# Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements 

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#### Abstract

Most Europeans fear that immigrants are a fiscal burden via their disproportionate participation in the generous social welfare programmes of the EU. However, to date there has not been any systematic attempt to evaluate the net contribution of migrants to welfare systems. The purpose of this background note is to contribute to filling this gap.

We first draw on data from the EU-SILC surveys to understand whether migrants to EU countries tend to be disproportionately represented in the population of beneficiaries of social transfers. Descriptive statistics point to marked differences - with respect to natives - in migrants' access to contributory and non-contributory benefits; migrants appear to be under-represented among the recipients of contributory benefits, while the opposite is true for non-contributory allowances, such as social assistance and housing benefits. This contributes to explain the widespread perception of welfare abuse. However, once we control for confounding factors which are likely to correlate with migrant status and influence the likelihood of receiving non-contributory benefits, (i.e., relevant individual and household characteristics), we find that migrant status has little if any - impact on the likelihood of being a recipient of social welfare benefits. Next we carry out a (static) analysis of the net fiscal position of natives' and migrants' household with respect to the government; adding up how much they contribute to the state budget via payroll and income taxes and how much they draw from it in terms of access to a variety of welfare programmes. Our analysis suggests that migrants pay lower taxes than natives, and yet a significant portion of migrants are net-contributors to the state budget.

Finally, we analyse the determinants of public opinion perceptions about immigrants in the EU countries; in particular, we analyse whether negative perceptions about migration are stronger in countries with a more generous redistributive system, or adopting specific migration policies. This analysis sheds light on the optimal interaction of social and migration policies that could cope with the concerns of public opinion with respect to migration from both New Member States and non-EU countries.


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## 1 The impact on public finances

### 1.1 Introduction

The participation of immigrants in welfare programmes has been widely investigated by empirical research in Europe and the US. Several studies document that the immigrant population is over-represented among the pool of welfare recipients, notably social assistance recipients, although for some European countries - but not all - those differences can be explained by differences in socio-economic characteristics (Barrett and McCarthy 2008, Boeri 2006, Hansen and Lofstrom 1999) As these programmes are noncontributory, a relatively high take-up rate may generate pressures on the fiscal budget, although the overall fiscal impact of immigration is still uncertain (Auerbach and Oreopoulos 1999). However, social assistance is often the main source of income for those migrants who are not entitled to contributory benefits (e.g. unemployment benefits) since they have not accumulated enough work experience in the host country to be eligible for social insurance.

In this note, we provide a first overview of the available evidence as to whether migrants to EU member states are more than proportionally represented among the recipients of welfare benefits. We employ the recently released survey on European Union Statistics on Income and Living Conditions, EU-SILC 2004-2006. Regrettably, the EU-SILC database provides an extremely rough division of immigrants with respect to their citizenship or country of birth, distinguishing only between immigrants from EU-25 countries and from third countries. This implies that it is not possible to use this otherwise rich data source to conduct analysis that focus on immigrants from the New Member States (NMS); still we argue that such an aggregate analysis can be informative about the phenomenon of interest given the remarkable similarities of migrants from NMS and other European migrants, especially when considering their human capital characteristics, as depicted in Deliverable 2. Furthermore, we will focus our attention particularly on those countries whose European migrants come prevalently from the NMS, like Greece (53\% of other EU-$25-$ citizen living there come from NMS), Finland (47\%), Iceland (46\%), Ireland (44\%) or Austria (36\%). ${ }^{1}$

The rather detailed coverage of the take-up of welfare programmes offered by the EUSILC enables us to evaluate the number of non-citizens benefiting from a certain kind of government transfer as well as the amount received, in order to assess the extent of their participation to social assistance schemes. We then make a comparison with the native population in order to consider whether migrants are more or less dependent on state transfers and evaluate their relative pressure on the public budget. In the next step, we test the presence of migrant residual dependency, that is to say, whether controlling for personal characteristics the migrant status directly affects the probability of receiving a

[^0]particular kind of transfer. We employ a standard probit regression model for this purpose (Section 2).

Throughout the analysis we always disentangle contributory from non-contributory transfers: the first group includes individual benefits designed to cover against the risks of unemployment, longevity (interacted with labour market risk), sickness, disability as well as survival to the death of the main breadwinner (survivor's pension); the second group is household-related and it includes housing and family allowances, as well as transfers targeted specifically to groups with a higher risk of social exclusion. ${ }^{2}$ Furthermore we will distinguish between migrants coming from other countries within the EU-25 or outside of this union; ${ }^{3}$ in the case of households we keep an eye also on mixed couples, where only the household head or his/her spouse is a native citizen.

We then move on to estimate the contribution of migrants to the state budget through their taxes and the mandatory social security contributions paid by both employees and employers. After estimating this quantity, we subtract from it the amount of transfers received by the household as a whole, in order to compute the net fiscal position of migrants relative to native citizens. A descriptive analysis of the data is, once more, followed by a more in-depth, multivariate analysis of the residual impact of the status of migrant on the household's net position with respect to the state budget (Section 3).

Next, we will focus on public opinion perceptions of migrants, drawing on a number of very specific questions raised in the European Social Survey (ESS) in 2002. In particular, we will compare across various European countries the opinions about migration and its effect on crime and the state budget. As a further step, we will examine the link between these perceptions and the individual-specific characteristic of the respondents, in order to identify the profile of the average citizen concerned with migration related issues. Finally, for different EU countries we will compare the average stance on migration matters with the generosity of their welfare state as well as crime rates (Section 4).

Finally, Section 5 offers a summary of our findings and provides some policy recommendations.

## 2 Migrants representation in the welfare state

The EU-SILC database enables us to distinguish migrants from the EU- 25 countries and from third countries. As a consequence, we will always share migrants into these two different groups. However, when looking at migrant households in stead of individuals, a

[^1]third category will be added: mixed households (i.e. households involving at least a native and a migrant).

For purposes of cross-country comparability, we consider the difference in the share of welfare recipients between migrants and native population in the host country, i.e.:
[1] $\frac{R_{M_{i}}}{M_{i}}-\frac{R_{N}}{N}$
Where $R_{M}$ represents welfare recipients among the $i$ group of migrants (where $i$ could be whether a migrant from the EU- 25 or a migrant from outside the EU- $25^{4}$ ), $M_{i}$ the total number of migrants belonging to the specific group $i, R_{N}$ native welfare recipients, and $N$ natives. Thus, a positive number indicates an over-representation of migrants in welfare schemes, since the percentage of recipient in the migrant population is higher than the share of welfare recipients in the native population. A negative number points instead to an under-representation of migrants.

Secondly, we will also compare the nominal amount of transfer received, on average, by natives and by migrants in the three years going from 2004 to 2006, as explained in equation [2]:
[2] $\frac{B_{M_{i}}}{M_{i}}-\frac{B_{N}}{N}$
Where $B_{M}$ represents the total amount of welfare benefits received by $i$-migrants, $B_{N}$ the total amount of welfare benefits received by natives. The difference between these two quantities will tell us how much more or less the average household can rely on, depending on its migrant status.

These two measures enable us to look both at the numbers (how many migrants benefit from the welfare with respect to natives) and the quantities (how much they receive, on average, with respect to natives).

### 2.1 Residual Welfare Dependency of Migrants

The EU-SILC survey offers a detailed source of information on participation to welfare programs. This allows us to evaluate both the number of migrants benefiting from specific government transfers as well as the amount received, and make a comparison with the native population. In order to carry out such estimates, we distinguish between

[^2]two main categories of state transfers: contributory benefits and non-contributory allowances.

### 2.1.1 Contributory benefits

We begin with the analysis of contributory benefits. Since the main condition of entitlement for contributory benefits is that the claimant must have paid sufficient personal insurance contributions, the unit of analysis for this category of benefits is the individual, independently of the existence of other household members. Our preliminary results are displayed in Table 1a. As it can be seen, apart from a few countries - notably Denmark, Finland, Lithuania and Slovakia - migrants are under-represented among recipients of contributory benefits in most countries.

The results are similar when, rather than considering take-up rates, we consider the average difference in benefits received by migrants with respect to natives (Table 1b). As already observed, such a difference is, in most cases, negative. In particular, this is always true for EU-15 countries, while evidence is more mixed for the NMS.

Table 1a. Contributory Benefits: migrant under-representation

|  | Country | EU-25 immigrants | Extra EU-25 immigrants | All immigrants |
| :---: | :---: | :---: | :---: | :---: |
| EU-15 | Austria | $-0.10[5.67]^{* * *}$ | -0.14 [12.55] ${ }^{* * *}$ |  |
|  | Belgium | -0.02 [2.37]** | -0.13 [9.10]*** |  |
|  | Denmark | 0.04 [1.91]* | 0.05 [3.77]*** |  |
|  | Finland | -0.03 [1.28] | 0.08 [4.69]*** |  |
|  | France | -0.01 [0.44] | -0.09 [8.69]*** |  |
|  | Germany ${ }^{+}$ |  |  | $-0.08[5.86]^{* * *}$ |
|  | Greece | -0.19 [7.50]*** | -0.25 [22.71]*** |  |
|  | Ireland | -0.14 [11.54]*** | -0.25 [13.62] ${ }^{* * *}$ |  |
|  | Italy | -0.17 [7.96]*** | -0.19 [24.76] ${ }^{* * *}$ |  |
|  | Luxembourg | -0.18 [34.54]*** | -0.24 [18.95]*** |  |
|  | Netherlands | -0.06 [1.63] | -0.17 [3.65]*** |  |
|  | Portugal | -0.12 [3.24]*** | -0.28 [15.24] ${ }^{* * *}$ |  |
|  | Spain | -0.07 [2.00]** | -0.22 [14.38] ${ }^{* * *}$ |  |
|  | Sweden | -0.08 [5.04]*** | -0.17 [10.51] ${ }^{* * *}$ |  |
|  | United Kingdom | -0.01 [0.81] | -0.24 [23.39]*** |  |
| New Member States | Cyprus | -0.05 [3.92]*** | -0.24 [19.39]*** |  |
|  | Czech Republic | 0.05 [1.05] | -0.37 [9.78]*** |  |
|  | Estonia ${ }^{+}$ |  |  | 0.06 [8.91]*** |
|  | Hungary | $-0.25[6.35]^{* * *}$ | $-0.34[5.71]^{* * *}$ |  |
|  | Latvia ${ }^{+}$ |  |  | 0.11 [13.43]*** |
|  | Lithuania | 0.06 [0.91] | 0.08 [3.01]*** |  |
|  | Poland | -0.03 [0.38] | -0.19 [3.78]*** |  |
|  | Slovakia | 0.18 [3.68]** | -0.06 [0.65] |  |
|  | Slovenia ${ }^{++}$ |  |  | 0.10 [15.40]*** |
| Other Countries | Iceland | -0.09 [3.27]*** | -0.04 [7.65]*** |  |
|  | Norway | -0.07 [4.10]*** | -0.13 [7.64]*** |  |

Notes: averages over the available years; t statistics in brackets, ***,** and * denote significance at 1,5 and 10 percent respectively; ${ }^{+}$ the EU-SILC does not distinguish between EU-25 and extra-EU25; ${ }^{++}$migrants identified by country of birth; the EU-SILC does not distinguish between EU-25 and extra EU- 25 migrants.

Source: own calculations on data from EU-SILC 2004-2006

Table 1b. Difference in average benefits received

|  | Country | EU-25 immigrants | Extra EU-25 immigrants | All immigrants |
| :---: | :---: | :---: | :---: | :---: |
| EU-15 | Austria | -2,152 [197.29]*** | $-3,288[522.39]^{* * *}$ |  |
|  | Belgium | -520 [105.21]*** | -1,833 [279.64]*** |  |
|  | Denmark | -195 [10.09]*** | -1,182 [91.48]*** |  |
|  | Finland | -1,424 [63.97]*** | -1,919 [117.02] ${ }^{* * *}$ |  |
|  | France | -1,040 [278.06] ${ }^{* * *}$ | -2,274 [720.17] ${ }^{* * *}$ |  |
|  | Germany ${ }^{+}$ |  |  | $-1,675[679.30]^{* * *}$ |
|  | Greece | -163 [19.94]*** | -1,844 [524.54] ${ }^{* * *}$ |  |
|  | Ireland | -1,426 [173.19]*** | -1,922 [165.71] ${ }^{* * *}$ |  |
|  | Italy | -1,967 [245.00]*** | $-3,254$ [1317.72]*** |  |
|  | Luxembourg | -4,901 [230.47] ${ }^{* * *}$ | -6,074 [118.46] ${ }^{* * *}$ |  |
|  | Netherlands | $-1,831$ [65.18]*** | -3,723 [123.12] ${ }^{* * *}$ |  |
|  | Portugal | $-548[54.89]^{* * *}$ | -1,469 [352.86] ${ }^{* * *}$ |  |
|  | Spain | -304 [31.49] ${ }^{* * *}$ | -1,865 [457.92]*** |  |
|  | Sweden | $-1,197[158.50]^{* * *}$ | -2,214 [292.27]*** |  |
|  | United Kingdom | -402 [85.88] ${ }^{* * *}$ | $-2,636[1026.91]^{* * *}$ |  |
| New Member States | Cyprus | -86 [7.19]*** | $-1,592[123.65]^{* * *}$ |  |
|  | Czech Republic | 37 [8.83]*** | -877 [285.47]*** |  |
|  | Estonia ${ }^{+}$ |  |  | 92 [89.95]*** |
|  | Hungary | $-588[128.04]^{* * *}$ | $-884[123.39]^{* * *}$ |  |
|  | Latvia ${ }^{+}$ |  |  | 141 [199.44]*** |
|  | Lithuania | 39 [6.30]*** | 315 [121.18] ${ }^{* * *}$ |  |
|  | Poland | 350 [50.43]*** | -628 [150.41]*** |  |
|  | Slovakia | 347 [60.44]*** | -40 [4.28]*** |  |
|  | Slovenia ${ }^{++}$ |  |  | 434 [89.41]*** |
| Other Countries | Iceland | $-2,455[33.53]^{* * *}$ | $-1,366[74.14]^{* * *}$ |  |
|  | Norway | -402 [85.88]*** | -2,636 [1026.91]*** |  |

Notes: figures are in euros, averages over the available years; $t$ statistics in brackets, ${ }^{* * * * * *}$ and ${ }^{*}$ denote significance at 1,5 and 10 percent respectively; ${ }^{+}$the EU-SILC does not distinguish between EU-25 and extra-EU25; ++ migrants identified by country of birth; the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants.

Source: own calculations on data from EU-SILC 2004-2006.

Summarising, whatever measure we take, take-up rates or difference in average social spending, when we look at unconditional distributions (not controlling for individuals' characteristics), migrants appear to be under-represented among the recipients of contributory transfers.

This result is hardly surprising as contributory benefits typically require a minimum vesting period for eligibility. Many migrants may have not yet accumulated sufficiently long contributions to be eligible for these transfers. Furthermore, migrants are much younger than natives who are therefore more represented in the population of pensioners.

### 2.1.2 Non-contributory allowances

We now move to non-contributory allowances. The unit of analysis here is not the individual, but the household. This is partly due to the way EU-SILC provide variables on family allowances, partly because most non-contributory benefits - funded from general
taxation - are not related to insurance contributions but to specific household needs or circumstances (support careers, educational allowances, child benefits, etc.) and therefore they have to be considered on a household basis.

When we focus on non-contributory allowances, the picture changes. A significant difference between non-EU-25 migrants and migrants from the EU-25 emerges. In most countries, EU- 25 migrants are under-represented also among recipients of noncontributory benefits. Interestingly, among them there are several countries where the share of NMS migrants in the population of EU-25 migrants is relatively large (Greece, Austria, Ireland, Italy). Unfortunately, limited data availability - the EU-SILC data do not disentangle migrants from the NMS from migrants from the EU-15 countries - does not allow for further investigations focusing only on migrants from the New Member States.

A different picture emerges for migrant households from outside Europe. In most EU-15 countries those migrants' households are indeed over-represented as welfare recipients and seem therefore to be more dependent on social assistance than the average native household (Table 2a). In those countries, not only non-EU-25 migrants are more likely to receive non-contributory allowances, but the average subsidy is generally higher than for natives (Table 2b). The relative size of allowances transferred to the households is shown in Table 2b. This suggests that migrants from outside Europe receive, on average, more than natives almost everywhere in EU-15 and by a significant margin in the Nordics.

In NMS non-EU-25 migrant households are generally equally represented among recipients of non-contributory transfers than natives. The average subsidies are, however, lower than those of natives.

There are also a few countries where data do not allow distinguishing EU-25 migrants from non-EU migrants (this is the case of Germany, Estonia, Latvia and Slovenia).

Finally, mixed households (involving at least a native and a migrant) are overrepresented both in terms of take-up rates and average social spending per household in all countries (except Greece and Cyprus, see Table 2a).

Table 2a. Non-contributory Allowances: non-EU migrant households over-representation
$\left.\begin{array}{llll}\hline \hline & & \begin{array}{c}\text { EU-25 immigrant } \\ \text { households }\end{array} & \begin{array}{c}\text { Extra EU-25 immigrant } \\ \text { households }\end{array}\end{array} \begin{array}{c}\text { Immigrant } \\ \text { households }\end{array}\right]$ Mixed households

Notes: averages over the available years; t statistics in brackets, ***,** and * denote significance at 1,5 and 10 percent respectively; ${ }^{+}$ the EU-SILC does not distinguish between EU-25 and extra-EU25; ${ }^{++}$migrants identified by country of birth; the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants.

Source: own calculations on data from EU-SILC 2004-2006.

Table 2b. Difference in average allowances received

|  | Country | EU-25 immigrant households | Extra EU25 immigrant households | Immigrant households | Mixed households |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EU-15 | Austria | -493 [60.49]*** | 707 [153.67] ${ }^{* * *}$ |  | 1,736 [355.62]*** |
|  | Belgium | -282 [82.14]*** | 1,736 [354.54]*** |  | 727 [208.75]*** |
|  | Denmark | 76 [8.75]*** | 1,555 [280.31]*** |  | 559 [112.11] ${ }^{* * *}$ |
|  | Finland | 361 [18.11]*** | 4,209 [294.16]*** |  | 2,052 [196.74]*** |
|  | France | -198 [85.01]*** | 2,918 [1517.96]*** |  | 1,735 [923.60]*** |
|  | Germany ${ }^{+}$ |  |  | 1,057 [383.68]*** | 1,649 [885.74]*** |
|  | Greece | 27 [9.88]*** | -99 [91.07]*** |  | -91 [62.22]*** |
|  | Ireland | -95 [7.97]*** | 3,326 [231.05]*** |  | 596 [57.42]*** |
|  | Italy | -304 [94.91]*** | 131 [150.16] ${ }^{* * *}$ |  | 366 [213.12]*** |
|  | Luxembourg | 1,481 [97.95]*** | 3,124 [67.44]*** |  | 1,020 [38.62]*** |
|  | Netherlands | 1,494 [56.97]*** | 4,357 [123.07]*** |  | 43 [4.09]*** |
|  | Portugal | -185 [33.35]*** | 32 [15.81]*** |  | 337 [156.19]*** |
|  | Spain | -92 [26.28]*** | -35 [24.12]*** |  | 311 [151.65]*** |
|  | Sweden | -393 [51.65]*** | 3,501 [440.42]*** |  | 1,982 [360.35]*** |
|  | United Kingdom | 1,197 [166.36] ${ }^{* * *}$ | 885 [257.33]*** |  | 979 [265.98]*** |
| New Member States | Cyprus | -945 [68.66] ${ }^{* * *}$ | -837 [49.33] ${ }^{* * *}$ |  | -106 [9.46]** |
|  | Czech Republic | -312 [76.39]*** | -166 [53.73]*** |  | 240 [84.33]*** |
|  | Estonia ${ }^{+}$ |  |  | -98 [88.44]*** | 41 [23.61] ${ }^{* * *}$ |
|  | Hungary | -47 [8.59]*** | -68 [9.28]*** |  | 409 [89.12]*** |
|  | Latvia ${ }^{+}$ |  |  | -72 [93.20]** | 20 [23.67]*** |
|  | Lithuania | -145 [14.23]*** | -85 [16.70]*** |  | 18 [7.10]*** |
|  | Poland | -123 [38.24]*** | -57 [19.97]*** |  | 80 [46.27]*** |
|  | Slovakia | 290 [42.29]*** | -146 [6.38]*** |  | 126 [35.20]*** |
|  | Slovenia ${ }^{++}$ |  |  | -4 [0.79] | 148 [27.82]*** |
| Other Countries | Iceland | -654 [8.81]*** | -480 [13.68]*** |  | 739 [45.86]*** |
|  | Norway | -260 [18.62] ${ }^{* * *}$ | 7,011 [480.58]*** |  | 1,954 [168.16]*** |

Notes: figures are in euros, averages over the available years; t statistics in brackets, ***,** and * denote significance at 1,5 and 10 percent respectively; ${ }^{+}$the EU-SILC does not distinguish between EU-25 and extra-EU25; ${ }^{++}$migrants identified by country of birth; the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants.

