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Refugee immigration and public sector finances

Longitudinal evidence from Sweden



Refugee immigration and public sector finances: Longitudinal evidence from Sweden

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Abstract

This is an analysis of refugee immigration and public sector finances in Sweden. All refugees who were listed in the national population registers from 2005 to 2007 are tracked from 2006 to 2012. We present two measures of the public sector's net costs related to refugee immigration. In the first measure, public revenues are related to all public costs associated with refugee immigration. The second measure relates public revenues to public costs associated with immigration, excluding costs that can be assumed to be fixed in the short run when refugee immigration increases. By presenting these two measures we are able to present an upper and a lower bound for the public net costs of refugee immigration during a refugee's first years in Sweden. Our results reveal that during a refugee's first year of residency in Sweden after the asylum application has been approved, the public sector net costs for that refugee's immigration are between 95,000 SEK and 190,000 SEK, depending on how public costs are allocated to the refugee population. After seven years in Sweden, the cost for that refugee is between 37,000 SEK and 125,000 SEK. Large differences are found between refugees with different educational attainment as regards the extent to which they incur a cost for the public sector's finances.

The results in this paper are based upon a report written for the Swedish Fiscal Policy Council by Aldén and Hammarstedt (2016), "Flyktinginvandring – sysselsättning, förvärvsinkomster och offentliga finanser", *Studier i finanspolitik*, 2016:1. The authors are grateful for comments from members of the Swedish Fiscal Policy Council and from Bertil Holmlund and Joakim Sonnegård. The authors are also grateful for discussions with Spencer Bastani and Jan Ekberg.

1. Introduction

An increased share of foreign-born residents in several OECD countries has raised concern about the effect of immigration on public sector finances. One question of certain interest has been the extent to which the public sector redistributes income between the native and the immigrant populations. The topic has been explored in several countries, and Rowthorn (2008) indicates that the effect is relatively modest; the redistribution of income from the native to the immigrant population in different countries ranges from +1 per cent to –1 per cent of GDP.¹

However, while studies in several countries have tried to answer the question of how the public sector redistributes income between the immigrant and the native population, less attention has been paid to the effect of refugee immigration on public finances. We have good reasons to believe that labour force and refugee migrants affect public sector finances in different ways. It is well known that labour market attachment is much weaker among refugees than among labour force migrants. In addition, for individuals in working age, labour market attachment is probably the decisive factor for the extent to which an individual contributes to public sector finances. Since several countries have received a large inflow of asylum seekers in recent years, more knowledge of how refugee immigration affects public sector finances is clearly needed.

To our best knowledge, only a few studies have to date focused on how refugee immigration affects public sector finances. In the UK, Dustmann and Frattini (2014) show that refugee immigrants contribute less to public finances than labour force immigrants. Similar results have been found in Sweden, where Ruist (2015) and Flood and Ruist (2016) show that refugee immigration implies a cost for the public sector since incomes are redistributed through the public sector from natives to the population who had once arrived in Sweden as refugees.²

However, previous studies on how refugee immigration affects public sector finances are cross-sectional in that they focus on how immigrants with refugee background affect public

¹ Similar results are found in a report from the OECD (2013).

² Studies by Ekberg (1999, 2009) indicate that the public sector redistributes incomes from the native to the foreign born population in Sweden. The size of this redistribution is about 1 per cent of the Swedish GDP each year.

sector finances in a country in a certain year, or over a certain period of years. Thus, previous studies of refugee immigration and public sector finances neglects the fact that the effect of refugee immigration on public sector finances changes in the course of the refugee's time in the new country.

With the help of longitudinal data, we explore how refugee immigration affects public finances in Sweden. We have access to information about all individuals (18 years of age or older) who migrated as refugees from countries in Africa, the Middle East and Asia, who were granted asylum and given a resident permit, and were registered in the national population registers from 2005 to 2007. We are able to follow these individuals in public registers from 2006 to 2012 in order to study how public sector revenues (direct taxes, indirect taxes and social insurance fees) and public sector costs (public transfers, public consumption) linked to these refugees evolves on the course of their time in Sweden. Thereby, our study will give us longitudinal information about how refugee immigration affect public sector finances in Sweden. Here it is worth noting that the Swedish Migration Authorities are responsible for the refugees while their asylum applications are being handled, (i.e. before they are granted asylum). Costs incurred at this time (e.g. for housing and other allowances) are paid by the Swedish Migration Authorities and are not included among the costs observed in our study.

The reminder of the paper is organized as follows. In Section 2 we present the data, definitions of public sector revenues and costs, and information about how the calculations have been carried out. Section 3 presents information about demographic variables and how the refugee's employment rates evolve during the observation period. The results of the calculations are presented in Section 4; Section 5 provides a discussion and conclusions.

