WHY IMMIGRANTS MANAGE TO GRAB MORE SOCIAL BENEFITS? EMPIRICAL CROSS - COUNTRY ANALYSIS

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Why Immigrants Manage to Grab More Social Benefits? Empirical Cross - Country Analysis*

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June, 2005

Abstract

Using data from the Luxembourg Income Study we analyze state welfare generosity to immigrants and natives in Sweden, Norway, Belgium, Germany and the USA. The distinction between EU and non-EU immigrants proves to be an interesting one. We find a substantial social income gap between non-EU immigrants and natives, while EU immigrants are quite similar to natives. The main reasons for the existence of this social income gap are family wage income, number of children and income earners in the family. While these characteristics explain almost fully the gap in the EU countries, they are of little help in others.

Abstrakt

S použitím dat Luxembourg Income Study jsme analyzovaly štědrost státní sociální péče k imigrantům a domácím obyvatelům ve Švédsku, Norsku, Belgii, Německu a USA. Odlišnost mezi imigranty pocházejícími ze zemí EU a mimo EU se projevila jako důležitá. Nalezly jsme podstatný rozdíl v sociálních příjmech mezi imigranty z oblastí mimo EU a domácími obyvateli, zatímco imigranti z EU jsou docela podobni domácím obyvatelům. Hlavními důvody existence rozdílu v sociálních příjmech jsou rodinné příjmy, počet dětí a osob výdělečně činných v rodině. Zatímco tyto charakteristiky objasňují téměř úplně rozdíl v zemích EU, poskytují jen malou pomoc pro ostatní země.

JEL Classification: J6, J61

Keywords: Immigration, European Union, social income

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Introduction

The increasing share of immigrants in Europe in the last decade has attracted the interest of both policy makers and economists. The current EU expansion, which is associated with potentially large migration flows, even further motivates the research on what drives migration, how do immigrants differ from natives and what are the factors behind these differences. Free mobility of labour within the enlarged EU requires that European policy makers have a clear stance on the following two issues: common immigration policy and harmonized welfare systems. While EU countries have made some progress in designing a common immigration policy (Tempere Summit 1999), little has been done with respect to harmonization of their welfare regimes (Givens and Luedke, 2004).

Many studies on migration (Bird et al., 1999; Borjas and Hilton 1996; Sinn, 2002) confirm that social income (income from social benefits) constitutes a substantial part of immigrants' income; often immigrants receive higher social benefits and consequently rely more on welfare, than natives. It is important to note that when studying welfare and its impact on immigrants in the EU, one should consider non-EU and EU immigrants separately. Since the Maastricht Treaty (1992), the European Union guarantees free movement of people within its borders and according to a proposal by the European Commission, all workers with EU citizenship are "entitled to the full social security benefits of whatever EU country they are employed in and these benefits would be transferred from one member state to another in case the worker moved" (COM, 2003/596). However, non-EU immigrants who immigrate to a certain EU country are subject to the immigration and welfare policies of that particular country.

The size[2] and nature[3] of recent migration flows into the EU urge European authorities to design a common welfare policy regarding non-EU migrants (CEC, 2002/703).

So far the existing literature has paid little attention to the importance of welfare in determining migrants' income within the EU. Most of the studies are limited to only one country (Bird et al., 1999; Sinn, 2002; Baker and Benjamin, 1995; Gustafsson and Osterberg, 2001) and thus fail to recognize the fact that the EU is a complex network of countries which should be considered simultaneously. The common regulations of all EU countries with respect to the free movement of people, goods and capital require an analysis of EU migration not at the country level but ideally taking into consideration and comparing all EU member states. We take a step forward in this respect since in our study we consider five countries known for their high immigration rates, namely Germany, Belgium, Sweden, Norway and the USA[4], out of which four are developed EU economies[5] and the USA is a useful benchmark, given the large amount of US literature on welfare take-ups of immigrants.

Another issue, which has not been explored yet, is the different effect of EU and non-EU immigrants' characteristics on their social income. Büchel and Frick (2003) who analyze the gross income gap between natives and immigrants, distinguish between EU and non-EU immigrants only by their immigration status but do not control separately

[2] The official net annual migrants in the EU are 932 000 in the year 2000; 964 000 in year 2001 and 1 094 000 in year 2002. The number of legal immigrants into the EU reached a peak of 1.2 million in 1992, mainly due to a large influx of refugees from former Yugoslavia. (*Source: Eurostat*)

[3] Most of the voluntary migration in recent decades is characterized by temporary labour migrants who are generally low-skilled, low-paid and depend extensively on welfare benefits.

[4] Norway, although not a member of the EU, has access to the EU internal market through the European Economic Area Agreement (EEA). The Agreement commits Norway to implement all EU-legislation related to the internal market. A number of programs and related activities, such as the Social Exclusion Program and the Anti-Discrimination Program, were added to the Agreement at a later stage.

[5] All other EU countries had to be excluded due to a lack of data.

for their demographic and socio-economic characteristics. The analysis of these characteristics for EU and non-EU immigrants is crucial since they are treated differently according to the European laws and regulations and the differences in social income between these two groups could be explained by differences in their socio-economic characteristics. In our paper, we make a clear distinction between EU and non-EU immigrants' characteristics, and we find that EU immigrants tend to share similar characteristics with natives while non-EU immigrants differ from the rest.

Once taking into account the difference in EU/non-EU immigrants' characteristics, we try to answer the question to what extent these characteristics explain the higher take-up rates of immigrants. While much research has been done on the wage differential between immigrants and natives (Lang, 2000; Constant and Massey, 2003), there are only a few studies considering the existence of a social income gap between these two groups and the factors behind this gap. Riphahn (1998), who focuses on the higher welfare dependence of immigrants in Germany using the German Socio-Economic Panel, finds that the difference in aggregate welfare dependence between natives and foreigners appears to be due to their characteristics, where the household head's labor market status and single parent status are central. Based on a much larger dataset provided by the Luxembourg Income Study[6], which consists of fully comparable and harmonized household surveys, we compare five countries and find that for three of the sample countries, namely Sweden, Belgium and Germany, the social income gap is explained almost fully by the immigrants' characteristics while for Norway characteristics play a minor role. The USA is a striking example of a country where

[6] www.lisproject.org

natives take on average higher social benefits than immigrants independently of their social characteristics.

In sum, the goal of the present paper is to answer the following questions:

- how do social-economic characteristics (age, gender, education, household size, etc.) of EU/non-EU immigrants differ with respect to natives across countries?
- how does social income differ among EU/ non-EU immigrants and natives within a country and across different countries given specific household characteristics (number of children and income earners in the family)?
- what part of the social income gap is explained by the difference in household characteristics' (wage income, number of children, number of income earners in the family) and what part is left to unobservables (including possibly discrimination)?

Answering the above questions allows us to find the main reasons for the existence of EU/non-EU immigrants' and natives' social income gap. The explicit separation of EU and non-EU immigrants accounts for the existing difference in legal requirements defined by the current regulations in the EU countries. The knowledge of how differently EU and non-EU immigrants "are treated" by their host countries will benefit the shaping and harmonization of future EU welfare policies. The analysis of whether household characteristics play a major role in immigrants' social income and whether different countries favour particular types of immigrant families should help policy makers in designing a common migration policy based on wage and productivity differences and not on the generosity of the welfare states. Knowing what part of the social income gap is due to social-economic characteristics, and what part belongs to

other possible reasons could give the European authorities valuable insights for determining how important it is to focus on different issues like discrimination, immigration policies, etc.