Source: own calculations on data from EU-SILC 2004-2006.

Thus, migrants in EU-15 - especially from outside EU-25 - would seem to have mainly access to non-contributory schemes of social assistance, probably because social assistance and housing benefits target the poorest fraction of the population regardless of their contribution history. On the contrary, migrants in the NMS, whatever origin they have, are under-represented among recipients of both contributory and non-contributory benefits,

### 2.2 Residual Welfare Dependency of Migrants

The over-representation of migrants among recipients of non-contributory transfers may be due to the fact that migrants have more children and lower educational attainments than natives or to a higher dependency from transfers also compared to natives with the same observable characteristics (the so-called residual welfare dependency). In order to disentangle the two effects, we resort to a multivariate analysis framework, running
country-specific probit models of the probability of receiving social assistance, controlling for some observable characteristics, and including among the regressors a dichotomous variable describing migrant status. A positive and statistically significant coefficient for this variable is informative as to the presence of welfare dependency among migrants.

### 2.2.1 Contributory benefits

In our first set of regressions, the dependent variable is a dummy equal to 1 when the individual receives any type of contributory benefits and 0 otherwise. We control for individual- and community-level characteristics, ${ }^{5}$ and we add separate dummies for migrants coming from the EU- 25 and those coming from non-EU countries.

As expected, we find that having a low personal income before transfers increases significantly the probability of receiving some kind of benefit. Unsurprisingly, singles with children are also more likely to receive transfers, while house-owners, and persons with higher education, are less likely to receive a contributory transfer. Other things being equal, men are more dependent on welfare than women. ${ }^{6}$

As far as the migrant dummy is concerned, Table 3 confirms our preliminary results': with a very few exceptions migrants are equally likely or less likely than natives to receive contributory transfers. This is the case of Germany and Estonia, two countries whose data do not allow separating EU- 25 from non-EU-25 migrants. Another country where this happens is Denmark.

Germany - in spite of data limitation - is a very interesting case, because our findings are at odds with those of earlier literature on the subject. As an example, Barrett (2008) states that, although unadjusted data show higher use of welfare by immigrants, in Germany this difference can be explained by controlling for observable characteristics.

[^3]Table 3. Change in the probability of receiving contributory benefits due to migrant status

|  | Country | Migrant dummies |  |  | Obs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | EU-25 | Extra EU-25 | All countries |  |
| EU-15 | Austria | -0.082 [3.21]*** | -0.011 [0.68] |  | 41,843 |
|  | Belgium | -0.052 [4.03]*** | $-0.200[12.39]^{* * *}$ |  | 40,460 |
|  | Denmark | 0.010 [0.31] | 0.074 [3.81]*** |  | 48,740 |
|  | Finland | -0.110 [3.01]*** | 0.020 [0.76] |  | 90,745 |
|  | France | -0.063 [3.72]*** | -0.109 [7.29]*** |  | 76,103 |
|  | Germany ${ }^{+}$ |  |  | 0.048 [2.37]** | 75,937 |
|  | Greece | -0.046 [1.39] | -0.081 [4.84] ${ }^{* * *}$ |  | 51,344 |
|  | Ireland | -0.125 [8.44]*** | -0.180 [8.13]*** |  | 46,340 |
|  | Italy | -0.107 [3.53]*** | -0.007 [0.52] |  | 192,440 |
|  | Luxembourg | -0.040 [4.15]*** | -0.103 [5.61]*** |  | 30,476 |
|  | Netherlands | 0.004 [0.08] | -0.128 [1.83]* |  | 17,750 |
|  | Portugal | -0.123 [2.63]*** | -0.116 [4.02] ${ }^{* * *}$ |  | 43,240 |
|  | Spain | -0.032 [1.81]* | -0.096 [5.60]*** |  | 119,170 |
|  | Sweden | -0.180 [7.81]*** | -0.245 [11.65] ${ }^{* * *}$ |  | 47,573 |
|  | United Kingdom | 0.004 [0.15] | -0.141 [7.98]*** |  | 58,626 |
| New Member States | Cyprus | -0.031 [2.20]** | $-0.137[6.75]^{* * *}$ |  | 26,751 |
|  | Czech Republic | 0.044 [0.72] | $-0.275[4.21]^{* * *}$ |  | 32,112 |
|  | Estonia ${ }^{+}$ |  |  | 0.049 [4.23] ${ }^{* * *}$ | 41,102 |
|  | Hungary | $-0.210[3.57]^{* * *}$ | $-0.402[5.35]^{* * *}$ |  | 46,059 |
|  | Latvia ${ }^{+}$ |  |  | -0.034 [2.69]*** | 24,893 |
|  | Lithuania | -0.157 [2.35]** | 0.042 [0.99] |  | 30,049 |
|  | Poland | -0.180 [2.03]** | -0.229 [3.90]*** |  | 110,235 |
|  | Slovakia | 0.122 [2.08]** | -0.227 [3.35]*** |  | 38,388 |
|  | Slovenia ${ }^{++}$ |  |  | 0.009 [1.00] | 74,347 |
| Other Countries | Iceland | -0.023 [0.63] | -0.025 [2.64] ${ }^{* * *}$ |  | 26,488 |
|  | Norway | -0.038 [1.45] | -0.201 [6.79]*** |  | 47,259 |

Notes: z statistics in brackets, ***,** and * denote significance at 1,5 and 10 percent respectively; ${ }^{+}$the EU-SILC does not distinguish between EU-25 and extra EU-25; ${ }^{++}$migrants identified by country of birth; the EU-SILC does not distinguish between EU-25 and extra EU25 migrants.

Source: own elaborations on data from EU-SILC 2004-2006.

Pushing our analysis a step further, we run a separate regression on the probability of receiving every single type of benefit that we have detailed information about, notably unemployment, old-age, survivors', sickness and disability benefits. The results are summarised in Figure 1.

Figure 1. Change in probability of receiving contributory benefits due to migrant status



Notes: only significant coefficients of migrant dummies displayed; the first column reports coefficients from Table 3. For expositional ease, we report in the figure the change in the estimated probability induced by a shift of the migrant dummy variable from 0 to 1 ; when the estimated effect lacks statistical significance at conventional confidence level, we don't report it; thus, Figure 1 succinctly provides information of the size and significance of the estimated effect for the variable of interest.

* The EU-SILC does not distinguish between EU-25 and extra EU-25 migrants.
** Migrants identified by country of birth; the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants.
Source: own elaborations (or calculations) on EU-SILC data 2004-2006

Even when considering separately each single contributory social programme, we obtain the same result: migrants do not display a significant welfare dependency, especially those who come from other EU countries.

The only important exception is represented by unemployment benefits in Denmark (which are largely non-contributory), Finland and Germany and by sickness benefits in Denmark, Estonia and Slovakia, for which we observe residual dependency of non-EU migrants.

### 2.2.2 Non-contributory allowances

We carry out the same analysis for non-contributory allowances.
In this case both the household size and the number of children increase significantly the probability of receipt. Also an older head of the household and a low level of education increase the probability of receiving the transfer. ${ }^{8}$

Table 4. Change in the probability of receiving non-contributory benefits due to migrant status

|  | Migrant household dummies |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Country | EU-25 | Extra EU-25 | All countries | Mixed | Obs. |
| EU-15 | Austria | -0.023 [0.53] | $-0.073[3.33]^{* * *}$ |  | 0.002 [0.07] | 17,470 |
|  | Belgium | -0.046 [2.37]** | 0.097 [2.90]*** |  | 0.037 [2.10]** | 17,744 |
|  | Denmark | 0.005 [0.06] | 0.067 [1.42] |  | 0.060 [2.61]*** | 21,054 |
|  | Finland | -0.141 [2.00]** | 0.162 [2.62]*** |  | -0.005 [0.14] | 37,252 |
|  | France | 0.034 [1.35] | 0.295 [10.13] ${ }^{* * *}$ |  | $0.130[6.41]^{* * *}$ | 32,679 |
|  | Germany ${ }^{+}$ |  |  | $0.179[3.73]^{* * *}$ | 0.032 [1.29] | 30,168 |
|  | Greece | -0.055 [1.66]* | -0.059 [3.84]*** |  | 0.009 [0.42] | 19,620 |
|  | Ireland | -0.168 [5.21]*** | -0.038 [0.80] |  | 0.069 [2.96]*** | 18,797 |
|  | Italy | -0.154 [1.68]* | -0.017 [1.19] |  | 0.058 [2.45]** | 75,098 |
|  | Luxembourg | 0.053 [2.62]*** | 0.090 [1.49] |  | 0.025 [0.96] | 12,661 |
|  | Netherlands | 0.061 [0.56] | 0.421 [2.86]*** |  | -0.013 [0.26] | 9,234 |
|  | Portugal | -0.177 [1.50] | -0.205 [6.15]*** |  | 0.123 [2.82]*** | 15,208 |
|  | Spain | -0.054 [3.76]*** | -0.018 [2.17]** |  | 0.004 [0.29] | 44,184 |
|  | Sweden | -0.184 [3.90]*** | 0.035 [0.70] |  | 0.059 [2.38]** | 20,326 |
|  | United Kingdom | -0.060 [0.95] | -0.229 [9.64]*** |  | -0.014 [0.59] | 23,329 |
| New Member States | Cyprus | $-0.391[11.63]^{* * *}$ | $-0.506[11.00]^{* * *}$ |  | $-0.115[4.74]^{* * *}$ | 9,191 |
|  | Czech Republic | $-0.261[6.74]^{* * *}$ | $-0.222[4.34]^{* * *}$ |  | -0.014 [0.25] | 13,005 |
|  | Estonia ${ }^{+}$ |  |  | $-0.068[3.68]^{* * *}$ | 0.046 [2.04]** | 13,991 |
|  | Hungary | -0.123 [1.55] | $-0.258[2.39]^{* *}$ |  | 0.248 [3.03]*** | 15,576 |
|  | Latvia ${ }^{+}$ |  |  | -0.024 [1.16] | -0.010 [0.45] | 7,699 |
|  | Lithuania ${ }^{++}$ |  | -0.173 [2.21]** |  | 0.054 [0.89] | 9,123 |
|  | Poland | 0.009 [0.06] | -0.171 [1.93]* |  | 0.016 [0.30] | 32,536 |
|  | Slovakia | -0.022 [0.21] | 0.291 [1.49] |  | -0.049 [0.78] | 11,856 |
|  | Slovenia ${ }^{++}$ |  |  | 0.006 [0.27] | 0.083 [5.55]*** | 19,612 |
| Other Countries | Iceland | $-0.232[2.80]^{* * *}$ | -0.047 [1.11] |  | -0.020 [0.58] | 9,919 |
|  | Norway | $-0.150[3.84]^{* *}$ | 0.106 [1.81]* |  | 0.101 [3.93]*** | 20,164 |

[^4]Source: own elaborations on data from EU-SILC 2004-2006

[^5]Our multivariate analysis supports the view that EU-25 migrants are less welfare dependent then natives. In fact, even controlling for observable characteristics, they seem to be equally or less likely than natives to receive non-contributory benefits. Moreover, regression results support what we previously observed for countries whose EU migrants come prevalently from the New Member States. They all show a negative (Finland, Greece, Ireland) or non-significant (Austria) correlation between the (EU-25) migrant status and the probability of receiving transfers.

Importantly, our estimates also suggest that being a migrant household from outside Europe does not explain benefit receipt in a large number of countries. Put it another way, the over-representation of non-EU migrants in the pool of welfare recipients is in several countries explained by observable characteristics making them more eligible rather than by a residual dependency effect.

There are, however, important exceptions in countries with a rather generous welfare programme in place: in Belgium, Finland, France, Germany, the Netherlands and Norway some residual dependency of non-EU migrants is observed. Those findings are quite consistent with previous studies on Nordic countries, typically characterized by generous welfare systems. Sweden is, however, an important exception. Although not showing evidence of migrants' welfare dependency in the present work, earlier literature on Sweden usually found that differences in welfare participation in that country cannot be explained by observable socio-economic characteristics (Hansen, 1999). As already mentioned, Germany is another case, where our results are different from those of the earlier literature (Barrett, 2008).

Mixed households are, in most countries, over-represented even after controlling for their observable characteristics. A number of explanations can be possibly provided for this result, such as better access to information on welfare programmes, assortative mating and household formation influenced by the welfare access opportunities.

Also in this case, we run separate probit regressions for housing allowances, familyrelated transfers and subsidies targeting specific marginal groups. The results are summarised in Figure 2.

Figure 2. Change in the probability of receiving non-contributory benefits due to migrant status




Notes: For expositional ease, we report in the figure the change in the estimated probability induced by a shift of the migrant dummy variable from 0 to 1 ; when the estimated effect lacks statistical significance at conventional confidence level, we don't report it; thus, Figure 1 succinctly provides information of the size and significance of the estimated effect for the variable of interest. The first column reports coefficients from Table 4;

* The EU-SILC does not distinguish between EU-25 and extra EU-25 migrants.
** Migrants identified by country of birth; the EU-SILC does not distinguish between EU- 25 and extra EU-25 migrants.
Source: own elaborations (or calculations) on EU-SILC data 2004-2006

Our analysis suggests that residual welfare dependency concerns only non-EU migrants and mixed households. Housing benefits in France are disproportionately targeted to nonEU migrants, perhaps because of their segregation in villes nouvelles and peripheral areas, where massive public housing schemes have been implemented. In Nordic Countries there is also residual welfare dependency of non-EU migrants, notably in family allowances and housing benefits.

## 3 The net fiscal position of migrants

In this section we evaluate the net fiscal position of migrant, non-migrant and mixed households in a static sense, that is, we consider only the difference between the current contributions and taxes paid by each household member (and her/his employer) and the current amount of transfers received by the state in terms of social programmes. No consideration is made of the lifetime contributions and benefits paid/received by the different households.

As the EU-SILC did not report gross-wages and taxes for Greece, Italy, Latvia and Portugal,' these countries had to be dropped from our analysis. Moreover, the EU-SILC does not provide information on employers' social security contributions; ${ }^{10}$ thus, we imputed these contributions by applying the rules as detailed in the OECD publication "Taxing Wages" (editions 2003/2004 to 2005/2006). The latter provides a routine for each country belonging to the OECD that can be used to calculate the average employers' social security contributions, conditional on gross-wages. This means that we also had to drop non-OECD EU countries, such as Cyprus, Estonia, Lithuania and Slovenia.

### 3.1.1 Taxes

Table 5 suggests that in the EU- 15 migrants, on average, contribute less to tax revenues and social security contributions than natives. This result is hardly surprising as taxes are typically progressive and social security contribution proportional to earnings and migrants are generally concentrated at the low end of the income (and earning) distribution.

Mixed household are, once more, an important exception. They pay, on average, more taxes than native citizens.

[^6]Table 5. Difference in average taxes paid: migrant households lower participation to the state budget

| Group | Country | Equation [2] |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | EU-25 migrant household | Extra EU-25 migrant household | Mixed household |
| EU-15 | Austria | -3159 [73.98] ${ }^{* * *}$ | -2402 [99.68]*** | 2550 [99.66]*** |
|  | Belgium | -3918 [50.29] ${ }^{* *}$ | 18983 [156.01]** | -2805 [40.06]*** |
|  | Denmark | -9549 [177.99]** | -7264 [212.63]** | 6456 [210.32]*** |
|  | Finland | -7176 [62.49]*** | -10834 [131.58]*** | 1227 [20.44]** |
|  | France | -2304 [149.65]** | -8911 [700.86]*** | 3249 [261.45]*** |
|  | Germany+ | -5166 [290.28]** |  | 3031 [252.00]*** |
|  | Ireland | -429 [9.51] ${ }^{* * *}$ | -4312 [79.25]*** | 4795 [122.23]*** |
|  | Luxembourg | 1155 [19.70]*** | -12669 [70.53]*** | 5521 [53.93]** |
|  | Netherlands | -4102 [40.65] ${ }^{* * *}$ | -5483 [40.25]*** | 3295 [81.77]*** |
|  | Spain | -1526 [43.67] ${ }^{* * *}$ | -194 [13.46]*** | 1766 [85.85]** |
|  | Sweden | -7012 [135.72]** | -15041 [278.89]*** | 2790 [74.75]** |
|  | United Kingdom | -5405 [170.05]** | 1828 [120.29] ${ }^{* * *}$ | 4539 [279.01] ${ }^{* * *}$ |
| New Member States | Czech Republic | 451 [14.27]*** | 1096 [45.88]*** | 1184 [53.94]*** |
|  | Hungary | -8 [0.22] | -1105 [22.78]*** | 1558 [51.17]*** |
|  | Poland | -1081 [35.13] ${ }^{* * *}$ | -123 [4.50]*** | 978 [59.32]*** |
|  | Slovakia | -2427 [59.96] ${ }^{* * *}$ | -969 [7.17] ${ }^{* * *}$ | 594 [28.01]*** |
| Other Countries | Iceland | -8723 [28.16] ${ }^{* * *}$ | 12938 [88.41] ${ }^{* * *}$ | 7479 [111.17] ${ }^{* * *}$ |
|  | Norway | 422 [7.18]*** | -13592 [221.59]*** | 10178 [208.30]*** |

Notes: z statistics in brackets, * significant at 10 per cent, ** significant at 5 per cent, *** significant at 1 per cent; + the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants.

Source: EU-SILC 2004-2006.

### 3.1.2 Net Balance with respect to the state budget

We now turn our attention to the net balance between, on the one hand, taxes and contributions paid and, on the other hand, state transfers received. We consider first net contributors to the state budget. Table 6a shows the difference between the share of net contributors among migrants and the share of net contributors in the native population.

Table 6a. Relative share of net contributory: migrant households over-representation

| Group | Country | Equation [1] |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | EU-25 migrant household | migrant household | Mixed households |
| EU-15 | Austria | 0.05 [1.53] | 0.19 [9.36]*** | 0.22 [8.70]*** |
|  | Belgium | -0.02 [0.89] | -0.15 [5.46] ${ }^{* * *}$ | 0.12 [5.00]*** |
|  | Denmark | -0.26 [6.36] ${ }^{* * *}$ | -0.14 [5.99] ${ }^{* * *}$ | 0.10 [4.83]*** |
|  | Finland | -0.11 [2.50]** | -0.39 [11.87]*** | 0.11 [4.17]*** |
|  | France | 0.00 [0.11] | -0.17 [9.80] ${ }^{* * *}$ | 0.11 [4.75]*** |
|  | Germany ${ }^{+}$ | -0.11 [3.60]*** |  | 0.11 [4.66]*** |
|  | Ireland | 0.10 [3.74]*** | 0.10 [3.24]*** | 0.16 [5.56]*** |
|  | Luxembourg | 0.23 [25.36]*** | -0.03 [1.32] | 0.16 [7.69]*** |
|  | Netherlands | -0.05 [0.51] | 0.22 [1.51] | 0.23 [5.18]*** |
|  | Spain | 0.06 [0.94] | 0.34 [12.06] ${ }^{* * *}$ | 0.21 [4.50]*** |
|  | Sweden | -0.07 [2.24]** | $-0.26[8.70]^{* * *}$ | 0.05 [2.14]** |
|  | United Kingdom | -0.10 [2.25]** | 0.16 [7.65]*** | 0.13 [5.01]*** |
| New Member States | Czech Republic | 0.19 [2.49]** | 0.28 [4.15]*** | 0.20 [3.07] ${ }^{* * *}$ |
|  | Hungary | 0.27 [3.28]*** | 0.40 [3.83]*** | 0.26 [3.04]*** |
|  | Poland | -0.18 [1.18] | 0.10 [0.64] | 0.13 [5.72]** |
|  | Slovakia | -0.36 [2.93] ${ }^{* * *}$ | -0.11 [0.31] | -0.04 [0.46] |
| Other Countries | Iceland | 0.17 [3.73]*** | 0.16 [9.58]*** | 0.05 [4.17]*** |
|  | Norway | 0.05 [1.84]* | -0.32 [10.02]*** | 0.13 [5.72]*** |

Notes: the difference between the share of net contributors among migrants and the share of net contributors in the native population, as in Equation [1]; t statistics in brackets, * significant at 10 per cent, ** significant at 5 per cent, *** significant at 1 per cent; averages over the available years; + the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants.

Source: EU-SILC 2004-2006.

