-EU migrants in their work using EU-SILC, with results implying higher differences compared to local citizens.

In the latter years, various versions of EU-SILC have proven to be popular in researching migrant welfare use in many countries of Europe, and proving to be useful both in comparison of national situations and providing a general overview. One of these works is Barrett and Maître (2013), highlighting that while welfare use tend to be similar across Europe, it is seemingly unable to counter existing differences in poverty between the two groups when lumping all benefits together. Pellizzari (2013) supplements EU-SILC data for the case of Italy from local administrative data, to find that geographical characteristics feature prominently in differences between certain groups. This leads through opportunities to difference in welfare use – as these differences act as magnets, then put migrants – especially from outside the EU - in a relatively low income and weak labor market position. Analyzing local 2005 data from the Netherlands, Zorlu (2013) also finds the existence of a significant barrier in social integration of non-Western immigrants, who are stuck on overusing many different types of benefits, and even transferring this pattern to their second generation (thus legally local) descendants.

This leads us to considering the work of Morissens and Sainsbury (2005), suggesting that migrant (and also ethnic minority) social rights could and should be analyzed through welfare use. This highlights similar challenges that Pellizzari and Zorlu find in their analysis, and as Corrigan (2013) finds, the role of providing a managed process for access and graduation from welfare would be paramount if we are to manage these differences better with social policy. This is also underlined by the results of Hooijer and Picot (2015), who focus on eligibility questions and their effects on benefit applications.

As recent results, like Guzi et al. (2015) indicate, migrants are not made less ready to adapt to labor market changes, just because they live in relatively more generous welfare states. Based

on this we should be considering analyzing how the last decades' challenges in Europe's economy left a mark on migrant populations and their welfare use. Research so far has indicated, that barriers to equivalent use had not been eliminated, yet migrants are able retain most of their labor market flexibility. The question that arises from here, is whether their situation have changed in sum of these effects, or not – when the welfare magnet hypothesis on its own is mostly refuted on European data (Giuletti, 2014).

## 2. Data and Methods

In the following section I will first introduce general information on the database used, then show how survey statistics display the differences between the native born and migrant citizens of each country selected. Along with the definition of what I consider a migrant based on the sample and what benefit information is available, discrepancies will be highlighted both in population characteristics and welfare use to establish a general understanding of the situation. This will be followed by introducing the chosen variables and methodology for the regression analysis.

### 2.1. About the European Union Statistics on Income and Living Conditions

As mentioned earlier, my analysis uses data from the European Union Statistics on Income and Living Conditions, hereinafter abbreviated as EU-SILC. EU-SILC is cross-sectional and longitudinal sample survey, where data collection is coordinated by Eurostat and is based on data from EU member states (and to a lesser extent, other states from the region). The survey information is on the level of individuals, querying income, poverty, social exclusion and living conditions, however it is important to note, that in-line with actual real life manifestation of information, social exclusion and housing condition information is included directly only on the household level (European University Institute, 2016).

The EU-SILC has two main elements, basically cross sectional databases are created for each and every year since 2003 for participating countries and these include a sub segment of longitudinal data that follows a lower number of individuals for 4 years, to observe changes in that time period. Since my interest lies in comparing the situation before and after the crises, I use data from the cross sectional database, the 4 year limit being too short to utilize it in my analysis.

Data collection for EU-SILC started in 2003, but at the time it was only a cooperative action by six EU member states (Austria, Belgium, Denmark, Greece, the Republic of Ireland, and

Luxembourg) plus Norway. While it was gradually expanded in 2004, the first fully year of implementation was 2005 – that is providing the baseline for my analysis. Since then EU-SILC gradually expanded to include not only all of the EU27 (and later EU28), but also countries like Switzerland, Iceland, Turkey or Russia (Eurostat, 2016).

While even for 2005, EU-SILC provides information on all new member states, I elected to focus on data from only the core EU15 countries. The reason for this partly conceptual, partly technical. Conceptual, because generally these are the countries that are most associated with a significant level of migrant population, as they are providing a target for significant levels of immigration since decades. This means not only established welfare system interactions with migrants, but also a significant level a social and political attention to the question – shaping policy decisions. The technical reason is very intertwined with this, and in a way quite simple – these are the countries, where the levels of migrant population are of significant level in the EU and thus the sample, making analysis feasible with EU-SILC providing sufficient data points for comparison with native born citizens. It is also important to note, that I focus on individuals aged between 18 and 64, to analyze a population that faces more or less a similar socio-economic situation in their lives, and to avoid complications arising from differences in education and pension systems. Altogether, even with these restrictions EU-SILC 2005 provides me with a little more, EU-SILC 2013 with a little less than 200 000 individuals surveyed, with migrants amounting to 5,5 and 6,5 percent of the two samples respectively – that is in line with general population statistics introduced in Table 1.

## 2.2. Comparison of native population and migrants

Before we take an initial look on how migrants in the EU15 countries actually use the countries respective welfare systems, we ought to take a closer look at how they differed from the native population both in 2005 and 2013. This not only gives us a quick glimpse at population dynamics captured in EU-SILC, but also underline the need for deeper analysis of



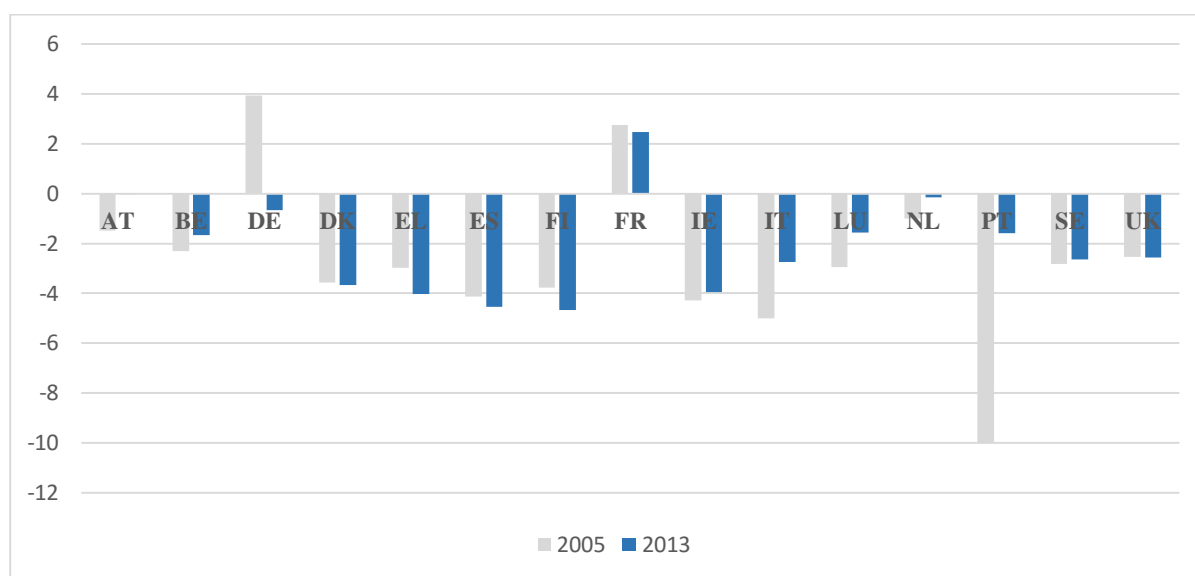
the available data. For that reason in the following section, I will offer an overview of differences in basic characteristics for both 2005 and 2013 that utilize the available data related to age, gender, education, residence, employment and unemployment, plus risk of poverty.

But first I will clarify the question of who can be classified as a migrant in the case of our data. For that purpose EU-SILC provides two instruments – one is being the citizenship of the individual and the other being the resident country of the mother at the time of birth. The problem with citizenship-based operationalization is that it would misclassify many, who after migrating to a certain EU15 country have received local citizenship through any process of naturalization. These processes are not only quite different between countries, but potentially effect a very significant part of the (sample) migrants, especially in countries like the United Kingdom, Belgium or France, where existing arrangements with former colonies would lead to a sizeable distortion using this metric. Resident country of mother at the time of birth however avoids this fallacy by focusing on data that is independent of local laws. However this information is collected only very broadly in the case of EU-SILC, with individuals sorted into three categories, based on place of birth – born in (1) the country where they are surveyed, in (2) another country of the European Union or (3) outside the European Union. The last category however obviously is where the peak of my interest lies, so this way of measurement can and will be utilized in my thesis. This solution might mask differences between source countries (challenges of an Argentinian migrant in Spain is obviously different to a Somali migrant in Sweden), but provides a clear opportunity for extracting the most general and comparable characteristics on EU15 welfare systems and their relative treatment of migrant individuals (Medgyesi and Pölöskei, 2013)

EU15 countries show some variability in terms of age difference between natives and migrants, with the main theme of the latter group being somewhat younger on average. In 9 countries – including Italy, Sweden and the United Kingdom – migrants are on average more

than 2 years younger than their native counterparts included in the database for both 2005 and 2013. Some countries like Portugal show quite some variation from 2005 to 2013 (with the difference falling from nearly exactly 10 years to below 2), but the pattern we see here is that migrants tend to be younger. In the cases of Austria and the Netherlands the differences tend to be minimal, while France provides a notable exception where the migrant group shows a larger average age. It is also interesting to note, that the age difference in Germany totally disappears from 2005 and 2013, seemingly ceasing its outlier status.

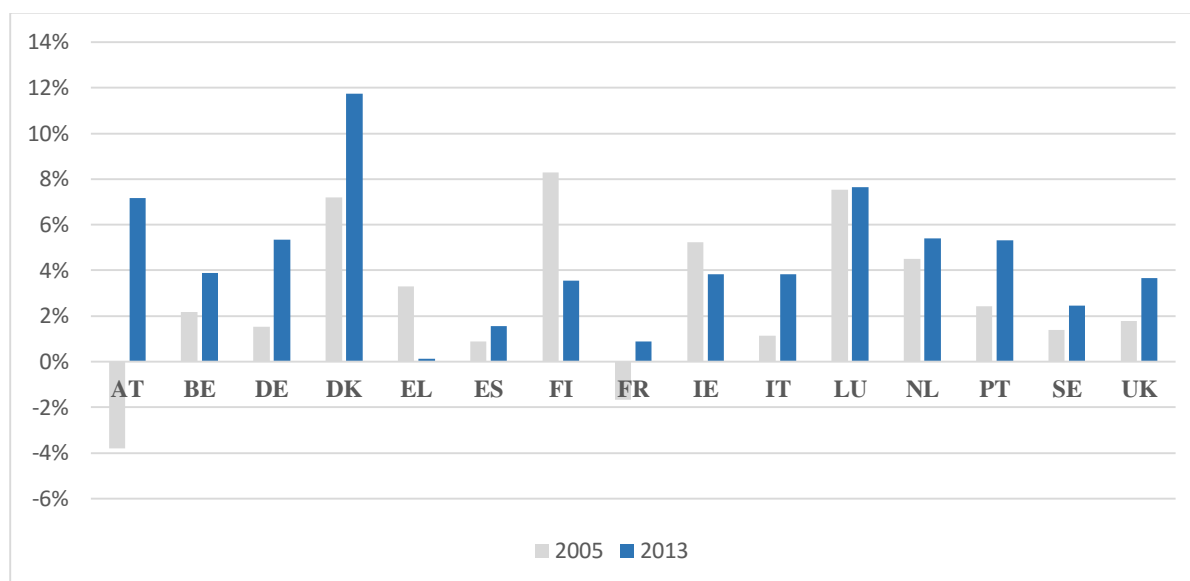
**Figure 1 - Difference in average age of native population and migrants (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013

If we take a look at the difference in terms of gender, we see a pattern that is quite contrary to popular belief – both in 2005 and 2013, the EU-SILC samples show that the share of women tend to be relatively higher among the migrants included in the sample compared to the native population. Data from Austria and France stick out from the pack in respect to 2005, but by the 2013 sample, they are more or less aligned with other countries. The trend is only dissimilar in the case of Greece, where the difference disappears from 2005 to 2013. Some countries show staggering discrepancies, like Denmark, where the difference reaches above 11 percentage points in 2013. The gap only stays below 2 percentage points in the case of Spain and France – although in the case of the latter a significant change can also be noticed.

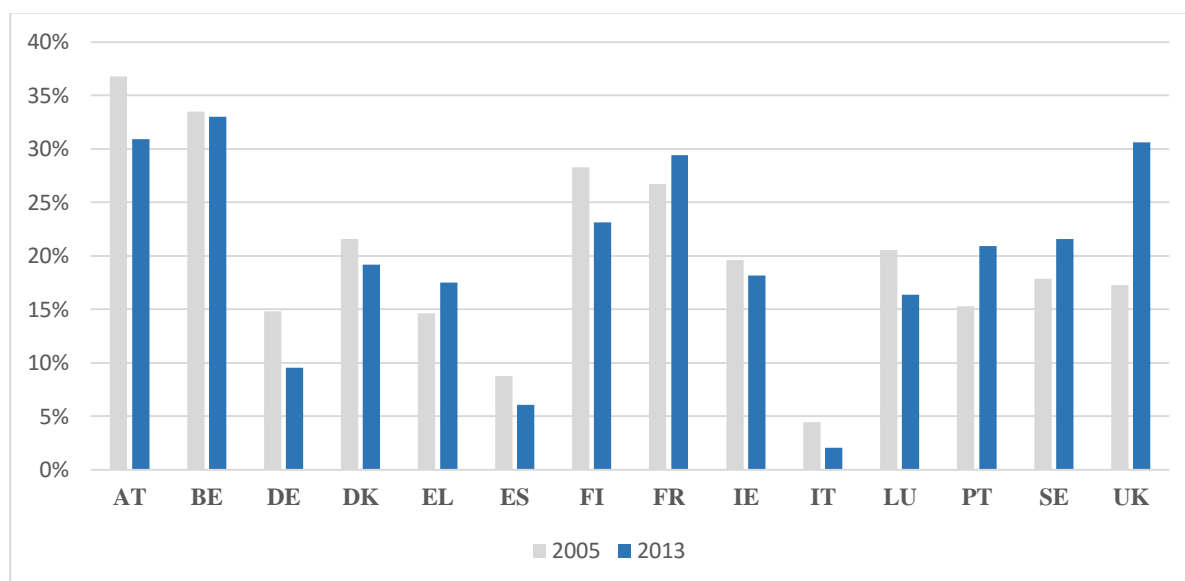
**Figure 2 - Percentage point difference in share of women among native population and migrants (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013

Somewhat unsurprisingly, if we look at residency data in Figure 3 – where EU-SILC classifies regions as either urban, semi-urban or regional – differences are staggering in nearly all cases, with Italy and to a lesser extent Spain and Germany acting as an outlier. Quite simply migrants typically reside in urban regions of their respective countries of choice. The gap reaches as high as above 30 percentage points for both 2005 and 2013 in the cases of Austria and Belgium, but similarly large numbers can be observed in countries like Finland, the United Kingdom or Portugal. However trends from 2005 to 2013 are less clear, with 9 countries including Austria or Finland showing a drop in the difference between choices regarding the region of residence – meanwhile rates are rising high in others, like the United Kingdom, where it nearly doubles from 17 percentage points to above 30 percentage points.