In our analysis we use household data based on the Luxembourg Income Study (LIS) for the years 1997 and 2000. The LIS is a collection of household income surveys and its main advantage is that it is a harmonized database that is considered one of the best sources of international comparative studies. We work with five countries, namely Germany, Belgium, Sweden, Norway (which are known to operate under different welfare systems) and the USA.

The paper is organized as follows: The first section provides a literature survey of the relevant existing research on migration. The second section provides description of the data and the relevant variables. The third section consists of a descriptive analysis of the income composition and household structure of both immigrants and natives. The fourth section explains the estimation methodology, and the fifth one presents the results of the regression analyses. The sixth section concludes with the main findings and future research plans.

I. Literature Survey: Immigrants and Welfare

Our research agenda is relevant to several strands of literature on immigrants. The existing studies concerned with immigrants' participation in the welfare system concentrate mainly on the potential costs or benefits that immigrants bring upon the local population. The potential economic costs and contributions of migrants in the host

country have often dominated the debate on migration. Whereas the first cohort of migrants in Western Europe[7] tended to be young males ready to be employed and thus net contributors to the welfare system (social security, unemployment compensations, health insurance, and pension systems) the picture is less straightforward now. The second and third cohort[8] migrants have a lower level of education than natives and this in turn creates problems for their integration into the labor force.[9] Thus, the concerns of the welfare state are how to deal with welfare-dependant poorly-integrated migrants. For the purposes of our analysis we shall focus mainly on research that considers the effect of public transfers (take-up rates) offered to immigrants and the differences among the welfare systems across countries.

The question of whether immigrants represent a burden or gain to the public sector budget has been tackled by many studies. However, the conclusions are contradictory. Gustafsson and Osterberg (2001) analyze the influence of immigrants on the Swedish public sector budget for the period 1983-1992. The immigrants' contributions to the budget are negative for the first years of the examined period and positive later on. As immigrants assimilate in the host country, they change their status from being net recipients to net contributors. Rurup & Sesselmeier (1994) support the claim that immigrants to Germany are net payers with respect to unemployment insurance and medical aid. Weber and Straubhaar (1996) confirm that the Swiss tax and social security system benefits rather than suffers from immigrants' participation in it.

[7] In 1970s and 1980s migration was driven mainly by bilateral labor treaties between countries in the EU (Italy, Spain, Portugal, and Greece) (Menz, 2003).
[8] In the late 1980s and 1990s,most immigrants came from outside the EU without any guarantee of employment (Menz, 2003)
[9] See Menz (2003).

Recent research papers on Germany also suggest that host country workers do not need to worry about potential decreases in their wage or about higher unemployment from immigrant flows. Lang (2000) focuses on the wage differential between native Germans and foreigners and points out that the gross income gap can be explained by the difference in the average group disparities in productivity characteristics. The other major source of the gap is the assimilation effect that leads to the equalizing of incomes of natives and immigrants with the time elapsed since mobility. Constant and Massey (2003) explore the occupational change of immigrants and its impact on earnings. The authors document a high degree of initial segmentation with immigrants being employed in low status jobs and having little mobility over time. As far as earnings are concerned, after controlling for personal characteristics the gap between the income of natives and immigrants is not that pronounced as is occupational status. Many authors like Pischke and Velling (1997), Axelsson and Westerlund (1998) find that immigration has quite an insignificant effect on the host labour markets and does not threaten the local population.

The take-up of welfare benefits and the phenomenon of "welfare migration" are closely connected to our research. There is extensive research on welfare-driven migration based on US data. Enchautegui (1997) finds a positive correlation between welfare and migration in the United Sates. This premise is supported by a range of studies on US data such as those by Blau (1984), Borjas and Trejo (1991), Borjas and Hilton (1996), and Hu (1998). Borjas and Hilton (1996) document the extent to which immigrants participate in welfare programs. They suggest the existence of a large "welfare gap." US immigrants experience more and longer unemployment spells, and there is a positive

correlation between the types of welfare benefits received by earlier immigrants and those obtained by recently arrived immigrants.

Siklos and Marr (1998) find that immigrants in Canada are more likely to receive social benefits, while according to Baker and Benjamin (1995) it is the local population who benefits primarily from the social welfare system. Gustman and Steinmeir (1998) conclude that immigrants receive much higher social benefits relative to US born workers with identical earnings but these transfers do not result from low incomes of immigrants. The immigrants with high earnings who have been working in the US for up to two decades are found to benefit the most from public transfers. Although, foreign born workers have a higher return to their social security taxes, US born workers still prefer that immigrants participate in the social security program since the retired immigrants contribute more to social security taxes in comparison to the amount of the received benefits.

There is also some literature on "welfare migrants" in the EU that concentrates mainly on Germany. Bird et al. (1999) use data from the German Socio-Economic Panel Study (GSOEP) to test whether immigrants in Germany, given their eligibility, are more likely to claim welfare benefits than natives. The authors find positive evidence of immigrants receiving more welfare benefits in comparison to natives mainly because of two reasons: first, there is a higher probability of immigrants being eligible to receive benefits, and second, the immigrants who are eligible are more likely to actually claim these benefits. Riphahn (1998) tries to explain why the share of German immigrants who participate in social programs is higher than that for natives. The study uses GSOEP data and tests the effect of assimilation, cohort, age and country of origin on

migrants' participation rate. The author finds that assimilation and the age at migration increase the probability of welfare benefit dependence.

The study of Büchel and Frick (2003) is closely related to our research since it compares the immigrants' pre and after tax income and social contributions across eight European Union countries. They find persistent differences across the examined countries in the relative economic performance (gross income) of immigrants in comparison to the local population. The authors explain this heterogeneity both by the variation of entry conditions to the EU and country-specific institutional aspects. While Büchel and Frick (2003) consider only pre and after tax income, in this paper we scrutinize the social income gap (any kind of benefits from the welfare regime) between immigrants and natives while taking into account social contributions. Another issue that has not been examined in the existing literature is that differences in social income between EU and non-EU immigrants could be accounted for by the difference in their socio-economic characteristics. Büchel and Frick (2003) use a substantially smaller (with respect to the number of immigrants) and older dataset (European Household Panel Survey 1994-98) of EU countries that are different from our sample countries, where they distinguish between EU and non-EU immigrants only by their immigration status but not by their characteristics. Controlling separately for these characteristics allows us to determine the sources of the social income gap between immigrants and natives. The explicit separation of EU and non-EU immigrants helps us to account for the existing legal differences in the current regulations in the EU countries.

II. Data and Variables

Data

We use the Luxembourg Income Study (LIS). The LIS is a micro-database collected from a large range of industrialized countries. It provides demographic, labor market, income and expenditure data, both at the household and individual level. At the household level, the LIS includes such demographic variables as age, marital status, number of income earners in a family, number of children, education, ethnicity, migration status, labor force status, etc. Income variables contain gross income, disposable income and a detailed classification of social income. This classification is appropriate for our analysis of the determinants of immigrants' social income since we can examine directly the types of benefits that both natives and immigrants receive. The database covers twenty-nine countries and its main objective is to provide comparable data that can be considered as a reliable source of cross-country analyses.