Unexpectedly, it would seem that in a number of countries migrant households are at least as equally represented in the group of net-contributors to the state budget. Remarkable examples are Ireland for both EU- 25 and non-EU- 25 migrants, Austria, Spain and the UK in case of non-EU migrants.

Next we consider the net balance of migrant and non-migrant households. Table 6b displays the difference between the average balance between taxes and transfers for native and migrant households.

Table 6b. Difference in average position with the government: migrant households lower participation to the state budget

| Group | Country | Equation [2] |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | EU-25 migrant household | Extra-EU-25 migrant household | Mixed households |
| EU-15 | Austria | 1100 [19.31]*** | 2815 [87.59]*** | 6265 [183.60] ${ }^{* * *}$ |
|  | Belgium | -2559 [32.15] ${ }^{* * *}$ | 20327 [163.48]** | -2734 [38.22]*** |
|  | Denmark | -9060 [125.55]*** | -9752 [212.23]*** | 7177 [173.81]*** |
|  | Finland | -7830 [55.83]*** | -13641 [135.65]*** | 2386 [32.55]*** |
|  | France | -107 [5.22]*** | -8013 [471.83]*** | 5134 [309.33] ${ }^{* * *}$ |
|  | Germany+ | -3159 [128.66]*** |  | 4356 [262.47] ${ }^{* * *}$ |
|  | Ireland | 3350 [56.06]** | -3703 [51.43]*** | 6232 [120.05]*** |
|  | Luxembourg | 9022 [105.91]*** | -4708 [18.04]*** | 10767 [72.40]*** |
|  | Netherlands | -2850 [20.90] ${ }^{* * *}$ | -3739 [20.31]*** | 5812 [106.75] ${ }^{* * *}$ |
|  | Spain | -852 [16.98]*** | 4193 [202.88]*** | 4601 [155.69] ${ }^{* * *}$ |
|  | Sweden | -4434 [73.15] ${ }^{* * *}$ | -14875 [235.11]*** | 2587 [59.09] ${ }^{* * *}$ |
|  | United Kingdom | -6842 [167.47]*** | 5987 [306.53]*** | 7028 [336.09] ${ }^{* * *}$ |
| New Member States | Czech Republic | 2082 [52.22]*** | 3144 [104.37]*** | 1525 [55.08]*** |
|  | Hungary | 888 [20.32]*** | 769 [13.13]*** | 2308 [62.83]*** |
|  | Poland | -1682 [40.52]*** | 1632 [44.24]*** | 1446 [65.04] ${ }^{* * *}$ |
|  | Slovakia | -3082 [57.50]*** | -463 [2.58]*** | 741 [26.39]*** |
| Other Countries | Iceland | -3395 [8.33]*** | 15545 [80.76]*** | 7466 [84.37]*** |
|  | Norway | 4610 [58.79]*** | -13660 [166.84]*** | 12561 [192.59]*** |

Notes: z statistics in brackets, * significant at 10 per cent, ** significant at 5 per cent, *** significant at 1 per cent; + the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants.

Source: own elaborations on data from EU-SILC 2004-2006.

While we find once more a net contribution of non-EU migrants in the UK, Spain (where there are many first-generation migrants) and Austria, the migrants to the Nordic countries contribute significantly less than what they receive from the state budget (roughly between 10 and 15,000 Euros per year).

The fact that migrants receive more than what they pay is consistent with the progressiveness of taxes in the EU and the distributive goals of European welfare states. Significantly, migrants are over-represented in the population of net contributors to the state budget, but those receiving more than what they contribute apparently receive significantly more than what they pay into the system.

### 3.1.3 Residual net dependency

As in the case of benefit receipt, it is important to consider if a negative net fiscal position of migrants survives to a control of their personal characteristics. Thus, we run regressions in which the dependent variable is the household net-position with respect to the government. The full results of our estimations are shown in the appendix (Table A4), while Table 7 reports the coefficients of the dummy variables associated to EU and thirdcountry migrants or mixed households.

Table 7. Incidence of migrant status on the net-position with the government

| Group | Country | Migrant dummies |  |  | Obs |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | EU-25 migrant household | Extra EU-25 migrant household | Mixed household |  |
|  | All | 2462.53 [6.35]*** | 2014.28 [2.71]*** | 3569.92 [9.23]** | 335868 |
| EU-15 | Austria | 1066.6 [0.80] | 1914.76 [3.97]*** | 3582.3 [4.77] ${ }^{* * *}$ | 17475 |
|  | Belgium | 3809.16 [2.49]** | 53182.25 [1.89]* | -756.34 [0.96] | 10823 |
|  | Germany+ | 746.16 [0.89] |  | 546.81 [0.55] | 30173 |
|  | Denmark | -461.78 [0.54] | -4312.91 [6.30] ${ }^{* * *}$ | 794.38 [1.03] | 21096 |
|  | Spain | 688.76 [0.31] | 2147.91 [3.80]*** | 1767.21 [1.44] | 12146 |
|  | Finland | 16821.53 [1.43] | -4790.31 [5.86] ${ }^{* * *}$ | -959.6 [1.67]* | 37267 |
|  | France | 419.56 [0.68] | -242.97 [0.45] | 2080.39 [3.04]*** | 32687 |
|  | Ireland | 1852.13 [1.71]* | -4162.06 [3.35] ${ }^{* * *}$ | -1547.57 [1.66]* | 18815 |
|  | Luxembourg | 3353.49 [4.80]*** | 3727.97 [2.42]** | 2798.16 [2.30]** | 12663 |
|  | Sweden | -837.71 [0.93] | -1180.55 [0.86] | -1124.11 [1.36] | 20360 |
|  | United Kingdom | 921.52 [0.63] | 3942.71 [2.81]*** | 2850.88 [2.53]** | 20030 |
| New Member States | Czech Republic | 766.27 [0.52] | 243.87 [0.37] | 326.59 [0.38] | 12247 |
|  | Hungary | -3003.7 [3.45]*** | 918.12 [1.36] | -356.84 [0.55] | 15579 |
|  | Poland | 1871.31 [2.23]** | -932.38 [1.14] | 4077.46 [1.86]* | 32536 |
|  | Slovakia | 426.66 [0.36] | 116.23 [0.17] | 222.71 [0.66] | 11875 |
| Other Countries | Iceland | 126.61 [0.09] | -2806.24 [2.31]** | -2093.21 [1.83]* | 9919 |
|  | Norway | 2936.72 [2.28]** | -1210.19 [1.16] | 1340.34 [1.88]* | 20177 |

Notes: t statistics in brackets, * significant at 10 per cent, ** significant at 5 per cent, significant at 1 per cent;+ the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants.

Source: own elaborations on data from EU-SILC 2004-2006.

Table 7 suggests that in most countries the documented net negative position of migrants with respect to the state budget is explained by their personal characteristics. In other words, there is no residual net dependency once we control for education, number of children and the other relevant covariates affecting the probability of receiving social transfers, as discussed in Section 2. This result is particularly clear for EU migrants, since the dummy coefficients are almost all non significant and even positive.

If we look at the non-EU migrants, however, there is still a minority of countries (Denmark, Finland, Ireland and Iceland) where migrants are residually dependent, notably they receive more than what they contribute even when account is made for their personal characteristics.

Finally, mixed households tend to maintain a non-negative position with respect to the state budget, despite some exceptions (Finland, Ireland and Iceland).

## 4 Perceptions

After having looked at the fiscal position of migrant households, we now want to see how European citizens perceive migration and its impact on the nation wellbeing. Their opinions will be assessed by drawing on results from the European Social Surveys (ESS), a public opinion survey carried out in many EU countries, ${ }^{11}$ which includes a number of questions about immigration. We will focus on the perceptions about the influence of migration on crime problems, as well as opinions on the impact of foreign guests on the fiscal balance of the recipient country. Although the ESS does not have a longitudinal design, access to micro data from the survey enables us to control for individual characteristics, as well as cyclical factors potentially affecting individual perceptions.

### 4.1 Crime

The typical profile of a criminal is a young male with low education and experiencing financial difficulties, mainly associated with low incomes or long-term unemployment (Freeman, 1991; Levitt, 1998; Grogger, 1998). At the same time, the first settlement of new migrants are usually carried out by young males, and those with low education and income constraints tend to receive a higher attention from the general public, probably due to the stark differences from the native population. Public opinion may combine these two phenomena of marginalisation and mentally associate migration with criminality even when it is faulty (see Buonanno et al., 2008).

Figure 3 shows the opinions of EU citizens with respect to the contribution offered by migration to crime rates. There is some cross-country variation, but almost $70 \%$ of the respondents believe that crime problems are made worse by migrants. ${ }^{12}$ The average EU citizen does associate migration with higher crime rates.

[^7]Figure 3. "Are national crime problems made worse or better by people coming to live here from other countries?" \% of responses


Notes: own elaboration on data from ESS-2002; EU-average showed in the first column;
Answers regrouped as follows: 0-2, worse; 3-4, little worse; 6-7, little better; 8-10, better.
We are interested in unfolding which social and economic factors might influence these perceptions. In order to attain this, we run an OLS regression of the probability of stating that migrants contribute to crime rates controlling for observables characteristics of respondents, as well as self-reported involvement in humanitarian organisations or friendship with migrants. ${ }^{13}$ Cross-country variation is taken into account by including country dummies in the regressors. The results are displayed in Table 8.

[^8]Table 8. Migrants and crime problems, incidence of personal characteristics

|  | Influence of immigration on crime |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| Male | $\begin{aligned} & -0.09 \\ & {[4.66]^{* * *}} \end{aligned}$ | $\begin{aligned} & -0.18 \\ & {[8.26]^{* * *}} \end{aligned}$ | $\begin{aligned} & -0.17 \\ & {[8.30]^{* * *}} \end{aligned}$ | $\begin{aligned} & -0.17 \\ & {[8.38]^{* * *}} \end{aligned}$ |
|  | -0.02 | -0.03 | -0.03 | -0.03 |
| Age | [8.50]*** | [9.01]*** | [9.66]*** | [9.73]*** |
|  | 0.0001 | 0.0001 | 0.0002 | 0.0001 |
| Age square | [5.57]** | [7.26]** | [7.59]*** | [7.58]*** |
|  | 0.09 | 0.08 | 0.06 | 0.05 |
| Secondary Education | [2.86]*** | [2.15]** | [2.00]** | [1.56] |
|  | 0.55 | 0.43 | 0.43 | 0.39 |
| Tertiary Education | [15.12] ${ }^{* * *}$ | [10.90]*** | [11.56]*** | [10.44]*** |
|  | -0.14 | -0.13 | -0.11 | -0.10 |
| Unemployed | [3.09]*** | [2.61]*** | [2.41]** | [2.25]** |
|  | $0.71$ | 0.60 | $0.66$ | $0.65$ |
| Migrant | [12.48] ${ }^{* *}$ | [9.74]** | [11.47] ${ }^{* *}$ | [11.41]*** |
|  | 0.08 | 0.06 | 0.05 | 0.05 |
| Medium Income | [2.81]*** | [2.07]** | [1.87]* | [1.77]* |
|  | 0.12 | 0.09 | 0.07 | 0.06 |
| High Income | [4.01]*** | [2.76]*** | [2.18]** | [1.87]* |
|  | 0.27 | 0.31 | 0.30 | 0.30 |
| city | [5.69]** | [6.05]** | [6.07]*** | [6.20]*** |
|  | 0.15 | 0.15 | 0.15 | 0.17 |
| suburbs | [3.09]** | [2.99]** | [3.18]*** | [3.46] ${ }^{* * *}$ |
|  |  |  |  | 0.14 |
| town | $[2.52]^{\star *}$ | [2.67]*** | $[2.82]^{\star * *}$ | [3.05]*** |
|  | 0.05 | 0.04 | 0.04 | 0.05 |
| country village | [1.20] | [0.92] | [1.00] | [1.20] |
|  |  | $0.32$ | $0.32$ | $0.31$ |
| Know an immigrant |  | [13.34] ${ }^{* * *}$ | [14.25]*** | [13.89]*** |
| Humanitarian organisations |  | $\begin{aligned} & 0.26 \\ & {[9.05]^{* * *}} \end{aligned}$ | $\begin{aligned} & 0.25 \\ & {[8.86]^{* * *}} \end{aligned}$ | $\begin{aligned} & 0.24 \\ & {[8.60]^{* * *}} \end{aligned}$ |
|  |  | -0.20 | -0.19 | -0.19 |
| Unsafe walking alone |  | [12.92]*** | [13.35] ${ }^{* * *}$ | [13.23]*** |
|  |  | -0.13 | -0.13 | -0.12 |
| Victim of crime |  | [4.88]*** | [5.15]** | [5.02]*** |
|  |  | 0.21 | 0.21 |  |
| Left |  | [8.36]*** | [8.38]*** |  |
|  |  | -0.11 | -0.11 |  |
| Right |  | [4.58]** | [4.67]*** |  |
|  |  | -0.02 |  |  |
| TV |  | [3.70]*** |  |  |
|  |  | -0.01 |  |  |
| Radio |  | [2.05]** |  |  |
|  |  | 0.02 |  |  |
| Newspaper |  | [2.58]** |  |  |
| Constant | $\begin{aligned} & 3.30 \\ & {[35.88]^{* * *}} \end{aligned}$ | $\begin{aligned} & 3.86 \\ & {[36.41]^{* * *}} \end{aligned}$ | $\begin{aligned} & 3.50 \\ & {[35.71]^{* * *}} \end{aligned}$ | $\begin{aligned} & 3.60 \\ & {[35.69]^{* * *}} \end{aligned}$ |
| Country Dummies | yes | yes | yes | yes |
| Observations | 40291 | 35408 | 39882 | 39683 |
| R-squared | 0.01 | 0.01 | 0.01 | 0.01 |

Notes: robust t statistics in brackets, * significant at 10\%, ** significant at 5\%, *** significant at $1 \%$; dependent variable on a scale from 0 , worse, to 10 , better, depending on answer to the question: "Are [country]'s crime problems made worse or better by people coming to live here from other countries?". Reference person: female living in farm or countryside with lower than secondary education. Country of reference: Iceland

## Source: ESS-2002.

Other things being equal, young males with lower education and living in rural areas are more concerned about the association between crime rates and migration. Furthermore, the higher education and family income, the less migrants are perceived as a threat to the security. The opposite holds for people identifying themselves as belonging to the right of the political spectrum or reporting feelings unsafe while walking back home alone or who have been victim of an assault.

Tertiary education has broadly the same effect on opinion, as well as being a migrant. Moreover, more frequent personal contacts with migrants - through work, volunteering, friendship or simply by living in a highly populated area - are associated with less concerns about the contribution of migrants to crime rates.

Finally, it seems that media (TV or radio) exposure increases negative perceptions of migrants. Next, we consider the relationship between perceptions and measured crime rates, across countries both unconditionally and controlling for the characteristics of respondents (in which case we report country dummies).

Figure 4. Crime and migration perceptions


Notes: \% of people answering strictly less than 5 to the ESS-2002 question about migration and crime.
Regression dummies from column (1) Table 8; The choice of the specification does not affect the regression results..
Source: share of incarcerated taken from the "United Nations Survey on Crime Trends and the Operations of Criminal Justice Systems (7th and 8th)", year 2002

As pointed out by Figure 4, there is not a clear relationship between perceptions and measured crime rates. If anything, the relationship is mildly negative.

### 4.2 Fiscal Contribution

In order to evaluate public opinion perceptions about the migrants' contribution to the state budget, we rely on the ESS, whose 2002 wave contained a very specific question on the topic: "Most people who come to live here work and pay taxes. They also use health and welfare services. On balance, do you think people who come here take out more than they put in or put in more than they take out?."

Let's first take a look at the rough data, as presented in Figure 5.

Figure 5. "Do you think migrants take out more than they put in or put in more than they take out?" \% of responses


Notes: Aggregation of data from ESS-2002. EU-average showed in the first column
Answers from 0 to 10 regrouped as follows: $0-2$, take out more; $3-4$, take out a little more; 5 , balance; $6-7$, put in a little more; 8 10, put in more.

Even if, on average, European citizens believe that migrants balance out the resources they receive with the taxes they pay, the distribution of answers is quite skewed to the left. In other words, when comparing those respondents who take a stance, the majority believes that migrants are a burden rather than an asset for public finances. Indeed, more than one European out of four (28\%) believes that migrants balance out their account with the government, but 22 and $23 \%$ respectively believes that they take out more or a little more than what they contribute to. However there are relevant differences across countries: while 43\% of Slovenians believe that foreigners depend on the welfare state, almost one Italian out of five believes that they contribute more than what they receive.

Once more, we consider conditional perceptions, controlling for individual characteristics. ${ }^{14}$

Table 9. Migrants and welfare state, incidence of personal characteristics

|  | Do migrants put in more than what they take out? |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| Male | 0.00 | 0.00 | 0.00 | 0.00 |
|  | [1.86]* | [1.39] | [1.58] | [1.17] |
|  | -0.02 | -0.02 | -0.02 | -0.02 |
| Age | [5.13]** | [5.45]** | [6.00]*** | [5.85]*** |
|  | 0.00 | 0.00 | 0.00 | 0.00 |
| Age square | [3.24]*** | [4.66]*** | [4.97]*** | [4.74]*** |
|  | 0.01 | 0.01 | 0.01 | 0.01 |
| Secondary Education | [4.97]*** | [3.59]*** | [3.89]*** | [3.46]*** |
|  | 0.05 | 0.04 | 0.04 | 0.03 |
| Tertiary Education | [16.62]*** | [12.55]*** | [12.91]*** | [11.79]*** |
|  | -0.22 | -0.21 | -0.18 | -0.18 |
| Unemployed | [4.32]*** | [3.99]** | [3.69]*** | [3.51]*** |
|  | 0.07 | 0.06 | 0.07 | 0.07 |
| Migrant | [22.04]*** | [17.48]*** | [20.93] ${ }^{* * *}$ | [21.07]*** |
|  | 0.01 | 0.00 | 0.01 | 0.01 |
| Medium Income | [3.53]*** | [2.30]** | [2.57]** | [2.53]** |
|  | 0.01 | 0.01 | 0.01 | 0.01 |
| High Income | [4.08]*** | [2.46]** | [2.46]** | [2.21]** |
|  | 0.02 | 0.01 | 0.01 | 0.01 |
| city | [4.91]*** | [2.44]** | [2.70]*** | [2.63]*** |
|  | 0.01 | -0.02 | 0.00 | 0.00 |
| suburbs | [2.06]** | [0.38] | [0.03] | [0.02] |
|  | 0.01 | 0.00 | 0.00 | 0.00 |
| town | [2.17]** | [0.35] | [0.73] | [0.81] |
|  | -0.05 | -0.11 | -0.09 | -0.09 |
| country village | [1.12] | [2.10]** | [1.93]* | [1.86]* |
|  |  | 0.03 | 0.03 | 0.03 |
| Know an immigrant |  | [16.52]*** | [17.88]*** | [17.64]*** |
| Humanitarian organisations |  | 0.03 | 0.03 | 0.02 |
|  |  | [11.78]*** | [12.09]*** | [11.58]*** |
|  |  |  | 0.02 | 0.02 |
| Left |  |  | [9.55]*** | [9.44]*** |
|  |  |  | -0.09 | -0.10 |
| Right |  |  | [3.55]*** | [3.67]*** |
|  |  |  |  | -0.02 |
| TV |  |  |  | [3.66]** |
|  |  |  |  | -0.01 |
| Radio |  |  |  | [2.44]** |
|  |  |  |  | 0.00 |
| Newspaper |  |  |  | [3.57]*** |
|  | 0.19 | 0.20 | 0.17 | 0.18 |
| Constant | [42.05]*** | [39.97]*** | [39.26]*** | [39.02]*** |
| Country Dummies | yes | yes | yes | yes |
| Observations | 39138 | 34966 | 39138 | 38943 |
| R-squared | 0.01 | 0.01 | 0.01 | 0.01 |

Notes: robust t statistics in brackets, * significant at $10 \%,{ }^{* *}$ significant at $5 \%,{ }^{* * *}$ significant at $1 \%$; dependent variable on a scale from 0 , worse, to 10 , better, depending on answer to the question: "Taxes and services: immigrants take out more than they put in or less?"; Reference person: female living in farm or countryside with lower than secondary education; Country of reference: Iceland.

Source: ESS-2002.

[^9]The typical profile of persons concerned about the net fiscal position of migrants is similar to that of those concerned about crime rates: it is mainly young people, unemployed, living in rural areas, with low levels of literacy and income sources, right-winged when it comes to politics, with little or no contact with the world of migration, who fear about the fiscal burden of migrants. Media once more strengthen these beliefs whilst people reading newspapers give a higher importance to the economic contributions of foreigners.