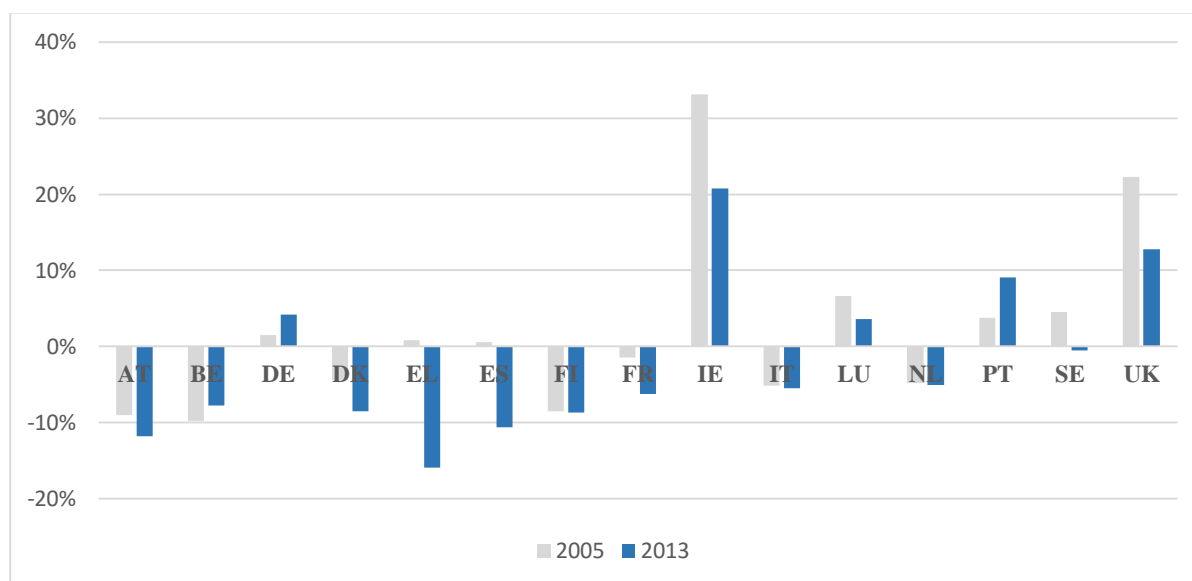
**Figure 3 - Percentage point difference in share of urban residents among native population and migrants (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013; No data available for the Netherlands

EU-SILC also provides information on the educational background of the people queried, using the International Standard Classification of Education (ISCED) classification of UNESCO. As by far the most common type of education level attained falls into secondary level, in this case individuals were characterized as having below or above secondary level education. In that regard countries can be put into either a smaller group – composed of Germany, the Republic of Ireland, Luxembourg, Portugal and the United Kingdom – where migrants tend to over perform locals in terms of education attained (the difference being the highest of the two countries of the British Isles), while in the case of the other 11 they fall short of the locals' level. As for comparing changes from 2005 to 2013, apart from Belgium, Germany and Portugal trends show a relative decrease in migrant skill level, with some countries like Greece or the Republic of Ireland showing a sharp fall in the share of highly skilled migrants in the population.

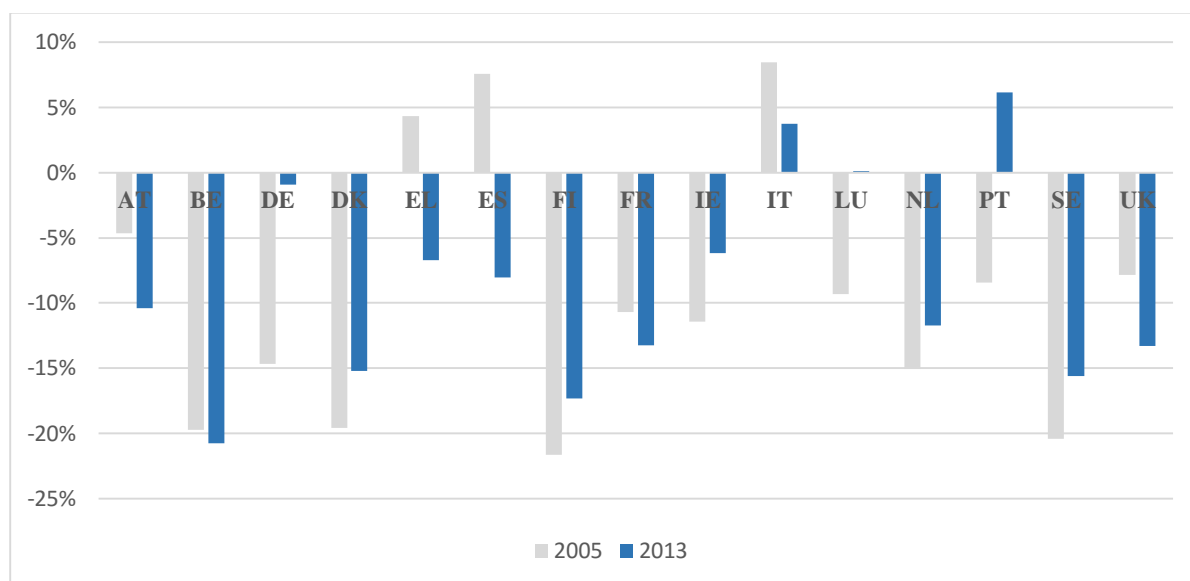
**Figure 4 - Percentage point difference in share of those having upper secondary degree among native population and migrants (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013

EU-SILC also provides information, whether responders consider themselves currently working. In that regard, migrants regularly fare much worse than native born citizens, as apart from the cases of Greece, Spain, Italy and Portugal, their employment levels are significantly lower in both 2005 and 2013, with Italy providing the only deviation from this rule both before and after the financial crisis had hit Europe. As for changes between 2005 and 2013, countries are quite divided, with 8 showing improvements in migrants' labor market positions and 7 cases where changes go in the opposite direction. In terms of positives, migrants in Portugal seem to fare the best, with the total net change being 14 percentage points, on the other hand, Spain provides the worst case where the net change amounts to minus 16 percentage points.

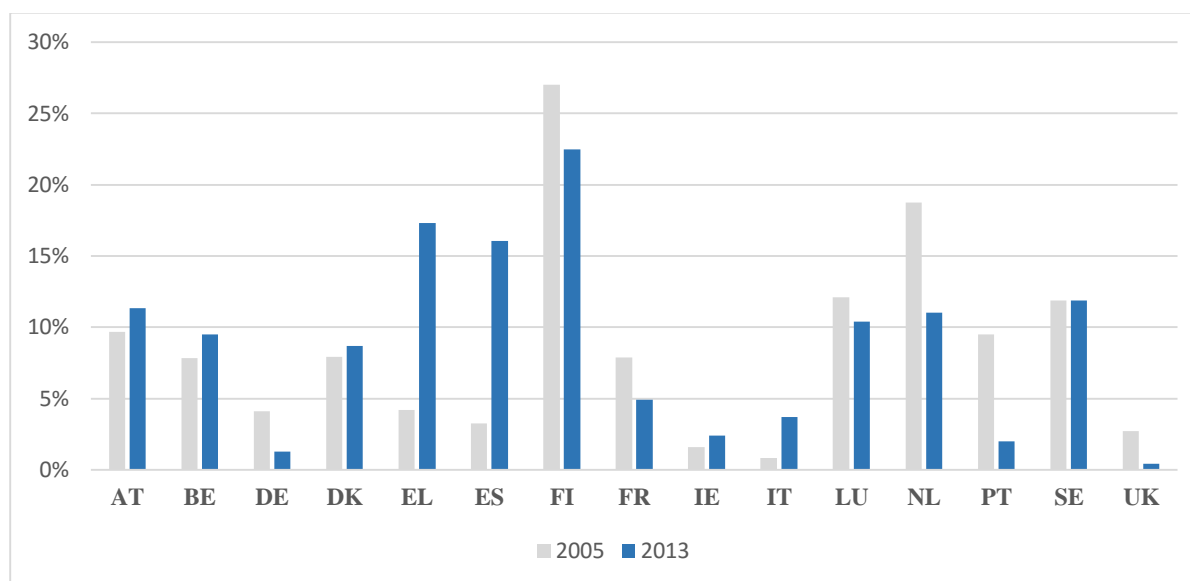
**Figure 5 - Percentage point difference in share of those in employment among native population and migrants (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013

While differences in employment levels can somewhat vary from country to country of from 2005 to 2013, the case for job security is a bit more straightforward in the data. Migrants fare undeniable worse, with all countries showing quite a difference in an unfavorable direction. To make matters worse, apart from four countries (including however Germany and the United Kingdom), differences are likely to be above 5 percentage points. Trends in experiencing unemployment are a bit more unclear, as differences increase in 7 countries but get somewhat lower in other 7 (with Sweden showing basically the same difference). In countries like Greece or Spain, where the crisis hit the hardest, the differences are staggering, as experiencing more unemployment compared to natives shoots up by more than 10 percentage points – while falls of 8 and 7 percentage points can be seen in the Netherlands and Portugal respectively.

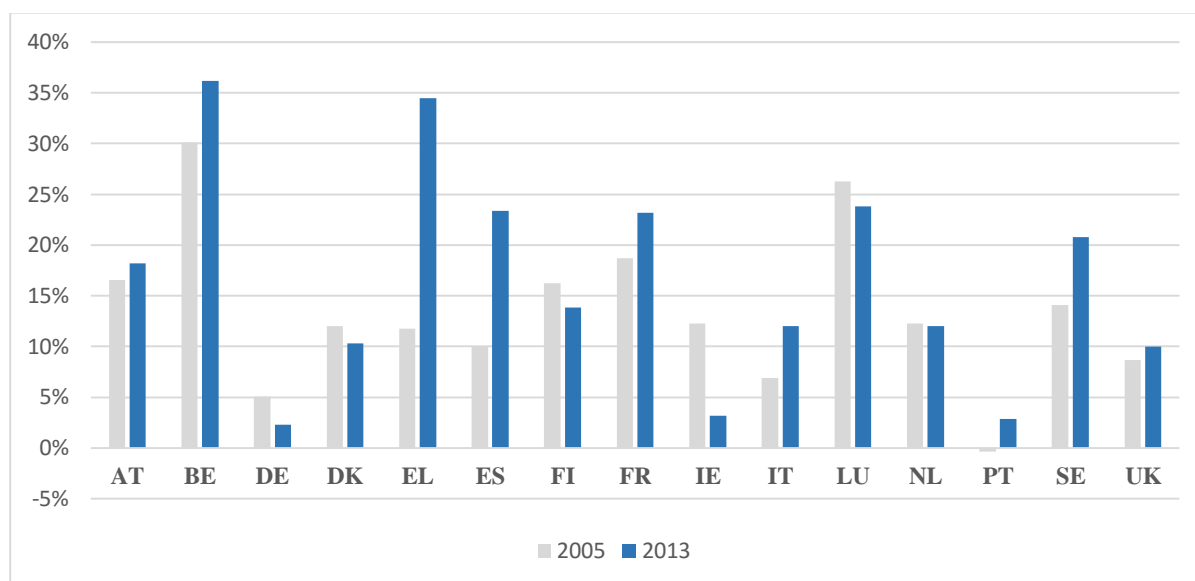
**Figure 6 - Percentage point difference in share of those with experience of unemployment during the reference year among native population and migrants (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013

To follow up all that, we can also look at the data for poverty levels – based on the individuals' household data – defined as whether having an equivalised disposable income of 60% or less of the median income in their respective countries based on the sampled data. After the disheartening picture of employment indicators, it might not come as a surprise, that the pattern here is again nearly unequivocal – with migrants showing higher risk of poverty rates in all but a single case in both sampling periods (the outlier being Portugal before the crisis). To make matters worse, trends seem to be worsening in 9 countries, with differences reaching as high as (nearly) 35 percentage points in cases like Belgium or Greece, but also reaching above 20 percentage points in four other cases in the sample in 2013.

**Figure 7 - Percentage point difference in share of those at risk of poverty among native population and migrants (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013

To sum up, while an absolutely clear picture cannot be drawn, it seems that while migrants are predominantly more urban and somewhat younger, with higher share of women among them in both cases. Also they tended to fare worse in the labor market than their native counterparts of the sample, obviously pushing more of them close to being at risk of poverty. What can be asked based on that is how did their general welfare use look like before and after the crisis? Can we formulate any prognosis on trends before to turn to a bit more sophisticated analysis now that we know their general background? The next chapter tries to address these questions.

### 2.3. Comparison of benefits received

Obviously a welfare system is composed of many different types of benefits, fit for different needs and situations. So before I introduce the tables regarding their receipt, we need to get ourselves acquainted with how EU-SILC data categorizes benefits and then we are able to move on to the actual numbers.