2. Data, definitions and outline of calculations

We obtain data from the LISA database at Statistics Sweden. We have information about all individuals born in countries in Africa, the Middle East or other Asian countries who migrated to Sweden as refugees, who gained asylum as refugees and were observed in the Swedish national population register from 2005 to 2007. All these individuals are followed in the LISA database from 2006 to 2012.

From the LISA database we have information about each refugee's age, gender, educational attainment and number of children. We also have information on whether or not a refugee is employed (either wage-employed or self-employed in November each year), about his or her taxable income and about incomes from different parts of the public transfer system. All definitions are presented in Table 1.

We start by defining the *public sector net*, which consists of the public sector's *revenues* and *costs*. In the calculation of the public sector's revenues and costs, we have to acknowledge some deficiencies and lack of information in the underlying data. Furthermore, we realize that it is not obvious how some public revenues and costs should be allocated to refugees. We discuss this in detail below.

Table 1 shows how the calculations are carried out. The public sector's *revenues* consist of direct taxes, social security fees and consumption taxes. Direct taxes are calculated using information about individual taxable incomes and current tax rates for each year. Social security fees are calculated with the help of individual incomes and current social security fees each year for the wage- and self-employed, respectively. In the calculations we assume that all of the refugee's total disposable income is consumed. Furthermore, we assume an average consumption tax rate of 15 per cent. All revenues are calculated in 2014 prices.

The public sector's *costs* are made up of transfers and public consumption. Transfers are received on the individual or household level. For transfers received on the individual level, the total amount of transfers is simply allocated to the individual.³ When transfers are received at the household level (e.g. social assistance and housing allowances) they are distributed evenly among the members of that household.

A central issue is how certain types of public consumption, such as costs for education, child care, hospital care, the judicial system, public administration, infrastructure and national defense should be allocated to refugees. Lee and Miller (1998) and Rowthorn (2008) discuss this in their work. In our calculations we are following Ruist (2015) and distribute such costs proportionally to refugees with the help of information from Borgquist et al (2010), Martens

³ Due to data limitations some individual transfers are not observable in the data. Sickness benefits and early retirement pensions are not included among the transfers we are able to observe. However, as shown by Hammarstedt (2000), the share of foreign-born individuals who receive early retirement pension during their first years upon arrival in Sweden is negligible.

and Holmberg (2005), Socialstyrelsen (2008) and Sveriges Kommuner och Landsting (2007). All costs are calculated in 2014 prices.

In the literature there is a disagreement over the extent to which costs for public goods such as public administration, infrastructure and national defence should be assumed to increase proportionally with immigration. Lee and Miller (1998) argue that such costs presumably increase very little; Rowthorn (2008) recommends that such costs are distributed equally across the population. This is of course relevant to our study. On the one hand, if the costs for certain public goods increase in proportion to refugee immigration, such costs should be allocated proportionally to the refugee population. On the other hand, if those costs are assumed to increase very little, we can safely assume that they are fixed, at least in the short run.

Against this background, we present two different measures of *public sector net*, calculated in 2014 prices. The first measure (*Public sector net 1*) relates the public sectors revenues to all public costs, where all public consumption is distributed following Ruist (2015). The second measure (*Public sector net 2*) relates public revenues to public costs, excluding costs that can be assumed to be fixed in the short run as refugee immigration increases. Such public costs are for goods, such as public administration, infrastructure and national defence. By presenting two measures, we can present an upper and a lower bound of the costs for refugee immigration to Sweden.

Table 1: Definition of public revenues and public costs

| Revenues and costs | Definition |
|---|---|
| <i>Revenues</i> | |
| Direct taxes | Consists of governmental tax, municipality tax and tax on capital income. These taxes have been calculated with the help of current tax rates each year. Basic deductions and in work benefits have been taken into account. |
| Social insurance fees | For the wage-employed the social insurance fee amounts to 31.4 per cent of income from work each year. For the self-employed the social insurance fees amount to 28.97 per cent of income from self-employment each year. |
| Consumption taxes | We assume that the household's total disposable income is consumed each year. The household's total disposable income is distributed equally among all adults in the household. We assume that the average consumption tax rate is 15 per cent. |
| <i>Costs</i> | |
| <i>Transfers</i> | |
| Social assistance | The household's amount of social assistance is distributed equally among the adults in the household. |
| Housing allowance | The household's amount of housing allowance is distributed equally among the adults in the household. |
| Child allowances | The child allowance is distributed equally among the adults in the household |
| Study grants | Received at the individual level |
| Parental leave grant | Received at the individual level |
| Unemployment insurance | Received at the individual level |
| Income from labour market measures | Received at the individual level |
| Age-related pension | Received at the individual level |
| <i>Public consumption</i> | Costs for public consumption are calculated following previous research, see Ruist (2015). |
| Hospital care and elderly care | |
| Disability care | |
| Education and child care | |
| Crime and justice | |
| Integration policies | |
| Labour market policies | |
| Other (public administration, infrastructure, national defence) | |
| <i>Public sector net</i> | |
| Public sector net 1 | Revenues – Costs |
| Public sector net 2 | Revenues – (Costs – Other) |

