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The fiscal lifetime cost of receiving refugees

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Abstract

This study estimates the fiscal consequences of receiving refugees, over the refugees' lifetime. It uses data from Sweden in 2015, and the calculations account for refugees' age, years since immigration, and country of origin. The estimated average annual fiscal net contribution over the lifetime of the average refugee (58 years) ranges from –12 per cent of GDP per capita for refugees from the countries of origin for which labor market performance has historically been the strongest, to –22 per cent for those for which it has been the weakest. The estimates imply that if the European Union received all refugees currently in Asia and Africa, the implied average annual fiscal cost over the same time span would be at most 0.6 per cent of GDP.

Keywords: refugees; immigration; public finances

JEL codes: F22, H20, H50, J61

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1 - Introduction

Disagreement over refugee immigration has paralyzed European policy making for several years. Although it has been strongly prioritized by political leaders of the European Union, and several proposals have been put forward, little actual progress has been made neither on border management nor on how to distribute or redistribute refugees across member states. At the heart of this policy problem is the strong resistance to refugee immigration among large parts of the population in each country. This resistance appears to be due to two main components: refugee immigration increases cultural heterogeneity, and it may weaken public finances. While concerns about increased cultural heterogeneity are mostly subjective and value-based, the effects of refugee immigration on public finances can in principle be objectively measured. Such measurement will improve countries' understanding of the consequences of admitting more or fewer refugees.

There exist many studies of the fiscal consequences of immigration. Yet most of these are not directly informative about the consequences of the immigration of refugees, since refugees' employment rates are on average far below those of other immigrants (Fasani, Frattini, and Minale, 2018). However, in Ruist (2015), I estimate that in 2007, the Swedish public sector redistributed the equivalent of 1.0 per cent of GDP from the rest of the country's population to its accumulated refugee population (including those who immigrated as family members of refugees). This result gives a sense of orders of magnitude. In 2007, Sweden had been the Western country with the highest refugee immigration per capita over the previous more than two decades, and the refugee population amounted to five per cent of the country's total population. Hence the result implies that at (by the time) record levels of refugee immigration, the fiscal consequences may be described as clearly noticeable, yet also clearly manageable.

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¹ These concerns are consistently referred to in public discussions in different countries, and are the rhetorical focus of political parties that strongly oppose refugee immigration. Much research (e.g. Dustmann and Preston, 2007; Card, Dustmann, and Preston, 2012) has shown that similar concerns are important in explaining resistance to immigration in general. These studies also highlight the role of concerns about increased competition on the labor market. Yet this factor is seldom mentioned in public discussions about current European refugee immigration, which is logical when it appears to take the median refugee more than ten years to find employment (Fasani, Frattini, and Minale, 2018).

² As part of this, it may also improve their chances of agreeing on schemes of monetary compensation between them in proportion to refugee volumes. Among others, Schuck (1997), and Fernández-Huertas Moraga and Rapoport (2014) have suggested tradable refugee quotas as a means to achieve an efficient distribution of refugees across countries. While such schemes of market-based setting of the (negative) price of a refugee may be too explicit to be likely to come about in practice (Sandel, 2012; Hatton, 2017), the EU already operates minor monetary compensation schemes, without explicit market determination of the compensation levels, and larger ones have been proposed.

However, this estimate does not provide much more than orders of magnitude. It does not provide an evaluation of the fiscal consequences of receiving a certain number of refugees today, not even if ignoring that the fiscal redistribution to immigrants and the fiscal consequence of immigration may not be the same thing (see Section 3). The estimate may easily be transformed into one of the fiscal redistribution to the average refugee in 2007. Yet this is not the same as the corresponding average over a refugee's entire lifetime in the country, which would be considerably more useful measure for assessing the consequences of current refugee immigration.

The reason for the discrepancy is that the total Swedish refugee population in 2007, like total refugee populations all over Europe today, was strongly skewed with respect to three variables that are of first-hand importance in determining the estimated fiscal redistributions. First, the population was young, with few individuals above 65 years of age, and hence low costs related to old age. Second, it was on average quite newly-arrived. Hence its employment rates would be projected to rise substantially in future years. Finally, its composition across countries of origin was very different from that of current European refugee inflows. It was quite strongly dominated by refugees from Former Yugoslavia. These have, for more than two decades, performed substantially better on the Swedish labor market than almost all other refugee groups (Ruist, 2018). It is thus likely that today's refugee inflows, which have a different composition across countries of origin, may have more negative fiscal consequences.

The aim of the present study is to provide a more direct assessment of the fiscal costs of current refugee immigration, through an analysis that takes these three variables into account. I use data from Sweden in 2015 to calculate net fiscal contributions of refugee immigrants, depending on their age, years since arrival, and country of origin. I use these conditional values to forecast future net contributions over the lifetime of refugees who arrive today. The results thus represent (above estimation error) what future net contributions will be, under the assumption that the conditional values calculated for 2015 remain stable. This amounts to making the most of the available data, and should be unambiguously more informative than the estimated net contribution of a total population in a given year. True future outcomes are of course likely to differ in either direction, depending on refugees' future labor market success.