Finally, we relate the perceptions of EU citizens to the level of generosity of welfare systems and the characteristics of social policies in different European countries, in order to assess whether negative perceptions about migration are stronger in countries with a more generous redistributive system or adopting specific policies.

Since the non-contributory part of public transfers turned out to be the one where migrants were over-represented, we focus our attention on the share of non-contributory allowances over the total government expenditure for social benefits. Figure 6 shows an inverse relationship between this quantity and the percentage of people stating that migrants are net contributors to public finances. This is in line with our findings: as long as the share of non-contributory benefits is relatively low as compared to the contributory ones, people appreciate more the fiscal contribution of migrants. On one side, when most of the transfers are given on a non-contributory basis, in which migrants are overrepresented, the average citizen is more concerned about his/her welfare dependency.

Figure 6. Migrants perceived dependency and non-contributory transfers


- Migrants give more (Percentage of respondents)

- Regression country dummies

Notes: percentage of people answering strictly less than 5 to the ESS-2002 question about migration and welfare contribution. Regression dummies from column (1) in Table 9, the choice of regression doesn't have a qualitative influence, given the very high correlation of dummies from different columns.
Share of non contributory benefits calculated as: Social transfers in kind / (Social benefits + social transfers in kind).
Source: Eurostat, statistics on Social Protection Expenditure 2002.
In order to be more rigorous we control for individual specific characteristics, and plotting the dummies from the first regression of Table 9 on the vertical axis, we find that a negative correlation still holds even conditionally on the respondent's personal features, as displayed in the right-panel of Figure 6.

As expected, a similar relation holds even when we consider the share of GDP spend for family allowances, housing or social exclusion, as displayed in Figure 7.

Figure 7. Migrants perceived dependency and non-contributory transfers


Notes: Regression dummies from column (1) in Table 9; The choice of regression doesn't have a qualitative influence, given the very high correlation of dummies from different columns.
Share of non contributory benefits calculated as: Social transfers in kind / (Social benefits + social transfers in kind)
Source: Eurostat, statistics on Social Protection Expenditure 2002
Furthermore it is interesting to notice a slightly positive relation between the perceptions of European citizens about migrants' contribution to the state budget and the average net fiscal position of migrants, as calculated using the EU-SILC 2005, as well as the government net lending, as provided by the European Commission for the Excessive Deficit Procedure.

Figure 8. Migrants perceived dependency and net fiscal position


Notes: Regression dummies from column (1) in Table 9; the choice of regression doesn't have a qualitative influence, given the very high correlation of dummies from different columns.
Source: Eurostat, statistics on Social Protection Expenditure 2002;
Net fiscal position calculated as country-average of the variable constructed in section 3, EU-SILC 2005;
Eurostat, Government Deficit and Debt, Excessive Deficit Procedure 2002.

## 5 Conclusions and policy implications

There is a widespread perception in Europe that migrants are a burden for public finance. This view is deeply rooted in the countries with a more generous redistributive system and is stronger among poorer and less educated individuals. We document in this study that migrants are indeed over-represented among beneficiaries of non-contributory transfers, while they are under-represented among recipients of contributory schemes. However, EU-25 migrants are under-represented also among recipients of noncontributory benefits. Interestingly, among them there are several countries where the share of NMS migrants in the population of EU-25 migrants is relatively large (Greece, Austria, Ireland, Italy). Furthermore, especially in Nordic countries, there is some evidence of "residual dependency" of migrants, thereby they receive transfers more than natives when control is made of their educational attainments and family characteristics.

We also try for the first time to estimate the net fiscal position of migrants vis-à-vis the state budget. Our estimates depend on a number of assumptions and caveats that are
detailed in the report. They suggest that the net fiscal position of migrants is not different than the one of natives. They pay less, but also receive less than natives. It should be stressed that our calculations are static, that is compare current contributions and taxes and current transfers rather than analysing them over the lifetime. Thus the young age of migrants may contribute to explain our results.

The main policy implications of our findings is that countries should look carefully at the design of their social welfare systems in order to minimise moral hazard and prevent migrants from falling into unemployment and poverty traps. Adopting a more Beveridgian welfare system is not always an option as some schemes (e.g., social assistance) can only be funded out of general Government revenues. But much can be done to reduce long-term dependency from such transfers, as suggested by ongoing policy experiments along the route of activation policies (Boeri, 2005).

## 6 References

Auerbach, A.J. and P. Oreopoulos (1999), "Analyzing the Fiscal Impact of U.S. Immigration", American Economic Review, 89(2), pp. 176-180.

Barrett, Alan and Yvonne McCarthy (2007), "Immigrants in a Booming Economy: Analysing their Earnings and Welfare Dependence", Labour, 21(4-5), pp. 789-808.

Barrett, Alan and Yvonne McCarthy (2008), "Immigrants and Welfare Programmes: Exploring the Interactions between Immigrant Characteristics, Immigrant Welfare Dependence and Welfare Policy," IZA Discussion Papers 3494, IZA, Bonn.

Bird, E.J., H. Kayser and J.R. Frick (1999), "The Immigrant Welfare Effect, Take-up or Eligibility?", IZA Discussion Paper 66, IZA, Bonn.

Blank, R.M. (1988), "The Effect of Welfare and Wage Levels on the Location Decisions of Female-Headed Households", Journal of Urban Economics, 24(2), pp. 186-211.

Blau, F. D. (1984), "The use of transfer Payments by Immigrants", Industrial and Labor Relations Review, 37, pp. 222-39.

Boeri, T. (2005), "An Activating Social Security System", De Economist, 153, n.4.

Boeri, T. (2006), "Migration Policy and the Welfare State", paper presented to the Conference "Reinventing the Welfare State", Tilburg.

Boeri, T., G. Hanson and B. McCormick (eds.) (2002), Immigration Policy and the Welfare System, Oxford University Press, Oxford.

Borjas, G.J. (1999), "Immigration and Welfare Magnets", Journal of Labour Economics, 17(4), pp. 607-637.

Borjas, G.J. (1995), "Immigration and Welfare, 1970-1990", Research in Labor Economics, 14, pp. 253-282.

Borjas, G.J. and S. J. Trejo (1991), "Immigrant Participation in the Welfare System", Industrial and Labor Relations Review, 44, pp. 195-211.

Borjas, G.J. (1996), "The Earnings of Mexican Immigrants in the United States", Journal of Development Economics, 51, pp. 69-98.

Borjas, G.J., and L. Hilton (1996), "Immigration and the Welfare State: Immigrant Participation in Means-Tested Entitlement Programs", Quarterly Journal of Economics, 111(2), pp. 575-604.

Brueckner, J. K. (2000), "Welfare Reform and the Race to the Bottom: Theory and Evidence", Southern Economic Journal, 66(3), pp. 505-525.

Buonanno, P., M. Bianchi and P. Pinotti (2008). "Do Immigrants Cause Crime?" Paris School of Economics Working Paper 05/2008

Fertig, M. and Schmidt, C. M., (2001), "First- and Second-Generation Migrants in Germany - What Do We Know and What Do People Think", in Rotte R. (ed.) Migration Policy and the Economy- International Experience, mimeo.

Fix, M.E., J.S. Passel and W. Zimmermann (1996), "Facts about immigrants' use of welfare", The Urban Institute.

Freeman, R.B. (1991). "Crime and the employment of disadvantaged youths", NBER Working Paper No. 3875.

Frick, J., F. Büchel and W. Voges (1996), „Sozialhilfe als Integrationshilfe für Zuwanderer in Deutschland", DIW-Wochenbericht, 63(48), pp. 767-775.

Gelbach, J.B. (2004), "Migration, the Life Cycle, and State Benefits: How Low Is the Bottom?", Journal of Political Economy, 112(5), pp. 1091-1130.

Gramlich, E.M. and D.S. Laren (1984), "Migration and Income Redistribution Responsibilities", Journal of Human Resources, 19(4), pp. 489-511.

Grogger, J. (1998), "Market wages and youth crime", Journal of Labor Economics, 16(4), pp. 756-791.

Hansen, J. and M. Lofstrom, (1999), "Immigration and Welfare Participation: Do Immigrants Assimilate Into or Out-of Welfare?", IZA Discussion Paper 100, IZA, Bonn.

Hansen, J. and M. Lofstrom, (2001), "The dynamics of immigrant welfare and labor market behaviour", IZA Discussion Paper 360, IZA, Bonn.

Hansen, J. and M. Lofstrom, (2003), "Immigrant assimilation and welfare participation: do immigrants assimilate into or out of welfare?", Journal of Human Resources, 38(1), pp. 74-98.

Levitt, S.D. (1996), "The effect of prison population size on crime rates: Evidence from prison overcrowding litigation", Quarterly Journal of Economics, 111(2), pp. 319-351.

Levitt, S.D. (1998), "Juvenile crime and punishment", Journal of Political Economy, 106(6), pp. 1156-1185.

McKinnish, T. (2005), "Importing the Poor: Welfare Magnetism and Cross-Border Migration", Journal of Human Resources, 40(1), pp. 57-76.

Meyer, B.D. (2000), "Do the Poor Move to Receive HigherWelfare Benefits?", Working paper no. 58. Northwestern University, Joint Center for Poverty Research Working Paper.

Pederson, P. (2000), "Immigration in a High Unemployment Economy: The Recent Danish Experience", IZA Discussion Paper 165, IZA, Bonn.

Riphahn, R.T. and M. Rosholm, (2001), "Immigrants' Time to Economic Independence: The Duration of Initial Public Transfer Reliance", mimeo.

Riphahn, R. T., (1998), „Immigrant Participation in the German Welfare Program", Finanzarchiv, 55, pp. 163-185.

Sinn, H.-W., G. Flaig, M. Werding, S. Munz, N. Düll and H. Hofmann, (2001), „EUErweiterung und Arbeitskräftemigration, Wege zu einer schrittweisen Annäherung der Arbeitsmärkte", ifo-Institut für Wirtschaftsforschung, Munich.

Walker, J.R. (1994), "Migration Among Low-Income Households: Helping the Witch Doctors Reach Consensus," discussion paper 94-1031, Institute for Research on Poverty, University of Wisconsin-Madison.

## 7 Annex

Table A1a. Share of migrants from New Member States over migrant population in European Countries

| Country | Share of immigrants from NMS-10 over total EU-25 immigrants | Share of immigrants from NMS-12 over total immigrants |
| :---: | :---: | :---: |
| Austria | 35.90 | 14.15 |
| Belgium | 4.00 | 4.17 |
| Bulgaria | 52.32 | 6.78 |
| Croatia | No information | No information |
| Cyprus | 4.41 | 8.56 |
| Czech | 79.71 | 41.12 |
| Denmark | 13.03 | 5.17 |
| Estonia | 69.11 | 3.10 |
| Finalnd | 46.77 | 26.74 |
| France | 3.37 | 2.37 |
| Germany | 19.35 | 8.98 |
| Greece | 52.86 | 14.55 |
| Hungary | 41.82 | 59.36 |
| Iceland | 45.47 | 28.20 |
| Ireland | 43.52 | No information |
| Italy | 33.26 | 16.18 |
| Latvia | 82.73 | 5.68 |
| Lithuania | 76.74 | 13.17 |
| Luxembourg | 1.37 | 1.46 |
| Malta | No information | No information |
| Netherlands | 7.84 | 3.84 |
| Norway | 7.90 | 5.06 |
| Poland | 11.97 | 3.96 |
| Portugal | 2.74 | 6.58 |
| Romania | 34.59 | 9.64 |
| Slovakia | 88.88 | 58.98 |
| Slovenia** | 18.68 | 2.80 |
| Spain | 9.80 | 20.21 |
| Sweden | 10.19 | 6.17 |
| Switzerland | 2.33 | 1.91 |
| Turkey | No information | No information |
| United Kingdom | 28.06 | 13.43 |

Source: Own elaborations on National Population Statistics and EUROSTAT LFS.

Table A1b. Descriptive Statistics - Citizens

| Country | Natives | Migrants |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | EU-25 Extra EU-25 |  |  |
| Austria | 38424 | 680 | 1970 | 41074 |
| Belgium | 36917 | 2022 | 1138 | 40077 |
| Cyprus | 23425 | 1497 | 1314 | 26236 |
| Czech Republic | 28861 | 146 | 173 | 29180 |
| Germany | 72964 |  | 77 | 74441 |
| Denmark | 45688 | 652 | 1470 | 47810 |
| Estonia | 35056 |  | 332 | 40388 |
| Spain | 26421 | 149 | 907 | 27477 |
| Finalnd | 87679 | 488 | 790 | 88957 |
| France | 70644 | 1632 | 2458 | 74734 |
| Greece | 48676 | 318 | 1857 | 50851 |
| Hungary | 44931 | 158 | 69 | 45158 |
| Ireland | 43211 | 1539 | 700 | 45450 |
| Iceland | 18174 | 240 | 7564 | 25978 |
| Italy | 185964 | 497 | 4156 | 190617 |
| Lithuania | 29151 | 54 | 275 | 29480 |
| Luxembourg | 17211 | 11264 | 1415 | 29890 |
| Latvia | 19762 |  | 83 | 24645 |
| Netherlands | 17172 | 142 | 92 | 17406 |
| Norway | 44747 | 902 | 829 | 46478 |
| Poland | 107955 | 36 | 92 | 108083 |
| Portugal | 41958 | 181 | 689 | 42828 |
| Sweden | 46174 | 959 | 1018 | 48151 |
| Slovenia | 66732 |  | 49 | 72881 |
| Slovakia | 37507 | 88 | 34 | 37629 |
| United Kingdom | 54749 | 621 | 2216 | 57586 |
| Total | 1290153 | 24265 | 49067 | 1363485 |

Table A1c. Descriptive Statistics - Households

| Country | Natives | Migrants |  | Mixed | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{cc} \hline \text { EU-25 } & \text { Extra EU- } \\ 25 \end{array}$ |  |  |  |
| Austria | 15791 | 183 | 617 | 606 | 17197 |
| Belgium | 15715 | 704 | 336 | 752 | 17507 |
| Cyprus | 7922 | 348 | 200 | 561 | 9031 |
| Czech Republic | 11868 | 43 | 56 | 85 | 12052 |
| Germany | 28638 | 266 |  | 693 | 29597 |
| Denmark | 19493 | 109 | 357 | 781 | 20740 |
| Estonia | 11585 | 1593 |  | 676 | 13854 |
| Spain | 11408 | 52 | 307 | 173 | 11940 |
| Finalnd | 35828 | 114 | 202 | 472 | 36616 |
| France | 29888 | 518 | 826 | 884 | 32116 |
| Greece | 18418 | 90 | 593 | 340 | 19441 |
| Hungary | 15192 | 37 | 23 | 60 | 15312 |
| Ireland | 17446 | 371 | 228 | 504 | 18549 |
| Iceland | 5940 | 60 | 689 | 3052 | 9741 |
| Italy | 72185 | 141 | 1660 | 596 | 74582 |
| Lithuania | 8825 | 7 | 27 | 106 | 8965 |
| Luxembourg | 6711 | 4344 | 361 | 1018 | 12434 |
| Latvia | 5559 | 1214 |  | 846 | 7619 |
| Netherlands | 8971 | 25 | 10 | 163 | 9169 |
| Norway | 18880 | 242 | 206 | 618 | 19946 |
| Poland | 32255 | 11 | 11 | 54 | 32331 |
| Portugal | 14706 | 46 | 163 | 157 | 15072 |
| Sweden | 18991 | 223 | 217 | 685 | 20116 |
| Slovenia | 16512 | 1275 |  | 1493 | 19280 |
| Slovakia | 11579 | 20 | 2 | 69 | 11670 |
| United Kingdom | 21680 | 117 | 550 | 591 | 22938 |
| Total | 481986 | 7805 | 11989 | 16035 | 517815 |

Table A2. Change in the probability of receiving contributory-benefits: individual probit regression