3. The refugee population

In this part of the paper we present information about age, gender and educational attainment at the time of arrival in Sweden for all refugees from Africa, the Middle East and other Asian countries, 18 years of age or older, who were listed in the national population register from the years 2005 to 2007. We explore how the employment rate among these refugees evolves over the length of their time in Sweden.

3.1 Demographic characteristics

Table 2 shows that the majority of the refugees originated from countries in the Middle East. In 2006, around 62 per cent of the refugees originated from countries in the Middle East. In 2007, the corresponding share was about 75 per cent. The average age of refugees was about 35 years. In 2007, around 67 per cent of the refugees who were registered in the national population register were male.

Table 2: Demographic characteristics of refugees (18 years of age or older) listed in the national population register, 2005 to 2007

| | 2005 | 2006 | 2007 |
|---|-------|--------|--------|
| Average age | 35.1 | 34.9 | 34.9 |
| Share of females | 0.473 | 0.354 | 0.334 |
| Nine years of compulsory school or less | 0.221 | 0.375 | 0.321 |
| Upper secondary school | 0.218 | 0.192 | 0.172 |
| University | 0.264 | 0.263 | 0.356 |
| Unknown education | 0.297 | 0.170 | 0.151 |
| <i>Region of birth</i> | | | |
| Africa | 0.381 | 0.201 | 0.176 |
| Middle East | 0.401 | 0.622 | 0.752 |
| Other Asia | 0.218 | 0.177 | 0.072 |
| Number of individuals | 3,277 | 13,044 | 11,214 |

In terms of education, a large share of the refugees had at most nine years of compulsory school at their time of arrival in Sweden. In 2006 this share was about 37 per cent. Approximately 30 per cent of the refugees had a university education upon arrival in Sweden. In 2005 the educational attainment for almost 30 per cent of refugees was unknown. The share of refugees with an unknown educational attainment was lower in the years 2006 and 2007.

3.2 Employment rate

We explore how the employment rate evolves after that the refugees have been registered in the national population register. The development for different cohorts is presented in Figure 1. For the 2005 cohort, about 9.8 per cent were employed in 2006. About 9 per cent of the refugees who immigrated in 2007 were employed in 2008. Among those who immigrated in 2006, slightly more than 14 per cent were employed a year later.⁴

Figure 1 shows that the employment rate in all cohorts increase with time spent in Sweden. After five years spent in Sweden, about 39 per cent of the refugees in the 2005 cohort were employed. Among those who immigrated in 2007, about 34 per cent were registered as employed five years later. In the 2005 cohort, around 49 per cent were registered as employed seven years after immigration to Sweden.⁵

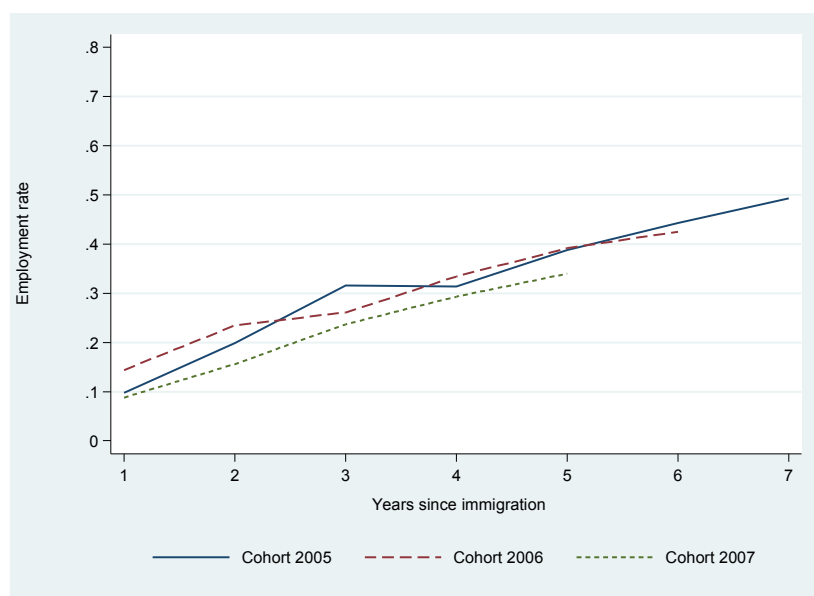


Figure 1: Employment rate (November each year) for all refugees who immigrated to Sweden from 2005 to 2007, by cohort.

