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Abstract

This study estimates the fiscal cost of refugee immigration. This is done by calculating the total value of economic resources that are redistributed through the public sector in Sweden in 2007 to the population of immigrants who once arrived in the country as refugees or their family members. The total redistribution corresponds to 1.0% of Swedish GDP in the same year. Four-fifths of it is due to lower public per-capita revenues from refugees compared with the total population, and one-fifth is due to higher per-capita public costs associated with refugees.

Keywords: immigration; public finances; refugees

JEL codes: H20, H50, J19, J61

1 – Introduction

The world currently has more refugees and internally displaced persons than it has ever had since the Second World War: more than 50 million people.¹ Yet wealthy – particularly European – countries' readiness to provide asylum to these refugees appears to be waning, and increasingly uneven. In 2013, Sweden and Germany alone accounted for 40% of all positive first-instance decisions on asylum claims in the entire European Union. Sweden alone, which hosts less than 2% of the total population in the EU, accounted for a full 22%.² These large differences in refugee admittance mirror correspondingly large differences in attitudes to immigration across Europe. In the 2012 wave of the European Social Survey, a full 21% of respondents stated the opinion that their country ought to allow no immigration at all from poorer countries outside Europe. Yet among respondents from Sweden or Germany, the share was merely 4% (own calculations).

Concerns about the negative impact on welfare sectors are likely to be a major reason why people and politicians across Europe oppose the idea of increasing their refugee intakes. Several studies (e.g. Semyonov, Raijman, and Gorodzeisky, 2006; Dustmann and Preston, 2007; Card, Dustmann, and Preston, 2012) have confirmed the importance of such concerns in shaping public opposition to immigration in general. And in the case of opposition to refugee immigration there are good reasons to expect them to be even more salient, since refugees generally have lower employment rates and higher benefit take-up rates compared with other immigrants.

If all of the EU15 (i.e. the pre-2004 EU members) would have had the same refugee immigration per capita as Sweden in 2005-2014, total refugee immigration in these fifteen countries would have been 5.9 million instead of the factual 740,000. The difference between these two numbers corresponds to almost one-third of the global stock of refugees residing outside their own country and in need of protection (16.7 million in 2013, according to UNHCR). Hence under the hypothesis that large public costs associated with refugee immigration are a major reason why refugee intakes are not higher, it is of primary importance to have a good estimate of how high these costs actually are. However no such estimate exists in the literature. A fairly large number of studies estimate the amounts that are redistributed through the public sectors in various OECD countries between natives and

¹ Data source: International Displacement Monitoring Centre: <http://www.internal-displacement.org>, accessed 11 February, 2015

² Data source: Eurostat, accessed 11 February, 2015

immigrants in general. Rowthorn's (2008) influential survey of this literature concludes that most estimates are in the interval between +1% and -1% of GDP being redistributed from natives to immigrants annually.

However these estimates refer to countries' total immigrant stocks, i.e. to different combinations of labor, family, and refugee immigrants. Yet it is quite evident that the net fiscal contribution of the average refugee immigrant must be lower than that of the average labor immigrant. Supporting this view, Ekberg (2009) summarizes Swedish studies since the 1970s and concludes that the average immigrant in Sweden was a net fiscal contributor during the period until around the mid-1980s, i.e. a period when the immigrant stock was strongly dominated by labor immigrants. Yet since then, refugees have come to make up larger shares of the total immigrant stock and immigrants' net fiscal contributions have consequently been negative. Dustmann and Frattini (2014) also conclude that European immigrants in the UK are net fiscal contributors on average. Yet they find that non-European immigrants – where refugees make up a more important share of the total stock – on average receive more from the public sector than they put in.

Yet beyond these indications, there exists no estimate of the fiscal redistribution explicitly to refugee immigrants in any Western country. This task is therefore undertaken in the present study. The empirical strategy is the same as in the literature on fiscal redistribution to/from immigrations in general (this strategy is discussed by Rowthorn, 2008, and Preston, 2014). We consider the case of Sweden, which appears to consistently have had Europe's largest refugee immigration per capita since the early 1980s,³ and also has a comparatively large welfare sector. We use micro data to identify refugees' individual tax payments and welfare transfers, and to estimate age related public spending such as on schooling and care. One important challenge in this exercise is that refugee immigrants are not explicitly identified in the data. Yet using the available information on year of immigration and country of birth, we can identify a large sample of individuals with very high probabilities of being refugees.