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | 0) | (11) | (12) | (13) | (14) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All | AT | BE | Y | CZ | $\mathrm{DE}^{+}$ | DK | EE+ | ES | FI | FR | GR | HU | IE |
| EU25 Migrant | $\begin{gathered} -0.065 \\ {[15.55]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.082 \\ {[3.21]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.052 \\ {[4.03]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.031 \\ {[2.20]^{* *}} \end{gathered}$ | $\begin{aligned} & \hline 0.044 \\ & {[0.72]} \end{aligned}$ |  | $\begin{aligned} & \hline 0.010 \\ & {[0.31]} \end{aligned}$ |  | $\begin{gathered} -0.032 \\ {[1.81]^{*}} \end{gathered}$ | $\begin{gathered} -0.110 \\ {[3.01]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.063 \\ {[3.72]^{* * *}} \end{gathered}$ | $\begin{aligned} & \hline-0.046 \\ & {[1.39]} \end{aligned}$ | $\begin{gathered} -0.210 \\ {[3.57]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.125 \\ {[8.44]^{* * *}} \end{gathered}$ |
| Extra EU25 Migrant | $\begin{gathered} -0.048 \\ {[16.54]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.011 \\ & {[0.68]} \end{aligned}$ | $\begin{gathered} -0.200 \\ {[12.39]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.137 \\ {[6.75]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.275 \\ {[4.21]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.048 \\ {[2.37] * *} \end{gathered}$ | $\begin{gathered} 0.074 \\ {[3.81]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.049 \\ {[4.23] * * *} \end{gathered}$ | $\begin{gathered} -0.096 \\ {[5.60]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.020 \\ & {[0.76]} \end{aligned}$ | $\begin{gathered} -0.109 \\ {[7.29]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.081 \\ {[4.84]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.402 \\ {[5.35]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.180 \\ {[8.13]^{* * *}} \end{gathered}$ |
| Male | $\begin{gathered} 0.094 \\ {[88.43]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.201 \\ {[27.65]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.197 \\ {[28.32]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.021 \\ {[3.20]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.087 \\ {[9.91]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.130 \\ {[22.10]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.002 \\ {[0.26]} \end{gathered}$ | $\begin{gathered} -0.062 \\ {[7.30]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.174 \\ {[42.13]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.014 \\ {[2.57]^{* *}} \end{gathered}$ | $\begin{gathered} 0.110 \\ {[20.49]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.159 \\ {[24.64]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.003 \\ & {[0.42]} \end{aligned}$ | $\begin{gathered} 0.122 \\ {[18.14]^{* * *}} \end{gathered}$ |
| Age | $\stackrel{-0.005}{[26.21]^{* * *}}$ | $\begin{gathered} -0.003 \\ {[2.44]^{* *}} \end{gathered}$ | $\begin{gathered} 0.020 \\ {[19.27]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.029 \\ {[24.33] * * *} \end{gathered}$ | $\begin{gathered} -0.030 \\ {[15.18]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.018 \\ {[15.54]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.010 \\ {[7.38] * * *} \end{gathered}$ | $\begin{gathered} -0.030 \\ {[16.76]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.002 \\ {[3.67]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.012 \\ {[10.64]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.002 \\ {[1.87]^{*}} \end{gathered}$ | $\begin{gathered} -0.003 \\ {[3.22]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.007 \\ {[4.10]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.004 \\ {[3.73]^{* * *}} \end{gathered}$ |
| Age^2 | $\begin{gathered} 0.000 \\ {[119.37]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[14.95]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[7.44]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[35.63]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.001 \\ {[24.98]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[33.25]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[4.20]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.001 \\ {[28.99]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[23.44]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[6.68]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[17.47]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[20.45]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.000 \\ & {[9.78]^{* * *}} \end{aligned}$ | $\begin{gathered} 0.000 \\ {[8.42]^{* * *}} \end{gathered}$ |
| Secondary Education | $\begin{gathered} 0.013 \\ {[10.13]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.018 \\ {[2.28]^{* *}} \end{gathered}$ | $\begin{aligned} & 0.004 \\ & {[0.59]} \end{aligned}$ | $\begin{gathered} -0.025 \\ {[3.14]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.052 \\ {[4.08]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.036 \\ {[4.24]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.017 \\ {[1.99] * *} \end{gathered}$ | $\begin{aligned} & -0.011 \\ & {[0.94]} \end{aligned}$ | $\begin{gathered} -0.018 \\ {[3.50]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.027 \\ {[3.86]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.045 \\ {[7.58]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.020 \\ {[2.85]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.023 \\ {[2.80]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.037 \\ {[4.92]^{* * *}} \end{gathered}$ |
| Tertiary Education | $\begin{aligned} & -0.002 \\ & {[1.33]} \end{aligned}$ | $\begin{aligned} & -0.006 \\ & {[0.55]} \end{aligned}$ | $\begin{aligned} & 0.012 \\ & {[1.40]} \end{aligned}$ | $\begin{gathered} -0.056 \\ {[6.07]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.025 \\ & {[1.29]} \end{aligned}$ | $\begin{aligned} & -0.009 \\ & {[0.92]} \end{aligned}$ | $\begin{gathered} -0.025 \\ {[2.53]^{* *}} \end{gathered}$ | $\begin{aligned} & -0.027 \\ & {[1.94]^{*}} \end{aligned}$ | $\begin{aligned} & 0.000 \\ & {[0.01]} \end{aligned}$ | $\begin{gathered} -0.017 \\ {[2.12]^{* *}} \end{gathered}$ | $\begin{gathered} 0.056 \\ {[7.04]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.061 \\ {[6.32]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.037 \\ {[2.92]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.034 \\ {[3.82]^{* * *}} \end{gathered}$ |
| High income (before transfers) | -0.267 $[179.04]^{* * *}$ | -0.261 $[26.37] * * *$ | ${ }_{-0.348}^{[33.35] * * *}$ | -0.146 $[2.56] * *$ | -0.223 $[16.91]^{* * *}$ | ${ }_{[21.61]^{-0 * *}}$ | ${ }_{-0.419}^{[42.51] * * *}$ | ${ }_{[0.083}^{[7.06] * * *}$ | -0.234 $[36.23]^{* * *}$ | -0.428 $[53.14]^{* * *}$ | -0.354 $[48.99] * * *$ | -0.261 $[31.25] * * *$ | ${ }_{-0.300}^{[26.31]^{* * *}}$ | ${ }_{-}^{-0.218}[2.55]^{* * *}$ |
| Low income (b.t) | $\begin{gathered} 0.129 \\ {[87.60]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.239 \\ {[26.61]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.291 \\ {[31.69]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.003 \\ & {[0.07]} \end{aligned}$ | $\begin{gathered} 0.199 \\ {[17.76]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.245 \\ {[25.68]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.150 \\ {[14.15]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.155 \\ {[13.93]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.076 \\ {[13.45]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.162 \\ {[19.41]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.105 \\ {[15.11]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.012 \\ & {[1.45]} \end{aligned}$ | $\begin{gathered} 0.165 \\ {[14.87]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.107 \\ {[11.50]^{* * *}} \end{gathered}$ |
| House Owner | $\begin{gathered} -0.043 \\ {[28.88]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.064 \\ {[7.50]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.108 \\ {[13.64]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.038 \\ {[2.76]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.011 \\ & {[1.00]} \end{aligned}$ | $\begin{gathered} -0.095 \\ {[15.27]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.045 \\ {[5.19]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.003 \\ & {[0.12]} \end{aligned}$ | $\begin{gathered} -0.019 \\ {[2.54]^{* *}} \end{gathered}$ | $\begin{gathered} -0.028 \\ {[3.75]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.037 \\ {[5.90]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.012 \\ & {[1.46]} \end{aligned}$ | $\begin{gathered} -0.043 \\ {[2.91]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.104 \\ {[10.68]^{* * *}} \end{gathered}$ |
| Single | $\begin{gathered} 0.057 \\ {[18.20]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.151 \\ {[7.33]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.020 \\ & {[1.10]} \end{aligned}$ | $\begin{aligned} & 0.005 \\ & {[0.24]} \end{aligned}$ | $\begin{gathered} -0.113 \\ {[4.52]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.041 \\ {[2.34]^{* *}} \end{gathered}$ | $\begin{gathered} -0.192 \\ {[7.96]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.001 \\ & {[0.05]} \end{aligned}$ | $\begin{gathered} 0.082 \\ {[7.91]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.075 \\ {[4.30]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.047 \\ {[3.09]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.181 \\ {[9.85]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.055 \\ {[2.48]^{* *}} \end{gathered}$ | $\begin{gathered} 0.197 \\ {[10.15]^{* * *}} \end{gathered}$ |
| Single with child | $\begin{gathered} 0.115 \\ {[37.10]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.142 \\ {[6.68]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.080 \\ {[5.18]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.068 \\ {[2.83]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.035 \\ & {[1.54]} \end{aligned}$ | $\begin{gathered} 0.114 \\ {[8.17]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.040 \\ {[1.89]^{*}} \end{gathered}$ | $\begin{gathered} 0.049 \\ {[2.58]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.198 \\ {[11.73]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.106 \\ {[6.86]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.081 \\ {[5.78]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.334 \\ {[12.29]^{* *}} \end{gathered}$ | $\begin{aligned} & -0.019 \\ & {[0.97]} \end{aligned}$ | $-0.013$ [0.71] |
| 1 child | $\stackrel{-0.072}{[30.46]^{* * *}}$ | $\begin{gathered} -0.037 \\ {[2.24]^{* *}} \end{gathered}$ | $\begin{gathered} -0.048 \\ {[3.01]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.041 \\ {[2.40]^{* *}} \end{gathered}$ | $\begin{gathered} -0.112 \\ {[5.47]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.006 \\ {[0.34]} \end{gathered}$ | $\begin{gathered} -0.078 \\ {[4.40]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.099 \\ {[7.02] * * *} \end{gathered}$ | $\begin{gathered} -0.023 \\ {[2.50] * *} \end{gathered}$ | $\begin{gathered} -0.128 \\ {[9.52]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.065 \\ {[5.40]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.043 \\ {[3.24]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.046 \\ {[2.57]^{* *}} \end{gathered}$ | $\begin{gathered} -0.050 \\ {[3.68]^{* * *}} \end{gathered}$ |
| 2 children | $\stackrel{-0.071}{[35.02]^{* * *}}$ | $\begin{gathered} -0.057 \\ {[3.79]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.074 \\ {[4.36]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.041 \\ {[3.53]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.078 \\ {[4.15]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.061 \\ {[5.49]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.094 \\ {[6.05]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.078 \\ {[5.85]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.020 \\ {[2.61]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.083 \\ {[6.88]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.078 \\ {[6.86]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.024 \\ {[1.94]^{*}} \end{gathered}$ | $\begin{gathered} -0.121 \\ {[8.95]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.091 \\ {[7.96]^{* * *}} \end{gathered}$ |
| 3 children | $\begin{gathered} -0.066 \\ {[2.77]^{* * *}} \end{gathered}$ |  | $\begin{gathered} -0.106 \\ {[1.09]} \end{gathered}$ | $\begin{aligned} & -0.036 \\ & {[0.28]} \end{aligned}$ |  | $\begin{aligned} & 0.141 \\ & {[0.72]} \end{aligned}$ | $\begin{aligned} & 0.051 \\ & {[0.40]} \end{aligned}$ | $\begin{aligned} & -0.113 \\ & {[1.50]} \end{aligned}$ | $\begin{aligned} & -0.071 \\ & {[0.83]} \end{aligned}$ | $\begin{gathered} 0.244 \\ {[2.11]^{* *}} \end{gathered}$ | $\begin{gathered} -0.176 \\ {[1.32]} \end{gathered}$ |  | $\begin{gathered} -0.074 \\ {[0.50]} \end{gathered}$ | $\begin{gathered} -0.215 \\ {[3.65]^{* * *}} \end{gathered}$ |
| 4+ children | $\begin{gathered} -0.093 \\ {[4.72]^{* * *}} \end{gathered}$ |  | $\begin{aligned} & -0.065 \\ & {[0.90]} \end{aligned}$ |  |  | $\begin{gathered} 0.433 \\ {[3.78]^{* * *}} \end{gathered}$ |  | $\begin{gathered} -0.263 \\ {[3.63]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.065 \\ & {[0.44]} \end{aligned}$ | $\begin{gathered} -0.174 \\ {[1.76]^{*}} \end{gathered}$ | $\begin{aligned} & 0.041 \\ & {[0.33]} \end{aligned}$ |  | $\begin{gathered} 0.290 \\ {[3.09]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.147 \\ {[2.44]^{* *}} \end{gathered}$ |
| 2 household members | $\begin{gathered} -0.067 \\ {[19.86]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.072 \\ {[3.52]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.169 \\ {[9.46]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.097 \\ {[3.97]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.151 \\ {[5.42]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.110 \\ {[5.94]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.196 \\ {[7.80]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.016 \\ {[0.64]} \end{gathered}$ | $\begin{gathered} -0.104 \\ {[11.51]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.021 \\ & {[1.10]} \end{aligned}$ | $\begin{gathered} -0.158 \\ {[10.20]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.021 \\ & {[1.23]} \end{aligned}$ | $\begin{gathered} -0.076 \\ {[2.86]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.012 \\ & {[0.63]} \end{aligned}$ |
| $\begin{gathered} 3 \mathrm{hh} \\ \text { members } \end{gathered}$ | $\begin{gathered} -0.112 \\ {[29.35]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.102 \\ {[4.38]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.202 \\ {[10.77]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.132 \\ {[5.51]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.206 \\ {[6.65]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.195 \\ {[8.66]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.311 \\ {[10.28]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.093 \\ {[3.39]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.135 \\ {[15.03]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.051 \\ {[2.16]^{* *}} \end{gathered}$ | $\begin{gathered} -0.226 \\ {[13.38]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.032 \\ {[1.69]^{*}} \end{gathered}$ | $\begin{gathered} -0.152 \\ {[5.05]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.054 \\ {[2.35]^{* *}} \end{gathered}$ |
| $\begin{gathered} 4 \mathrm{hh} \\ \text { members } \end{gathered}$ | $\begin{gathered} -0.130 \\ {[28.23]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.137 \\ {[4.40]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.293 \\ {[10.53]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.157 \\ {[4.76]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.287 \\ {[7.30]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.239 \\ {[7.91]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.371 \\ {[9.12]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.081 \\ {[2.66]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.175 \\ {[15.67]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.062 \\ {[2.05]^{* *}} \end{gathered}$ | $\begin{gathered} -0.296 \\ {[12.64]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.031 \\ & {[1.36]} \end{aligned}$ | $\begin{gathered} -0.158 \\ {[4.47]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.021 \\ & {[0.73]} \end{aligned}$ |
| $\begin{gathered} 5 \mathrm{hh} \\ \text { members } \end{gathered}$ | $\begin{gathered} -0.120 \\ {[23.35]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.138 \\ {[4.54]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.243 \\ {[9.20]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.113 \\ {[3.93]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.244 \\ {[5.33]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.218 \\ {[4.71]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.351 \\ {[6.35]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.120 \\ {[3.46]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.126 \\ {[10.25]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.120 \\ {[1.78]^{*}} \end{gathered}$ | $\begin{gathered} -0.243 \\ {[9.46]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.017 \\ {[0.68]} \end{gathered}$ | $\begin{gathered} -0.176 \\ {[4.55]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.014 \\ {[0.46]} \end{gathered}$ |
| $\begin{aligned} & 6 \mathrm{hh} \\ & \text { members } \end{aligned}$ | $\begin{gathered} -0.165 \\ {[34.60]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.135 \\ {[4.16]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.286 \\ {[12.43]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.160 \\ {[5.58]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.346 \\ {[8.74]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.276 \\ {[9.55]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.427 \\ {[10.69]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.105 \\ {[3.07]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.182 \\ {[17.23]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.114 \\ {[3.41]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.311 \\ {[14.51]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.046 \\ {[1.85]^{*}} \end{gathered}$ | $\begin{gathered} -0.254 \\ {[6.99]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.058 \\ {[1.83]^{*}} \end{gathered}$ |
| $\begin{aligned} & 7 \mathrm{hh} \\ & \text { members } \end{aligned}$ | $\begin{gathered} -0.191 \\ {[39.99]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.177 \\ {[5.38]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.300 \\ {[13.13]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.176 \\ {[5.90]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.348 \\ {[8.73]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.301 \\ {[10.68]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.434 \\ {[11.08]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.164 \\ {[4.82]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.198 \\ {[18.41]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.170 \\ {[4.53]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.318 \\ {[14.97]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.054 \\ {[2.17]^{* *}} \end{gathered}$ | $\begin{gathered} -0.256 \\ {[6.92]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.051 \\ & {[1.58]} \end{aligned}$ |
| Densly populated area | $\begin{gathered} -0.021 \\ {[15.05]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.017 \\ {[1.86]^{*}} \end{gathered}$ | $\begin{aligned} & 0.007 \\ & {[1.04]} \end{aligned}$ | $\begin{aligned} & -0.016 \\ & {[1.58]} \end{aligned}$ | $\begin{aligned} & 0.018 \\ & {[1.41]} \end{aligned}$ | $\begin{gathered} -0.044 \\ {[6.80]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.058 \\ {[6.69]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.074 \\ {[7.84]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.023 \\ {[4.80]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.027 \\ {[2.89]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.014 \\ {[2.21]^{* *}} \end{gathered}$ | $\begin{aligned} & -0.020 \\ & {[1.21]} \end{aligned}$ | $\begin{gathered} -0.005 \\ {[0.38]} \end{gathered}$ | $\begin{aligned} & 0.000 \\ & {[0.00]} \end{aligned}$ |

[^10]Table A2 (Continued). Change in the probability of receiving contributory-benefits: individual probit regression