Figures 2 and 3 show how the employment rate evolves with time spent in Sweden for refugees with different educational attainment observed at the time of arrival in Sweden.⁶ University-educated refugees immigrating to Sweden are, not surprisingly, doing better than the average; the opposite is true of refugees who immigrate to Sweden with nine-year

⁴ All figures are presented in Table A1 in the Appendix.

⁵ The results are in line with the results in Lundborg (2013).

⁶ All figures are presented in Figure A2 in the Appendix.

compulsory schooling or less. As in Figure 1, the different cohorts in Figure 2 and Figure 3 display a similar pattern. Among refugees with university education, about 49 per cent of those who immigrated in 2005 were registered as employed after five years in Sweden. After seven years, the share that was employed among those with university education was nearly 60 per cent.

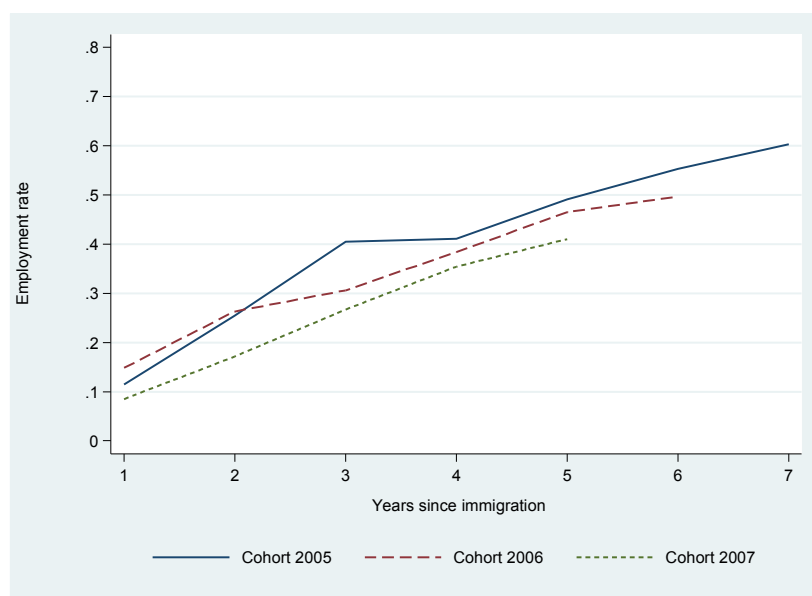


Figure 2: Employment rate (November each year) for refugees who immigrated to Sweden with university education from 2005 to 2007, by cohort.

As mentioned, the share of employed refugees is lower among those with nine-year compulsory schooling or shorter education. About 37 per cent of those who immigrated in 2005 with nine-year compulsory schooling or shorter education were employed after five years in Sweden. In the same cohort, about 48 per cent of the refugees were employed seven years after immigration to Sweden.

When studying refugees with different educational attainment, it is noteworthy that we focus on their educational attainment upon arrival in Sweden. Thus, in the sample of individuals with at most nine years of compulsory there may be individuals who have resumed their education during the observation period.

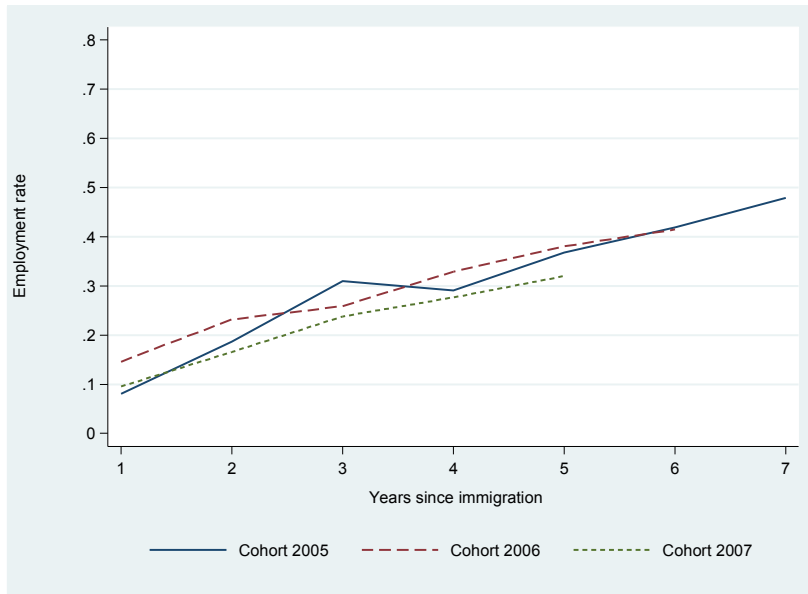


Figure 3: Employment rate (November each year) for refugees who immigrated to Sweden with no more than nine years of compulsory education from 2005 to 2007, by cohort.