The data is from 2007, which was the last year before Statistics Sweden enacted a policy of only providing researchers with less detailed information on individual country of birth in their micro data sets. It was also the year after a particularly large inflow of refugees from

³ This statement is true since 2004 according to Eurostat data on refugee immigration. Before 2004, there is no comparable data on actual refugee immigration. Yet in UNHCR data on the size of refugee populations by country of asylum, Sweden appears to host the highest number of refugees per capita in Europe in each year 1983-2003.

Iraq. The total stock of immigrants who once arrived as refugees (not counting those who arrived during 2007) is estimated to have made up 5.1% of the total Swedish population in 2007. We estimate that the fiscal redistribution to this population from the remaining 94.9% of the Swedish population amounted to 1.0% of GDP in 2007. Since then, the Swedish refugee stock has kept increasing, and by the end of 2014 it made up approximately 7.0% of the Swedish population. Scaling up the redistribution in 2007 by this increase in the refugee population, we estimate that the corresponding redistribution in 2015 is likely to be around 1.35% of GDP.

Section 2 describes the data set that was used in this study, and the process of identifying refugees in the data. Section 3 provides descriptive statistics on the refugee population. Section 4 describes in detail how the fiscal redistribution to the refugee population was calculated, and the result of this calculation. The findings are discussed in Section 5.

2 – Data

We use micro data from the LINDA database 2007, which is provided by Statistics Sweden. This database contains information from Swedish public registers on e.g. individual income, tax payments, and welfare receipts, as well as on characteristics such as gender, age, education, country of birth, and year of immigration (for immigrants). The database consists of a random sample of 3% of the total Swedish population, plus an additional random sample of 20% of the total immigrant population. Hence merging these two we obtain a random sample of approximately 22.4% of the total immigrant population.

2.1 – Identification of refugees

The data does not contain information on whether an immigrant is a refugee or not. Hence a fundamental task in this study is to obtain a sample of individuals that provides a good representation of the refugee population in Sweden. To this end we sample individuals who arrived from certain countries during certain periods, where – based on historical accounts – we can be certain that as good as all individuals are in fact refugees or their family members. In doing this, it is important to strike the right balance between including as many refugees as possible, and including as few non-refugees as possible. Primary importance is given to the latter objective. It is most important to ensure that the contamination of non-refugees in the sample is as small as possible, also at the expense of excluding more actual refugees.

The sampled countries and years of immigration are listed in the first two columns of Table 1. Notably, the list includes some countries (e.g. Liberia, Sierra Leone) that have in fact sent only small numbers of refugees to Sweden, whereas it excludes other countries that have sent substantially larger numbers (e.e. Poland, Turkey). This is for the purpose of not sampling non-refugees. There was significant labor immigration from these countries also during the periods when there was large refugee immigration.

The obtained refugee sample contains 79,724 individuals. Their distribution across countries of origin in the sample is shown in the third column of Table 1. We see that the most important origins are Former Yugoslavia, Iraq, and Iran, which together make up more than 70% of the sample. As a check on how well we have managed to exclude non-refugees, we may compare the sample's distribution across countries of the origin with the corresponding distribution of all asylum requests ever approved in Sweden. This comparison should be relevant, since refugees in general have low remigration rates (Klinthäll, 2007). Hence the distribution of refugees that are present in 2007 should be a good representation of all refugees who ever immigrated. And if a country of origin's share of all immigrants present in 2007 is substantially larger than its share of all asylum grants ever given, this would indicate that the sample of immigrants from that country also contains a substantial share of non-refugees and that it is appropriate to delete immigrants from this country from the refugee sample.