EU-SILC uses different benefit receipt categories, out of those six will be used in my thesis, which are the following: unemployment, education, disability, family support, housing support



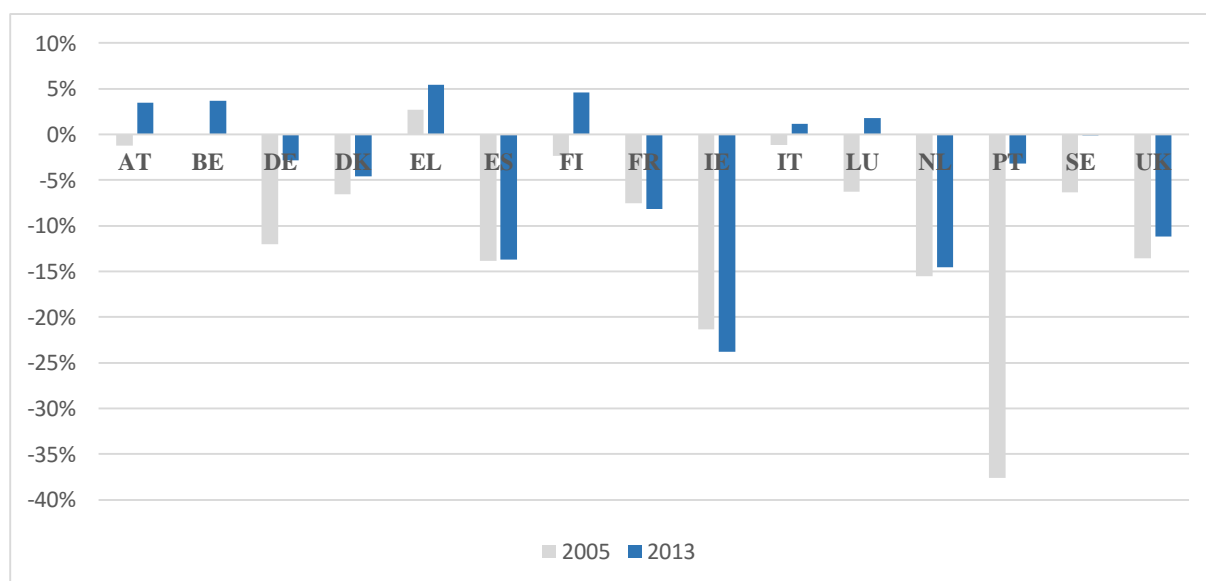
and social exclusion related benefits. There is of course data for some other, contributory benefits (like old-age, survivor or sickness-related ones), but our interest lies mainly in the mentioned non-contributory ones, due to accessibility and relevancy constraints. Unemployment benefits are being a notable exception, as their importance to establishing a full picture cannot be denied. It is important to note, that unemployment, education and disability benefits are measured on the individual level, while the other three are on household level, due to the nature of the benefits – as decisions are usually made on individual characteristics in the former, and household characteristics in the latter case. For the sake of uniformity and comparability, I converted household level information to individual level data – so what is reported here is all on individual level.

As I mentioned earlier, we should look at these benefit types as broader categories that include a group of transfers. In the case of education, they could be scholarships, grants or other education support received by students of any kind. Disability benefits can refer to benefits that support those, whose ability to earn work income was impaired severely enough to reach a defined minimum level. States of course have different legislation in place for minimums that can include both physical and mental disabilities. It also refers to disability pension earned in case of early retirement due to reduced ability to work, or care allowance, plus allowances paid to disabled people if and when they undertake work or when they undergo vocational training that is supported by the respective states. Family allowances are usually covering those transfers whose main goal is to provide some support for the particular households in bringing up children, but also covers the cases when they are supporting other family members. This category can include a wide array of transfers from parental leave to family and child benefits and numerous other family-related cash benefits. Housing benefits are generally provided to help the particular households in maintaining their current level of housing, with the most typical being some form of rent support. Benefits against social exclusion vary greatly but all

target individuals that have some group identifier showing risks of reaching a level of poverty that could hinder their functioning in the society, assisting them in various difficult situations (GESIS, 2016).

Below, in Figure 8, we can glimpse at how unemployment benefit receipt differs between (temporarily) unemployed native born citizens and migrants. As we can remember from Figures 5 and 6, migrants tend to have lower employment levels and lower employment security – now if we compare that with Figure 8, we see that contrary to that, they tend to receive unemployment benefits less frequently than their local counterparts in most cases. In 8 countries both before and after the crisis, they received unemployment benefits in a lower ratio than natives, even as much as by 10 percentage points in cases like Spain, the Republic of Ireland, the Netherlands and the United Kingdom. The biggest exception to this rule is the case of Greece, where both in 2005 and 2013, the likelihood of receiving this type of benefits was higher. As for dynamics between the two points in time, trends are positive in as many as 12 cases, so it would seem that while unemployment trends were harsher on migrants, they edged a bit closer to natives all over Europe, with 5 countries showing positive differences in 2013.

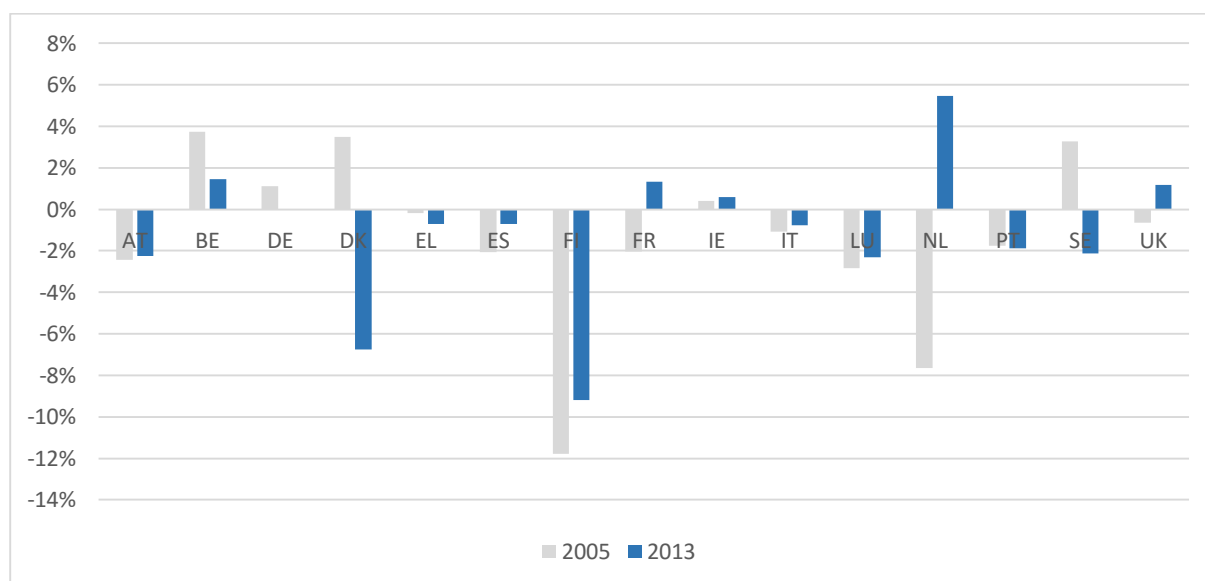
**Figure 8 - Percentage point difference in share of those receiving unemployment benefits among those experiencing unemployment during the year (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013

As for education related benefits among those below 35 years, data seems to draw a very scatter-like picture, with relatively large differences between countries and years. Some countries show extreme differences in general, with Finland being a negative outlier of differences around 10 percentage points for both 2005 and 2013, while the Netherlands show a tectonic shift between the two selected samples, moving from a negative difference of nearly 8 percentage points to a positive difference of more than 5. Trends are very mixed, with 7 cases relatively favoring the natives and the other 8 migrants, sometimes showing the aforementioned shifts – like how Denmark’s negative change offsetting the developments in the Netherlands. All in all, by 2013, most education related benefits still do not seem to favor migrants, but the general picture seem to be a bit more balanced on the average of the EU15.

**Figure 9- Percentage point difference in share of those receiving education-related benefits among those aged 35 or less**

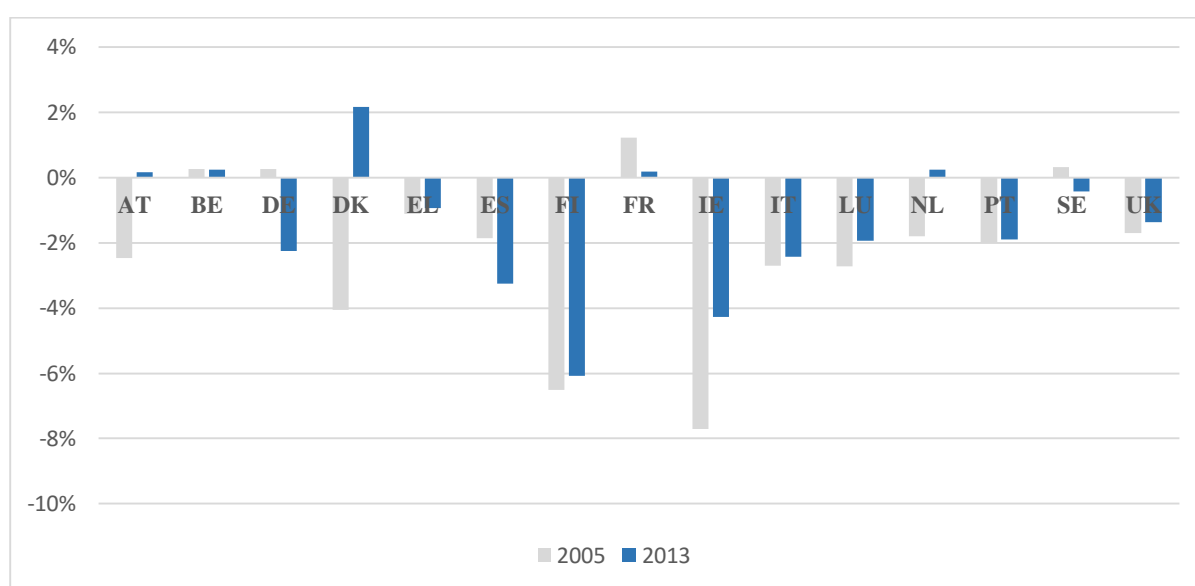


Source: Own calculations based on EU-SILC 2005 and 2013

Disability support is a case, where receipt is nearly unequivocally relatively negative from a migrant viewpoint, regardless of the data year – even is some individual shifts can also be noticed. In 8 cases, migrants received these kind of transfers in a relatively lower share, however usually the size of the difference remained somewhat toned down, with Finland and the Republic of Ireland being notable exceptions with more than 4 percentage point gaps in both

years. Trends seem to be positive however, with the relative receipt increasing in 10 cases (and stagnating in Belgium), hinting at a relative equalization of benefit receipt. The largest positive change was experienced in Denmark, which in its altogether amounts to a larger than 6 percentage points change – however it is also being the only case, where migrants' disability benefit attainment is significantly higher in comparison to their native counterparts of the sample.

**Figure 10 - Percentage point difference in share of those receiving disability support (18-64 years old)**

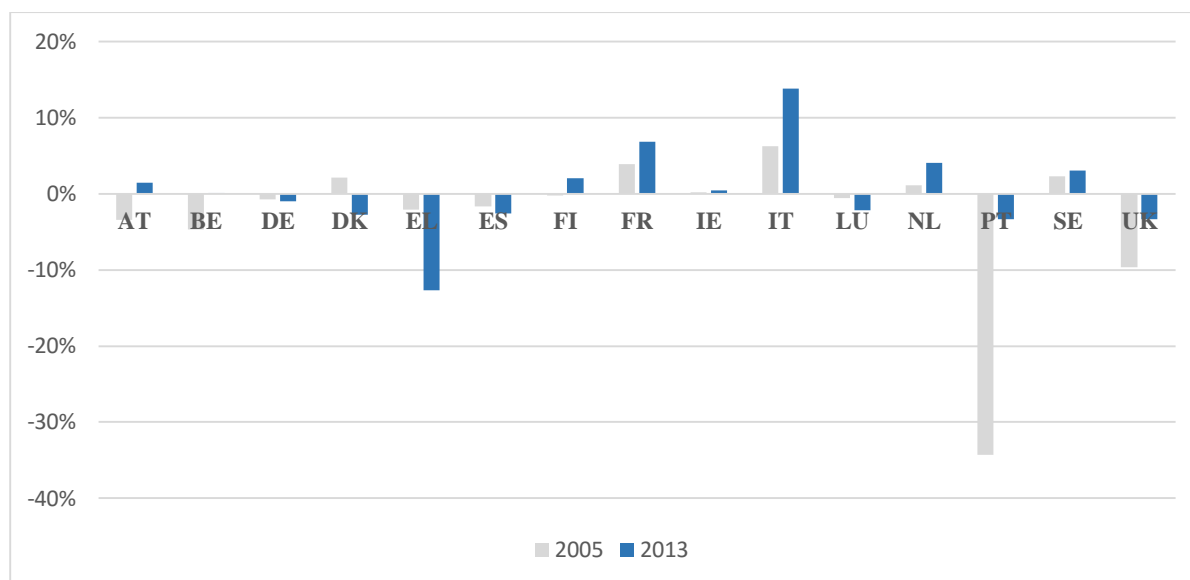


Source: Own calculations based on EU-SILC 2005 and 2013

In terms of how family assistance receipt differs between individuals living in households with children, perceived differences are driven by the massive one-time negative outlier of Portugal, however without that, the picture is quite mixed. Italy and France lead the fray in terms of higher migrant benefit receipt in this category, with percentage point differences as high as 14 and 7 in 2013. 6 countries show a steady negative, and 5 a steady positive difference between the migrant and native groups, making this a quite contested benefit category in terms of the whole EU15 landscape. However, if we search for trends, in nearly two thirds of cases – 9 countries – show developments from 2005 to 2013 that seem to be positive in terms of relative migrant welfare use. Apart from Portugal's outlier disappearing, notable shifts include a 6

percentage point change in the United Kingdom and a 3 point change in France and the Netherlands.