4. Refugee immigration and public sector finances

In this section, we study the relationship between refugee immigration and public sector finances. As discussed in Section 2, we have to consider the way in which costs of public consumption should be allocated to refugees. Some types of public consumption, received at the individual level, such as costs for education, health and child care cannot be traced to individual recipients. Other types of public consumption are public goods, such as costs for public administration, infrastructure and national defense, and again cannot be traced to individual recipients. In line with Ruist (2015), we resolve this issue by allocating the per capita costs for public consumption proportionally to each refugee. The per capita amount is assumed to be constant during the observation period. The amount for each type of public consumption is presented in Table A5 in the Appendix.

As mentioned, two different measures of public sector finances are presented. *Public sector net 1* relates public sector revenues to all public sector costs. *Public sector net 2* relates public sector revenues to public sector costs, but excludes costs that can be assumed to be fixed in the short run as refugee immigration increases, such as costs for public administration, infrastructure and national defense. All calculations are presented in 2014 prices.

Figure 4 depicts the evolution of the public sector net across the observation period.⁷ The first year after immigration to Sweden, *Public sector net 1* totaled 192,000 SEK per capita for refugees who immigrated to Sweden in 2005.⁸ The corresponding per capita amounts for refugees who immigrated in 2006 and 2007 were 181,000 SEK and 188,000 SEK, respectively. Five years after immigration to Sweden the per capita amount was approximately 129,000 SEK for refugees in the 2005 cohort. After seven years the per capita amount was around 95,000 SEK. This can be compared to the results in Ruist (2015), who found that the yearly public sector cost per capita was around 70,000 SEK for immigrants with refugee backgrounds residing in Sweden in 2007. Here it is worth noting that Ruist's results are based on all refugees residing in Sweden in 2007. Many of them had been resident in Sweden for several years and the population is therefore not comparable to the population of relative newcomers in our study.

Turning to *Public sector net 2*, in which certain costs for public goods are excluded, we find that the net cost is around 133,000 SEK in the first year after immigration for refugees in the 2005 cohort. After five years, this measure of public costs had decreased to around 71,000 SEK for this cohort, while it amounted to around 37,000 SEK seven years after immigration.

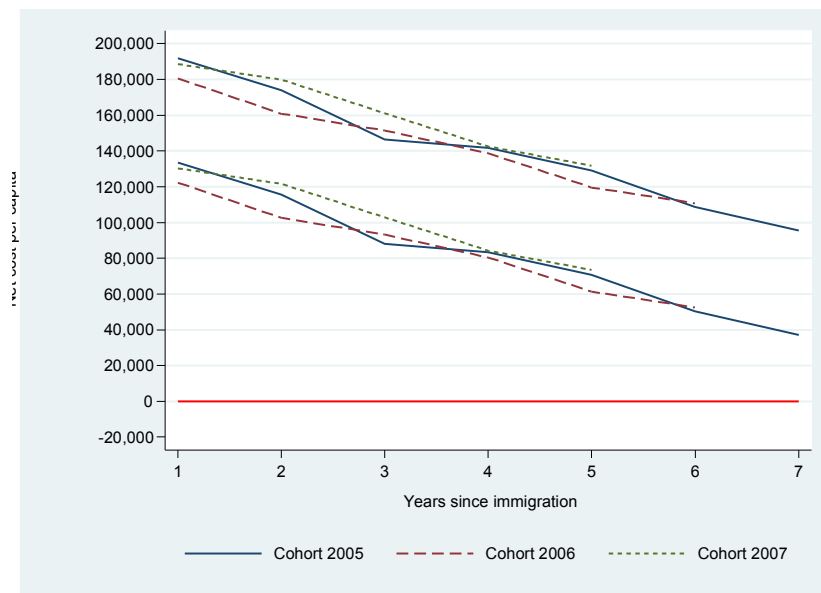


Figure 4: Public sector net for all for all refugees who immigrated to Sweden from 2005 to 2007, by cohort.

⁷ All figures are presented in Table A3 in the Appendix.

⁸ In September 2016, 1 SEK was worth 0,104 EURO.

How the public sector net evolves for refugees with different educational attainment at their point of time for arrival in Sweden is highlighted in Figure 5 and Figure 6.⁹ The public sector net for refugees with different levels of educational attainment upon arrival in Sweden appears similar. However, as shown in Section 3, more highly educated refugees fare considerably better on the labour market than do less-educated refugees. This is reflected also by the evolution of the public sector net over time. The costs for highly educated immigrants decrease much faster than the costs for refugees with no more than nine years of compulsory schooling.