In our study we include Norway, Sweden, Belgium, Germany and the USA for the years 1997 and 2000 (depending on data availability)[10]. The advantage of this data is that it is comparable across countries because the original data files are transformed into a harmonized LIS data format. For example, the cash transfer variables (sick pay, accident pay, social retirement benefits, child and family allowances, etc.) contain the same information for each country, which allows us to compare the social incomes across counties.

[10] Data on immigration status is missing for the Netherlands, UK, France and Italy; the total number of immigrants is too small for Austria (95) and Ireland (58). Thus these countries are excluded from the study.

We pool all available annual cross-sectional data for each of the five countries. The unit of analysis is an individual in the household context, since some welfare benefits are reported only at the household level (particularly those related to means-tested cash benefits like housing subsidies, social assistance, unemployment assistance and near cash benefits such as food benefits, housing benefits, cash medical benefits, heating benefits, etc.). An important assumption made in our study similar to other studies (Büchel and Frick, 2003) is that families pool resources and share the utility of income derived partly because of the families' status. Thus although we analyze social income at the individual level, income information in the LIS is provided at the household level. In our study we employ an equivalence scale which takes the square root of the total size of the family.[11]

One of the family members is considered to be "head," that is the main breadwinner in the family. We include only individuals in the family aged between 18 and 60. In such a way we avoid the retired population, whose pension income varies across countries and depends on different factors than the income of working age people. The average retirement age across different countries varies from 55 to 65 so we have chosen the intermediate solution of including people up to 60 years old. In the sample we distinguish between three groups: natives, European Union (EU) and non-European Union (non-EU) immigrants. The purpose of this migrant classification is to examine the differences in the treatment of both groups by the European Union, which originate from the legislative framework (The Treaty of Rome 1957). According to it, the EU favors the free movement of people with European citizenship and treats them as locals.

[11] We also applied the modified OECD equivalence scale, which gives weights of 1.0 to the head, 0.5 to other adult member, and 0.3 to children. The results were not significantly different.

The non-EU residents, however, meet the restrictions of the immigration law regarding employment opportunities and social benefits. Since we consider recent years (1997 and 2000) from the development of the Union, we expect that this policy has already been implemented.

The LIS provides the variable "Immigrant status" for our sample countries. This variable shows whether an individual is foreign born (immigrant), or born in the host country (native). Büchel and Frick (2003a) point out that defining immigrants as foreign-born is more appropriate than using a citizen-based immigration definition because it avoids the differences in country-specific citizenship legislation. Borjas and Hilton (1996), Shields and Price (1998) and Bell (1997) also employ this definition of immigrant status. However, this variable in the LIS does not give information on the country of origin. That is why we use "Ethnicity" status[12] in our analysis, which defines the country of origin and allows us to make a clear distinction between EU and non-EU migrants.

Descriptive Statistics

Table 1 shows our summary statistics for the natives, EU immigrants and non-EU immigrants in all countries. The table confirms the differences in personal and employment characteristics that other researchers have documented as well (Borjas 1995; Büchel & Frick, 2003b; SOPEMI, 2001): immigrants are younger, less educated, and live in bigger families with fewer income earners than native families. While

[12] We identify for each country how many of the EU/non-EU migrants are classified in the variable "Immigrant status" as original natives, born abroad with native parents, etc. Thus only for Norway we exclude 7 observations for Norwegians born abroad but counted as migrants. Sweden and Belgium do not

previous studies confirm this tendency for immigrants in general, we observe that it holds for non-EU immigrants but not for EU immigrants. For example, consider the average age of the three groups. In all the countries non-EU immigrants are younger on average than natives (for USA all migrants are in one group). This is not the case for EU immigrants; in Sweden, Norway, Belgium and Germany they are slightly older than locals (the difference is less than a year on average). It seems that according to age, the natives and EU immigrants share similar age structure; non-EU immigrants however, are younger.

Comparing household size, we find a similar tendency. The non-EU immigrants have larger families than both natives and the EU immigrants. The percentage of non-EU immigrants with high education is smaller than the fraction of natives, except for Germany (19% of non-EU immigrants are with high education and 13% of locals). The share of highly educated EU immigrants for Norway and Germany is higher than for natives (44% EU immigrants vs. 31% Norwegians and 22% EU immigrants versus 13% Germans). We anticipate that highly educated people will receive less social income than low educated ones.

On average the non-EU families have fewer income earners than natives for all counties. Sweden and Belgium record the lowest number of income earners (1.4 for non-EU vs. 1.93 for natives; 0.66 for non-EU vs. 1.42 for natives) respectively. The tendency of fewer income earners in a family increases the chances for social benefits for non-EU immigrants. Similar to previous studies (Borjas, 1995; Hu, 1998), we

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report variable "immigrant status" so we use "ethnicity" without corrections. For all the other countries we compared the variables "Immigrant status" and "Ethnicity" and found full consistency between them.

suppose that the number of income earners in a family explains a big part of the social income variation. Another factor that influences the family social income is the number of children (Büchel & Frick, 2003a; Borjas & Hilton, 1996). For all countries the non-EU immigrants have more children than locals and EU migrants. We expect that the number of children is positively related to social income.

Table 1 also reports the log annual social income. This variable is constructed by adjusting the household annual social income according to the household size by the equivalence scale specified earlier. In all the countries but the USA, non-EU immigrants receive higher social income on average. In Sweden natives receive 47% less benefits than non-EU immigrants; in Norway 31% less; in Belgium 55% less; in Germany 5% less and in USA natives receive 55% more than immigrants. The differential between natives and EU migrants is as follows: Sweden 17 % less for natives; Norway 22% more for natives; Germany 7% more for natives; Belgium 10% less for natives.

The descriptive analysis reveals two important patterns. First, our results confirm previous research on the characteristics of non-EU immigrants (Borjas 1995; Büchel & Frick, 2003b; SOPEMI, 2001), while EU immigrants seem to be very similar to natives. Second, non-EU immigrants and locals differ in their relative social incomes across welfare regimes in all countries. The gaps between non-EU migrants and natives are substantially larger than the gaps between natives and EU movers. The current migration literature has paid little attention to the social income of EU and non-EU immigrants in the Union. The distinction between EU and non-EU immigrants is important since it might help to explain the origin of the social income gap and the reasons behind it. We expect that the differences in social income gaps between

EU/non-EU immigrants and natives are to a large extent due to different EU/non-EU migrants' characteristics.

III. Descriptive Analysis of Income across Welfare States

1. Gross Income Decomposition by Source of Income

The social income of immigrants constitutes a substantial part of their gross income (Büchel & Frick 2003a; Benefits and Wages, OECD, 2002). By focusing on the components of gross income first, we will be able to better identify the profile of immigrants and to compare it with other relevant studies. Exploring the concrete types and conditions for receiving benefits according to the existing normative framework, we distinguish among several prevailing types of benefits across countries and the conditions for receiving them. These are unemployment insurance, unemployment assistance, social assistance, family benefits, and sick pay. The presence of job history and contributions to insurance funds entitles workers to unemployment insurance and/or assistance; if the minimum standard of living is not met, then a resident may receive social assistance; the presence of dependent children entitles households to family benefits; in the case of sickness and health contributions, one is entitled to sick pay.