|  | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) | (27) | (28) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IS | IT | L | L | $\mathrm{LV}^{+}$ | NO | P | PT | SE | SK | UK | $\mathrm{SI}^{+}$ | N | UK |
| EU25 Migrant | -0.023 | -0.107 | ${ }^{-157}$ | -0.040 |  | -0.038 | 0.180 | - 123 | ${ }^{-0.180}$ | 0.122 | 0.003 |  | 0.004 | 0.004 |
|  | [0.63 | [3.5 | [2.35]** | [4. |  | [1.45] | [2. | [2. | [7.81] | [2.08]** | [0.08] |  | .08] | [0.15] |
| $\begin{gathered} \text { Extra EU25 } \\ \text { Migrant } \end{gathered}$ | $\begin{gathered} -0.025 \\ {[2.64]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.007 \\ {[0.52]} \end{gathered}$ | $\begin{aligned} & 0.042 \\ & {[0.99]} \end{aligned}$ | $\begin{gathered} -0.103 \\ {[5.61]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.034 \\ {[2.69]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.201 \\ {[6.79]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.229 \\ {[3.90]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.116 \\ {[4.02]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.245 \\ {[11.65]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.227 \\ {[3.35]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.161 \\ {[8.21]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.009 \\ & {[1.00]} \end{aligned}$ | $\begin{gathered} -0.128 \\ {[1.83]^{*}} \end{gathered}$ | $\begin{gathered} -0.141 \\ {[7.98] * * *} \end{gathered}$ |
|  | $\begin{gathered} -0.015 \\ {[2.08]^{* *}} \end{gathered}$ | $\begin{gathered} 0.159 \\ {[41.10]^{*} *} \end{gathered}$ | $\begin{gathered} -0.048 \\ {[4.74]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.188 \\ {[19.18]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.057 \\ {[5.65]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.033 \\ {[5.23]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.056 \\ 12.51]^{* *} \end{gathered}$ | $\begin{aligned} & 0.100 \\ & {[4.80]^{* * *}} \end{aligned}$ | $\begin{gathered} -0.003 \\ {[0.49]} \end{gathered}$ | $\begin{gathered} -0.045 \\ {[6.28]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.106 \\ & 14.38]^{* * *} \end{aligned}$ | $\begin{gathered} -0.037 \\ {[7.09] * *} \end{gathered}$ | $\begin{gathered} 0.134 \\ 10.90]^{* * *} \end{gathered}$ | $\begin{aligned} & 0.107 \\ & 5.86]^{* * *} \end{aligned}$ |
| Age | $\begin{gathered} {[2.08]^{* *}} \\ -0.016 \\ {[13.55]^{* *}} \end{gathered}$ | $\begin{gathered} {[-0.024} \\ {[31.60]^{* * *}} \end{gathered}$ | $\begin{gathered} {[4.14]} \\ -0.029 \\ {[13.72]^{* * *}} \end{gathered}$ | $\begin{gathered} {[19.18]^{*}} \\ {[3.007} \\ {[3.46 * *} \end{gathered}$ | $\begin{gathered} {[0.036} \\ {[16.59]^{* * *}} \end{gathered}$ | $0.014$ | $\begin{gathered} -0.009 \\ {[7.44] * *} \end{gathered}$ | $-0.006$ $[4.91]^{* * *}$ | $0.019$ 19.21]*** | $\begin{aligned} & {[0.28]^{m}} \\ & -0.010 \\ & {[6.28]^{* * *}} \end{aligned}$ | $-0.034$ | $-0.008$ $[6.00] * * *$ | $\begin{gathered} -0.026 \\ 12.47]^{* * *} \end{gathered}$ | $-0.034$ <br> 20.90]*** |
| Age^2 | $\begin{gathered} 0.000 \\ {[24.27] *} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[51.51]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.001 \\ {[25.47] * * *} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[11.30] *:} \end{gathered}$ | $\begin{gathered} 0.001 \\ {[26.89]^{* * *}} \end{gathered}$ |  | $\begin{gathered} 0.000 \\ {[24.74]^{*}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[18.56]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[5.79] * * *} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[19.41]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.001 \\ 30.683^{* * *} \end{gathered}$ | $\begin{aligned} & 0.000 \\ & 0.591 * * \end{aligned}$ | $\begin{gathered} 0.000 \\ 21.077^{* * *} \end{gathered}$ | $\begin{aligned} & 0.001 \\ & 33.38]^{* * *} \end{aligned}$ |
| Secondary Educatio | -0.015 <br> [2.09]** | $\begin{gathered} -0.048 \\ {[11.41]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.046 \\ {[3.33]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.016 \\ {[1.72]^{*}} \end{gathered}$ | $\begin{aligned} & -0.001 \\ & {[0.10]} \end{aligned}$ | $\begin{gathered} -0.027 \\ {[3.10]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.037 \\ {[6.70] * * *} \end{gathered}$ | $\begin{gathered} -0.031 \\ {[2.78]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.077 \\ {[10.17]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.092 \\ {[9.24]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.010 \\ & {[1.21]} \end{aligned}$ | $\begin{gathered} 0.043 \\ {[6.90]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.048 \\ {[3.77]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.008 \\ & {[1.08]} \end{aligned}$ |
| Tertiary Educatio | $\begin{gathered} -0.039 \\ {[3.21]^{*} *} \end{gathered}$ | $\begin{gathered} -0.061 \\ {[9.01]^{* *}} \end{gathered}$ | $-0.005$ | $\begin{array}{r} -0.035 \\ {[2.69]^{* *}} \end{array}$ | $\begin{gathered} -0.034 \\ {[1.93]^{*}} \end{gathered}$ | $\begin{gathered} -0.097 \\ {[9.75]^{*}} \end{gathered}$ | $\begin{gathered} 0.025 \\ 2.76]^{* *} \end{gathered}$ | $0.065$ | $\begin{gathered} 0.030 \\ 3.37]^{* *} \end{gathered}$ | $\begin{gathered} 0.071 \\ 5.04]^{* *} \end{gathered}$ | $\begin{gathered} -0.002 \\ {[0.24]} \end{gathered}$ | $\begin{gathered} 0.084 \\ 7.71]^{* *} \end{gathered}$ | $\begin{gathered} 0.059 \\ {[3.75]^{* *}} \end{gathered}$ | $0.008$ [0.90] |
| High | -0.177 | -0.196 | 140 | -0.191 | -0.010 | -0.384 | -0.310 | -0.148 | -0.316 | -0.231 | -0.127 | 0.216 | -0.301 | 0.122 |
| inctrater transfers) | [18.49]*** | [34.62]*** | [8.43]*** | [14.10]*** | [0.67] | [43.58]*** | [38.46]*** | [13.79]*** | [40.12]*** | [21.19]*** | [12.80]*** | [28.17]*** | [18.49]*** | [13.34]*** |
| Low income (b.t) | $\begin{gathered} 0.206 \\ {[22.04]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.024 \\ {[4.46]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.312 \\ {[20.88]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.228 \\ {[17.62]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.209 \\ {[15.35]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.146 \\ {[16.22]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.178 \\ {[23.82]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.247 \\ {[27.87]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.201 \\ {[25.16] * * *} \end{gathered}$ | $\begin{gathered} 0.204 \\ {[19.45]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.306 \\ {[34.36]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.081 \\ {[11.27]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.032 \\ {[1.99]^{* *}} \end{gathered}$ | $\begin{gathered} 0.321 \\ {[39.42]^{* * *}} \end{gathered}$ |
| House Owner | $\begin{gathered} -0.088 \\ {[7.41]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.001 \\ & {[0.21]} \end{aligned}$ | $\begin{gathered} 0.090 \\ {[2.55]^{* *}} \end{gathered}$ | $\begin{aligned} & 0.008 \\ & {[0.65]} \end{aligned}$ | $\begin{gathered} -0.050 \\ {[3.81]^{*} * *} \end{gathered}$ | $\begin{gathered} 0.029 \\ {[2.77] * * *} \end{gathered}$ | $\begin{aligned} & -0.020 \\ & {[1.53]} \end{aligned}$ | $\begin{gathered} -0.025 \\ {[2.91]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.021 \\ {[3.14]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.005 \\ & {[0.42]} \end{aligned}$ | $\begin{gathered} -0.100 \\ {[11.27]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.001 \\ & {[0.07]} \end{aligned}$ | $\begin{gathered} -0.045 \\ {[3.70]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.093 \\ {[11.53]^{* * *}} \end{gathered}$ |
| Single | $\begin{aligned} & 0.021 \\ & {[0.96]} \end{aligned}$ | $\begin{gathered} 0.056 \\ {[5.21]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.027 \\ {[0.88]} \end{gathered}$ | $\begin{gathered} 0.104 \\ {[3.71]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.104 \\ & {[3.92]^{* * *}} \end{aligned}$ | $\begin{aligned} & -0.011 \\ & {[0.60]} \end{aligned}$ | $\begin{gathered} 0.066 \\ {[4.53] * * *} \end{gathered}$ | $\begin{gathered} 0.147 \\ {[6.66]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.313 \\ {[16.99]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.019 \\ {[0.80]} \end{gathered}$ | $\begin{gathered} 0.102 \\ {[4.45]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.190 \\ {[8.18]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.037 \\ & {[0.61]} \end{aligned}$ | $\begin{gathered} 0.125 \\ {[5.75] * * *} \end{gathered}$ |
| Single with child | $\begin{gathered} 0.147 \\ {[6.85]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.098 \\ {[8.02]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.232 \\ {[10.39]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.300 \\ {[9.80] * * *} \end{gathered}$ | $\begin{gathered} 0.102 \\ {[4.27]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.067 \\ {[3.84]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.234 \\ {[17.55]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.206 \\ {[8.68]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.022 \\ {[1.44]} \end{gathered}$ | $\begin{gathered} 0.147 \\ {[6.66]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.043 \\ {[1.95]^{*}} \end{gathered}$ | $\begin{gathered} 0.056 \\ {[3.14]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.025 \\ & {[0.55]} \end{aligned}$ | $\begin{gathered} 0.044 \\ {[2.14] * *} \end{gathered}$ |
| 1 child | $-0.022$ <br> [1.68]* | $\begin{gathered} -0.102 \\ {[12.35]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.061 \\ {[2.38] * *} \end{gathered}$ | $\begin{gathered} -0.078 \\ {[4.67] * * *} \end{gathered}$ | $-0.085$ <br> [3.63]*** | $\begin{gathered} -0.104 \\ {[7.80]^{* *}} \end{gathered}$ | $-0.047$ <br> [4.36]*** | $\begin{gathered} -0.072 \\ {[5.19]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.076 \\ {[5.64] * *} \end{gathered}$ | $\begin{gathered} -0.056 \\ {[3.41] * * *} \end{gathered}$ | $\begin{gathered} -0.073 \\ {[3.54]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.050 \\ {[4.43]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.064 \\ {[3.03] * * *} \end{gathered}$ | $\begin{gathered} -0.066 \\ {[3.22]^{* * *}} \end{gathered}$ |
| 2 children | $\begin{gathered} -0.042 \\ {[3.44]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.089 \\ {[10.29]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.046 \\ {[3.01]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.054 \\ {[3.28]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.027 \\ & {[1.59]} \end{aligned}$ | $\begin{gathered} -0.096 \\ {[7.96]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.057 \\ {[8.37]^{* * *}} \end{gathered}$ | $\begin{gathered} {[0.19] 4} \\ -0.074 \\ {[5.85] * * *} \end{gathered}$ | $\begin{gathered} -0.046 \\ {[3.92]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.052 \\ {[4.79]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.099 \\ {[6.81]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.041 \\ {[4.88]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.080 \\ {[1.78]^{*}} \end{gathered}$ | $\begin{gathered} -0.091 \\ {[6.69] * * *} \end{gathered}$ |
| 3 children | $\begin{aligned} & 0.049 \\ & {[0.50]} \end{aligned}$ | $\begin{aligned} & 0.035 \\ & {[0.20]} \end{aligned}$ |  | $\begin{aligned} & 0.067 \\ & {[0.43]} \end{aligned}$ |  | $\begin{gathered} -0.118 \\ {[1.09]} \end{gathered}$ | $\begin{aligned} & 0.022 \\ & {[0.21]} \end{aligned}$ |  | $\begin{aligned} & 0.045 \\ & {[0.62]} \end{aligned}$ | $\begin{gathered} -0.141 \\ {[1.25]} \end{gathered}$ | $\begin{aligned} & 0.065 \\ & {[0.39]} \end{aligned}$ | $\begin{gathered} -0.105 \\ {[0.68]} \end{gathered}$ |  | $\begin{gathered} 0.074 \\ 0.44] \end{gathered}$ |
| 4+ children 2 household member | $\begin{gathered} -0.065 \\ {[0.55]} \end{gathered}$ | $\begin{gathered} -0.156 \\ {[1.93]^{*}} \end{gathered}$ | $\begin{gathered} 0.304 \\ {[2.31]^{* *}} \end{gathered}$ |  | $\begin{aligned} & 0.006 \\ & {[0.05]} \end{aligned}$ | $\begin{gathered} -0.300 \\ {[2.58]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.064 \\ & {[1.07]} \end{aligned}$ |  | $\begin{gathered} -0.228 \\ {[3.12]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.178 \\ {[2.25]^{* *}} \end{gathered}$ |  | $\begin{aligned} & 0.032 \\ & {[0.22]} \end{aligned}$ |  |  |
|  | $\begin{gathered} -0.088 \\ {[3.86]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.040 \\ {[3.46]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.038 \\ & {[0.95]} \end{aligned}$ | $\begin{gathered} -0.051 \\ {[1.92]^{*}} \end{gathered}$ | $\begin{gathered} -0.070 \\ {[2.21]^{* *}} \end{gathered}$ | $\begin{gathered} -0.113 \\ {[5.66]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.039 \\ {[2.02]^{* *}} \end{gathered}$ | $\begin{aligned} & -0.037 \\ & {[1.59]} \end{aligned}$ | $\begin{gathered} -0.239 \\ {[12.39]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.072 \\ {[2.46]^{* *}} \end{gathered}$ | $\begin{gathered} -0.008 \\ {[0.34]} \end{gathered}$ | $\begin{gathered} -0.153 \\ {[4.84]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.060 \\ & {[1.05]} \end{aligned}$ | $\begin{aligned} & 0.003 \\ & {[0.13]} \end{aligned}$ |
| s 3 mernber | $\begin{gathered} -0.121 \\ {[5.16]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.064 \\ {[4.88]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.056 \\ & -[1.24] \end{aligned}$ | $\begin{aligned} & -0.049 \\ & {[1.63]} \end{aligned}$ | $\begin{gathered} -0.102 \\ {[2.77] * * *} \end{gathered}$ | $\begin{gathered} -0.157 \\ {[6.54]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.050 \\ {[2.34]^{* *}} \end{gathered}$ | $\begin{gathered} -0.070 \\ {[2.89]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.384 \\ {[16.44] * * *} \end{gathered}$ | $\begin{gathered} -0.133 \\ {[4.24]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.065 \\ {[2.21]^{* *}} \end{gathered}$ | $\begin{gathered} -0.243 \\ {[7.61]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.105 \\ & {[1.88]^{*}} \end{aligned}$ | $\begin{gathered} -0.054 \\ {[1.89]^{*}} \end{gathered}$ |
| $\stackrel{4}{\text { member }}$ | $\begin{gathered} -0.153 \\ {[5.13]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.082 \\ {[5.28]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.084 \\ {[1.59]} \end{gathered}$ | $\begin{gathered} -0.110 \\ {[3.07]^{*} * *} \end{gathered}$ | $\begin{gathered} -0.122 \\ {[2.75]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.165 \\ {[5.46]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.065 \\ {[2.86]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.085 \\ {[3.03] * * *} \end{gathered}$ | $\begin{gathered} -0.468 \\ {[15.29] * * *} \end{gathered}$ | $\begin{gathered} -0.162 \\ {[4.73] * * *} \end{gathered}$ | $\begin{gathered} -0.031 \\ {[0.77]} \end{gathered}$ | $\begin{gathered} -0.284 \\ {[8.41]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.134 \\ {[2.37]^{* *}} \end{gathered}$ | $\begin{aligned} & -0.022 \\ & {[0.57]} \end{aligned}$ |
| S 5 member | $\begin{gathered} -0.121 \\ {[4.26]^{*} *} \end{gathered}$ | $\begin{gathered} -0.095 \\ {[5.37] * * *} \end{gathered}$ | $-0.057$ $[0.99]$ | $-0.084$ $[2.19]^{* *}$ | $-0.083$ | $\begin{gathered} -0.156 \\ {[4.05]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.095 \\ {[4.01]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.080 \\ & {[2.68]^{* * *}} \end{aligned}$ | $\begin{gathered} -0.435 \\ {[13.03] * * *} \end{gathered}$ | $\begin{gathered} -0.157 \\ {[4.57]^{* * *}} \end{gathered}$ | $-0.077$ | $\begin{gathered} -0.303 \\ {[9.53]^{* * *}} \end{gathered}$ | $-0.114$ | $-0.081$ |
| $\begin{gathered} 6 \\ \text { member } \end{gathered}$ | $\begin{gathered} -0.165 \\ {[5.75]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.101 \\ {[5.82]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.083 \\ {[1.51]} \end{gathered}$ | $\begin{gathered} -0.119 \\ {[3.53] * * *} \end{gathered}$ | $\begin{gathered} -0.196 \\ {[4.26] * * *} \end{gathered}$ | $\begin{gathered} -0.224 \\ {[6.97]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.066 \\ {[2.81]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.123 \\ {[4.29]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.526 \\ {[17.81] * * *} \end{gathered}$ | $\begin{gathered} -0.207 \\ {[5.99] * * *} \end{gathered}$ | $\begin{aligned} & -0.051 \\ & {[1.22]} \end{aligned}$ | $\begin{gathered} -0.369 \\ {[11.13]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.028 \\ {[0.27]} \end{gathered}$ | $\begin{aligned} & -0.045 \\ & {[1.11]} \end{aligned}$ |
| s 7 member | $\begin{gathered} -0.172 \\ {[6.29]^{* *}} \end{gathered}$ | $\begin{gathered} -0.128 \\ {[7.25]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.126 \\ {[2.36]^{* *}} \end{gathered}$ | $\begin{gathered} -0.124 \\ {[3.62]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.183 \\ {[3.87] * * *} \end{gathered}$ | $\begin{gathered} -0.253 \\ {[7.79]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.091 \\ {[3.87]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.145 \\ {[5.17]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.550 \\ {[21.17] * * *} \end{gathered}$ | $\begin{gathered} -0.247 \\ {[7.02]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.074 \\ {[1.75]^{*}} \end{gathered}$ | $\begin{gathered} -0.420 \\ {[12.83]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.004 \\ & {[0.02]} \end{aligned}$ | $\begin{aligned} & -0.073 \\ & {[1.83]^{*}} \end{aligned}$ |
| Densly populated area | $\begin{gathered} -0.017 \\ {[2.42]^{* *}} \end{gathered}$ | $\begin{gathered} -0.038 \\ {[9.42]^{* * *}} \end{gathered}$ |  | $\begin{gathered} 0.034 \\ {[3.48]^{* * *}} \end{gathered}$ |  | $\begin{gathered} -0.040 \\ {[4.68]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.010 \\ & {[1.43]} \end{aligned}$ | $\begin{gathered} 0.029 \\ {[3.70]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.021 \\ {[2.15]^{* *}} \end{gathered}$ | $\begin{gathered} -0.036 \\ {[4.29]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.026 \\ {[3.07]^{* * *}} \end{gathered}$ |  |  |  |

[^11]|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All | AT | BE | CY | CZ | DE | DK | EE | ES | FI | FR | GR | HU | IE |
| EU25 Migrant House | 0.062 | -0.023 | -0.046 | -0.391 | -0.261 |  | 0.005 |  | -0.054 | -0.141 | 0.034 | -0.055 | -0.123 | -0.168 |
|  | [5.07]*** | [0.53] | [2.37]** | [11.63]*** | [6.74]*** |  | [0.06] |  | [3.76]*** | [2.00]** | [1.35] | [1.66]* | [1.55] | [5.21]*** |
| Extra EU25 Migrant House | $\begin{gathered} -0.041 \\ {[5.22]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.073 \\ {[3.33] * * *} \end{gathered}$ | $\begin{gathered} 0.097 \\ {[2.90]^{* *}} \end{gathered}$ | $\begin{gathered} -0.506 \\ {[11.00]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.222 \\ {[4.34]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.179 \\ {[3.73]^{* *}} \end{gathered}$ | $\begin{aligned} & 0.067 \\ & {[1.42]} \end{aligned}$ | $\begin{gathered} -0.068 \\ {[3.68]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.018 \\ & {[2.17]^{* *}} \end{aligned}$ | $\begin{gathered} 0.162 \\ {[2.62] * *} \end{gathered}$ | $\begin{gathered} 0.295 \\ {[10.13]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.059 \\ {[3.84]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.258 \\ {[2.39]^{* *}} \end{gathered}$ | $\begin{aligned} & -0.038 \\ & {[0.80]} \end{aligned}$ |
| MixedHousehold | 0.050 | 0.002 | 0.037 | -0.115 | -0.014 | 0.032 | 0.060 | 0.046 | 0.004 | -0.005 | 0.130 | 0.009 | 0.248 | 0.06 |
|  | [6.76]*** | [0.07] | [2.10]** | [4.74]*** | [0.25] | [1.29] | [2.61]*** | [2.04]** | [0.29] | [0.14] | $[6.41]^{* * *}$ | [0.42] | [3.03]*** | [2.96]*** |
| Male | 0.000 | 0.004 | -0.018 | 0.052 | 0.003 | -0.004 | -0.100 | 0.024 | -0.004 | -0.035 | -0.021 | -0.052 | -0.013 | -0.017 |
|  | [0.13] | [0.25] | [1.49] | [2.11]** | [0.16] | [0.25] | [6.92]*** | [1.58] | [0.87] | [2.96]*** | [2.11]** | [6.04]*** | [0.85] | [1.34] |
| Age | 0.001 | 0.027 | 0.039 | -0.007 | 0.029 | 0.042 | -0.021 | 0.015 | 0.002 | -0.001 | 0.003 | -0.010 | 0.004 | -0.024 |
|  | [2.58]*** | [9.45]*** | [9.66]*** | [2.36]** | [8.45]*** | $[14.09]^{* * *}$ | [7.96]*** | [4.53]*** | [2.97]*** | [0.30] | [1.86]* | [8.53]*** | [1.35] | [12.88]*** |
| Age^2 | $\begin{gathered} 0.000 \\ {[23.89]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.000 \\ & {[13.15]^{* * *}} \end{aligned}$ | $\begin{gathered} -0.001 \\ {\left[1.441^{* * *}\right.} \end{gathered}$ | $0.000$ | $\begin{gathered} 0.000 \\ {[11.95]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.001 \\ {[18.90]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[3.79]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[8.17]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[7.11]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[7.86]^{* *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[10.86]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[8.48]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[7.29] * *} \end{gathered}$ | $\begin{aligned} & 0.000 \\ & {[13.73]^{* * *}} \end{aligned}$ |
| Secondary Education | -0.057 | 0.037 | 0.016 | 0.027 | -0.081 | -0.063 | 0.003 | 0.051 | 0.006 | -0.023 | -0.033 | -0.043 | -0.031 | 0.017 |
|  | [21.58]*** | [2.60]*** | [1.58] | [1.91]* | [3.41]*** | [3.71]*** | [0.22] | $[2.70]^{* * *}$ | [1.60] | [2.13]** | [3.99]*** | [6.10]*** | [2.35]** | [1.48] |
| Tertiary Education | $\begin{gathered} -0.046 \\ {[14.95]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.103 \\ {[6.22]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.031 \\ {[2.89]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.026 \\ & {[11.58]} \end{aligned}$ | $\begin{gathered} -0.126 \\ {[5.22]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.031 \\ & {[1.79]^{*}} \end{aligned}$ | $\begin{gathered} 0.065 \\ {[4.58]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.079 \\ {[3.56]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.017 \\ {[4.62]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.017 \\ & {[1.46]} \end{aligned}$ | $\begin{gathered} -0.034 \\ {[3.29]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.022 \\ {[2.66]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.033 \\ {[1.92]^{*}} \end{gathered}$ | $\begin{gathered} -0.020 \\ {[1.71]^{*}} \end{gathered}$ |
| High income (before transfers) | -0.160 | -0.190 | -0.048 | -0.122 | -0.218 | -0.256 | -0.178 | -0.088 | -0.018 | -0.190 | -0.207 | -0.027 | -0.149 | -0.148 |
|  | [64.38]*** | [19.64]*** | [5.52]*** | [8.36]*** | [19.46]*** | [29.44]*** | [16.03]*** | [7.00]*** | [5.36]*** | [20.03]*** | [24.11]*** | [3.71]*** | [11.30]*** | [12.58]*** |
| Low income (b.t) | 0.049 | 0.000 | 0.009 | 0.054 | 0.077 | 0.036 | 0.157 | 0.115 | 0.018 | 0.239 | 0.115 | 0.052 | 0.073 | 0.156 |
|  | [15.78]*** | [0.02] | [0.72] | [2.96]** | [4.60]*** | [2.88]*** | [10.85]*** | [6.35]*** | [4.43]*** | [20.29]*** | [10.98]*** | [6.25]*** | [4.66]*** | [11.48]*** |
| House Owner | -0.092 | 0.024 | 0.025 | 0.105 | -0.044 | -0.015 | -0.265 | -0.002 | 0.001 | -0.241 | -0.222 | -0.026 | -0.006 | 0.020 |
|  | [33.07]*** | [2.19]** | [2.44]** | [4.82]*** | [3.35]*** | [1.78]* | [22.35]*** | [0.07] | [0.18] | [20.43]*** | [27.17]*** | [2.92]*** | [0.27] | [1.47] |
| Single | -0.227 | -0.335 | -0.262 | -0.376 | -0.250 | -0.047 | 0.041 | -0.395 | -0.037 | -0.066 | -0.212 | -0.082 | -0.400 | -0.453 |
|  | [40.10]*** | [11.50]*** | [12.14]*** | [8.19]*** | [8.65]*** | [1.37] | [0.30] | [16.21]*** | [6.04]*** | [1.72]* | [9.27]*** | [6.02]*** | [13.23]*** | [14.13]*** |
| Single with child | 0.226 | 0.402 | 0.367 | 0.026 | 0.314 | 0.593 | 0.430 | 0.285 | 0.030 | 0.440 | 0.186 | -0.012 | 0.313 | 0.121 |
|  | [25.51]*** | [7.44]*** | [8.26]*** | [0.37] | [5.91]*** | [9.52]*** | [3.90]*** | [6.94]*** | [2.87]*** | [9.58]*** | [6.81]*** | [0.47] | [5.88]*** | [2.62]*** |
| 1 child | 0.281 | 0.545 | 0.635 | 0.276 | 0.352 | 0.441 | 0.342 | 0.453 | 0.055 | 0.370 | 0.346 | 0.014 | 0.470 | 0.287 |
|  | [44.65]*** | [16.18]*** | [15.50]*** | [9.21]*** | [10.37]*** | [8.59]*** | [4.00]*** | [16.32]*** | [7.34]*** | [14.11]*** | [16.56]*** | [0.99] | [14.01]*** | [17.98]*** |
| 2 children | $\begin{gathered} 0.289 \\ {[46.00]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.649 \\ {[14.72]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.542 \\ {[12.29]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.289 \\ {[11.73]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.371 \\ {[11.68]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.404 \\ {[8.07]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.353 \\ {[4.28]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.549 \\ {[14.17]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.058 \\ {[7.23]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.316 \\ {[12.74]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.394 \\ {\left[16.081^{* * *}\right.} \end{gathered}$ | $0.022$ | $\begin{gathered} 0.512 \\ {[16.70]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.283 \\ {[16.18]^{* *}} \end{gathered}$ |
| 3 children | $\begin{gathered} 0.457 \\ {[5.34]^{* * *}} \end{gathered}$ |  |  |  |  |  |  |  | $\begin{aligned} & 0.241 \\ & {[1.27]} \end{aligned}$ |  |  |  |  |  |
| 4+ children | $\begin{gathered} 0.507 \\ {[5.53]^{* * *}} \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 household members | $\begin{gathered} -0.053 \\ {[8.09]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.082 \\ {[2.33]^{* *}} \end{gathered}$ | $\begin{gathered} -0.014 \\ {[0.52]} \end{gathered}$ | $\begin{gathered} -0.155 \\ {[3.17]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.052 \\ {[1.36]} \end{gathered}$ | $\begin{gathered} 0.238 \\ {[6.58]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.268 \\ {[1.97]^{* *}} \end{gathered}$ | $\begin{gathered} -0.121 \\ {[4.49]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.013 \\ {[2.12]^{* *}} \end{gathered}$ | $\begin{gathered} 0.166 \\ {[4.24]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.127 \\ {[5.28]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.051 \\ {[3.13]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.281 \\ {[7.75]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.206 \\ {[7.11]^{* * *}} \end{gathered}$ |
| 3 hh members | -0.023 | -0.092 | 0.014 | -0.225 | -0.082 | 0.531 | 0.462 | -0.118 | 0.010 | 0.325 | -0.137 | -0.053 | -0.288 | -0.406 |
|  | [2.89]*** | [2.40]** | [0.43] | [3.82]*** | [1.95]* | $[12.57]^{* * *}$ | [3.82]*** | [4.03]*** | [1.36] | [7.25]*** | [4.59]*** | [3.10]*** | [7.57]*** | [10.01]*** |
| 4 hh members | -0.006 | -0.014 | 0.070 | -0.147 | 0.016 | 0.515 | 0.587 | -0.077 | 0.029 | 0.432 | -0.127 | -0.025 | -0.331 | -0.345 |
|  | [0.58] | [0.25] | [1.58] | [2.10]** | [0.27] | [8.02]*** | [2.69]*** | [2.11]** | [3.51]*** | [6.46]*** | [3.05]*** | [1.05] | [6.14]*** | [6.50]*** |
| 5 hh members | 0.041 | 0.046 | 0.226 | -0.128 | 0.135 | 0.575 |  | -0.085 | 0.011 | 0.491 | -0.014 | 0.150 | -0.180 | -0.374 |
|  | [2.86]*** | [0.71] | [2.58]*** | [1.40] | [1.53] | [5.67]*** |  | [1.67]* | [0.84] | [8.14]*** | [0.22] | [4.09]*** | [2.68]*** | [5.80]*** |
| 6 hh members | 0.070 | -0.072 | 0.122 | -0.097 | -0.022 | 0.677 | 0.537 | -0.097 | 0.036 | 0.525 | -0.123 | -0.058 | -0.319 | -0.554 |
|  | [5.83]*** | [1.26] | [2.36]** | [1.28] | [0.35] | [12.90]*** | [3.80]*** | [2.32]** | [3.37]*** | [9.42]*** | [2.66] ${ }^{* * *}$ | [2.42]** | [6.16]*** | [9.02]*** |
| 7 hh membe | $\begin{gathered} 0.155 \\ {[11.92]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.120 \\ {[1.79]^{*}} \end{gathered}$ | $\begin{gathered} 0.425 \\ {[6.89]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.052 \\ & {[0.74]} \end{aligned}$ | $\begin{aligned} & 0.060 \\ & {[0.86]} \end{aligned}$ | $\begin{gathered} 0.680 \\ {[14.88]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.516 \\ {[5.00]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.032 \\ & {[0.69]} \end{aligned}$ | $\begin{gathered} 0.078 \\ {[6.05]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.548 \\ {[11.75]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.078 \\ & {[1.45]} \end{aligned}$ | $\begin{aligned} & -0.003 \\ & {[0.12]} \end{aligned}$ | $\begin{gathered} -0.202 \\ {[3.49]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.453 \\ {[7.07]^{* * *}} \end{gathered}$ |