After five years in Sweden, the *Public sector net 1* for university-educated refugees who immigrated to Sweden in 2005 is roughly 100,000 SEK per capita. The corresponding per capita amount for less-educated refugees in 2005 was about 139,000 SEK. After seven years spent in Sweden the *Public sector net 1* for refugees with a university education was around 60,000 SEK; the comparable figure for refugees with no more than nine years of compulsory school was around 107,000 SEK.

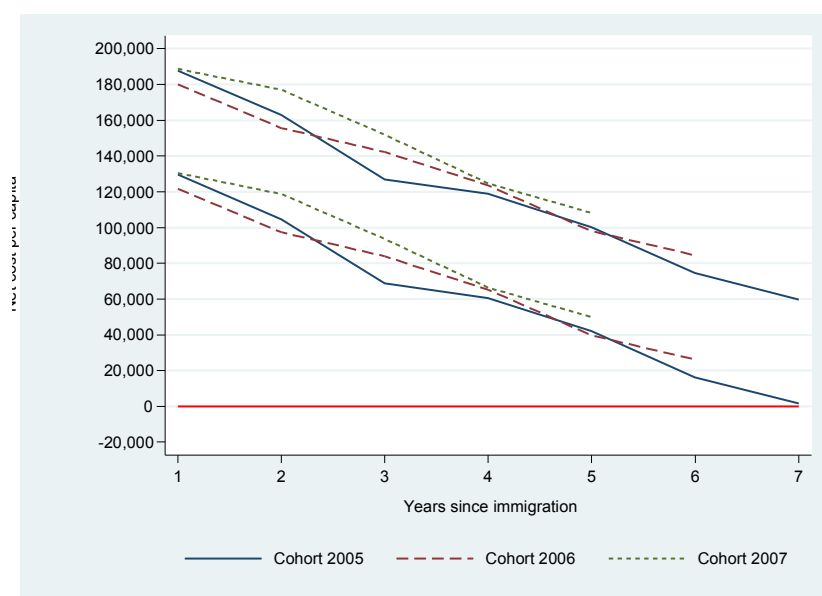


Figure 5: Public sector net for all for university-educated refugees who immigrated to Sweden from 2005 to 2007, by cohort.

Turning to *Public sector net 2*, (i.e. the measure that excludes costs that can be assumed to be fixed in the short run as refugee immigration increases), we find that the yearly public per capita net cost for refugees who immigrated with university education in 2005 was roughly

⁹ All figures are presented in Table A4 in the Appendix.

42,000 SEK after five years in Sweden. The corresponding per capita amount for refugees with no more than nine years of compulsory schooling was around 81,000 SEK.

After seven years in the country, the per capita amount for *Public sector net 2* amounted to around 49,000 SEK for refugees with nine years of less of compulsory schooling. For refugees with university education the *Public sector 2* was close to zero after seven years in Sweden.

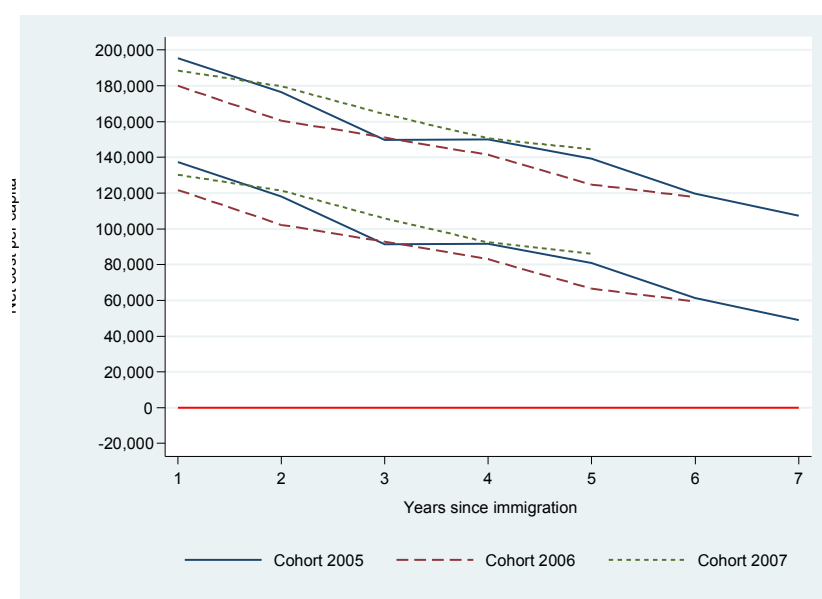


Figure 6: Public sector net for all for refugees who immigrated to Sweden from 2005 to 2007 with no more than nine years of compulsory schooling, by cohort.