Since we are interested in the difference between EU/non-EU immigrants and natives' social incomes, we decompose the gross income into the following subgroups: 1) employment income (wages), 2) capital income,[13] and 3) social income. Subtracting the social contributions and income taxes from the gross income yields disposable income.

[13] We do not report the share of capital income (interest and dividends, rents, private saving plans) since it is not related to the current topic.

We distinguish among three groups of social income. The first one, labeled "unemployment and child benefits" includes social retirement benefits, child and family benefits and unemployment compensation; the second one, "health benefits" includes sick pay, accident pay, disability pay, maternity pay, and the third, "cash benefits" includes means-tested cash benefits, near-cash benefits, private income, and other cash income. The rational behind this division is to separate unemployment compensation from health benefits that are both insurance-based, and the cash benefits. The choice to form different groups of social income is not essential for the analysis in this paper, but it provides useful information on the sources of total social income.

The results are presented in Table 2, where we observe that for the natives of the two Nordic countries the share of unemployment and child benefits and health benefits constitutes the major part of the total social income. The cash benefits that comprise the "emergency" type of benefits have a substantially smaller share in natives' social income. Immigrants, however, benefit much more from cash benefits than natives, which means that they meet the criteria of the low-income group. In addition, non-EU immigrants in Sweden and Norway manage to capture a higher share of unemployment and child benefits and health benefits than both natives and EU immigrants. Overall, the welfare systems in the two Nordic countries generously support the non-EU immigrants who are usually considered to be a low-income group.

The distribution of welfare benefits between natives and immigrants in the two Western European countries, Germany and Belgium, exhibit quite a similar tendency. Non-EU immigrants are those who benefit the most from the social support provided, with unemployment and child benefits having the highest share in the total social income for

all groups, while EU immigrants and natives exhibit a very similar level of total social income. The USA's welfare system, which is known to be liberal or market type welfare,[14] aims at achieving efficiency and does not provide much social support. Here, cash benefits constitute the biggest part of social income. The social income figures suggest that immigrants and natives are treated quite similarly by the welfare system.

We document that the types of social benefits vary across countries. The separation of EU and non-EU immigrants within a country is justified in most cases.[15] The main tendency is that unemployment and child benefits constitute the biggest share of total social income and non-EU immigrants receive significantly higher social income than both EU immigrants and natives. In the USA there is hardy any difference between natives and immigrants and cash benefits are leading in determining the total social income support.

2. Income Decomposition by Family Size and Number of Income earners in a Family

In our further analysis we consider the number of income earners and the number of children in the family to be among the main factors that influence the amount of total social benefits. In Sweden the above two factors together explain 15% out of the 17% total explained variation of immigrants' social income and 14% out of 15% of natives' social income; in Norway the numbers are 11% out of 15% for immigrants and 17% out

14 Esping-Andersen (1990) was the first to differentiate among three main groups of welfare systems: the corporatist (Belgium, Germany, Austria, France), the social-democratic (Norway, Sweden, Denmark) and the liberal systems (UK, Ireland, USA).

15 After performing t-tests, we found out that the values of the total social income among natives, EU and non-EU immigrants within country are significantly different at the 1% significance level with the exception of Germany, where non-EU immigrants vs. natives is significant at the 10% significance level, and Belgium, where EU immigrants and natives' total social income are not statistically different.

of 19% for natives. In Belgium 45% out of 48% variance for immigrants is explained by the number of children and income earners in the family and 40% out of 40% for natives, while for Germany the values are 23% out of 24% for immigrants and 24% out of 30% for natives, respectively. The number of children and income earners in the family seem to be ex-post measures of the relative generosity of different welfare systems and while these tendencies are not explicitly featured in the laws, they appear as a result of practice and application patterns.

In Table 3 we consider the relative gross income position of immigrants to natives (gross income of immigrants divided by the gross income of natives and multiplied by 100); the relative social income position of immigrants to natives and the social income for each additional child (marginal). We differentiate among households with no children, households with one child and households with two or more children. This division is justified by the fact that there is scarce data for families with more than three children on one hand, and the average number of children is less than 2 on the other (except for Belgium, 2.17). In order to make the comparison easier since all countries encourage the birth of more children, we have calculated the marginal change in the social income received by a family when an additional child is born.

The calculations show that with respect to gross income, immigrants of all countries are in a worse position in comparison to corresponding native families, with the exception of Germany where an immigrant family with one child receives gross income similar to a German family. On average all countries with the exception of Germany and the USA give immigrant families higher social income relative to natives if one child is present.

Considering the effect of an additional child in the family helps us to differentiate more clearly between the countries. Norway clearly encourages additional child in the family while Sweden shows its generosity when the family has more than two kids. Germany does not particularly reward families when they have an additional child and might even discourage a family with no children from having one (-6.74%). Belgium tolerates all kinds of immigrant families and in such a way resembles Sweden. The USA not only discourages families from having more kids but even makes them "pay" for them. The results suggest that Sweden and Belgium turn out to be the two countries that most support the birth of an additional child in the family.

Table 4 presents the social income position of immigrants vs. natives depending on the number of income earners in the household. We notice a clear difference between the countries under consideration. In Sweden and Norway the relative social income position of immigrant to native families without income earners (106.76% in Norway; 94.5 % in Sweden, column 2, Table 4) is better than the relative position of immigrant to native families in Belgium and Germany (89.6% in Belgium and 85.85% in Germany). Assuming other factors to be fixed, we may conclude that immigrants who do not earn would be better off in Sweden and Norway. However if the family has one earner, then the situation changes completely in favour of German and Belgian immigrants. In the case of two income earners, Sweden and Norway are the most generous. Unlike all the other countries, the liberal USA does not provide higher social income for immigrant families with one or two income earners.

In summary, immigrants' and natives' social income position seems to depend on both the number of children and the number of income earners in the family. The Nordic

states favor big immigrant families more than native ones, the corporatist states exhibit the same tendency though to a much smaller extent, and the liberal USA even discourages families from having an additional child. The social income decomposition by number of income earners shows that the Nordic states support families with more than one earner, Western European states mainly help the head of the family (one earner) while the liberal states such as the USA are indifferent to this family characteristic. This descriptive analysis motivates further regression analysis in order to explore the dependence of social income on all family characteristics simultaneously.

IV. Estimation Methodology

The descriptive analysis in the previous section suggests that the differences in welfare regime seem to influence the relative social income performance of immigrant and native families across countries. In order to evaluate more precisely this tendency, it is necessary to control for certain social-economic characteristics of natives and immigrants across countries and then argue whether the income differences still persist. We perform a multivariate median regression analysis that allows us to observe how the median social income is explained by the same set of regressors in each country, and to compare the social income impact of each explanatory variable.