There is aggregated data in official Swedish records on the distribution of all asylum grants given across years and countries of origin, yet only from 1980. Hence the fourth column shows the distribution of the sampled individuals who immigrated 1980 or later. Since only few refugees immigrated before 1980, the difference from the previous column is small. The largest difference is for Hungary, from which there was substantial refugee immigration already in the late 1950s. The fourth column is then to be compared with the fifth, which shows the distribution across countries of origin of all Swedish asylum grants that were given in the corresponding period to applicants from any of the relevant combinations of years and countries of origin (hence also this column sums to 100%). We see that the distributions of these two columns are indeed highly similar. The largest difference is for former Yugoslavia, where the share in the 2007 sample is significantly *smaller* than the share of all asylums granted. This is consistent with the comparatively high repatriation rates observed for refugees originating from former Yugoslavia (UNHCR, 2005).

The country of origin that is more clearly over-represented in the 2007 sample compared with in the asylum grants data is Lebanon, which represents 3.7% of the 2007 sample yet only 2.3% of the asylum grants. It might have been more appropriate to delete immigrants of Lebanese origin based on this. Yet doing so or not does not have any noticeable impact on the results of this study.⁴

We also need to estimate the size of the total refugee population in Sweden in 2007. Our sample of 79,724 individuals is a random sample of 22.4% of a total population which is then approximately 350,000 individuals. The combinations of years and countries of origin that are included in our sample represents 75% of all asylum grants that were given in Sweden 1980-2006. Assuming that we have captured a similar share also of all refugees who arrived prior to 1980, our best estimate of the total refugee population in Sweden in 2007 is $350,000 / 0.75 = 470,000$ individuals. This number is equal to 5.1% of the total Swedish population in that year.

3 – Characteristics of the refugee population

Descriptive statistics on the refugee population and the total Swedish population in 2007 are shown in Table 2. We see that males are slightly overrepresented among refugees; they make up 52.3% of the refugee sample. We also see that the refugee sample is more concentrated in the middle age groups between twenty and sixty years of age, compared with the total population. Turning to years since immigration, we see that there is a peak in the 10-14 years since immigration interval. This is due to the large refugee inflow associated with the war in Bosnia.

Education levels are reported for individuals aged 25-64. There are a few missing observations: 3.5% for refugees and 1.9% for the total population. The main difference between the two columns is that the share that has not completed lower secondary education (9-10 years of education) is more than twice as high among refugees: 13.8% compared with 5.3% in the total population.

⁴ By comparison, we did not include any immigrants from Turkey in the refugee sample, although 5,000 asylums were given to people from Turkey in 1980-1994. If we would include immigrants who arrived from Turkey during this period in the 2007 sample, they would make up 4.4% of that sample, while they would only make up 2.0% of all asylum grants. Hence in this case the over-representation would have been 2.4 percentage points, compared with 1.4 for immigrants from Lebanon. There is also a contextual difference between these two countries. Lebanese refugees were generated by a civil war that affected the whole country. Turkish refugees were more selectively generated; to a large extent they belonged to discriminated ethnic minorities (Kurds, Assyrians).

3.1 – Economic status of refugees

The last rows of Table 2 show statistics on the economic status of the refugee population aged 18-64, compared with the total population in the same age interval. Here we see strikingly large differences. The first row reports average non-capital income (mainly salary income, small business income, and pensions). We see that the average income level of refugees is merely 60% of that in the total population. The second row reports the share of each sample that earns on average more than 9,000 kronor per month over the whole year. We use this level as a measure of employment, since it is below approximately this level that a one-person household may be entitled to social assistance.⁵ We see that the share earning an income at least this high is more than twenty percentage points lower in the refugee population compared with in the total population. One may suspect that this may be partly due to lower female labor force participation among refugees. Yet the next row shows that this is not the case to any large extent. When comparing the shares above the same threshold among males only, the difference between the two groups becomes only a few percentage points smaller.

Correspondingly, on the final row we see a substantially larger share receiving social assistance among refugees than in the total population: 17.0% among refugees and 3.3% in the total population.⁶ How this share varies with time spent in Sweden for refugees is shown in Figure 1. In the year after immigration, slightly more than half of the refugee population aged 18-64 receives social assistance. Subsequently, the value drops steadily over time, yet never fully as low as the corresponding share in the total population.