4. Concluding discussion

This study focuses on refugee immigration and public sector finances in Sweden. All refugees from Africa, the Middle East or Asia, whose applications for asylum were approved, who received a resident permit and were listed in the national population registers from 2005 to 2007, were identified in public registers and followed from 2006 to 2012.

Differences in employment rates were observed for refugees with different levels of educational attainment. Among university-educated refugees who immigrated to Sweden, about 60 per cent were employed seven years later; somewhat less than 50 per cent of the refugees with no more than nine years of compulsory schooling were employed seven years after immigration.

We present two measures of the public sector's net costs related to refugee immigration. In the first measure, public revenues associated with refugee immigration are related to all public costs associated with refugee immigration. The second measure relates public revenues associated with refugee immigration to public costs associated with refugee immigration, excluding costs that are presumably fixed in the short run as refugee immigration increases. By presenting these two measures, we are able to set an upper and a lower bound for the public net costs of refugee immigration during a refugee's first seven years in Sweden. Here, it should be noted that costs incurred during a refugee's initial period in Sweden, when the refugee's asylum application is being processed (paid by the Swedish Migration Authorities), are not included in the calculations.

The first year after immigration to Sweden, the average public net costs amounts to around 190,000 SEK per refugee when all public costs are allocated to the refugee population proportionally. Seven years after immigration to Sweden this cost, on average, was around 95,000 SEK per refugee. When public costs that can be assumed to be fixed in the short run are excluded, the average public cost per refugee totals approximately 125,000 SEK in the first year in Sweden. After seven years, this cost was around 37,000 SEK per refugee.

Thus, our results shows that the public sector net costs for immigration ranges from 95,000 SEK to 190,000 SEK per refugee, depending on how public costs are allocated to the refugee population, during the refugee's first year of residence in Sweden. After seven years in the country, this cost is between 37,000 SEK and 125,000 SEK per refugee.

We find large differences between refugees with different educational attainment upon arrival in Sweden. During the first year of stay in Sweden, the public net cost is about the same for highly educated refugees and those with nine years or less of formal education. After seven years in Sweden, the average public net cost for a refugee with a university education is around 60,000 SEK per refugee when all public costs are allocated proportionally to refugees. This figure rises to around 107,000 SEK for a less-educated refugee.

The striking differences between highly educated refugees and less-educated refugees become even more pronounced when we exclude public costs than can be assumed to be fixed in the short run from the calculations. After seven years in Sweden, the average per capita cost is

about 49,000 SEK for a refugee with nine years of compulsory schooling while the net cost for refugees with university education is almost zero.

So what have we learned from these calculations? As far as we know, this is the first study to explore how public revenues and costs associated with refugee immigration evolve as a refugee's time in Sweden increases. Previous research in this area has focused on the redistribution of incomes between natives and refugees during a certain year, or over a certain number of years. In a previous Swedish study, Ruist (2015) uses an approach similar to ours and calculates the public net cost per refugee during the year 2007. Ruist finds that in 2007 each individual with a refugee background incurred a net cost for the public sector of 70,000 SEK. Not surprisingly, our results are consistent with those findings. However, we have also shown that during a refugee's first seven years in Sweden the yearly net cost for the public sector is considerably higher. Against Ruist's findings, and according to the results presented in our study, we have evidence that it takes several years before, if ever, refugee immigration becomes a net gain for the public sector finances in Sweden.

The calculations have also shown that there are large differences between groups of refugees with different educational attainment regarding the extent to which they contribute to public sector finances. The net cost for refugees with university education decreases at a much faster rate than the net costs for refugees with lower education. This is, of course, related to the stronger labour market position for more educated refugees. We therefore want to underline the importance of improved labour market integration of refugees.¹⁰ How to improve refugee's labour market is beyond the scope in this paper, but traditional labour market policies, combined with education, language training and systematic work against different kinds of discrimination should be useful tools.

¹⁰ An overview of immigrant's labour market position in Sweden can be found in Aldén & Hammarstedt (2015).

Appendix

Table A1: Employment rate (November each year) for all refugees who immigrated to Sweden from 2005 to 2007, by cohort.

| Year | Cohort | | |
|------|--------|-------|-------|
| | 2005 | 2006 | 2007 |
| 2006 | 0.098 | | |
| 2007 | 0.199 | 0.144 | |
| 2008 | 0.316 | 0.234 | 0.088 |
| 2009 | 0.314 | 0.261 | 0.156 |
| 2010 | 0.388 | 0.334 | 0.237 |
| 2011 | 0.443 | 0.392 | 0.293 |
| 2012 | 0.493 | 0.425 | 0.340 |

Table A2: : Employment rate (November each year) for all refugees who immigrated to Sweden from 2005 to 2007, by cohort and educational attainment.