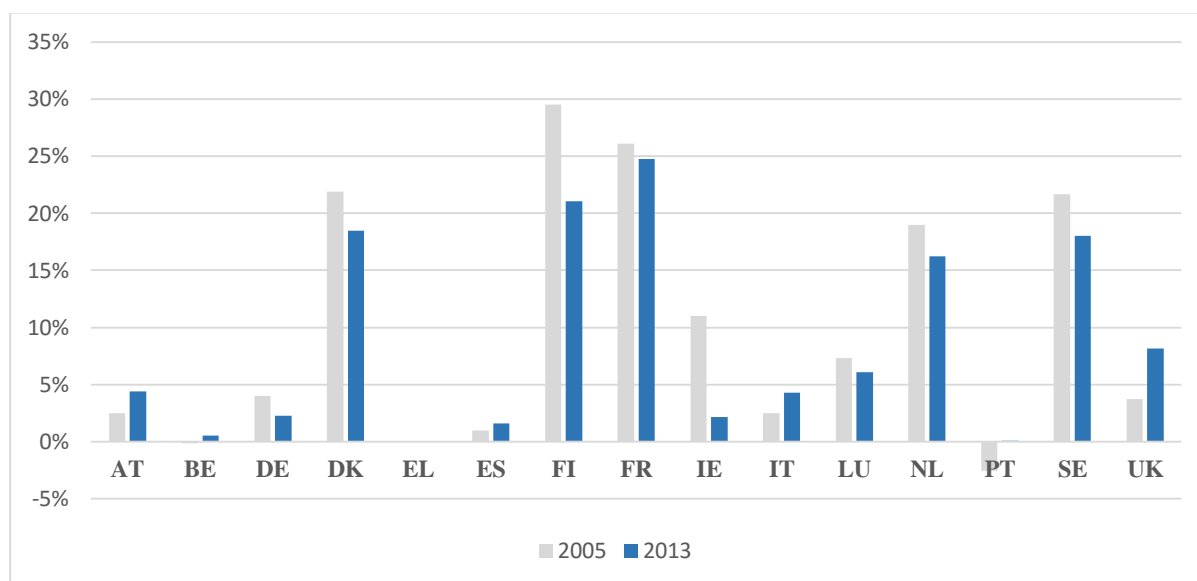
**Figure 11 - Percentage point difference in share of those receiving family assistance among those living in household with children (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013

Housing assistance related benefits provides a case where a relatively more intensive use by migrants is clearly the case apart from a few cases, where gaps are minimal. We can see that in 6 countries - like Finland or France – the difference is well above 5 percentage points both in 2005 and 2013, with differences sometimes even reaching above the 20 mark. In 4 countries – namely Belgium, Greece, Spain and Portugal – the differences are minimal (data for Portugal in 2005 even shows a slight underuse by migrants). However comparing before and after the crisis situations show that in 8 cases – including the ones with the largest gaps in use – differences get somewhat smaller, even if the general picture stays more or less the same. Notable exceptions include the United Kingdom, where however difference nearly doubles in the opposite direction.

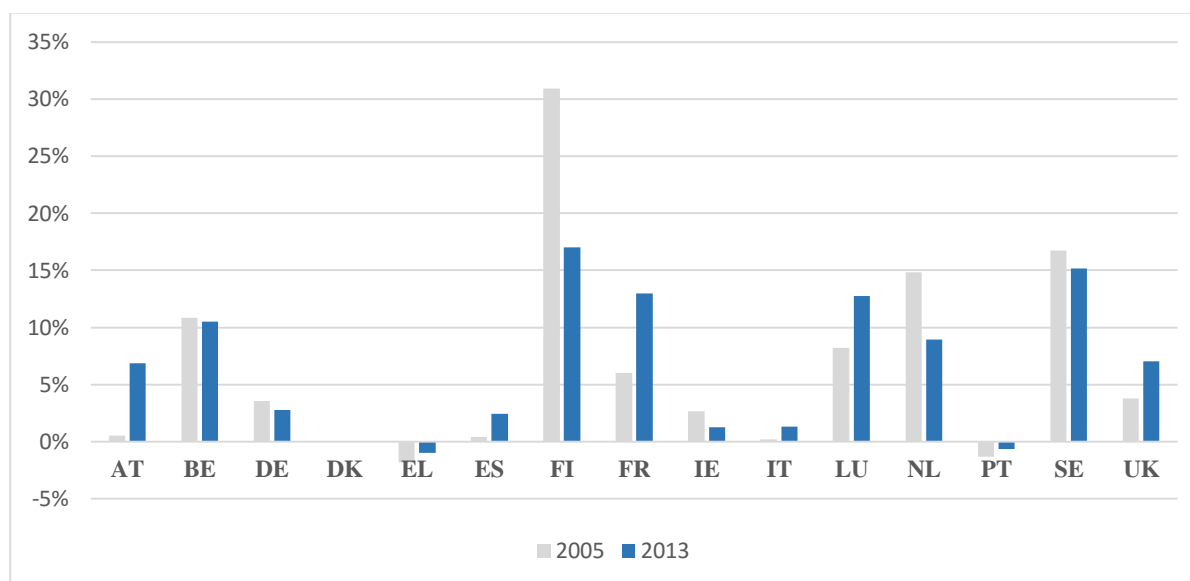
**Figure 12- Percentage point difference in share of those receiving housing assistance (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013

Finally, we can also take a quick look at how differences go in benefits that are against social exclusion – with some of those directly including targeted opportunities for migrants. Keeping that in mind, if Figure 13 can remind us of anything, is the previous one picturing differences in housing benefit receipt. In most cases – 12 out of 15 - migrants over perform locals in the receipt of this benefit in both cases, with differences ranging as high as above 10 or 15 percentage points on some instances, mostly in the Scandinavian countries like Finland and Sweden. In terms of changes between before and after the crises, again, the picture is not so clear, with differences getting smaller in 7 cases (though including Portugal, the only country where the data shows lower benefit receipt by migrants) and rising in the 7 other (including France, where the gap more than doubles to reach 13 percentage points).

**Figure 13 - Percentage point difference in share of those receiving benefits against social exclusion (18-64 years old)**



Source: Own calculations based on EU-SILC 2005 and 2013, No data available with Denmark

So what do descriptive differences between migrants and locals tell us, after scouring these categories? Not too surprisingly, not much on their own – but they both highlight the general fact, that we need to use more sophisticated methods to get clearer insight, and hint that systemic differences might be possible. Does the relatively lower level of benefit use in disability and work related areas hold, if we proceed? Does the relatively higher level of migrant benefit receipt in housing and social exclusion categories? Is there any other areas we should be looking out for, and are there country patterns? And for our next chapter – how to try to find an answer to these questions? Let us proceed to my chosen methodology and hopefully the other questions will also follow suit in getting answered.

## 2.4. Methodology

The following section consists of two parts – first I introduce the main variables I am going to use, then I will introduce the reader to the exact estimation method utilized. The former introduces the differences in variable use that is required due to the fact that some benefits were collected on a household level, while the latter focuses on how to put them in estimation

equations that are structurally very similar, just counter this difference stemming from how benefits are allocated.

#### 2.4.1. Operationalization of variables

As I mentioned earlier, our main variable of interest will be migrant status, defined as whether a given individual's mother's country of residence was outside the European Union at the time of the given individual's birth date, or not. The EU-SILC database treats changes in geographical borders, by clarifying that borders at the time of the birth is what counts, while in the case of countries that no longer exist, should be substituted according to the current political geography (at the time of the survey). The EU-SILC also stores data on mobile citizens within the European Union, providing a useful control variable, to distinguish that part of the migration effect that is similar regardless of country of origin – parts of language, cultural and administrative barriers.

Of course since the main inquiry in my thesis, is to look at how having a migrant background affect welfare use, operationalization of welfare receipt is of paramount importance. For that, luckily EU-SILC data collection registers information on each individual and household head about the social benefit transfers they receive. EU-SILC has a clear and detailed terminology on what constitutes as such benefits for each benefit category and they register the total amounts received in the income reference period for which individuals have to provide information during data collection. From that I am able create separate binary variables for each benefit type – whether an individual received any amount or not. Unemployment, education and disability benefit receipt information is directly available on individual level. Family or children, housing and social exclusion related benefits data however are collected on household level, but are matched to all members of the household – so operationalization into binary variables also had been done for each individual.



This however requires us to control for household types as well in all regressions – the number of members, and their adult status should be considered – otherwise my results would be seriously biased, when estimating benefits that are allocated on the household level. EU-SILC assigns both personal and household identification numbers, enabling me to create a household classification, creating individual variables based on household and household head characteristics for all variables necessary. This is executed in the following way:

- Household heads are defined as the oldest working age (18-64) male members of each household. In a case where no such household member exists, then the oldest woman of working age is defined as the household head. If no such member exists, then in a similar order male and female members older than working age are considered household heads
- Household classification is created based on whether a household with a working age adult has a single adult and no children, more than a single adult and no children, a single adult with children, 2 or more adults with 1 or 2 children, 2 or more adults with 3 or more children, or a household without a working age adult have a single adult member or more than one adult

We also have to control for activity status. Luckily, EU-SILC also provides information on economic activity, with data on whether given individuals are working part- or full-time, are unemployed, studying, retired, disabled, are in military service, fulfilling domestic/care responsibilities or are inactive in any other unspecified way (by 2013, the data also distinguishes between employees and self-employed individuals, for the sake of a unified approach however I re-categorized them according to the 2005 standards). Respondents also give a monthly unemployment history, stating whether they have experienced or not unemployment in each of the 12 months of the reference period.

Data is also available on the level of education attained based on the mentioned ISCED qualification coding mentioned in the previous sections. Categories and the classification I used are the following:

- pre-primary education – below secondary level education
- primary education – below secondary level education
- lower secondary education – below secondary level education
- (upper) secondary education – secondary level education
- post-secondary non-tertiary education – above secondary level education
- first and second stages of tertiary education – above secondary level education

#### 2.4.2. Estimation method used

To unveil how migrant status has different effects on welfare use before and after the crisis, I will use probit models that will allow me to identify for every case, how a particular characteristic (like the aforementioned migrant background) affects the likelihood of receiving a certain type of benefit. I will use similarly structured models all benefits, with two main types – depending on whether a certain benefit was allocated on the individual level or on the household level.

The general structure of my estimation models is the following:

$$(1) B\_rec_i = \alpha + \beta mig + \gamma eu\_m + \delta + u_i$$

Where  $B\_rec_i$  is the dummy variable signifying the receipt of a certain type of benefit mentioned – unemployment, education, disability, family and child allowances, housing or benefits against social exclusion.  $i$  in each and every case is the indicator of the country the model is run in the actual case.  $mig$  represents the effect of having a migrant status on benefit receipt, while  $eu\_m$  is the control variable included because of other, intra-EU migrants in the population. Furthermore with  $\delta$  a selection of control variables are included to accommodate for differences in household types, education levels plus employment and activity information.

This model type allows us to gain insight into how big of a marginal effect our variable in focus could have on whether or not a certain individual will receive the type of benefit in question. What remains is the challenge of results presentation – this approach means 2 times 6 times 15 separate probit estimations are to be done, and relevant data should be reported. For that reason, in the following section I will focus on reporting  $\beta$  for both years in all six cases and for all countries where estimation is applicable.

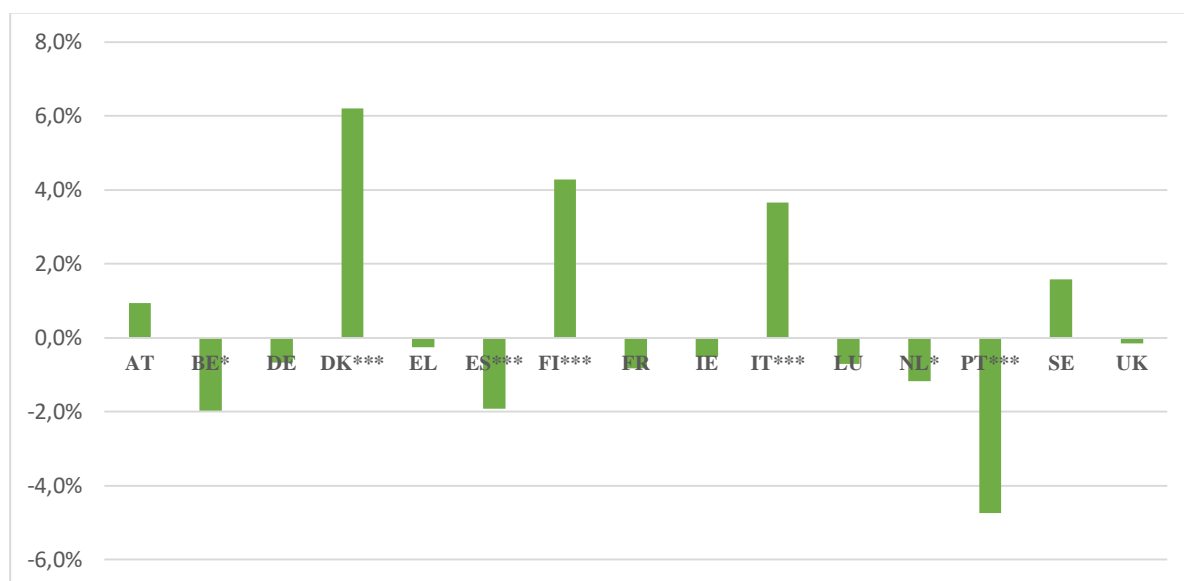
### 3. Regression analysis results

This section introduces my results, each section covering a particular benefit type from unemployment benefits to benefits against social exclusion. Each section is structured into three parts, with results discussed first from 2005, then 2013 and then finally a comparison and reflection on how the situation changed. After finishing introducing all six benefit categories, I move on to discuss how these should be interpreted from a policy perspective and what this could mean in terms of thinking about the relation of welfare policy and migration from outside the European Union.

#### 3.1. Unemployment benefits

Based on EU-SILC data from 2005, we can establish, that in the case of unemployment benefits, there was significant marginal difference in welfare usage due to having a migrant background in as many as 7 countries from our sample of 15. In three of these cases – Denmark, Finland and Italy – the differences are not only largely positive, suggesting that migrants relatively overuse this element of the welfare state compared to their native counterparts, but the estimate values are also quite large, ranging from 3,7 to 6,2 percentage points. In countries, where the difference implies migrant underuse of unemployment benefits, the estimate values are somewhat lower, ranging from 1,2 to 4,7 percentage points. It is also important to point out, that in 5 of the 7 cases, significance levels imply that differences are quite robust.