Notes: z statistics in brackets; * significant at 10percent; ** significant at 5percent; *** significant at 1percent; ${ }^{*}$ the EU-SILC does not distinguish between EU-25 and extra EU25 migrants; ${ }^{++}$migrants identified by country of birth; the EU-SILC does not distinguish between EU- 25 and extra EU- 25 migrants. Low income variable defined as equivalized income lower than 60 percent of median income; High income variable defined as equivailzed income greater than $4 / 3$ of median income.

Table A3 (Continued). Change in the probability of receiving non-contributory allowances: household probit regression

|  | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) | (27) | (28) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IS | IT | LT | LU | $\mathrm{LV}^{+}$ | NO | PL | PT | SE | SK | UK | $\mathrm{SI}^{+}$ | NL | UK |
| $\begin{aligned} & \text { EU25 Migrant } \\ & \text { House } \end{aligned}$ | -0.232 | -0.154 |  | 0.053 |  | -0.150 | 0.009 | -0.177 | -0.184 | -0.022 | -0.069 |  | 0.061 | -0.060 |
|  | [2.80]*** | [1.68]* |  | [2.62]*** |  | [3.84]*** | [0.06] | [1.50] | [3.90]*** | [0.21] | [0.75] |  | [0.56] | [0.95] |
| Extra EU25 Migrant House | -0.047 | -0.017 | -0.173 | 0.090 | -0.0 | 0.106 | -0.171 | -0.205 | 0.035 | 0.291 | -0.245 | . 006 | 0.421 | -0.229 |
|  | [1.11] | [1.19] | [2.21]** | [1.49] | [1.16] | [1.81]* | [1.93]* | [6.15]*** | [0.70] | [1.49] | [9.61]*** | [0.27] | [2.86]*** | [9.64]*** |
| Mixed Household | -0.020 | 0.058 | 0.054 | 0.025 | -0.010 | 0.101 | 0.016 | 0.123 | 0.059 | -0.049 | -0.020 | 0.083 | -0.013 | -0.014 |
|  | [0.58] | [2.45]** | [0.89] | [0.96] | [0.45] | [3.93]*** | [0.30] | [2.82]*** | [2.38]** | [0.78] | [0.78] | [5.55]*** | [0.26] | [0.59] |
| Male | $\begin{aligned} & -0.033 \\ & {[1.63]} \end{aligned}$ | $\begin{gathered} 0.087 \\ {[14.34]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.021 \\ & {[1.06]} \end{aligned}$ | $\begin{aligned} & -0.048 \\ & {[1.78]^{*}} \end{aligned}$ | $\begin{aligned} & -0.007 \\ & {[0.37]} \end{aligned}$ | $\begin{gathered} -0.088 \\ {[5.36]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.019 \\ {[2.12]^{* *}} \end{gathered}$ | $\begin{gathered} 0.004 \\ {[0.24]} \end{gathered}$ | $\begin{gathered} -0.138 \\ {[10.25]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.034 \\ {[1.66]^{*}} \end{gathered}$ | $\begin{gathered} -0.002 \\ {[0.11]} \end{gathered}$ | $\begin{gathered} -0.057 \\ {[4.08]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.059 \\ {[3.29]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.000 \\ & {[0.02]} \end{aligned}$ |
| Age | 0.014 | -0.007 | -0.013 | 0.048 | -0.011 | 0.007 | 0.007 | 0.022 | -0.016 | 0.008 | 0.028 | 0.027 | -0.008 | 0.029 |
|  | [4.15]*** | [6.95]*** | [4.47]*** | [8.96]*** | [3.47]*** | [2.17]** | [4.99]*** | [7.72]*** | [7.81]*** | [2.14]** | [14.49]*** | [9.95]*** | [2.43]** | [16.54]*** |
| Age^2 | $\begin{gathered} 0.000 \\ {[8.94]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[4.61]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.000 \\ & {[1.20]} \end{aligned}$ | $\begin{gathered} -0.001 \\ {[10.61]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.000 \\ & {[0.31]} \end{aligned}$ | $\begin{gathered} 0.000 \\ {[7.28]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[12.44]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[12.86]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.000 \\ & {[0.57]} \end{aligned}$ | $\begin{gathered} 0.000 \\ {[7.36]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[19.98]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[14.19]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.000 \\ & {[1.27]} \end{aligned}$ | $\begin{gathered} 0.000 \\ {[22.42]^{* * *}} \end{gathered}$ |
| Secondary Education | -0.011 | $\stackrel{-0.070}{[14.48 * * *}$ | 0.004 | -0.038 | 0.012 | $\stackrel{-0.056}{ }$ | -0.061 $[7.671 * * *$ | -0.012 | $\xrightarrow{-0.085}$ | -0.128 [5.24**** | $\stackrel{-0.067}{[6.64]^{* * *}}$ | ${ }_{-0.060}^{-0.66 * * *}$ | $\xrightarrow{-0.111}$ | -0.070 $-7.501 * * *$ |
|  | [0.70] | [14.48]*** | [0.21] | [2.08]** | [0.64] | [3.29]*** | [7.67]*** | [0.72] | [6.30]*** | [5.24]*** | [6.64]*** | [4.66]*** | [6.39]*** | [7.50]*** |
| Tertiary Education | $\begin{aligned} & 0.012 \\ & {[0.60]} \end{aligned}$ | $\begin{gathered} -0.096 \\ {[13.29]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.059 \\ {[2.41]^{* *}} \end{gathered}$ | $\begin{aligned} & -0.023 \\ & {[1.07]} \end{aligned}$ | $\begin{aligned} & 0.006 \\ & {[0.25]} \end{aligned}$ | $\begin{aligned} & -0.002 \\ & {[0.09]} \end{aligned}$ | $\begin{gathered} -0.176 \\ {[18.51]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.098 \\ {[6.24]^{* * *}} \end{gathered}$ | $\begin{aligned} & -0.022 \\ & {[1.52]} \end{aligned}$ | $\begin{gathered} -0.075 \\ {[2.74]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.068 \\ {[6.26]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.152 \\ {[9.25]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.061 \\ {[3.26]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.063 \\ {[6.26]^{* * *}} \end{gathered}$ |
| High income (before transfers) | -0.230 | -0.128 | -0.090 | -0.137 | -0.053 | -0.195 | -0.196 | -0.051 | -0.203 | -0.142 | -0.131 | -0.091 | -0.254 | -0.134 |
|  | [15.82]*** | [24.62]*** | [5.64]*** | [7.51]*** | [2.86]*** | [20.42]*** | [29.92]*** | [4.31]*** | [19.94]*** | [10.63]*** | [12.47]*** | [8.45]*** | [16.28]*** | [13.93]*** |
| Low income (b.t) | $\stackrel{0.085}{[4.48 * * *}$ | ${ }_{-0.025}^{-0.05)^{* * *}}$ | ${ }_{\text {0.097 }}^{\text {[5.14]*** }}$ | ${ }^{0.094}$ | 0.032 | ${ }^{0.223}$ | ${ }^{0.018}$ | ${ }_{-0.043}$ | 0.171 | ${ }^{0.039}$ | 0.190 | 0.012 | 0.135 | 0.188 |
|  | [4.48]*** | [3.95]*** | [5.14]*** | [3.31]*** | [1.55] | [15.46]*** | [2.22]** | [3.02]*** | [12.53]*** | [2.40]** | [14.18]*** | [0.90] | [6.29]*** | [15.33]*** |
| House Owner | $\begin{aligned} & 0.032 \\ & {[1.39]} \end{aligned}$ | $\begin{gathered} -0.052 \\ {[8.23]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.034 \\ {[0.78]} \end{gathered}$ | $\begin{aligned} & 0.034 \\ & {[1.55]} \end{aligned}$ | $\begin{aligned} & -0.010 \\ & {[0.49]} \end{aligned}$ | $\begin{gathered} -0.086 \\ {[4.36]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.060 \\ {[4.48]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.111 \\ {[8.45]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.064 \\ {[5.74]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.071 \\ {[3.74]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.297 \\ {[26.61]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.206 \\ {[8.53]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.144 \\ {[9.65]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.296 \\ {[28.71]^{* * *}} \end{gathered}$ |
| Single | -0.385 | -0.370 | -0.128 | -0.317 | -0.311 | -0.269 | -0.128 | -0.367 | 0.016 | -0.163 | -0.417 | -0.232 | 0.044 | -0.416 |
|  | [7.02]*** | [34.29]*** | [3.50]*** | [6.09]*** | [8.56]*** | [5.47]*** | [8.46]*** | [13.99]*** | [0.23] | [3.89]*** | [13.41]*** | [6.71]*** | [0.09] | [13.91]*** |
| Single with child | $\begin{gathered} 0.105 \\ {[1.93]^{*}} \end{gathered}$ | $\begin{aligned} & -0.007 \\ & {[0.38]} \end{aligned}$ | $\begin{aligned} & 0.060 \\ & {[1.38]} \end{aligned}$ | $\begin{gathered} 0.522 \\ {[8.19]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.228 \\ {[4.19]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.381 \\ {[6.72]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.152 \\ {[6.51]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.041 \\ & {[0.96]} \end{aligned}$ | $\begin{gathered} 0.277 \\ {[4.26]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.409 \\ {[5.70]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.218 \\ {[4.10]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.190 \\ {[4.55]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.516 \\ {[1.90]^{*}} \end{gathered}$ | $\begin{gathered} 0.193 \\ {[3.71]^{* * *}} \end{gathered}$ |
| 1 child | 0.027 | 0.133 | -0.011 | 0.449 | 0.390 | 0.543 | 0.151 | 0.328 | 0.450 | 0.460 | 0.499 | 0.374 | 0.521 | 0.498 |
|  | [0.92] | [10.89]*** | [0.38] | [7.52]*** | [10.20]*** | [10.49]*** | [10.04]*** | [12.31]*** | [8.74]*** | [13.90]*** | [15.26]*** | [17.08]*** | [12.40]*** | [15.26]*** |
| 2 children | $\begin{aligned} & 0.002 \\ & {[0.06]} \end{aligned}$ | $\begin{gathered} 0.193 \\ {[13.42]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.018 \\ {[0.81]} \end{gathered}$ | $\begin{gathered} 0.456 \\ {[8.92]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.385 \\ {[9.81]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.463 \\ {[10.90]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.139 \\ {[11.79]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.282 \\ {[8.94]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.420 \\ {[9.19]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.433 \\ {[15.69]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.463 \\ {[16.10]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.413 \\ {[21.15]^{* * *}} \end{gathered}$ |  | $\begin{gathered} 0.482 \\ {[19.05]^{* * *}} \end{gathered}$ |
| 3 children | $0.025$ $[0.11]$ |  |  |  |  |  | $\begin{aligned} & 0.154 \\ & {[1.06]} \end{aligned}$ |  |  |  |  |  |  |  |
| 4+ children |  |  |  |  |  |  | $\begin{gathered} 0.351 \\ {[1.75]^{*}} \end{gathered}$ |  |  |  |  |  |  |  |
| 2 household members | $\begin{gathered} -0.198 \\ {[3.51]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.135 \\ {[9.04]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.049 \\ {[1.21]} \end{gathered}$ | $\begin{aligned} & 0.037 \\ & {[0.60]} \end{aligned}$ | $\begin{gathered} -0.178 \\ {[4.38]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.108 \\ {[2.10]^{* *}} \end{gathered}$ | $\begin{aligned} & -0.013 \\ & {[0.68]} \end{aligned}$ | $\begin{gathered} -0.183 \\ {[4.55]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.216 \\ {[3.18]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.155 \\ {[3.28]^{* * *}} \end{gathered}$ | $\begin{gathered} -0.274 \\ {[7.67]^{* * *}} \end{gathered}$ | $\begin{aligned} & 0.029 \\ & {[0.70]} \end{aligned}$ | $\begin{aligned} & 0.256 \\ & {[0.51]} \end{aligned}$ | $\begin{gathered} -0.281 \\ {[8.17]^{* * *}} \end{gathered}$ |
| 3 hh members | -0.213 | -0.150 | -0.062 | 0.093 | -0.182 |  | $-0.013$ | -0.222 | 0.488 |  | -0.290 | 0.061 | 0.288 | -0.294 |
|  | [3.25]*** | [9.86]*** | [1.29] | [1.30] | [3.76]*** | [3.45]*** | [0.57] | [5.88]*** | [6.84]*** | [2.25]** | [7.65]*** | [1.35] | [0.61] | [8.12]*** |
| 4 hh members | -0.196 | -0.161 | 0,11 | 0.235 | -0.113 | 0.350 | 0.050 | -0.228 | 0.557 | 0.283 | -0.380 | 0.221 | 0.420 | -0.393 |
|  | [2.44]** | [8.00]*** | [1.71]* | [2.33]** | [1.74]* | [3.67]*** | [1.95]* | [4.99]*** | [4.82]*** | [4.85]*** | [6.21]*** | [4.65]*** | [1.03] | [6.48]*** |
| 5 hh members | -0.149 | -0.131 | 0.190 | 0.229 | ${ }^{0.006}$ | 0.345 | 0.168 | -0.197 | 0.503 | 0.287 | -0.280 | 0.273 | 0.461 | -0.267 |
|  | [1.79]* | [5.66]*** | [1.94]* | [1.90]* | [0.07] | [2.92]*** | [4.80]*** | [4.24]*** | [4.89]*** | [4.47]*** | [3.66]*** | [5.32]*** | [1.21] | [3.51]*** |
| 6 hh members | -0.139 | -0.199 | 0.106 | 0.253 | -0.041 | 0.500 | 0.064 | -0.210 | 0.576 | 0.319 | -0.336 | 0.246 |  | -0.347 |
|  | [1.57] | [10.54]*** | [1.46] | [2.35]** | [0.58] | [5.82]*** | [2.22]** | [4.66]*** | [7.06]*** | [5.46]*** | [6.07]*** | [4.84]*** |  | [6.59]*** |
| 7 hh members | -0.093 | -0.180 | 0.328 | 0.479 | 0.127 | 0.564 | 0.173 | -0.173 | 0.566 | 0.477 | -0.304 | 0.436 |  | -0.311 |
|  | [1.01] | [8.94]*** | [4.00]*** | [4.77]*** | [1.64] | [7.54]*** | [5.51]*** | [3.58]*** | [9.33]*** | [9.12]*** | [5.22]*** | [9.27]*** |  | [5.59]*** |

Table A4. Net fiscal position of Households: incidence of individual characteristics