After analyzing social income distributions at different percentiles, we found that the disparity between EU/non-EU immigrants' and natives' income is substantial at the right tail of the distribution.[16] The immigrant status has a stronger influence on the people that appear in the upper part of the social income distribution and has much a

smaller effect in the lower tail of this distribution. In order to solve the problem of the skewed distribution, we perform quantile regressions. Buchinsky (1998) points out that the estimated coefficient vector is not sensitive to outliers in the dependent variable and this estimator could be more efficient in the case of non-normal error.[17] We estimate separately for natives, EU and non-EU migrants the following multivariate median regressions:

$$Y_i = \alpha + \beta_1 * d\_wage\ income_i + \beta_2 * age_i + + \beta_3 * age^2{}_i + \beta_4 * education_i + \beta_5 * gender_i + \beta_6 * income\ earners_i + \beta_7 * children_i + \varepsilon_i$$

The explanatory variable *d_wage income* is equal to one if the whole household has zero average gross wage and zero otherwise;[18] *age, gender, income earners and children* are linear variables which can be attributed to immigrants or natives depending on the specification where $i \in \{immigrant\_EU,\ immigrant\_Non\text{-}EU,\ natives\}$. Y_i indicates the social income and education is a dummy variable, which takes the value of 1 when the head of the family has a college or university degree. The dependent variables are measured in PPP-adjusted U.S. dollars[19] and are transformed logarithmically. The social income measure includes all of the three types of social incomes described above: social benefits, health benefits, and cash benefits. We include the age of the head of the family as a regressor in the social income equation in order to

[16] Results are available upon request.
[17] We have performed the χ^2 test for normality, which suggests that the errors are not normal at the 1% significance level.
[18] In the study we assume that the welfare regime does not affect the choice of employment. Rather, we want to analyze how the welfare state "rewards" the household in the case all its members are unemployed compared to their employed counterparts. Specifically we run probit regressions of the choice to work or not on the social income and social-economic characteristics. We document that the social benefits' estimates are not significant. Therefore, we could assume that the choice to work does not depend on the social income while the welfare regime values this choice differently.

control for experience even though we acknowledge that this is not a precise measure.[20] Assuming that the age of the head is positively correlated with the number children and by controlling for age, we insure against omitted variable bias. The education variable serves as a rough proxy for the ability of the head of the family.

In order to perform a comparative analysis, we need to correct for sample disparities across natives, EU and non-EU immigrants. We apply two procedures to resolve the issue. Firstly, for all the variables we find a corresponding match between each observation in the immigrants' sample and the natives' sample. Thus we construct a sample that consists only of matched observations. Secondly, we find which percentile from the social income distribution of natives corresponds to the median social income of EU and non-EU migrants. In such a way we can compare the results both across groups and across countries. We are aware that the exogeneity of the number of income earners and the number of children may be violated for at least two reasons: there may be unobserved factors that affect social income propensities,[21] and at the same time, social income take-up and fertility decisions may be simultaneously determined. We therefore regard our approach as a correlation analysis rather than as a causal one. To avoid systematic correlation between the incomes of family members, we restrict our sample to heads of family.

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[19] *Source:* OECD Purchasing Power Parities

[20] We could use the popular approximation for experience, however, the dataset does not include years of education.

[21] If we had panel data, we could assume that unobserved factors that affect simultaneously social income take-up and family employment decisions are time constant; then the fixed effect estimation would correct for any unobserved heterogeneity.

Based on the descriptive analysis and on the differences in the welfare systems,[22] we expect that the number of children has a different effect on the social income of EU and non-EU migrants in different countries. The number of income earners also seems important for the household's social income, and we reckon that its impact will differ across countries. Using a dummy variable reflecting whether the family receives any wage income or not allows us to account for the possible impact of the presence of wage income on social income. Therefore, our analysis focuses mainly on these three variables.

V. Regression Analyses

Using a quantile regression analysis, we explore the relationship between the social income of natives, European Union and non-European Union immigrants' families and their social-economic characteristics. According to the legal requirements for receiving social benefits across the examined countries, there are three family characteristics, which prove to be of primary importance: wage income, number of children and number of income earners in the family. Therefore, these three characteristics will be our main criteria for distinguishing between different households and deriving conclusions on whether different countries favor families with a particular family structure.

In order to examine the differences between natives and non-EU immigrants, we estimate a median regression equation[23] where we condition separately on the socio-

[22] See Appendix 2 for details.

[23] We perform a second specification where we distinguish between EU and non-EU immigrants given that their household characteristics are the same. The main findings are that non-EU immigrants have higher social income than both EU immigrants and natives. We consider also a third specification, where

economic characteristics of natives, EU and non-EU migrants. The results are presented in Table 5 and Table 6.

3.1 Non-EU immigrants vs. Natives

Table 5 describes the effect of non-EU immigrants' social-characteristics on their social income in comparison to natives. The two important characteristics for Swedish families are the number of income earners and number of children with corresponding slope coefficients of –0.23 and 0.20. In both respects non-EU immigrants' social income is favored in comparison to natives; additional income earners in the non-EU immigrants' family lead to a 16 percentage points decrease in the social income less than that for natives, while more children contribute to a 12 percentage points higher immigrants' social support from the state[24]. While the situation in Germany is quite similar to that of Sweden, Belgium and Norway exhibit quite different trends. The two latter states make almost no difference between immigrants and natives in terms of the number of income earners in the family and both of them support an increase in the number of children, eg. Norway exhibits coefficients of 0.23 for immigrants and 0.07 for natives. The lack of any immigrant family wage income is mostly rewarded in Belgium and Germany with coefficients 0.92 and 0.55 respectively. For the American immigrants it is vital whether they receive any wage income or not (0.84) for receiving higher social income, which confirms the premise that the USA relies much more on the market itself rather than on state interference.

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the number of income earners and the number of children are dummy variables in order to account for differences in intercepts. The results are available upon request.

[24] Tests for equality of coefficients have been performed and the results show that the estimates are significantly different at the 5% significance level.

In sum, Sweden and Germany exhibit quite similar social policies and reward higher social benefits to immigrant families with fewer income earners and more children. Norway and Belgium show no difference between immigrants and natives in the case of additional earner in the family and support immigrant children. The USA policy reflects even more the fact that only if all members of the family have no wage income, then they could expect social support.

3.2 EU immigrants vs. Natives

Table 6 depicts the differences between EU immigrants and natives in the five countries under analysis. The general tendency of the state supporting more children and fewer income earners is preserved here too. Sweden still favours immigrants' families with respect to natives in the case more income earners appear in the family (-0.36 and –0.42), while this time Norway and Belgium join this group too. Germany makes hardly any difference between immigrants and natives in the case one more earner contributes to the family budget. The fact whether any of the household members receives wage income gets the highest recognition by Norway and Germany, which favour immigrants to natives (0.73 and 0.21 percentage points, respectively).

We perform tests for equality of coefficient estimates within countries. We confirm that the sensitivity of non-EU migrants' social income to the number of income earners in Sweden and Germany is more favourable than that for natives (significant at the 5% level), while in Norway and Belgium the effect of this factor is the same once we compare natives and non-EU immigrants. The results from the regression analysis suggest that according to the number of income earners, non-EU immigrants' families are treated more favorably by the welfare system in Sweden and Germany than in

Norway and Belgium. In contrast, comparing the effect of income earners on social income between EU immigrants and natives forms different groups of countries where Norway, Sweden and Belgium favor immigrants much more than Germany. The presence of more children in the family leads to higher social income for both non-EU and EU immigrants in comparison to natives in all the states under consideration. Last but not least, in the case the family does not receive any wage income, Belgium, Germany and the USA favour non-EU immigrants to natives, while Norway comes first in the case of EU immigrants to natives. To explore further the reasons for this social income differential between natives and immigrants, we perform social income decomposition.