**Figure 14 - Estimated difference in unemployment benefit receipt of migrants compared to locals, 2005 (% points)**

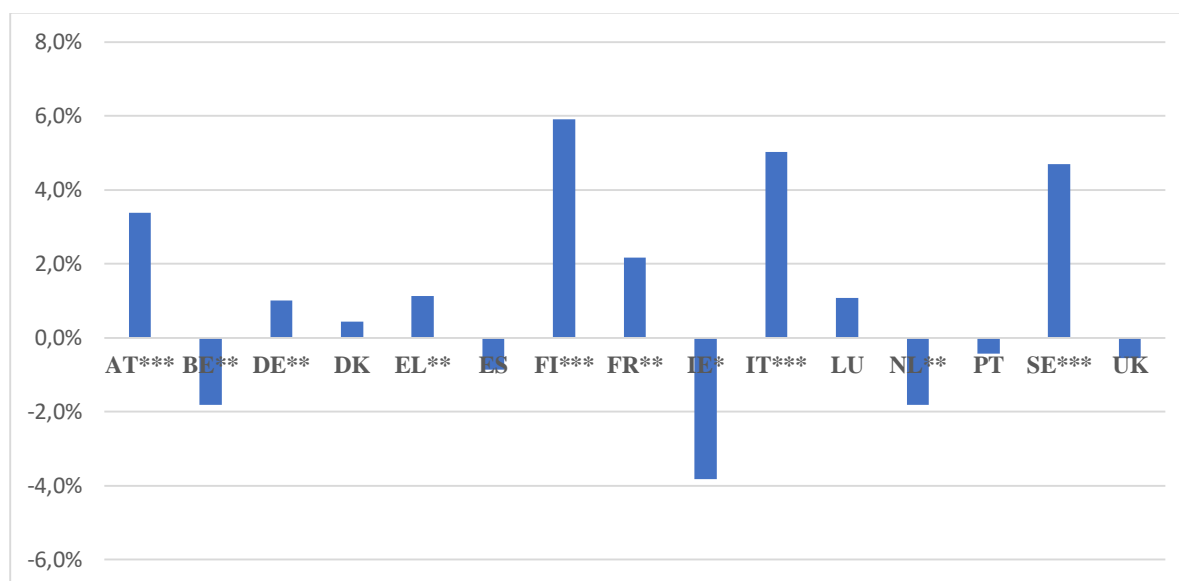


\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005

As for 2013, results are statistically significant in 10 cases, with 3 of them depicting a case where migrants' background leads to a relatively lower usage of unemployment benefits, and 7 where it leads to a relatively more intensive use. Into the former category falls Belgium, the Republic of Ireland and the Netherlands with point estimates for marginal effects ranging from 1,8 to 3,8, a relatively modest difference, with the Republic of Ireland showing the largest gap.. In the latter category, we find some Nordic countries, like Sweden and Finland but also France and Italy. Differences range from a relatively meagre 1 percentage point to nearly 6, with Finland scoring as high as 5,9 percentage points. Other notables include Italy and Sweden, both scoring above 4 percentage points, when it comes to measuring the difference between migrant and local use of unemployment benefits.

**Figure 15 - Estimated difference in unemployment benefit receipt of migrants compared to locals, 2013 (% points)**



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2013

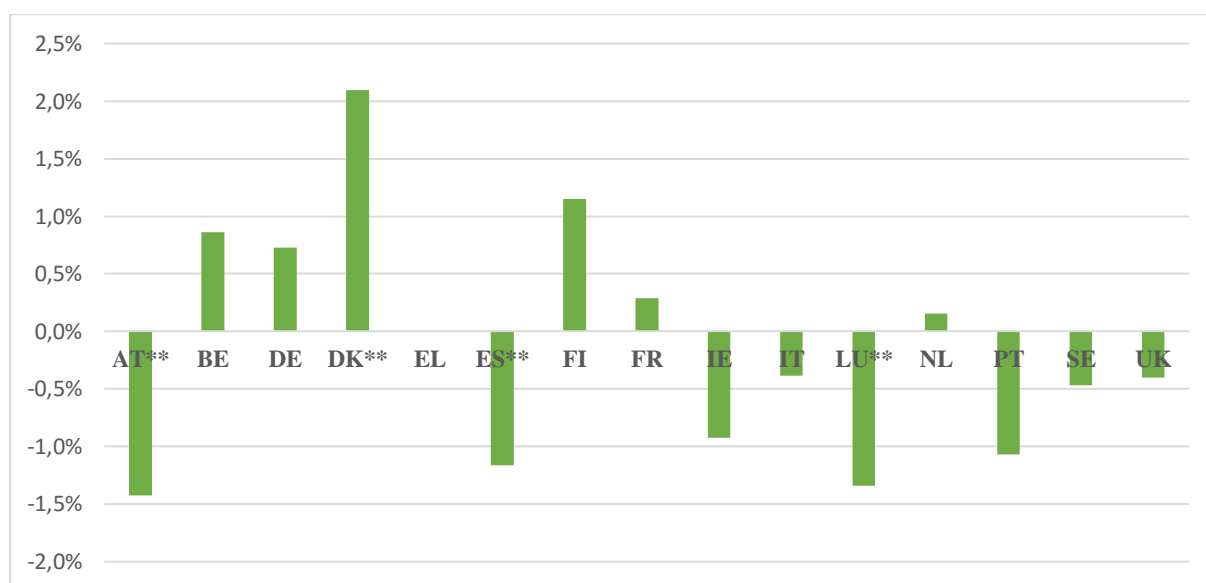
Based on these results, we can say, that countering our original expectation based on simple descriptive statistics (see Figure 8), the relative role of migrant status has increased in unemployment benefit receipt – with two thirds of countries showing a statistically significant relationship. It might also be important to note however, that in only 4 cases – in Belgium, Finland, Italy and the Netherlands – are the results statistically significant in both cases. All in all, this might be a somewhat weak but still existing hint that migrants are becoming relatively more active in applying for and receiving unemployment related benefits. We must also note however, that only 4 countries show statistically significant results for both 2005 and 2013 – Belgium, Finland, Italy and the Netherlands, with all of them keeping differences along the same lines (negative marginal differences in Belgium and the Netherlands, positive in the other 2).

### 3.2. Education benefits

If we look at Figure 16, we can establish, that in case of education benefits in 2005, in the majority of the cases having a migrant background would be leading to a relative overuse of this welfare category – with out of 14 instances (with no data available for Greece), 8 showing

negative marginal effects. However, we must also note, that these are significant in only 3 cases – namely in Austria, Spain and Luxembourg, with fluctuations that are very little, as gaps are between 1,2 and 1,4 percentage points. On the other hand, from 6 countries showing a relatively higher likelihood of migrant educational benefit use, only Denmark provides a statistically significant result, however the estimate itself is a bit larger, amounting to 2,1 percentage points. All in all, we can establish that results for 2005 are not spectacularly robust, but lean towards relative underuse of this benefit type.

**Figure 16 - Estimated difference in education benefit receipt of migrants compared to locals 2005 (% points)**

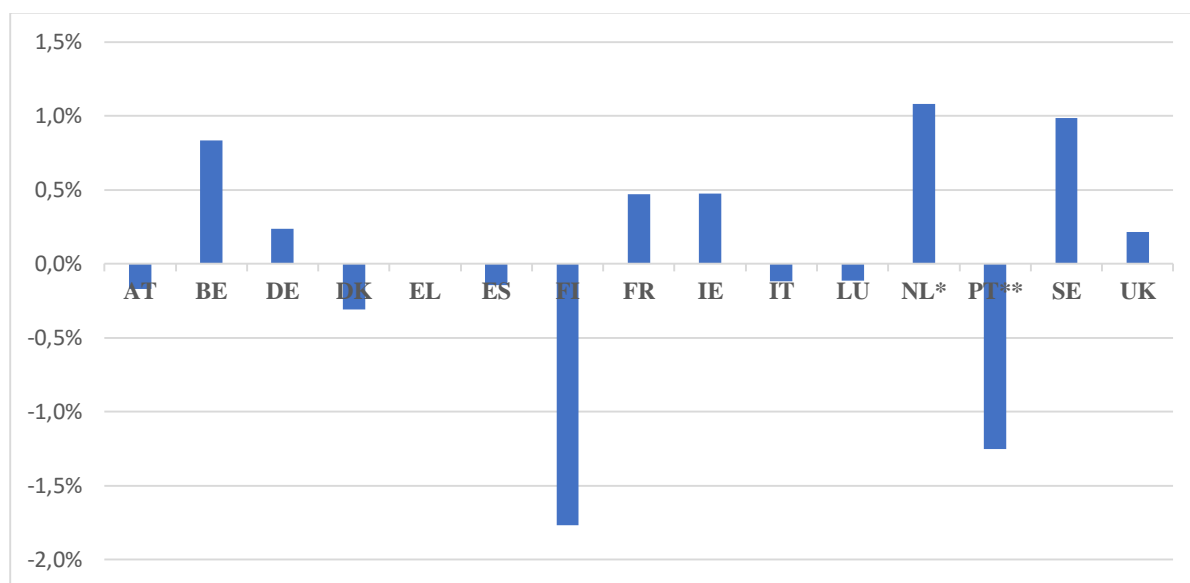


\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005, No data available for Greece

Results are a bit more balanced but even weaker in the case of 2013, with 7-7 countries showing results in either direction – but only one each of those actually providing a statistically significant result. These exceptions are the Netherlands and Portugal. In the former, migrants are 1,1 percentage point more likely to use education benefits compared to their native born counterparts, while in the latter they are 1,3 percentage point less likely to receive such transfers compared to their local peers.

**Figure 17 - Estimated difference in education benefit receipt of migrants compared to locals, 2013 (% points)**



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2013, No data available for Greece

Looking at the two results together, we have very little concrete evidence for any simple great conclusion, with both years hinting at a more or less balanced picture in differences. This is supported by the low statistical significance of most of the results, evidencing that at least in the case of sampled individuals, the differences seem to be somewhat underwhelming. It is also important to note, that entirely different countries show statistically significant results for 2005 and 2013. This reinforces the picture from the descriptive statistics (Figure 9), which hinted at relatively low systematic differences already in this particular category in most countries – that might have changed due to crisis effects, but not in a systematic way.

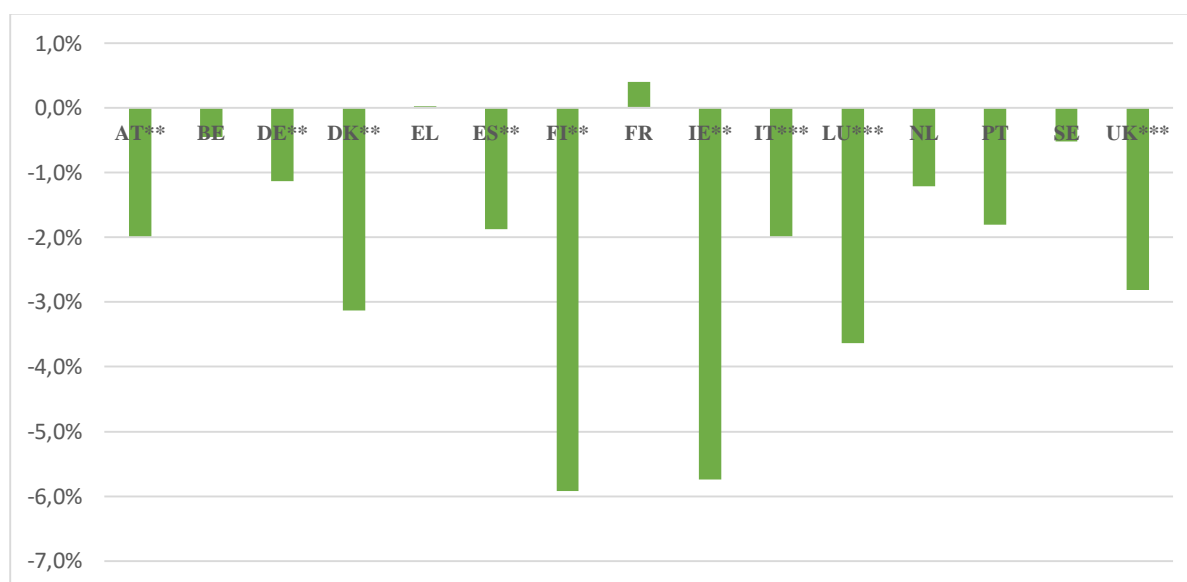
### 3.3. Disability benefits

For 2005, in the case of disability benefits, the picture for migrants seem to be very-very bleak – with only 2 countries showing indications in my results, that migrants might be using this particular benefit relatively more compared to their native counterparts. These cases were Greece and Spain – however their differences prove to be statistically insignificant. For the other 13 cases, where differences are unfavorable for migrants, a whopping 9 cases show statistically significant negative marginal effects. This is a very diverse group of countries from



Spain through the United Kingdom to Finland, showing a quite far reaching pattern, with point estimates between 1,1 percentage points in Denmark to 5,9 in Finland. So altogether, only 6 countries seem to be neutral in terms of disability benefits for the data collected in 2005.

**Figure 18 - Estimated difference in disability benefit receipt of migrants compared to locals, 2005 (% points)**

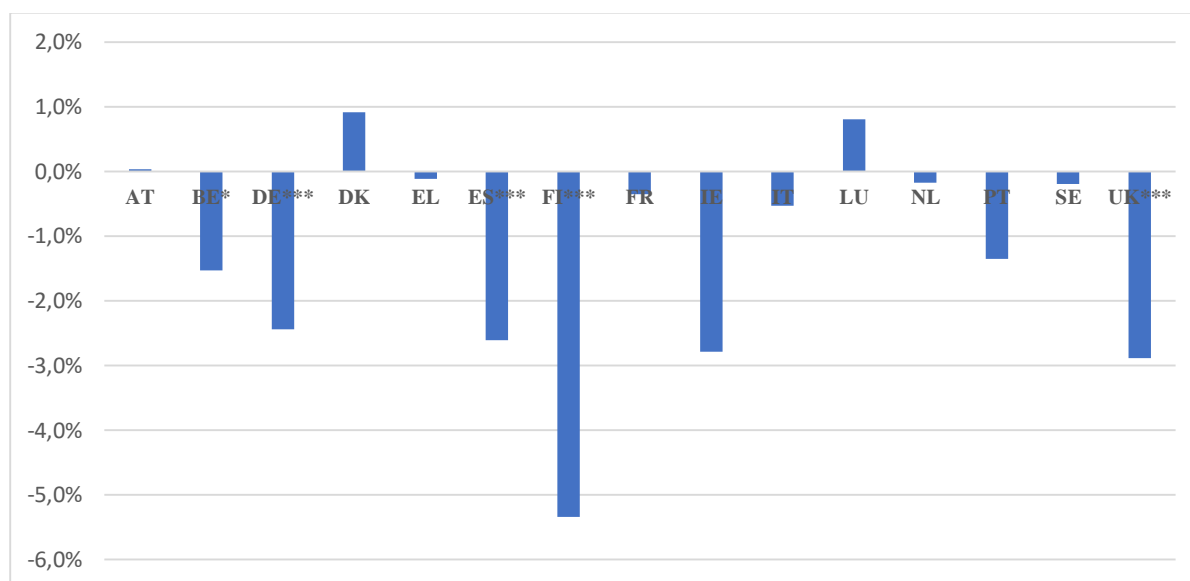


\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005

As for the results in the case of 2013, we can also see that the estimates of marginal effects are again mostly negative – with positive results only coming in the case of Austria, Denmark and Luxembourg, with not one of them being statistically significant. Out of the other 12 countries showing negative marginal effects, 5 are showing statistically significant differences – those being Belgium, Denmark, Spain, Finland and the United Kingdom. Point estimates of statistically significant marginal effects range from 1,5 percentage points (in Belgium) to 5,3 percentage points (in Finland).