In column (1) of Table 3 we analyze the variation in social assistance receipts among refugees further by reporting these shares separately by refugees' countries/regions of origin. We see strikingly large differences between major regions, ranging from 3.2% of those from Eastern Europe receiving social assistance to 40.2% of those from Somalia.

A major reason behind these differences is that some immigrant groups are more recently arrived and have had less time than others to integrate into the labor market. To control for this, we regress a binary variable that indicates whether an individual receives social assistance or not on the full set of dummies for age and years since migration intervals that

⁵ No exact threshold is defined. Yet according to guidelines from the Swedish board of Health and Welfare, a one-person household should have approximately 3,470 kronor per month at its disposal after paying income taxes and rent (which is allowed to cost approximately 3,000 kronor per month outside the larger cities).

⁶ Notably, "social assistance" includes the introductory assistance that is received specifically by refugees for up to their first two years in Sweden.

was reported in Table 2, plus one dummy for each of the regions listed in Table 3. The resulting coefficients on the regional dummies are reported in column (2) of Table 3, with Eastern Europe being the omitted category. We see that controlling for age and years since migration significantly reduces the differences between regions of origin, yet also that large differences still remain: the min-max range decreases from 37.0 to 25.0 percentage points.

Going one step further, column (3) reports the resulting coefficients on the regional dummies when we also include the education dummies that were listed in Table 2 in the regression. This further reduces the differences between origins, yet this time the reduction is smaller.

4 – The redistribution of resources to refugees through the public sector

The results reported in the previous section showed that refugees earn substantially lower income levels and receive substantially more social assistance compared with the total population. This indicates that the redistribution of economic resources through the public sector from the rest of the population to the refugees is likely to be substantial. This section is devoted to the main task of the present study, namely to estimate the magnitude of this redistribution.

In theory almost all of the public sector's revenues and also the majority of its costs can be attributed to specific individuals, although there are limitations to doing this in practice. A summary of Swedish public revenues and costs in 2007 is provided in column (1) of Table 4. We will now explain in detail how we calculate refugees' contributions to each of the revenue and cost items in the table.

4.1 – Estimating refugees' contributions to public revenues and costs

Public revenues

Direct taxes, individuals: Direct taxes paid by individuals include labor and capital income taxes, and property taxes. These make up slightly more than one-third of Swedish public revenues in 2007. Individual tax payments are obtained from the LINDA database.

Payroll taxes: Payroll taxes are taxes paid by the employer as a function of the employee's wage. In 2007 the basic payroll tax rate was 32.42%. Yet a number of different deductions applied, which cannot be traced to specific individuals using the available data. Therefore, a common payroll tax rate is applied to the wage earnings of all individuals in LINDA. This

rate is calculated so that total estimated payments should match total reported payroll tax revenues (Swedish Government, 2007).

Consumption taxes: Consumption taxes include VAT, alcohol and carbon taxes, etc. They are in effect paid by specific individuals when these buy consumer goods. Yet there is no way for us to trace them back to these individuals. Instead we estimate individual consumption taxes by using aggregate data provided by Statistics Sweden on the relation between household income and consumption in 2007. Hence we may estimate each individual's share in total consumption and thus in total consumption taxes paid. Yet we do not know the consumption tax rate on the average krona spent, since different goods have different rates. Instead we calculate an effective average consumption tax rate that makes estimated total payments equal to the total consumption tax revenues reported by the Swedish Government (2007).

Direct taxes, corporations: About 7% of public revenues are made up of taxes paid by corporations. In principle these revenues could be traced to individuals if we had information on the ownership of these corporations, although this exercise would be complicated by foreign ownership. Yet it is fair to assume that refugees' ownership of larger corporations in Sweden is very small. Hence we make the simple – although quite strong – assumption that it is in fact zero.

Other revenues: Slightly less than 3% of public revenues are not covered by the four major categories listed above. These revenues are assumed to be distributed equally across the entire population; hence refugees' share of these is set equal to their share of the total population.