Social Income Decomposition

We use the Oaxaca-Blinder decomposition method (e.g., Oaxaca and Ransom, 1994) to account for the social income differential between non-EU immigrants and natives on one hand, and EU immigrants and natives on the other. This method decomposes the overall gap into a part that is due to differences in observable factors (age, gender, education, wage income dummy, number of income earners, and number of children) and a part that remains unexplained. We run separate OLS regressions for natives, EU and non-EU immigrants, and then we describe the social income gap as written below:

$$\ln \bar{y}_i - \ln \bar{y}_n = \bar{x}_i'(\hat{\beta}_i - \beta^*) + \bar{x}'_n(\beta^* - \hat{\beta}_n) + (\bar{x}_i - \bar{x}_n)'\beta^*$$

where *i* denotes EU/non-EU immigrants and *n* denotes natives, $\ln \bar{y}_s$ is the immigrants/natives mean of the natural logarithm of social income, and x_s represents

the respective vectors of mean values of explanatory variables for immigrants and natives with $s \in \{i, n\}$. Finally, $\hat{\beta}_i$ and $\hat{\beta}_n$ are the corresponding vectors of estimated coefficients and β^* represents the nondiscriminatory welfare effect. We obtain it from the pooled sample of immigrants and natives.[25]

Up to now we use estimates from the median regression; however, the Oaxaca-Blinder decomposition requires application of the OLS method. That is why we examine how both estimators differ.[26] We find that the OLS and median estimates are not statistically different, and therefore we claim that both the regression and the decomposition analyses are comparable.

Since EU and non-EU immigrants are treated differently by the host country (law restrictions such as residence, work permits, etc.), we consider two separate decompositions: non-EU/ natives and EU/natives. As non-EU immigrants have socio-economic characteristics that are likely to call for higher social income than natives and EU immigrants (see Table 1), we expect that the size of the social income differential between natives and non-EU immigrants would be larger than that for EU immigrants and natives.

[25] In the original approaches developed by Oaxaca (1973) and Blinder (1973), it is assumed that the wage structure (in this paper the social income structure) of the advantageous group (non-EU immigrants) would prevail in the absence of discrimination, i.e., $\beta^* = \beta n$. However, later research suggests that this assumption is *ad hoc* and Neumark (1988), Oaxaca and Ransom (1994) advance the idea that the nondiscriminatory productivity factor estimates fall between the two groups; hence, they are the weighted average of each group's social income.

[26] We calculated the percentile corresponding to the mean social income for each of the sample countries and groups. Then we run regressions at the above mean percentile together with the 50^{th} (the median) percentile and test the equality of the estimates. The results show that both estimators provide statistically equal estimates, thus ensuring comparability between the regression analysis and the Oaxaca decomposition. The results are available upon request.

The decomposition of non-EU immigrants/natives' log social income differential is presented in Table 7. The overall "raw" logarithmic social income gap, representing the non-EU immigrants' advantage varies across countries. For example, in Sweden the gap between non-EU migrants and natives is 0.47, in Norway 0.31, in Belgium 0.55, in Germany 0.05 and in the USA -0.55.[27] Further, we analyze what part of the gap is explained by differences in socio-economic characteristics. In Sweden, 28 percentage points of this gap is due to disparities in age, gender, education, number of children, number of income earners and wage income between non-EU immigrants and natives. Belgium and Germany exhibit similar tendencies due to characteristics with 30 and 4 percentage points, respectively. Norway is rather different with only 9 percentage points due to explained variables. The USA is definitely a subject for further research since 20 percentage points of the gap are explained by family characteristics with the major difference being that the social income gap is in favour of the natives rather than the immigrants.

It appears that according to the importance of social characteristics', the countries sort into two groups: Sweden, Belgium and Germany, where the social income gap is mainly explained by characteristics' differential, and Norway, which favours non-EU immigrants to natives due to unexplained factors. The USA belongs in the Norwegian group since the unexplained variables have a larger share in explaining the gap but the welfare policy favours natives rather than immigrants.

[27] The gaps are significant at the 1 % level with the exception of Germany, where the gap is significant at the 10 % level. The size of the social income differential in Germany (Table 7) is comparatively small. The reason might be the peculiarity of the German non-EU migrants coming from Turkey in the 1960s (see Geddes, 2003). It seems that this group has adjusted to locals and does not exhibit disparities in social income like the other countries.

In order to compare the non-EU/natives' social income gap with that of EU/natives we make another decomposition, the results are provided in Table 8. Our premise that the size of the EU immigrants/natives' differential is smaller than that for the non-EU/natives is confirmed. The potential reasons are that both EU immigrants and natives share similar socio-economic characteristics and have integrated into the host-country, or the legal framework does not discriminate according to immigrant status.

In Sweden, the logarithmic social income gap is 0.17, in Norway -0.22, in Belgium-0.10[28] and in Germany -0.07. The smaller size of the differential in Belgium and Germany could be explained both by the similar social economic structure of the EU immigrants and natives. Examining the source of the gap allows us to conclude that the characteristics of the EU immigrants do not explain the differential in Sweden (7 percentage points) and in Norway (1 percentage point).

In sum, the decomposition of the social income differential indicates that non-EU immigrants differ from natives due to disparities in characteristics in Sweden, Belgium and Germany and due to unobservables in Norway and the USA. The EU immigrants /natives' social income differential is much smaller than that of the non-EU/natives.

VI. Conclusion

While there is much research on welfare migration, no empirical studies examine the social income differences among EU/non-EU immigrants and natives. The main goal of

[28] The gap is not statistically significant.

this paper is to find out whether natives and immigrants' social income differs within a country and across groups of countries. We confirm in accordance with previous studies that non-EU immigrants tend to be younger, less educated, and live in bigger families with fewer income earners than native families. EU immigrants are relatively as old as natives, have similar education and family size. The social income gap between non-EU immigrants and natives is larger than between EU immigrants and natives. The USA exhibits a very different tendency by providing natives with higher social income than immigrants. Overall, we find that the wage income, the number of income earners in the family and the presence of children are the main factors for the existence of the social income gap between natives and non-EU immigrants.

The main finding of this paper, after controlling for social demographic characteristics, is that in all three EU countries (Sweden, Belgium and Germany), the non-EU immigrants/natives' social income gap is explained almost fully by the socio-economic characteristics of the family head, while in Norway and the USA characteristics cannot explain the gap at all. The USA is the only country that gives higher social benefits to natives.

Overall, the main contribution of the paper to the existing literature is proof of the existence of a social income differential that favors immigrants to natives in some of the most developed EU countries. The second valuable point that we make is that one cannot consider immigrants without differentiating between EU and non-EU ones. EU immigrants are treated by the welfare systems almost as locals, which is due to the special regulations of the EU regarding European citizens. Non-EU immigrants benefit much more than natives from the different welfare policies and in all EU countries such as in Sweden, Belgium and Germany this is mainly due to their socio-economic

characteristics. These most important are the number of income earners in the family together with the number of children. There is a striking difference between the EU countries on one hand and the USA on the other, where the immigrants in the latter receive on average less social benefits than natives no matter what their family social characteristics are.