**Figure 19 - Estimated difference in disability benefit receipt of migrants compared to locals, 2013 (% points)**



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

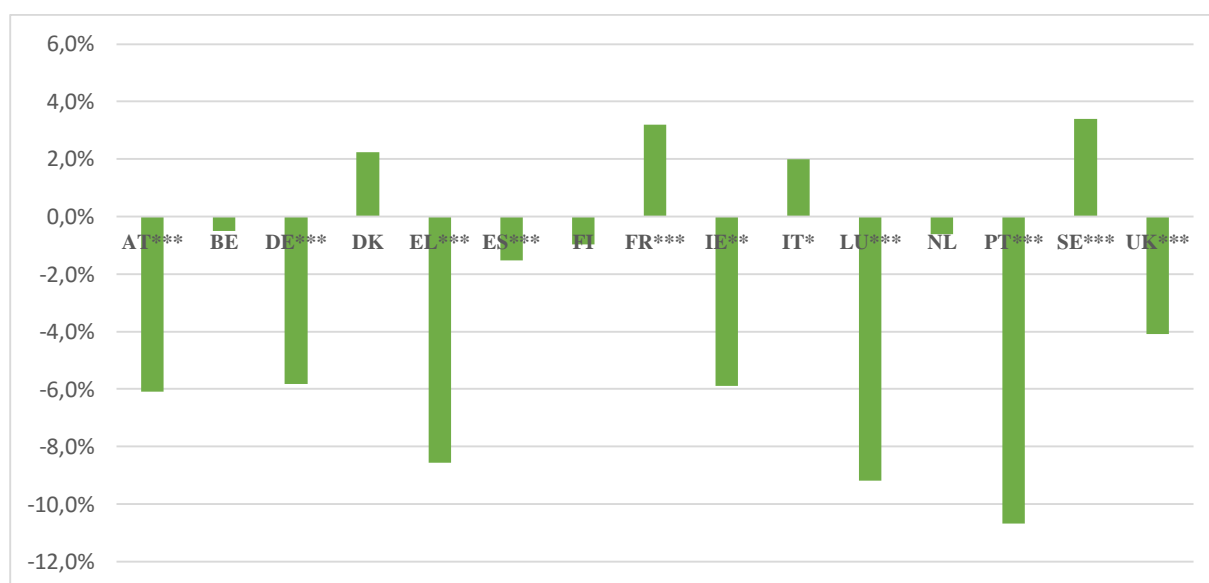
Source: Own calculations based on EU-SILC 2013

Altogether, in the case of disability related benefits the picture is quite similar for both 2005 and 2013, with migrant status most likely to have a negative marginal effect on the likelihood of receiving the benefit itself. Not only the direction but the size of the difference seems to be robust, hinting at the existence of a systematic underuse of this benefit type among migrants included in the EU-SILC data. There are 4 countries, where differences are statistically significant for both cases – Germany, Spain, Finland and the United Kingdom. Out of these 4, gaps are somewhat narrowed in Finland and Spain, remain similar in the United Kingdom and increase further in Germany, again robbing us of a clear conclusion, especially after taking into consideration that differences appear in Belgium from 2005 to 2013, but disappear in 5 other cases. Summing up, disability benefits are a likely candidate for looking into further specifics into how migrant use of them differs from the possibilities of natives, but the picture is far from clear.

### 3.4. Family and child related benefits

In the case of family and child related benefits, the situation for 2005 is that while 4 countries show positive marginal effects for migrant status on benefit receipt, in 11 cases the gap is clearly in the other direction. The 4 cases are Denmark, France, Italy and Sweden – with the latter 3 all showing statistically significant results. These positive effects vary from 2 percentage points in Italy to 3,4 percentage points in Sweden. From the other 11 cases, as many as 8 country results are also statistically significant. This group is obviously diverse, including members from Ireland through Luxembourg to Portugal, with the gaps ranging from as little as 1,5 percentage points in Spain to a staggering 10,7 percentage point difference in Portugal. It is also worthwhile to note, that apart from Ireland, the differences are very robust, as 7 cases are statistically significant even on the 1 percent level.

**Figure 20 - Estimated difference in family/child allowances receipt of migrants compared to locals, 2005 (% points)**



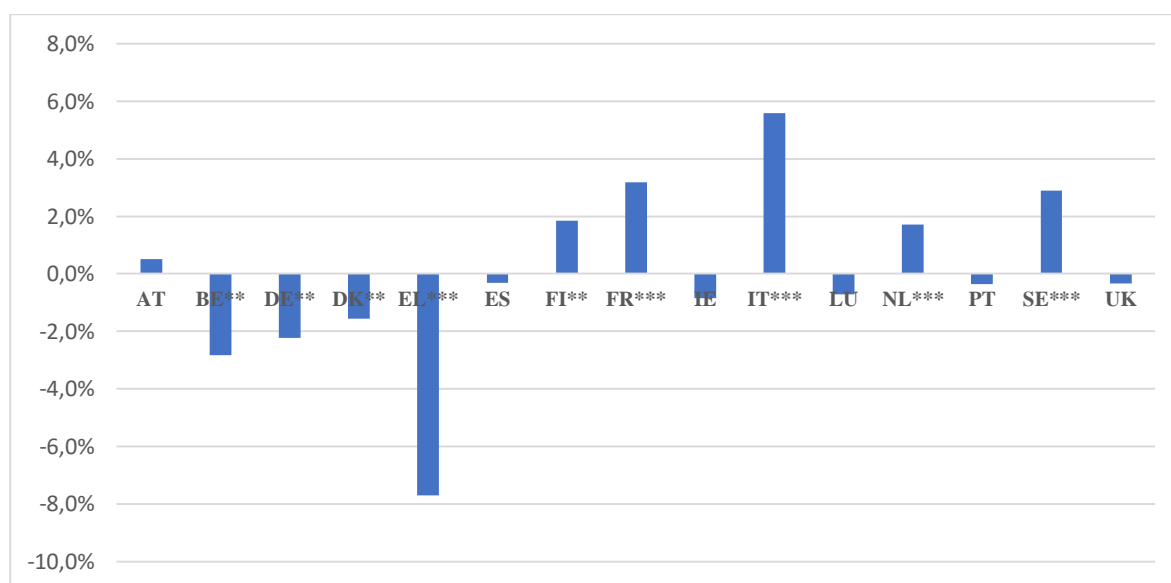
\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005

In the case of data from 2013 results show a positive marginal effect of migrant status on likelihood of receiving family and child related benefits in 6 cases – including 5 of which is statistically significant. These countries are Finland, France, Italy, the Netherlands and Sweden,

with point estimates ranging from 1,7 percentage points (the Netherlands) to 5,6 percentage points (in Italy). Curiously, all of these show a quite robust relationship, with 4 being statistically significant on the 1 percent level (Finland providing the only moderate exception). The other 9 countries are showing at least some negative marginal effect of having a migrant status, however only 4 show a statistically significant result: Belgium, Germany, Denmark and Greece. Point estimates are again quite different, ranging from 1,6 percentage points in Denmark to 7,7 in Greece.

**Figure 21 - Estimated difference in family/child allowances receipt of migrants compared to locals, 2013 (% points)**



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2013

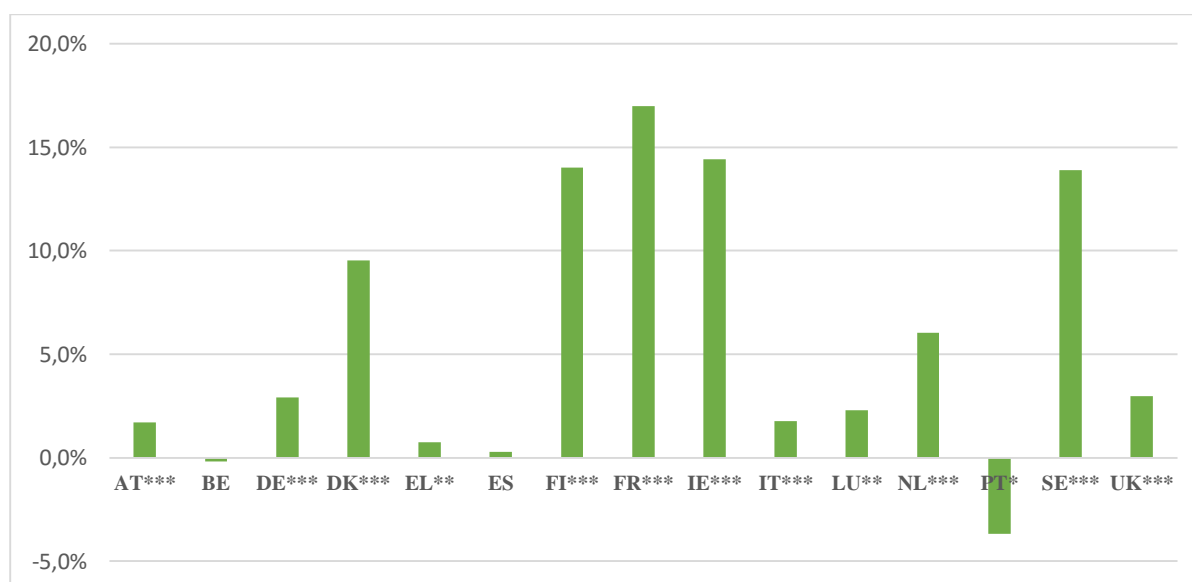
So in the case of family and child related benefits, the initial situation of 2005, where in most cases migrants tend to underutilize their respective countries' welfare system, the differences are becoming somewhat toned down by 2013, providing a very mixed picture. The negative relationship persist in Germany and Greece, but appears as a new element in Denmark and Belgium. On the other hand, statistically significant marginal effects persist in France, Italy and Sweden, plus appear in Finland. This would imply, that while in more than half of the cases, a

2005-2013 picture is either ambiguous or neutral, in third of the EU15, differences are quite persistent, meaning that some systematical differences might be unearthed.

### 3.5. Housing benefits

The case of housing benefit receipt shows a surprisingly clear picture in terms of summarizing results for 2005 – in the overwhelming majority of cases, migrant status has a robust positive effect on benefit receipt. Portugal provides the only exception, where migrant status has a statistically significant negative marginal effect on the use of these parts of the welfare system, however there the point estimate is also relatively large with 3,7 percentage points. In the other 14 cases, the effect is positive – with apart from Belgium and Spain all country results also showing statistical significance (and 10 of those on the 1 percent level). Point estimates range from a relatively lowly 0,7 percentage points in the case of Greece to the staggering heights of 17 percentage points in the case of France, with Ireland, Finland and Sweden also reaching nearly 15 percentage points.

**Figure 22 - Estimated difference in housing benefit receipt of migrants compared to locals, 2005 (% points)**

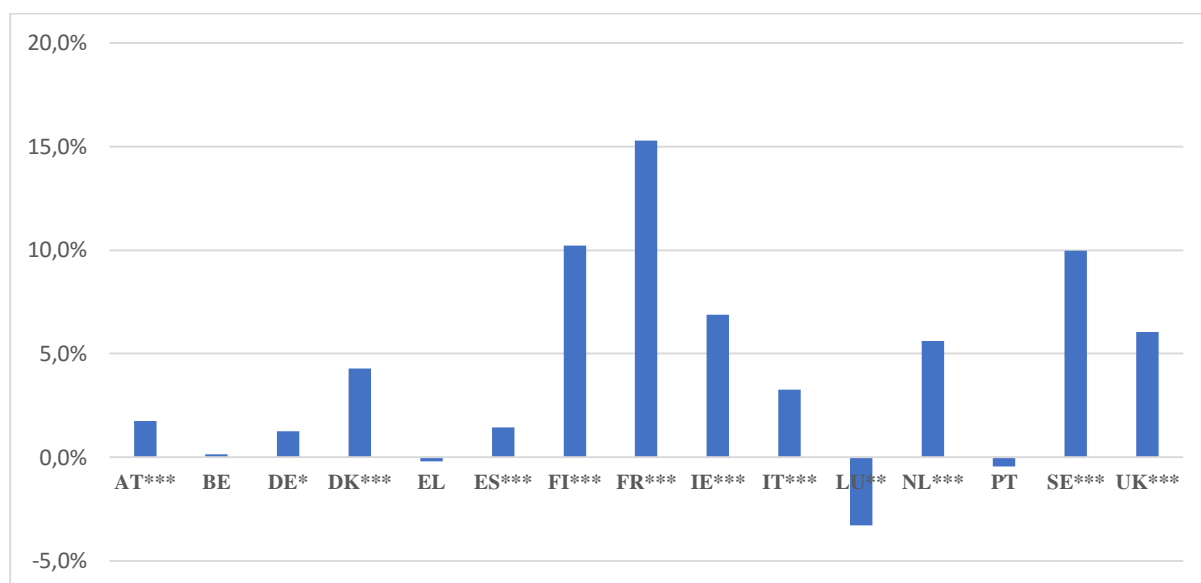


\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005

As for the results on the data from 2013, the picture is somewhat muted but very much the same. Here, negative marginal effects are identified in Greece and Luxembourg as well as in Portugal, but only the case of Luxembourg is showing statistical significance (on the 5 percent level). From the 12 cases, where point estimates are positive, results from 11 countries also statistically significant, with again 10 being so on the 1 percent level. These countries are obviously a diverse group – again – with members from all regions of the EU15. Results vary between 1,4 percentage points – the case of Spain – to 15,3 percentage points in France, although this is a relative outlier, with others like Finland and Sweden only amounting to roughly 10 percentage point gaps between migrants and native born citizens.