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AT | BE | CZ | $\mathrm{DE}^{+}$ | DK | ES | FI | FR | HU |
| EU25 Migrant House | 1066.60 | 3809.16 | 766.27 |  | -461.78 | 688.76 | 16821.53 | 419.56 | -3003.70 |
|  | [0.80] | [2.49]** | [0.52] |  | [0.54] | [0.31] | [1.43] | [0.68] | [3.45]*** |
| Extra EU25 Migrant House | 1914.76 | 53182.25 | 243.87 | 746.16 | -4312.91 | 2147.91 | -4790.31 | -242.97 | 918.12 |
|  | [3.97]*** | [1.89]* | [0.37] | [0.89] | [6.30]*** | [3.80]*** | [5.86]*** | [0.45] | [1.36] |
| Mixed Household | 3582.30 | -756.34 | 326.59 | 546.81 | 794.38 | 1767.21 | -959.60 | 2080.39 | -356.84 |
|  | [4.77]*** | [0.96] | [0.38] | [0.55] | [1.03] | [1.44] | [1.67]* | [3.04]*** | [0.55] |
| Male | -745.13 | 3165.56 | -381.46 | -427.15 | 1065.55 | 89.70 | 358.94 | -615.70 | 195.58 |
|  | [2.17]** | [2.94]*** | [2.97]*** | [1.48] | [4.55]*** | [0.33] | [1.55] | [2.15]** | [1.24] |
| Age | 426.53 | 1790.33 | 116.78 | 580.75 | -68.60 | 359.06 | 462.74 | 613.59 | 148.52 |
|  | [10.16]*** | [6.02]*** | [6.60]*** | [14.47]*** | [2.10]** | [8.40]*** | [14.14]*** | [15.80]*** | [7.50]*** |
| Age^2 | -6.19 | -18.93 | -1.82 | -8.61 | -0.88 | -4.74 | -6.24 | -7.80 | -2.28 |
|  | [15.31]*** | [6.04]*** | [10.33]*** | [21.87]*** | [2.68]*** | [11.64]*** | [19.36]*** | [20.98]*** | [12.28]*** |
| Secondary Education | -1287.93 | 1088.56 | -412.74 | -1562.70 | 119.01 | -946.06 | 442.78 | -1958.79 | -569.21 |
|  | [4.89]*** | [0.87] | [3.20]*** | [5.65]*** | [0.64] | [3.34]*** | [2.10]** | [8.09]*** | [6.25]*** |
| Tertiary Education | 777.64 | 8448.16 | 1883.44 | -764.67 | 3907.77 | 942.27 | 5310.38 | 3915.59 | 3164.43 |
|  | [1.97]** | [4.41]*** | [8.13]*** | [2.47]** | [14.36]*** | [2.75]*** | [20.76]*** | [9.79]*** | [8.55]*** |
| High income (before transfers) | 21429.97 | 25663.52 | 6294.90 | 18918.46 | 21819.80 | 12044.18 | 23459.03 | 24047.17 | 7230.92 |
|  | [70.55]*** | [17.84]*** | [39.44]*** | [72.49]*** | [61.39]*** | [43.39]*** | [66.49]*** | [84.91]*** | [51.10]*** |
| Low income (b.t) | -16871.70 | -18974.00 | -5216.36 | -18478.10 | -20490.10 | -8108.95 | -17454.40 | -17868.50 | -2874.97 |
|  | [59.70]*** | [15.54]*** | [43.12]*** | [65.90]*** | [93.04]*** | [25.96]*** | [100.75]*** | [63.15]*** | [25.92]*** |
| House Owner | 1189.53 | 508.27 | -101.36 | 1222.47 | 2861.41 | 41.94 | 1894.42 | 1625.59 | 349.25 |
|  | [4.18]*** | [0.86] | [0.86] | [6.02]*** | [14.73]*** | [0.12] | [6.55]*** | [7.04]*** | [1.79]* |
| Single | -831.65 | -4001.83 | 312.12 | 1668.59 | 1367.93 | 2643.87 | -1004.11 | 901.20 | 249.78 |
|  | [1.04] | [1.36] | [0.98] | [2.48]** | [1.77]* | [4.70]*** | [0.87] | [1.50] | [0.80] |
| Single with child | -3492.02 | -932.98 | -895.28 | -2891.15 | -1215.39 | -162.38 | -4741.12 | -639.56 | -1783.64 |
|  | [3.94]*** | [0.46] | [3.08]*** | [4.84]*** | [1.62] | [0.28] | [5.68]*** | [1.09] | [5.55]*** |
| 1 child | 1996.15 | -1141.92 | 1025.19 | 1101.04 | 4111.16 | 3504.05 | 7504.46 | 2905.47 | 288.96 |
|  | [2.96]*** | [1.09] | [3.84]*** | [1.80]* | [5.54]*** | [7.79]*** | [7.35]*** | [5.71]*** | [1.09] |
| 2 children | 1977.94 | -2895.28 | 1555.92 | 377.51 | 5196.56 | 2227.72 | 6306.18 | 3055.54 | 1209.93 |
|  | [2.45]** | [1.89]* | [3.97]*** | [0.63] | [5.60]*** | [2.74]*** | [9.10]*** | [3.53]*** | [1.28] |
| 3 children | 865.78 | 2145.81 |  | -9692.76 | -21033.40 | 6649.06 | -1546.21 | -5062.40 | 303.88 |
|  | [0.25] | [0.30] |  | [2.69]*** | [1.81]* | [4.59]*** | [0.20] | [0.91] | [0.56] |
| 4 children | 3039.90 | -9866.17 | -462.15 | -1642.48 | 7031.31 |  | 4877.22 | 3642.18 | -3414.65 |
|  | [1.25] | [2.60]*** | [0.51] | [0.89] | [2.23]** |  | [3.06]*** | [1.26] | [4.22] ${ }^{* * *}$ |
| $5+$ children | -10383.20 | -21365.70 |  | 12003.84 | 17077.49 |  | 7366.83 | -10458.90 |  |
|  | [8.96]*** | [2.39]** |  | [3.76]*** | [6.34]*** |  | [2.25]** | [5.74]*** |  |
| 2 household members | -1792.42 | 5363.29 | -615.04 | -268.71 | 2684.52 | 2069.37 | -1936.33 | -1383.66 | -978.90 |
|  | [2.17]** | [1.41] | [1.90]* | [0.40] | [3.52]*** | [3.88]*** | [1.74]* | [2.35]** | [3.21]*** |
| 3 hh members | -955.30 | 8441.37 | -469.09 | 179.79 | 8479.67 | 999.47 | -668.95 | 505.45 | -1209.26 |
|  | [0.94] | [2.14]** | [1.19] | [0.20] | [6.82]*** | [1.71]* | [0.59] | [0.59] | [2.71]*** |
| 4 hh members | 1240.19 | 13095.37 | 593.26 | 2680.28 | 6987.47 | 2589.35 | 2354.97 | 3255.88 | -501.64 |
|  | [0.85] | [3.68]*** | [1.12] | [2.08]** | [4.69]*** | [3.78]*** | [1.03] | [3.07]*** | [0.91] |
| 5 hh members | 3303.67 | 17458.01 | 545.31 | 7616.60 | 22409.49 | 2525.62 | 918.30 | 1911.02 | 5.82 |
|  | [2.09]** | [3.58]*** | [0.79] | [2.11]** | [2.49]** | [2.55]** | [0.54] | [1.25] | [0.01] |
| 6 hh members | 4716.70 | 14582.57 | 1453.42 | 7713.94 | 12487.33 | 177.44 | 7326.38 | 9225.74 | 1362.33 |
|  | [2.80]*** | [3.94]*** | [2.22]** | [5.40]*** | [6.98]*** | [0.09] | [3.01]*** | [6.55]*** | [1.85]* |
| 7 hh members | 11772.61 | 29546.97 | 3905.20 | 14390.23 | 15402.60 | 1544.96 | 13307.66 | 11970.72 | 4081.44 |
|  | [5.86]*** | [7.00]*** | [5.40]*** | [8.50]*** | [4.65]*** | [0.34] | [5.06]*** | [6.83]*** | [5.66]*** |
| Densly populated area | 47.15 | -69.64 | -132.38 | 632.97 | 1463.59 | 165.91 | 1459.06 | -189.37 | 163.41 |
|  | [0.15] | [0.11] | [0.76] | [2.98]*** | [6.21]*** | [0.63] | [4.61]*** | [0.74] | [0.87] |
| Thinly populated area | -988.71 | -762.42 | -178.06 | -526.54 | -1177.08 | -155.36 | -767.59 | -329.98 | -16.81 |
|  | [3.56]*** | [0.86] | [0.98] | [2.01]** | [5.84]*** | [0.57] | [3.71]*** | [1.13] | [0.09] |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Country dummies |  |  |  |  |  |  |  |  |  |
| Regional dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Constant | 3128.14 | -34368.20 | 902.05 | 4562.59 | 14414.69 | -6086.82 | 1023.32 | -4283.63 | -429.42 |
|  | [2.32]** | [5.34]*** | [1.68]* | [2.83]*** | [13.84]*** | [3.98]*** | [0.69] | [2.71]*** | [0.60] |
| Observations R-squared | 17475 | 10823 | 12247 | 30173 | 21096 | 12146 | 37267 | 32687 | 15579 |
|  | 0.66 | 0.15 | 0.59 | 0.65 | 0.67 | 0.60 | 0.59 | 0.60 | 0.43 |

Notes: z statistics in brackets; * significant at 10percent; ** significant at 5percent; *** significant at 1percent; ${ }^{+}$the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants; ${ }^{++}$migrants identified by country of birth; the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants. Low income variable defined as equivalized income lower than 60 percent of median income; High income variable defined as equivailzed income greater than $4 / 3$ of median income.

Table A4 (Continued). Net fiscal position of Households: incidence of individual characteristics

|  | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IE | IS | LU | NO | PL | SE | SK | UK | All |
| EU25 Migrant House | 1852.13 | 126.61 | 3353.49 | 2936.72 | 1871.31 | -837.71 | 426.66 | 921.52 | 2462.53 |
|  | [1.71]* | [0.09] | [4.80]*** | [2.28]** | [2.23]** | [0.93] | [0.36] | [0.63] | [6.35]*** |
| Extra EU25 Migrant House | -4162.06 | -2806.24 | 3727.97 | -1210.19 | -932.38 | -1180.55 | 116.23 | 3942.71 | 2014.28 |
|  | [3.35]*** | [2.31]** | [2.42]** | [1.16] | [1.14] | [0.86] | [0.17] | [2.81]*** | [2.71]*** |
| Mixed Household | -1547.57 | -2093.21 | 2798.16 | 1340.34 | 4077.46 | -1124.11 | 222.71 | 2850.88 | 3569.92 |
|  | [1.66]* | [1.83]* | [2.30]** | [1.88]* | [1.86]* | [1.36] | [0.66] | [2.53]** | [9.23]*** |
| Male | -143.06 | 1701.65 | 2448.04 | 770.03 | -113.75 | 372.32 | -71.86 | 35.10 | -101.47 |
|  | [0.32] | [3.29]*** | [2.49]** | [2.21]** | [1.65]* | [1.42] | [0.45] | [0.09] | [0.84] |
| Age | 484.19 | 1307.16 | 1353.97 | 353.94 | 175.77 | 261.45 | 58.11 | 718.99 | 693.33 |
|  | [9.84]*** | [13.37]*** | [13.09]*** | [7.52]*** | [21.10]*** | [7.09]*** | [3.66]*** | [12.16]*** | [41.58]*** |
| Age^2 | -5.79 | -15.51 | -16.42 | -5.28 | -2.27 | -3.40 | -1.06 | -9.02 | -8.49 |
|  | [13.40]*** | [16.44]*** | [16.38]*** | [11.02]*** | [29.31]*** | [9.26]*** | [6.28]*** | [15.16]*** | [51.23]*** |
| Secondary Education | -305.16 | 815.32 | -2445.96 | 299.13 | -670.43 | 1127.40 | -342.73 | -2091.79 | -1885.72 |
|  | [0.84] | [2.03]** | [3.92]*** | [0.98] | [16.53]*** | [4.27]*** | [2.30]** | [5.83]*** | [17.52]*** |
| Tertiary Education | 8070.79 | 11294.12 | 4732.94 | 5463.95 | 1376.27 | 7431.96 | -151.64 | 2734.85 | 2536.51 |
|  | [12.89]*** | [14.57]*** | [4.73]*** | [12.51]*** | [12.81]*** | [18.58]*** | [0.98] | [4.28]*** | [15.79]*** |
| High income (before transfers) | 20620.69 | 24157.40 | 28332.72 | 25895.01 | 4476.75 | 26916.31 | 4559.44 | 26001.06 | 18698.59 |
|  | [49.60]*** | [33.28]*** | [38.60]*** | [69.56]*** | [82.56]*** | [75.47]*** | [43.24]*** | [52.86]*** | [139.48]*** |
| Low income (b.t) | -10427.00 | -18556.70 | -19421.60 | -24443.40 | -2311.43 | -20819.50 | -3646.77 | -13990.30 | -16717.30 |
|  | [27.97]*** | [32.24]*** | [27.97]*** | [85.52]*** | [44.17]*** | [89.82]*** | [37.41]*** | [40.24]*** | [149.03]*** |
| House Owner | 2107.57 | 2394.72 | -437.21 | 858.08 | 443.48 | 2272.22 | 58.99 | 3274.36 | 1098.12 |
|  | [5.36]*** | [4.44]*** | [0.77] | [2.69]*** | [4.38]*** | [8.95]*** | [0.40] | [11.38]*** | [11.47]*** |
| Single | 931.19 | -480.87 | 3300.16 | 1105.02 | 405.16 | -6772.40 | 1710.34 | -177.57 | -874.83 |
|  | [0.93] | [0.31] | [1.98]** | [1.33] | [3.38]*** | [10.35]*** | [4.75]*** | [0.11] | [3.14]*** |
| Single with child | -3465.21 | -3888.20 | -384.51 | -3324.35 | -1100.98 | -5098.06 | 1045.21 | -6815.40 | -4333.44 |
|  | [3.89]*** | [2.77]*** | [0.21] | [3.87]*** | [9.29]*** | [8.22]*** | [0.76] | [4.57]*** | [16.63]*** |
| 1 child | 4846.24 | 3782.54 | 2986.75 | 5566.11 | 761.68 | 4997.44 | 497.57 | 1401.33 | 3629.59 |
|  | [3.72]*** | [3.98]*** | [2.15]** | [6.88]*** | [6.72]*** | [9.56]*** | [1.69]* | [1.23] | [15.39]*** |
| 2 children | 2350.07 | 123.51 | 4655.82 | 5986.65 | 619.53 | 5490.77 | 729.34 | 7119.42 | 5566.93 |
|  | [2.63]*** | [0.11] | [2.70]*** | [6.07]*** | [5.91]*** | [6.06]*** | [2.62]*** | [3.89]*** | [15.02]*** |
| 3 children | 2141.43 | -2024.79 | 4809.72 | 3456.86 | 171.76 | 655.18 | -40.33 | 2023.64 | 4322.82 |
|  | [0.95] | [0.37] | [0.71] | [0.44] | [0.20] | [0.22] | [0.03] | [0.23] | [2.36]** |
| 4 children | -5751.79 | -3228.78 | 1729.83 | 4493.14 | 789.76 | 10389.84 | 122.46 | 39301.51 | 11575.61 |
|  | [2.16]** | [1.51] | [0.67] | [1.73]* | [3.22]*** | [4.27]*** | [0.56] | [1.53] | [3.50]*** |
| $5+$ children | 1657.09 |  |  | 4595.18 | 112.64 | -19369.20 | -915.33 |  | 6595.98 |
|  | [0.38] |  |  | [2.11]** | [0.15] | [3.41]*** | [1.46] |  | [2.17]** |
| 2 household members | -3510.82 | 1536.10 | -557.34 | 402.57 | -52.74 | -4937.78 | -173.23 | -2567.78 | -3051.43 |
|  | [3.69]*** | [1.05] | [0.36] | [0.48] | [0.41] | [7.63]*** | [0.49] | [1.62] | [11.10]*** |
| 3 hh members | -5340.54 | 5388.57 | -1934.53 | 5950.91 | -130.54 | -1711.15 | 282.56 | -860.50 | -3537.55 |
|  | [4.33]*** | [3.01]*** | [0.93] | [4.78]*** | [0.79] | [1.78]* | [0.43] | [0.42] | [9.66]*** |
| 4 hh members | -3643.98 | 7075.66 | 2440.85 | 6082.13 | 478.48 | -296.96 | 712.11 | -228.75 | -2590.56 |
|  | [2.00]** | [3.23]*** | [0.89] | [3.90]*** | [2.25]** | [0.25] | [1.30] | [0.07] | [5.23]*** |
| 5 hh members | -3061.91 | 12416.99 | 4617.81 | 8036.88 | 253.22 | 972.28 | 625.71 | -582.24 | -4250.07 |
|  | [1.41] | [4.87]*** | [1.46] | [3.24]*** | [1.19] | [0.49] | [0.81] | [0.20] | [6.64]*** |
| 6 hh members | -2528.67 | 13546.82 | 2610.26 | 14817.11 | 500.75 | 8534.98 | 1778.09 | 8.48 | -2057.36 |
|  | [1.20] | [5.52]*** | [0.81] | [7.87]*** | [2.14]** | [5.21]*** | [3.49]*** | [0.00] | [3.72]*** |
| 7 hh members | -881.89 | 19277.20 | 9027.58 | 20627.51 | 969.20 | 13431.85 | 3062.27 | 268.97 | -2392.46 |
|  | [0.38] | [7.32]*** | [2.50]** | [8.84]*** | [4.02]*** | [6.11]*** | [5.89]*** | [0.08] | [3.76]*** |
| Densly populated area | 93.19 |  | -144.45 | 1869.85 | 38.96 | 384.01 | 355.09 | -444.08 | $-354.51$ |
|  | [0.16] |  | [0.23] | [5.81]*** | [0.44] | [0.73] | [3.57]*** | [1.15] | [3.33]*** |
| Thinly populated area | -1598.93 | -1143.77 | -1112.45 | 31.44 | -292.57 | -2751.59 | -28.67 | 2706.81 | -449.94 |
|  | [3.80]*** | [2.61]*** | [1.48] | [0.10] | [3.38]*** | [7.46]*** | [0.36] | [1.15] | [3.52]*** |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Country dummies |  |  |  |  |  |  |  |  | Yes |
| Regional dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |  |
| Constant | -11096.00 | -16292.70 | -26115.70 | 4811.71 | -2702.02 | 12339.69 | 111.20 | -9550.80 | -2174.66 |
|  | [6.32]*** | [6.96]*** | [9.07]*** | [3.64]*** | [9.99]*** | [12.16]*** | [0.22] | [4.26]*** | [4.46] ${ }^{* * *}$ |
| Observations | 18815 | 9919 | 12663 | 20177 | 32536 | 20360 | 11875 | 20030 | 335868 |
| R -squared | 0.45 | 0.59 | 0.62 | 0.63 | 0.56 | 0.65 | 0.48 | 0.41 | 0.45 |

Notes: z statistics in brackets; * significant at 10percent; ** significant at 5percent; *** significant at 1percent; ${ }^{+}$the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants; ${ }^{++}$migrants identified by country of birth; the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants. Low income variable defined as equivalized income lower than 60 percent of median income; High income variable defined as equivailzed income greater than $4 / 3$ of median income.


[^0]:    ${ }^{1}$ See Table A1 in the appendix.

[^1]:    ${ }^{2}$ These categories correspond rather closely to the definitions of the EU-SILC; groups at risk of "social exclusion may be identified (among others) as destitute people, migrants, refugees, drug addicts, alcoholics, victims of criminal violence". For more details, see the SILC User Database Variable Description (epunet.essex.ac.uk/EU-SILC_UDB.pdf).
    ${ }^{3}$ For Estonia, Germany, Latvia and Slovenia even this rough classification is unfeasible, as this distinction is not provided by the dataset.

[^2]:    ${ }^{4}$ As previously explained, categories will become three when looking at migrant households (in stead of individuals): migrant households from the EU25 countries, migrant households from non-EU25 countries, and mixed households (at least one migrant and one native).

[^3]:    ${ }^{5}$ We control for sex, age and age square, education, income, number of children, size of the household, whether the house is of property, the density of the neighbouring area, dummies for different regions (NUTS2) and years.
    ${ }^{6}$ See Table A2 in the appendix.
    ${ }^{7}$ For ease of exposition, we reported in the Table only the change in the estimated probability induced by a shift of the migrant dummy variables from 0 to 1 ; for the whole regression results, see Table A2 in the appendix.

[^4]:    Notes: z statistics in brackets, ***,** and * denote significance at 1,5 and 10 percent respectively; ${ }^{+}$the EU-SILC does not distinguish between EU- 25 and extra EU-25; ${ }^{++}$migrants identified by country of birth; the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants; ${ }^{+++}$migrant households from EU-25 countries excluded from the estimation because of their limited number.

[^5]:    ${ }^{8}$ See Table A3 in the appendix.

[^6]:    ${ }^{9}$ This information is available for Spain only for 2006.
    ${ }^{10}$ The EU-SILC committee decided that this information must be provided from MS only from 2007 onwards.

[^7]:    ${ }^{11}$ Austria, Belgium, Czech Republic, Germany, Denmark, Spain, Finland, France, United Kingdom, Greece, Hungary, Ireland, Italy, Luxemburg, Netherlands, Norway, Poland, Portugal, Sweden, Slovenia.
    12 The respondents were asked: "Are [country's] crime problems made worse or better by people coming to live here from other countries?" and were allowed to give a grade from 0 (being: Crime problems made worst) to 10 (being: Crime problems made better).

[^8]:    ${ }^{13}$ We control for sex, age and age square, education and labour status of respondent, also adding a dummy for migrants, one for high and one for medium total household income. Furthermore we include dummies for declared domicile description (big city, suburbs or outskirts of a big city, town or small village, country village), a dichotomy variable equal to one if the respondent is friend or works with a migrant, and another one for having taken part to a humanitarian organisation. We also introduce a dummy for political views (left of right) and variable controlling for the declared time spent watching the TV, listening to the radio and reading newspapers (from 0: no time at all, to 7: more than 3 hours a day). Finally, we control for the feeling of safety when walking alone at home in the dark (1: very safe; 4: very unsafe) and for those whose household members were victim of burglary/assault in the last 5 years.

[^9]:    ${ }^{14}$ We use the same set of control variables as in Table 4, but those variables related to feeling of safety and criminal victim. See note above.

[^10]:    Notes. $z$ statistics in brackets, significant at 10percent, * significant at 5percent; **significant at percent," the EU-SILC does not distinguish between EU- 25 and extra EU income lower than 60 percent of median income; High income variable defined as equivailzed income greater than $4 / 3$ of median income.

[^11]:    Notes: z statistics in brackets; * significant at 10percent; ** significant at 5percent; *** significant at 1 percent; ${ }^{+}$the EU-SILC does not distinguish between EU-25 and extra EU-25
    migrants; ${ }^{++}$migrants identified by country of birth; the EU-SILC does not distinguish between EU-25 and extra EU-25 migrants. Low income variable defined as equivalized income lower than 60 percent of median income; High income variable defined as equivailzed income greater than $4 / 3$ of median income.