Public costs

Transfers to individuals: Public transfers to individuals amount to one-third of public sector spending. Individual receipts are reported in the LINDA database. By far the single largest item is public pensions, which make up more than half of the total transfer value. Other items include, among others, unemployment support, parental leave support, and early retirement. The most important differences in average transfers received between the total population and the refugee population are on pensions and social assistance. Hence these are the only two transfer categories that are listed separately in Table 4, whereas all others are grouped together in the “Other individual transfers” category.

Hospital and elderly care: Hospital and elderly care is always given to specific individuals. Yet there is no public data where these individuals can be traced. However there is a strong relationship between a person's age and their average care needs. Hence we use information from Borgquist et al. (2010) on average hospital costs by age interval, and information from the Social Board of Health and Welfare (2008) on average elderly care costs by age interval. For refugees we multiply hospital care costs by a factor 1.3. This reflects the finding of Wallin and Carlberg (2000) that – controlling for age – individuals that were born outside Europe (i.e. predominantly refugees) visit doctors or nurses about 1.3 times as often as other individuals in Sweden.

Disability care: As for hospital and elderly care, disability care is given to specific individuals. Yet in this case we have better possibilities to trace them. We identify individuals who are likely to be receivers of disability care from the fact that they received an individual subsidy for disabled persons. We then allocate total public disability care costs evenly across these individuals.

Schooling and child care: The allocation of public costs of schooling and child care follows a similar procedure to that for hospital and elderly care costs. Average costs by age interval are provided by the Swedish Association of Municipalities and Regions (2007). Possibly these costs underestimate the schooling costs for refugee children, since these children often suffer from previous traumatic experiences and may thus require extra support. There is no data that helps us to estimate the magnitude of this difference. Yet it appears reasonable to assume that refugees' age-adjusted schooling cost markup is lower than their age-adjusted hospital care cost markup. Hence we multiply refugees' schooling costs by a factor 1.1, which is lower than the factor 1.3 that was applied to hospital care costs.

Crime and justice: Total public costs relating to crime and justice are obtained from the Swedish Government (2007). According to Martens and Holmberg (2005), individuals who were born outside Sweden are 2.5 times as likely to be suspected of criminality as people who were born in Sweden by two Swedish-born parents. This distinction only partly corresponds to the one that we are interested in. All immigrants' criminality may underestimate refugees' criminality. At the same time, the criminality of people born in Sweden of two Swedish-born parents will underestimate the criminality of the total population in Sweden. Having no further information about which underestimation may be worse than the other, we apply the

factor 2.5 also as a measure of the degree of criminality among refugees compared with that in the total population.

Language training for immigrants: This cost item is explicitly for immigrants. It is the sum of education in Swedish and in the mother's tongue. According to Ekberg (2009), these costs were in total approximately 1.5 billion kronor in 2006. We apply this figure also to 2007, and ascribe half of it to refugees and half to other immigrants (according to our estimates, approximately 40% of all immigrants present in 2007 were refugees).

Integration policy: This is another cost item that explicitly targets immigrants. As for language training, we allocate half of total costs to refugees and half to other immigrants.

Labor market policy: Ekberg (2009) allocates labor market policy spending between immigrants and natives under the assumption that per-capita spending is twice as high for immigrants as for natives. We allocate spending between refugees and the rest of the population by assuming that the same factor holds between these two groups.

Other: The category "Other" encompasses one-third of all public sector costs. To some extent this category contains spending that was in fact targeted at specific individuals, yet we lack the information to trace it. Yet to a large extent it consists of spending on public goods such as infrastructure, defense, and central administration. It also includes the large public sector surplus in 2007. Not all studies in the literature include the surplus on the cost side in this way, yet we follow the recommendation of Rowthorn (2008) to do so.

4.2 – Results

Refugees' estimated contributions to fiscal revenues and costs are reported in column (2) of Table 4. Column (3) reports refugees' share of the total amount for each item. A value in column (3) that is higher than 5.1% (i.e. refugees' share of the total population) means that refugees are over-represented, and a value lower than that means that they are under-represented.