**Figure 23 - Estimated difference in housing benefit receipt of migrants compared to locals, 2013 (% points)**



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2013

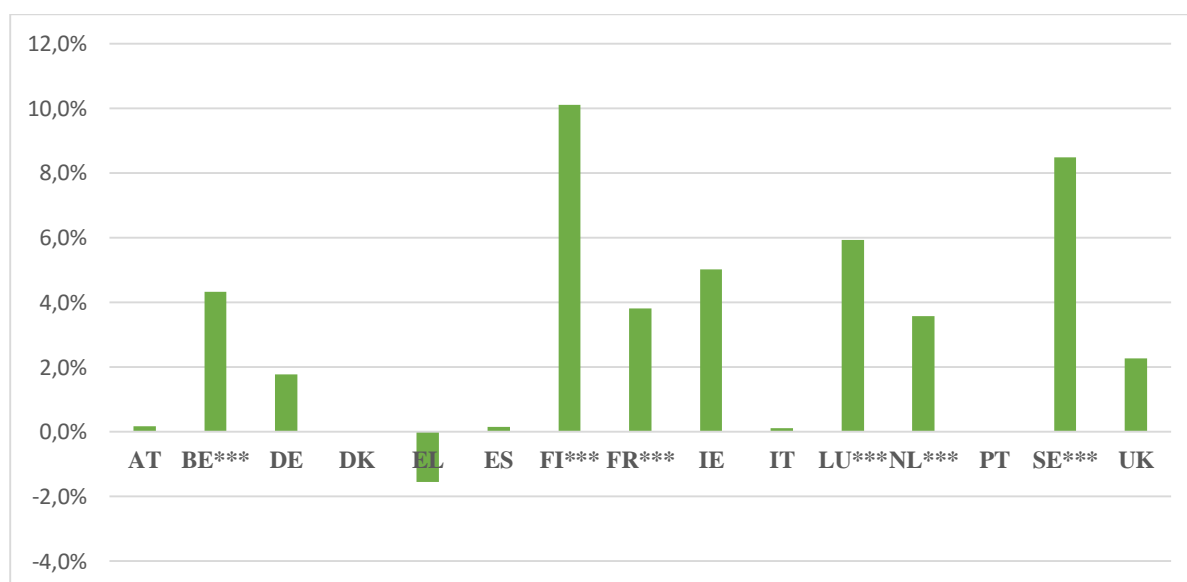
In terms of relating results to each other from 2005 and 2013, we can conclude, that relatively little has changed – migrants in most cases tend to use this type of benefits relatively more frequently than their locally born counterparts. While differences melt in Portugal and appear in a disadvantageous direction in Luxembourg, in case of 10 countries – Austria, Germany, Denmark, Spain, Finland, France, Ireland, Italy, the Netherlands, Sweden and the United

Kingdom – they stay the same, even if their sizes are becoming somewhat diminished. Housing benefits provide a clear example, where while the benefit itself would be universally available for both groups, migrant activity seems to be far higher.

### 3.6. Benefits to counter social exclusion

Results for benefits that are targeting those at risk of social exclusion are somewhat similar to the previous section. For 2005, from the 13 countries with data available, only Greece provides a negative marginal effect, and only to an extent, that is not statistically significant even on the 10 percent level. The other 12 cases show positive estimates, with 6 of them – Belgium, Finland, France, Luxembourg, the Netherlands and Sweden - being statistically significant, all of them on the 1 percent level. Estimated marginal effects vary from 3,6 percentage points in the Netherlands to 10,1 in Finland, providing a significant range with most countries scoring between 3,6 and 5,9 (Sweden and the mentioned Finland being the notable exceptions).

**Figure 24 - Estimated difference in receipt of benefits against social exclusion of migrants compared to locals, 2005 (% points)**

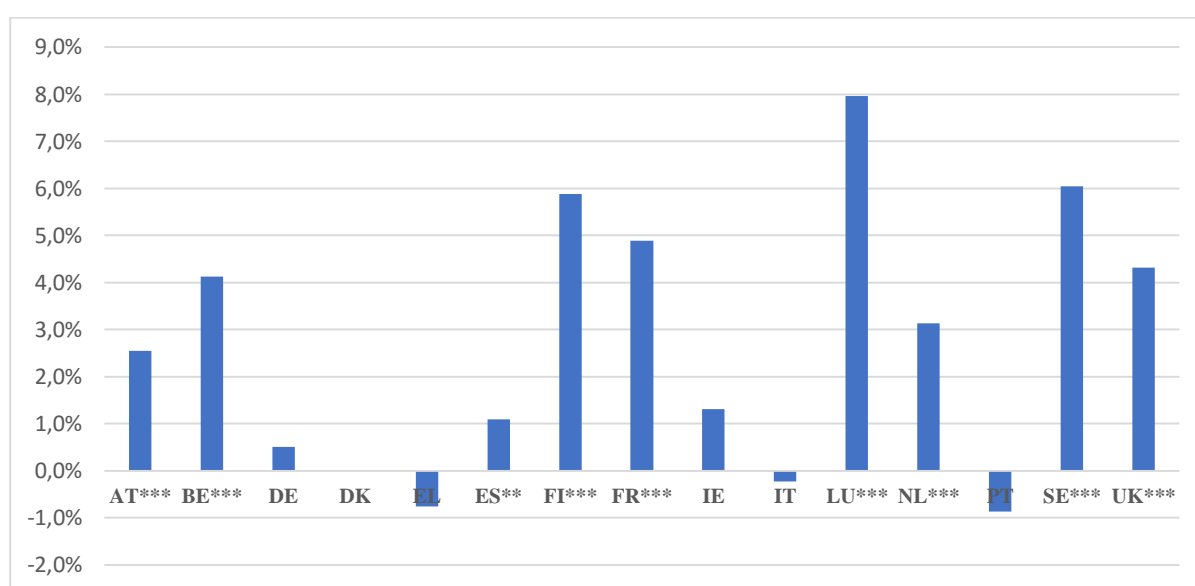


\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005, 2013, No data available for Denmark and Portugal

For 2013, the structure of results remain largely the same – out of the 14 cases, only 3 show negative point estimates (Greece, Italy and Portugal), with none of them being statistically significant. From the other 11 cases, as many as 9 show statistically significant differences (and 8 of those are significant on the 1 percent level). Point estimates fluctuate between 1,1 percentage points in Spain to as high as 8 percentage points in Luxembourg. 5 countries fall between roughly 4 and 6 percentage points in difference, making up the bulk of this group.

**Figure 25 - Estimated difference in receipt of benefits against social exclusion of migrants compared to locals, 2013 (% points)**



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2013, No data available for Denmark

That results skew towards a population that is partly directed by a certain benefit should not cause much of a surprise, but after looking at data from both 2005 and 2013, it is important to note that in the case of benefits against social exclusion, migrants tended to be more likely to receive them in both cases, regardless of any policy changes between the two periods. Differences are quite robust, with seven countries showing statistically significant results for both cases – all of them showing higher likelihood of migrant benefit receipt. These countries are Belgium, Finland, France, Luxembourg, the Netherlands, Sweden and the United Kingdom where differences appear to be quite large both before and after the crisis. Point estimates



however tend to shift around, with Sweden and Finland registering a significant fall in the difference, the Netherlands and Belgium showing largely the same gap with France, Luxembourg and the United Kingdom showing larger numbers. We can also add, that the significant difference disappears in the Republic of Ireland and Germany, but appears in Austria and Spain – making dynamics somewhat similar in the Nordic countries, the Republic of Ireland and Germany on one hand, and Benelux countries, France, Spain, the United Kingdom and Austria on the other.

### 3.7. Policy considerations

As we have been able to see in the previous chapter, both starting positions and changes in relative migrant positions have been quite different across benefit types and countries for the period between 2005 and 2013. However, as Table 1 summarizes the directions in change, migrant positions mostly have not deteriorated, and in some cases have significantly improved over these years.

**Table 2 – Change in relative migrant use across benefit types and countries**

|                                | Unemployment | Education | Disability | Family/<br>Child | Housing   | Social<br>exclusion | Net change |
|--------------------------------|--------------|-----------|------------|------------------|-----------|---------------------|------------|
| <b>Austria</b>                 | Increase     | Decrease  | Increase   | Increase         | No change | Increase            | 3          |
| <b>Belgium</b>                 | No change    | No change | Decrease   | Decrease         | No change | No change           | -2         |
| <b>Germany</b>                 | Increase     | No change | No change  | No change        | No change | Decrease            | 0          |
| <b>Denmark</b>                 | Decrease     | Decrease  | Increase   | Decrease         | No change | -                   | -2         |
| <b>Greece</b>                  | Increase     | -         | No change  | No change        | Decrease  | No change           | 0          |
| <b>Spain</b>                   | Increase     | Increase  | No change  | Increase         | Increase  | Increase            | 5          |
| <b>Finland</b>                 | No change    | No change | No change  | Increase         | No change | No change           | 1          |
| <b>France</b>                  | Increase     | No change | No change  | No change        | No change | No change           | 1          |
| <b>Republic of<br/>Ireland</b> | Decrease     | No change | Increase   | Increase         | No change | Decrease            | 0          |
| <b>Italy</b>                   | No change    | No change | Increase   | No change        | No change | No change           | 1          |
| <b>Luxembourg</b>              | No change    | Increase  | Increase   | Increase         | Decrease  | No change           | 2          |
| <b>Netherlands</b>             | No change    | Increase  | No change  | Increase         | No change | No change           | 2          |
| <b>Portugal</b>                | Decrease     | Decrease  | No change  | Increase         | Increase  | No change           | 0          |
| <b>Sweden</b>                  | Increase     | No change | No change  | No change        | No change | No change           | 1          |
| <b>United<br/>Kingdom</b>      | No change    | No change | No change  | Increase         | No change | No change           | 1          |
| <b>Net change</b>              | 3            | 0         | 4          | 6                | 0         | 0                   |            |

*Table based on own calculations, 'Increase' coded as 1, 'No change' as 0 and 'Decrease' as -1 for summarizing purposes*

While I was able to identify categories, where relative migrant position was weaker – for example in disability benefits –if we take into consideration how some differences disappeared, (thus hinting at a net positive tendency for migrants' use of welfare), chances seemingly have improved. The three benefit categories where balance held on the EU15 level were either very similar for migrants and natives, like education, or were in the categories of housing and benefits against social exclusion, where migrant receipt was already at higher levels in most countries before the crisis. Based on this, we have to arrive at the general conclusion, that policy changes initiated during the crisis did not disproportionately effect negatively migrant population in the EU15. However what have to face is that general tendencies same to be locked in regarding some underuse– as disability benefits – and overuse – as housing benefits – that hint structural differences on what parts of welfare systems are accessible for migrant groups.

My results also provide us with a chance to briefly compare how different country policies are affecting migrants in their jurisdiction. Maybe the most surprising results in my data are visible in the case of Spain, where it seems that while the country – being hit severely during the crises –had to seriously reconsider welfare expenditures and eligibility rules, it seemingly affected migrants to a lesser extent than their native counterparts, thus pushing relative migrant welfare use towards showing positive changes in 5 out of 6 categories. While apart from housing and benefits against social exclusion came from disappearing negative positions, it indeed highlights the Spanish policy environment as a unique case in Europe.

It is also important to highlight, that out of 15 countries only two – namely Denmark and Belgium – show negative changes in net migrant positions using this classification. In Belgium, the likelihood of benefit receipt stagnated in most categories, while differences appeared in the case of disability and family or child related transfers. In Denmark, while existing differences disappeared in disability benefit receipt, changes drove down migrant positions in 3 other

categories, which is especially alarming considering that no data is available for the country regarding benefits against social exclusion. These negative changes are somewhat contrary to the general trends identified, and should also warrant a closer look, to understand local dynamics and the reasons for change.

## Conclusion

In my thesis I was interested in how having a non-EU migrant status have effected differently benefit receipt in the EU15 in 2005 and 2013, to provide an account on how the group's benefit use have changed after the most intensive policy period of the financial and euro crises have ended. My focus was on analyzing whether similar arguments to the welfare magnet hypothesis hold relevant power in the European policy environment, as the recent influx of migrants and refugees into the European Union is more and more perceived as a threat to the European Welfare State.

Previous research originally focused on migrants as separate actors, but from the 1980s gradually paid more and more attention to differences between native and migrant welfare use, with the question garnering serious attention in Europe from the 1990s. The European Union Statistics on Income and Living Conditions in the last nearly 15 years have begun to provide a data framework for analyzing similar questions both on national and continental level. However less attention was paid to mapping general changes in migrant attitudes in terms of continent wide patterns, especially in the face of the last decade's economic hardships.

In my work I used the EU-SILC to define migrants of interest as those, whose mother was resident of another country at the time of their birth, trying to focus and gain insight into the attitudes of first generation migrants in the most developed countries of the European Union. Simple descriptive data for both 2005 and 2013 showed that migrants not only differ in important background characteristics from native citizens, they also tend to have unique tendencies in each non-contributory benefit category selected and also in relation unemployment benefits. To control for the former, similarly to most recent approaches in the literature I employ probit regressions to control for basic socio-economic characteristics and to establish marginal benefits use differences for both 2005 and 2013, to be able to draw conclusions for each benefit category.

In the case of unemployment benefits, results show that change from 2005 to 2013 is quite moderate, but not only initial levels show migrant status having a positive effect on benefit receipt in more than half of the cases – the situation that remains the same, and even somewhat intensifies for 2013. Education benefit-related results are more flat, showing that in the vast majority of countries, both before and after the crisis, migrants were prone to using this particular transfer quite like their native counterparts. Disability benefits however provide us with a case, where after a moderate drop from 2005 levels, results still indicate that migrant background leads to decreased participation in this segment of the welfare system. With this, disability benefits provide a clear area of interest in understanding how migrants approach differently the welfare state, regardless of the nature of the business cycle.

Child and family related benefits are similar to the case of unemployment, as migrant disadvantages apparent in 2005 seemingly fade somewhat by 2013, again providing an example that migrant participation might converge somewhat to natives, even with policies under fiscal pressure. On the other hand, both housing and benefits against social inclusion provide a clear case, where migrant status captures differences in welfare use between natives and foreign born citizens – as relative overuse of the latter group persists between the two moments in time.

Summing up my results provide me with a conclusion, that if we want to understand the mechanics of differences between native and migrant use further, we have a few very good points to follow-up. As mentioned, disability on the one hand, and housing plus benefits against social exclusion on the other, are clearly existing parts of the welfare system, where the two groups' activities significantly differ. Country level changes are also interesting, showing that in the case of Spain, migrants in 2013 were better off in nearly all categories compared to their local Spanish counterparts – thus suggesting, that looking at Spanish policy changes and their relative effects might shed further light on how migrants operate differently. Attention however should also be paid to the Danish and Belgian story, where relative migrant positions weaken.