An avenue for future research is to address the issues of endogeneity of the regressors. We are aware that variables like number of children, education and number of income earners in the family are also choice variables which might be influenced by social income. A useful exercise that would test the robustness of our results would be to include more EU countries in the analysis. Further research could also focus on the nature of the immigration flows and how the welfare states determine these flows. Additional analysis on migrants' characteristics: year of arrival; reason for migration (family reunification); assimilation and occupational choice would provide valuable insights for explaining the nature of migration flows.

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Appendix 1

Table 1. Descriptive Statistics for Household Heads: Native-Born, EU Immigrants and Non-EU Immigrants
(Standard Errors in Parentheses) [a]

	Sweden			Norway			Belgium			Germany			USA	
	Natives	EU Immigrants	Non-EU Immigrants	Natives	EU Immigrants	Non-EU Immigrants	Natives	EU Immigrants	Non-EU Immigrants	Natives	EU Immigrants	Non-EU Immigrants	Natives	Immigrants
Age of Head [b]	42.60 (10.51)	43.23 (9.89)	37.77 (8.87)	41.62 (10.3)	42.55 (9.81)	40.69 (9.14)	43.87 (10.56)	43.80 (10.37)	42.47 (10.93)	45.15 (10.4)	47.13 (9.61)	43.03 (10.99)	40.81 (11.6)	40.12 (10.75)
Household size	3.33 (1.38)	3.27 (1.28)	3.65 (1.68)	3.51 (1.37)	3.53 (1.16)	3.81 (1.60)	3.37 (1.34)	3.53 (1.35)	4.92 (2.12)	3.32 (1.23)	4.18 (1.66)	4.47 (1.81)	3.79 (1.67)	4.85 (2.01)
Education [c]	0.30 (0.46)	0.28 (0.45)	0.23 (0.42)	0.31 (0.46)	0.44 (0.5)	0.27 (0.44)	0.58 (0.50)	0.39 (0.49)	0.32 (0.47)	0.13 (0.33)	0.22 (0.42)	0.19 (0.39)	0.48 (0.50)	0.31 (0.46)
Number of Income earners	1.93 (0.87)	1.82 (0.85)	1.40 (0.92)	2.06 (0.98)	1.95 (0.77)	1.93 (1.04)	1.42 (0.83)	1.39 (0.94)	0.66 (0.70)	1.75 (0.89)	1.99 (0.93)	1.70 0.92)	1.93 (0.96)	2.12 (1.13)
Number of Children	1.32 (1.16)	1.32 (1.09)	1.72 (1.33)	1.41 (1.15)	1.46 (1.06)	1.57 (1.22)	1.03 (1.15)	0.99 (1.11)	2.17 (1.44)	1.04 (1.02)	1.52 (1.30)	1.82 (1.32)	1.47 (1.27)	1.87 (1.32)
Sample Size	7267	191	180	6269	168	141	2023	90	100	5243	217	394	14953	1793
Log Annual Social Income	8.06 (1.05)	8.22 (1.07)	8.53 (0.87)	7.93 (1.04)	7.72 (1.08)	8.24 (1.00)	7.83 (1.09)	7.73 (0.95)	8.38 (0.70)	8.53 (0.91)	8.46 (0.87)	8.58 (0.79)	7.67 (1.31)	7.13 (1.32)

Notes: Data is from LIS. For further details see Section "Data and variables.".
[a] Weighted using LIS sampling weights.
[b] Aged 18-60 are included.
[c] Education measures the percentage of people with higher education (College and/or University degree: LIS definition).

Table 2. Decomposition of the Household Gross Income by Source: Natives and Immigrants

	Norway			Sweden			Belgium			Germany			USA	
Income Variables	Income Share: Natives [a]	Income Share: EU Immigrant [b]	Income Share: non-EU Immigrant [c]	Income Share: Natives	Income Share: EU Immigrant	Income Share: non-EU Immigrant	Income Share: Natives	Income Share: EU Immigrant	Income Share: non-EU Immigrant	Income Share: Natives	Income Share: EU Immigrant	Income Share: non-EU Immigrant	Income Share: Natives	Income Share: Immigrant [d]
Wages	74	80	67	76	74	59	80	83	63	78	80	79	78	82
Total Social Income*	12	9	21	18	21	37	12	11	25	11	12	17	13	13
Unemployment and Child Benefits	5	4	10	6	7	13	10	9	17	8	8	12	3	3
Health Benefits	6	4	7	9	12	12	1	2	7	2	4	1	3	2
Cash benefits	1	1	4	2	2	12	1	0	1	1	0	4	7	8
Disposable Income	75	72	78	69	69	76	67	66	76	71	71	74	81	84

Note: LIS and authors' calculations (weighted)

[a] Calculated as a percentage of natives' gross income.

[b] Calculated as a percentage of EU immigrants' gross income.

[c] Calculated as a percentage of non-EU immigrants' gross income.

[d] For USA the group of immigrants is not divided into EU/non-EU migrants.

* After performing mean comparison t-tests of the total social income among natives, EU and non-EU immigrants within a country, we find out that the means are significantly different at the 1% significance level with the exception of Germany where non-EU immigrants vs. natives' social income is significantly different at the 10% significance level and Belgium where EU immigrants and natives' total social income are not statistically different.

Table 3. Immigrants' Income Position Depending on Number of Children in the Household

	Gross Income Relative Position [a]	Social Income Relative Position [b]	Social Income Relative Position for Additional Kid [c]
Norway			
Household without children	89	91	
Household with one child	88	118	27
Households with two and more children	87	125	7
Sweden			
Household without children	81	118	
Household with one child	77	118	-1
Households with two and more children	71	173	55
Belgium			
Household without children	74	93	
Household with one child	84	130	37
Households with two and more children	72	160	30
Germany			
Household without children	91	98	
Household with one child	108	92	-7
Households with two and more children	95	121	29
USA			
Household without children	91	91	
Household with one child	91	80	-11
Households with two and more children	78	77	-2

Note: LIS and authors' calculations (weighted)

[a] Immigrants' Gross Income to Natives' Gross Income in percent.

[b] Immigrants' Social Income to Natives' Social Income in percent.

[c] Increment of Social Income Relative Position with an additional child in percent.

Table 4. Immigrants' Income Position Depending on Number of Income earners in the Household

	Gross Income Relative Position [a]	Social Income Relative Position [b]
Norway		
Household without earner	78	107
Household with one earner	95	111
Household with two and more income	88	109
Sweden		
Household without earner	85	95
Household with one earner	90	118
Household with two and more income	83	126
Belgium		
Household without earner	66	89
Household with one earner	83	119
Household with two and more income	87	106
Germany		
Household without earner	67	86
Household with one earner	92	137
Household with two and more income	91	104
USA		
Household with one earner	87	73
Household with two and more income	82	89

Note: LIS and authors' calculations (weighted)

[a] Immigrants' Gross Income to Natives' Gross Income in percent.

[b] Immigrants' Social Income to Natives' Social Income in percent.