On the public revenue side refugees are clearly under-represented. We estimate that only 3.4% of total revenues are from refugees. On the other hand, refugees are over-represented as receivers of public transfers and public consumption. The most striking case is that of social assistance, where the refugee population receives a full 55% of total spending. Still, social assistance is a relatively small budget item. Hence the total value of refugees' over-

representation as receivers of social assistance is for example more than balanced by that of their under-representation as public pension receivers.

We saw in Table 2 that refugees are to a higher extent in the 20-59 years-of-age interval. This is reflected by their lower-than-average costs of hospital and elderly care, as well as of schooling and child care.

On the final row of Table 4 we find the estimate of the total amount of resources that are redistributed to refugees through the public sector in 2007: 32.5 billion kronor. This is quite exactly equal to 1% of Swedish GDP in that year (or exactly 0.99%). Four-fifths of this deficit is created by lower public per-capita revenues from refugees, and one-fifth is created by higher public per-capita costs. Total public revenues from refugees are 26.0 billion kronor less than they would have been if per-capita revenues from refugees had been the same as those from the total population. Yet public costs associated with refugees are only 6.5 billion kronor more than they would have been if also these per-capita levels were similar. If we divide the total redistribution by the total number of refugees, we find that the redistribution to the average refugee amounts to approximately 70,000 kronor. This number is in turn equal to 44% of the public sector's per capita revenues in 2007.

5 – Discussion

The calculations that have been reported in this article show that the Swedish public sector in 2007 redistributed an amount equal to 1.0% of GDP from the rest of the population to the refugee population. Scaling that number up by the subsequent increase in the refugee population, the corresponding redistribution in 2015 is estimated at around 1.35% of GDP. This value thus represents the net annual cost today of having had Europe's apparently highest per-capita rate of refugee immigration for a full thirty years. As such, it also gives an indication of what the cost would be of higher refugee immigration in the rest of Europe. As mentioned in the introduction, the EU15 would have hosted an additional five million refugees today if it had matched the Swedish per capita refugee immigration rate since 2005.

This study adds to the literature that estimates fiscal redistribution from natives to immigrants in various high-income countries, yet it is unique in its specific focus on refugee immigrants. In this literature in general, the main sources of error are expected to be decreasing marginal public costs of an increasing population, and crowding-out effects on the labor market. The first of these would lead us to over-estimate the public cost of immigration, and the second to

under-estimate it. Decreasing public costs refer to the idea that if the population increases by 1% due to immigration, not all public costs increase in proportion. Defense and infrastructure are often cited as plausible candidates where this may be the case. Crowding-out effects on the other hand would imply that in the absence of immigrants, natives' earnings and tax payments would have been higher, as they would have faced less labor market competition. Between these two sources of error, decreasing marginal costs is most often treated in the literature as being the largest source of error. Several studies (e.g. Lee and Miller, 1998; Dustmann and Frattini, 2014) report estimates where part of public spending is not assumed to be affected by immigration. Rowthorn (2008) argues that the literature pays too little attention to the possible importance of a negative labor market impact of immigration. Yet in the present case where we consider refugees, this factor is likely to be less important than for immigration in general. This is because the average refugee takes several years to enter the labor market (see Ekberg and Hammarstedt, 2002, for this result in the Swedish case). Hence it appears more likely that the calculations in this study over-estimate than under-estimate the public cost of refugee immigration.

The results reported also show that the net redistribution to the refugee population is to about 80% due to lower per-capita revenues from refugees, and only to about 20% due to higher per-capita spending. The lower public revenues from refugees are in turn a direct effect of low employment rates; the employment rate among adult refugees was found to be a full twenty percentage points lower than that among all adults. Hence in shaping policies to reduce the net redistribution to the present refugee population, it appears wise to focus on policies that aim at increasing refugees' employment rates.