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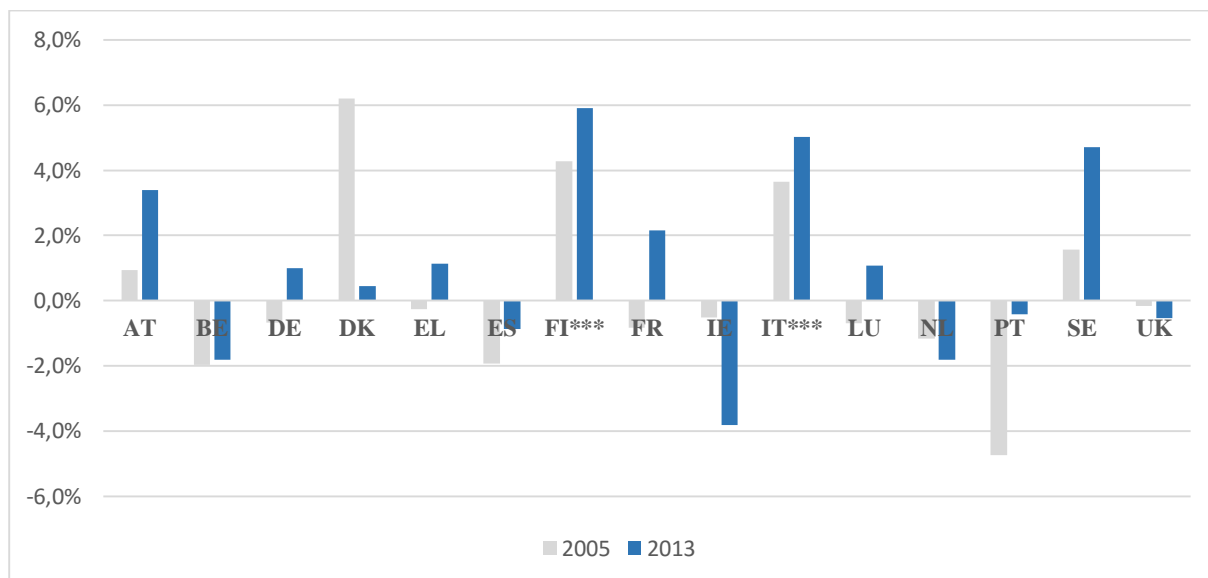
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## Appendix

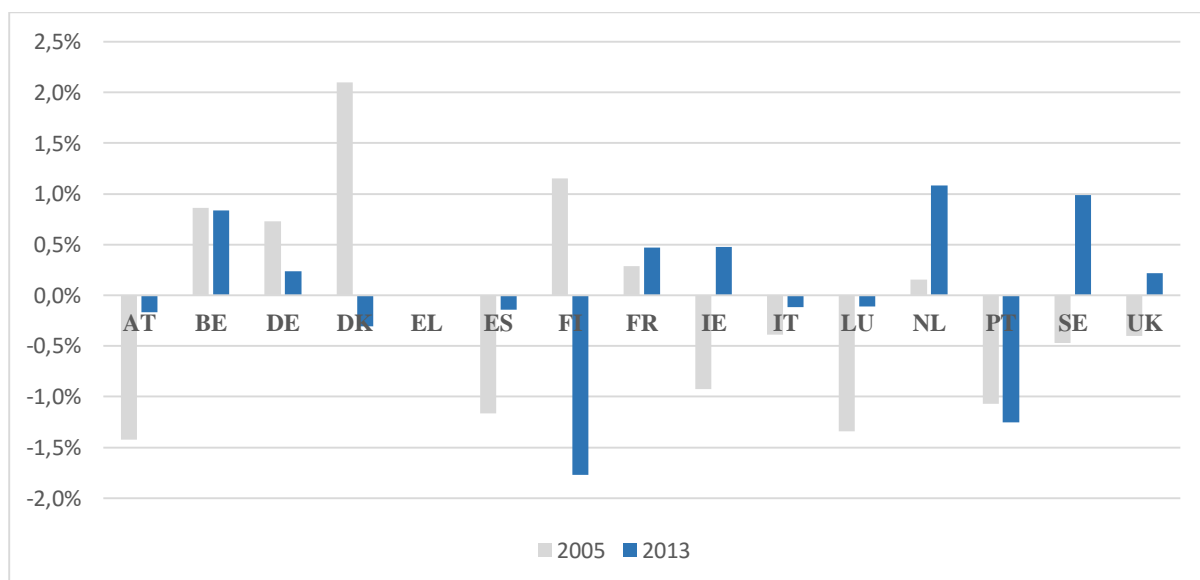
### Estimated difference in unemployment benefit receipt of migrants compared to locals, 2005-2013 (% points)



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005, 2013

### Estimated difference in education benefit receipt of migrants compared to locals, 2005-2013 (% points)

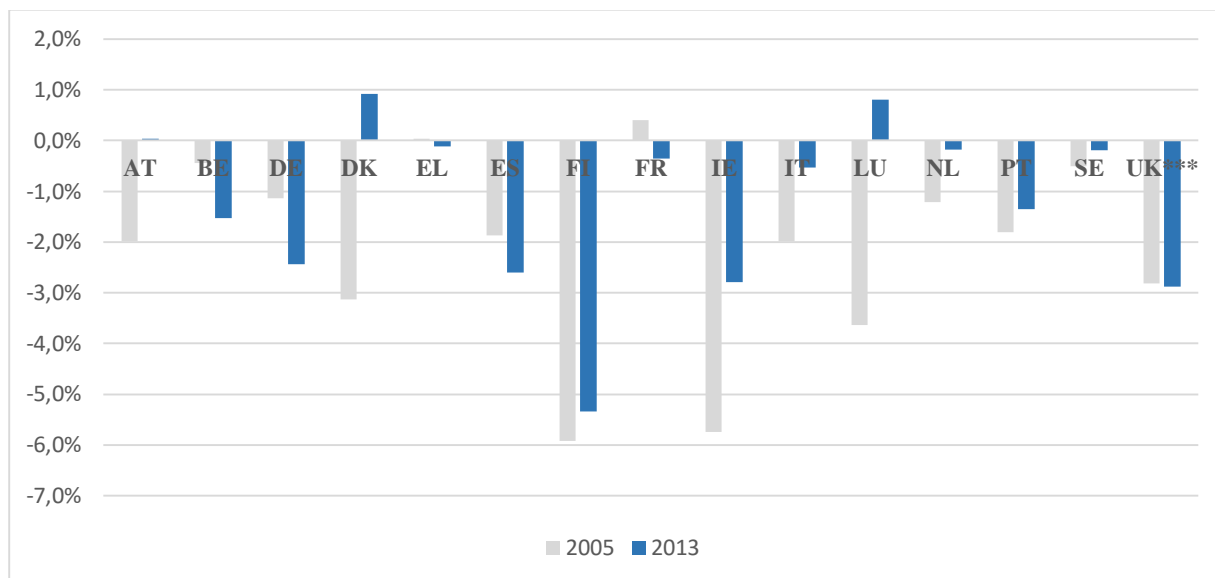


\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005, 2013



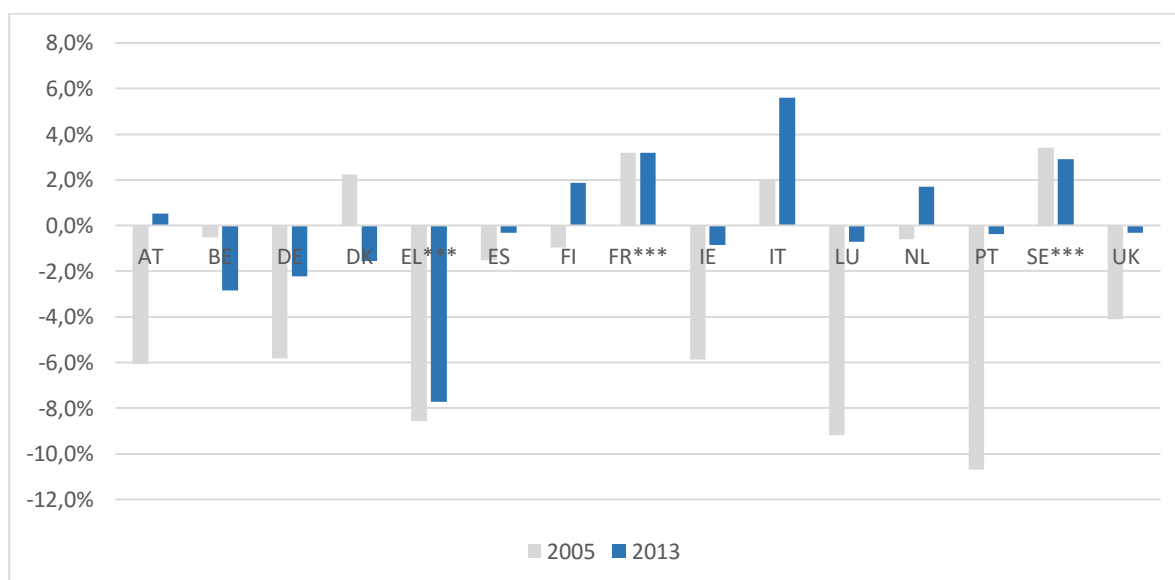
### Estimated difference in disability benefit receipt of migrants compared to locals, 2005-2013 (% points)



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005, 2013

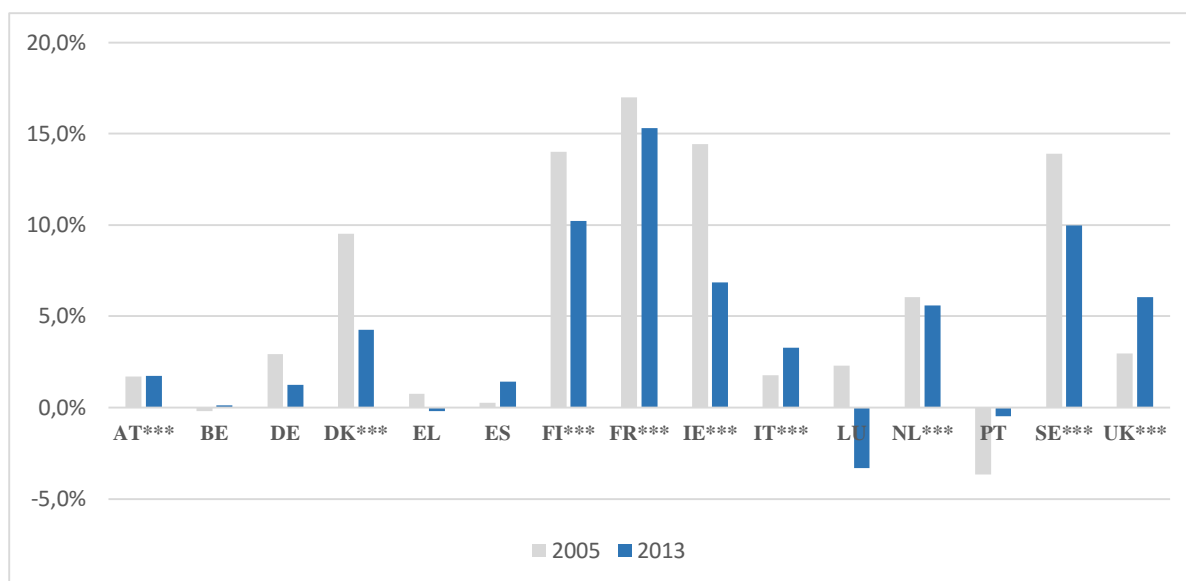
### Estimated difference in family/child allowances receipt of migrants compared to locals, 2005-2013 (% points)



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005, 2013

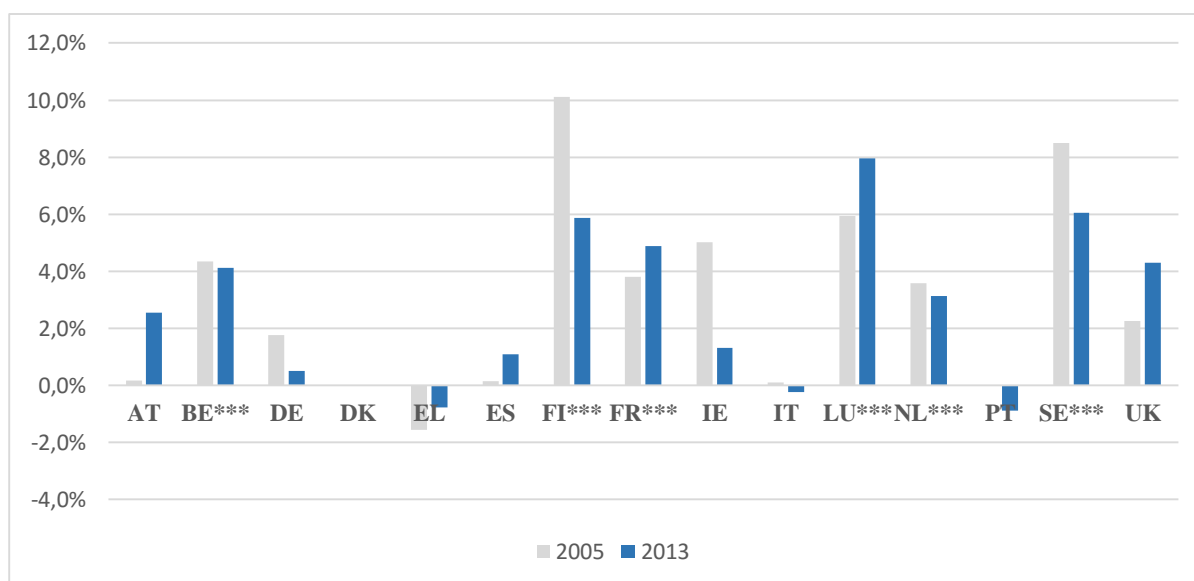
### Estimated difference in housing benefit receipt of migrants compared to locals, 2005-2013 (% points)



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005, 2013

### Estimated difference in receipt of benefits against social exclusion of migrants compared to locals, 2005-2013 (% points)



\*\*\*: statistically significant on the 1% level; \*\*: statistically significant on the 5% level; \*: statistically significant on the 10% level

Source: Own calculations based on EU-SILC 2005, 2013, No data available for Denmark