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Table 5. Estimated Social Income Equations for Natives and Non-EU Immigrants (Standard Errors in Parentheses)

	Sweden		Norway		Belgium		Germany		USA	
Independent variables	Natives	Non-EU Immigrants	Natives	Non-EU Immigrants	Natives	Non-EU Immigrants	Natives	Non-EU Immigrants	Natives	Immigrants
Age of head	-0.03 (0.01)***	0.04 (0.04)	-0.05 (0.01)***	-0.21 (0.05)***	-0.09 (0.02)***	0.12 (0.01)***	-0.13 (0.01)***	-0.03 (0.01)**	0.06 (0.01)***	-0.07 (0.01)***
Age Squared	0.001 (0.001)***	-0.002 (0.0005)	0.001 (0.0001)***	0.003 (0.0005)***	0.001 (0.0002)***	-0.01 (0.0003)***	0.001 (0.0001)***	0.001 (0.0001)***	0.001 (0.0001)***	0.001 (0.0001)***
Gender	0.06 (0.06)	-0.03 (0.15)	0.44 (0.04)***	0.53 (0.17)***	0.33 (0.09)***	-0.50 (0.01)***	0.12 (0.05)***	0.04 (0.06)	0.06 (0.03)***	0.33 (0.05)***
Education	-0.25 (0.04)***	-0.25 (0.13)**	-0.34 (0.03)***	-0.99 (0.14)***	-0.11 (0.05)***	-0.84 (0.09)***	-0.18 (0.05)***	-0.15 (0.04)***	0.06 (0.03)**	0.04 (0.05)
Wage Income	0.14 (0.09)*	-0.13 (0.18)	0.37 (0.07)***	0.09 (0.22)	0.05 (0.08)	0.92 (0.01)***	0.22 (0.06)***	0.55 (0.05)***	0.48 (0.05)***	0.84 (0.08)***
Number of Income earners	-0.39 (0.02)***	-0.23 (0.08)***	-0.29 (0.02)***	-0.31 (0.07)***	-0.45 (0.04)***	-0.43 (0.01)***	-0.30 (0.02)***	-0.14 (0.02)***	-0.20 (0.02)***	-0.11 (0.02)***
Number of Children	0.08 (0.02)***	0.20 (0.05)***	0.07 (0.02)***	0.23 (0.06)***	0.10 (0.02)***	0.05 (0.01)***	0.04 (0.02)**	0.15 (0.01)***	-0.04 (0.01)***	0.06 (0.02)***
R^2	0.11	0.14	0.19	0.25	0.29	0.56	0.27	0.15	0.09	0.07
Number of observations	7267	180	6269	141	2023	100	5243	394	14953	1793

Note:
*** Indicates significance at 1% significance level;
** Indicates significance at 5% significance level;
* Indicates significance at 10% significance level;
Dependent variable is a natural logarithm of annual social income. Education is a dummy variable where 1 stand for people with university and college degrees, Gender is a dummy variable where males are reference group; Wage Income is a dummy where families with nonzero gross income are the reference group. The set of explanatory variables is jointly significant at the 1 % significance level.

Table 6. Estimated Social Income Equations for Natives and EU Immigrants (Standard Errors in Parentheses)

	Sweden		Norway		Belgium		Germany	
Independent variables	**Natives**	**EU Immigrants**	**Natives**	**EU Immigrants**	**Natives**	**EU Immigrants**	**Natives**	**EU Immigrants**
Age of head	-0.08 (0.01)***	-0.23 (0.05)***	-0.14 (0.01)***	-0.18 (0.07)***	-0.12 (0.02)***	-0.16 (0.09)*	-0.18 (0.02)***	-0.16 (0.01)***
Age Squared	0.001 (0.0001)***	0.003 (0.0005)***	0.001 (0.0001)***	0.002 (0.0008)***	0.001 (0.0001)***	0.002 (0.001)**	0.002 (0.0002)***	0.003 (0.0003)***
Gender	0.20 (0.05)***	0.63 (0.17)***	0.62 (0.05)***	0.56 (0.27)**	0.34 (0.07)***	-0.90 (0.43)**	0.13 (0.05)***	-0.08 (0.03)***
Education	-0.29 (0.04)***	-0.78 (0.13)***	-0.33 (0.04)***	-0.15 (0.19)	0.008 (0.4)	0.41 (0.29)	-0.11 (0.05)***	0.70 (0.01)***
Wage Income	0.48 (0.09)***	0.22 (0.23)	0.71 (0.09)***	1.44 (0.43)***	0.05 (0.06)	-0.26 (0.49)	0.46 (0.06)***	0.67 (0.02)***
Number of Income earners	-0.42 (0.02)***	-0.36 (0.08)***	-0.25 (0.02)***	-0.16 (0.12)	-0.41 (0.03)***	-0.25 (0.18)	-0.25 (0.03)***	-0.28 (0.01)***
Number of Children	0.22 (0.02)***	0.02 (0.06)	0.22 (0.02)***	0.27 (0.11)***	0.27 (0.02)***	0.04 (0.14)	0.16 (0.02)***	0.05 (0.01)***
R^2	0.12	0.22	0.17	0.15	0.27	0.25	0.23	0.26
Number of observations	7267	191	6269	168	2023	90	5243	217

Note:
*** Indicates significance at 1% significance level;
** Indicates significance at 5% significance level;
* Indicates significance at 10% significance level;
Dependent variable is a natural logarithm of annual social income. Education is a dummy variable where 1 stands for people with university and college degrees, Gender is a dummy variable where males are reference group; Wage Income is a dummy where families with nonzero gross income are the reference group. The set of explanatory variables is jointly significant at the 1 % significance level.

Table 7. Decomposition of the Non-EU Immigrants/Natives' Gap in Social Income*

	Sweden	Norway	Belgium	Germany	USA
Difference in Mean Log Social Income	0.47 [a]	0.31	0.55	0.05	-0.55 [b]
Unexplained	0.19	0.22	0.25	0.01	-0.35
Characteristics	0.28	0.09	0.30	0.04	-0.20
Number of Income Earners	0.21	0.06	0.22	0.08	-0.03
Wage Income	0.06	0.03	0.01	0	-0.02
Number of Children	0.07	0.03	0.12	0.02	-0.04

* The table reports the coefficients from Oaxaca-Blinder decomposition of the log annual wage differential between natives and non-EU immigrants. The effect of age, age squared, education, gender and the constant are not reported in the table.

[a] The negative gap indicates that natives are favored.

[b] The positive gap indicates that EU immigrants are favored.

Table 8. Decomposition of the EU Immigrants/Natives' Gap in Social Income*

	Sweden	Norway	Belgium	Germany
Difference in mean log social income	0.17 [a]	-0.22	-0.10 [b]	-0.07
Unexplained	0.10	-0.21	-0.03	0.01
Characteristics	0.07	-0.01	-0.07	-0.08
Number of Income Earners	0.04	0.03	-0.02	-0.09
Family Gross Income	0.01	-0.01	0	-0.03
Number of Children	0	0	-0.02	0.02

* The table reports the coefficients from Oaxaca-Blinder decomposition of the log annual wage differential between natives and non-EU immigrants. The effect of age, age squared, education, gender and the constant are not reported in the table.

[a] The negative gap indicates that natives are favored.

[b] The positive gap indicates that EU immigrants are favored.

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