| Year | University education | | | Nine-year compulsory school or shorter | | |
|------|----------------------|-------|-------|--|-------|-------|
| | 2005 | 2006 | 2007 | 2005 | 2006 | 2007 |
| 2006 | 0.115 | | | 0.080 | | |
| 2007 | 0.255 | 0.148 | | 0.187 | 0.146 | |
| 2008 | 0.404 | 0.263 | 0.085 | 0.310 | 0.232 | 0.095 |
| 2009 | 0.411 | 0.306 | 0.171 | 0.291 | 0.259 | 0.166 |
| 2010 | 0.491 | 0.384 | 0.267 | 0.368 | 0.329 | 0.238 |
| 2011 | 0.554 | 0.465 | 0.354 | 0.419 | 0.380 | 0.277 |
| 2012 | 0.603 | 0.497 | 0.410 | 0.479 | 0.415 | 0.320 |

Table A3: Public sector net for all for all refugees who immigrated to Sweden from 2005 to 2007, by cohort.

| Year | Public sector net 1 Public sector net cost | | | Public sector net 2 Public sector net cost excluding public costs that are assumed to be fixed in the short run | | |
|------|---|----------|----------|--|----------|----------|
| | 2005 | 2006 | 2007 | 2005 | 2006 | 2007 |
| 2006 | -191,806 | | | -133,534 | | |
| 2007 | -173,966 | -180,546 | | -115,694 | -122,274 | |
| 2008 | -146,427 | -160,871 | -188,528 | -88,155 | -102,599 | -130,256 |
| 2009 | -141,776 | -151,422 | -179,894 | -83,504 | -93,150 | -121,622 |
| 2010 | -129,063 | -138,735 | -161,096 | -70,791 | -80,463 | -102,824 |
| 2011 | -108,731 | -119,557 | -142,478 | -50,459 | -61,285 | -84,206 |
| 2012 | -95,374 | -110,750 | -131,754 | -37,102 | -52,478 | -73,482 |

Table A4: Public sector net for all for all refugees who immigrated to Sweden from 2005 to 2007, by cohort and education.

| Year | Public sector net 1 Public sector net cost | | | Public sector net 2 Public sector net cost excluding public costs that are assumed to be fixed in the short run | | |
|--|---|----------|----------|--|----------|----------|
| | 2005 | 2006 | 2007 | 2005 | 2006 | 2007 |
| <i>University education</i> | | | | | | |
| 2006 | -187,779 | | | -129,507 | | |
| 2007 | -162,808 | -179,954 | | -104,536 | -121,682 | |
| 2008 | -126,974 | -155,612 | -188,708 | -68,702 | -97,340 | -130,436 |
| 2009 | -118,844 | -142,196 | -177,025 | -60,572 | -83,924 | -118,753 |
| 2010 | -100,257 | -123,480 | -151,862 | -41,985 | -65,208 | -93,590 |
| 2011 | -74,573 | -97,930 | -124,679 | -16,301 | -39,658 | -66,407 |
| 2012 | -59,835 | -84,444 | -108,130 | -1,563 | -26,172 | -49,858 |
| <i>Nine-year compulsory schooling or shorter</i> | | | | | | |
| 2006 | -195,522 | | | -137,250 | | |
| 2007 | -176,316 | -179,943 | | -118,044 | -121,671 | |
| 2008 | -149,628 | -160,488 | -188,466 | -91,356 | -102,216 | -130,194 |
| 2009 | -149,942 | -151,041 | -179,714 | -91,670 | -92,769 | -121,442 |
| 2010 | -139,194 | -141,330 | -164,081 | -80,922 | -83,058 | -105,809 |
| 2011 | -119,714 | -124,776 | -150,670 | -61,442 | -66,504 | -92,398 |
| 2012 | -107,232 | -117,764 | -144,316 | -48,960 | -59,492 | -86,044 |

Table A5: Costs included in public consumption the year 2007 (for details, see Ruist, 2015), billions SEK.

| | All costs | Costs that are fixed in the short run excluded |
|--|-----------|--|
| Hospital care and elderly care | 9,1 | 9,1 |
| Disability care | 2,1 | 2,1 |
| Education and child care | 4,9 | 4,9 |
| Crime and justice | 7,7 | 7,7 |
| Integration policies | 2,9 | 2,9 |
| Labour market policies | 3,5 | 3,5 |
| Other (Public administration, infrastructure, national defence) | 25,3 | |
| <hr/> | | |
| Total costs for public consumption | 55,5 | 30,2 |
| Per capita cost ^{b)} | 118,000 | 64,000 |
| Per capita cost calculated in 2014 prices | 127,334 | 69,062 |

a) All costs except per capita costs expressed in billions SEK.

b) The per capita costs is calculated with the help of the total amount of refugees resident in Sweden in 2007. This number amounted to 470,000 individuals, see Ruist (2015).

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