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Tables

Table 1. Origins of refugee population

Origin	Years of immigration	Share (%) of		
		total sample	sample immigrated 1980-2006	all asylum grants 1980-2006
Afghanistan	1980-2006	2.8	3.0	2.3
Chile	1973-1990	5.8	4.7	5.2
Cuba	All	0.5	0.6	0.3
Ethiopia/Eritrea	1974-2006	4.7	4.8	4.5
Hungary	1950-1989	2.8	0.8	–
Iran	All	15.8	16.0	17.0
Iraq	All	23.5	24.6	21.0
Lebanon	1975-1991	3.9	3.7	2.3
Liberia	1989-2005	0.1	0.1	–
Romania	1950-1989	1.7	1.6	1.5
Sierra Leone	1992-2003	0.1	0.1	–
Somalia	All	5.2	5.4	5.4
Sudan	All	0.3	0.3	–
Vietnam	All	2.7	2.8	3.2
Yugoslavia (former)	1993-2006	30.1	31.6	37.4

Notes: Number of individuals in total sample: 79,724. Number of individuals immigrated 1980-2006: 75,855. Shares of all asylum grants in 1980-2006 (fifth column) refer to all grants to the relevant countries and periods. Countries with a dash in this column are not separately listed in the aggregate asylum grants data.

Table 2. Descriptive statistics

Variable	Refugees	Total population
Male	52.3%	49.7%
Age		
0-19	13.1%	26.1%
20-39	42.2%	24.2%
40-59	34.8%	25.5%
60-79	8.8%	18.5%
80+	1.2%	5.7%
Years since immigration		
1-4	16.9%	
5-9	18.4%	
10-14	30.4%	
15-19	17.2%	
20-24	9.4%	
25+	7.7%	
Education (ages 25-64)		
Not completed lower secondary	13.8%	5.3%
Exactly lower secondary	10.0%	10.3%
Some upper secondary	42.3%	46.8%
Some tertiary	30.4%	35.8%
Unknown	3.5%	1.9%
Economic status (ages 18-64)		
Median annual non-capital income	142,071	233,024
Share non-capital income > 9,000 kronor/month		
All individuals	56.5%	78.5%
Males only	61.0%	80.0%
Share receiving social assistance	17.0%	3.3%

Notes: Non-capital income is mainly salary income, small business income, and pensions

Table 3. Share of refugee population aged 18-64 receiving social assistance by origin

Origin	Share (%)		
	(1) Raw data	(2) (1) + control age & years since immigration	(3) (1) + control education (ages 25-64)
Former Yugoslavia	11.9	+0.5	-1.6
Iraq	29.3	+13.4	+12.0
Iran	10.2	+3.8	+3.9
Somalia	40.2	+25.0	+20.3
Latin America	6.4	+4.3	+2.9
Eastern Europe	3.2	-	-
Other Asia	18.3	+10.5	+7.0
Other Africa	14.3	+5.9	+3.1
Min-max range	37.0	25.0	21.9
Obs	66,503	66,503	55,392

Notes: Column (1) reports the shares of refugee immigrants who receive social assistance by region of origin. Columns (2)-(3) report the residual probabilities of being a social assistance receiver by origin, after controlling for combinations of age, years since immigration, and education.

Table 4. Redistribution to refugees through the public sector year 2007

	(1) Total population (billion kronor)	(2) Refugees (billion kronor)	(3) Refugees share of total value (%)
Public revenues	1473.3	49.4	3.4
Direct taxes, individuals	536.8	16.2	3.0
Payroll taxes	391.5	15.3	3.9
Consumption taxes	398.6	15.9	4.0
Direct taxes, corporations	106.6	0	0
Other	39.8	2.0	5.1
Public costs	1473.3	81.9	5.6
Social assistance	7.8	4.3	55.4
Pensions	286.7	3.3	1.2
Other individual transfers	195.4	18.8	9.6
Hospital and elderly care	240.6	9.1	3.8
Disability care	37.2	2.1	5.7
Schooling and child care	158.0	4.9	3.1
Crime and justice	30.6	7.7	25.3
Language training for immigrants	1.5	0.8	50
Integration policy	4.1	2.1	50
Labor market policy	16.7	3.5	20.7
Other	494.8	25.3	5.1
Net result	0	-32.5	

Figures

Figure 1. Shares of refugees receiving social assistance, by years since immigration