The results show large fiscal redistribution to refugees in the first few years after their arrival, when their employment rates are low, and much fiscal resources are spent on investing in their skills. As employment rates rise, net contributions become less negative. For refugees from the

countries of origin for which labor market performance has historically been the strongest, net contributions are positive after about 15–40 years since arrival, before becoming negative again when larger fractions reach old age. For those from the countries of origin with the weakest historical labor market performance, the average net contribution barely touches zero from below, after about 20–30 years in the country, before again becoming more negative. Distributed over the 58 years that is the expected remaining lifetime of the average refugee upon arrival, the average net contribution is -53,000 kronor (10 kronor \approx 1 euro) per year for the group with the strongest historical labor market performance, and -94,000 kronor per year for the group with the weakest. By comparison, Swedish GDP per capita in 2015 was approximately 430,000 kronor, and public sector revenues were 180,000 kronor.

If we accept the Swedish case as giving useful indications about corresponding results also in other EU countries, these numbers may be scaled up to provide a rough estimate of the fiscal consequences of higher refugee immigration at the level of the European Union. According to UNHCR estimates from June 2018, the total number of refugees (excluding Palestinians) in need of assistance in Asia and Africa was 13 million. This corresponds to 2.6 per cent of the population of the EU. Assuming that if these were received in the EU, they would on average perform like the weakest historical group in Sweden (most likely an exaggeration in the negative direction), the average fiscal cost per year of receiving all these refugees, over their average expected lifetime, would be the equivalent of approximately 0.6 per cent of GDP. This is e.g. considerably below the estimated net distribution to the entire Swedish refugee population (seven per cent of the total population) in 2015, which according to the results was 1.0 per cent of GDP. Hence from the perspective of fiscal costs, it would even be possible for the European Union to completely solve the current international refugee crisis, while incurring costs per individual in the total population that are smaller than those currently born by Sweden.

2 – Swedish refugee immigration, and refugees' labor market performance

Sweden became a prominent destination for refugee migration in the early 1980s. Since then, the country's share of all European refugee immigration has far exceeded its share of the total European population. In the decade before the refugee crisis in 2015, i.e. in 2005–14, Swedish refugee immigration per capita was a full ten times as high as that in the rest of the European Union (data source: Eurostat). By the end of 2017, slightly more than eight per cent of the resident Swedish population had once immigrated as refugees or family members of refugees (Ruist, 2018).

Like more or less all migration flows worldwide, Swedish refugee immigration has always been concentrated in the younger working ages. With this age distribution, immigration would be unambiguously beneficial to public finances, if the immigrants were on average similar to the rest of the population conditional on age. The immigrants were not present in the country during their first twenty living years, during which net contributions to public finances are negative. Instead they arrive in the beginning of their productive working life.

However, if an immigrant group's labor market performance is weak enough compared with that of other similarly-aged residents, its immigration does not have to have a positive impact on public finances. In Sweden, as in the rest of Europe (Fasani, Frattini, Minale, 2018), refugees' labor market performance has for long been considerably weaker than that of natives and of migrants who immigrated for primarily economic reasons. Average annual incomes of refugees who immigrated in 1982–2014, measured in per cent of the median income of 20–50 year old native men in each year, by sex, arrival period, and years since arrival, are shown in Figure 1. There is some variation between cohorts, which to a large extent correlates with fluctuations in aggregate unemployment (very low in the 1980s, very high in the early 1990s, in-between thereafter). Typically, average income is very low in the first few years after immigration. It reaches above 60 per cent of the reference income after 4–10 years for men, and 11–14 years for women. It flattens out at slightly below 80 per cent for men, and around 70 per cent for women. It is thus not surprising that the fiscal consequences of refugee immigration have been found negative, in spite of refugees' concentration in younger working ages.

Around the averages shown in Figure 1, there is a quite striking amount of variation in each cohort between refugees of different countries of origin. Those from certain countries have persistently performed better than others. One example is shown in Figure 2, which shows similar information as Figure 1, yet only for the cohort that arrived in 1997–2001. Separate curves are shown for eight main countries or groups of countries of origin. For about the first ten years in Sweden, the average income of refugees from Former Yugoslavia, Ethiopia, or Eritrea, is at least twice as high as that of refugees from Somalia. As I show in detail in Ruist, 2018 (including the online appendix), the pattern of which groups have performed more strongly and more weakly on the labor market, has been mostly stable over the entire period 1983–2015. Yet it is difficult to find a convincing explanation for the pattern. Differences in formal education does e.g. not appear to play a major role.

Figures 1 and 2 have thus shown that there is large variation in refugees' labor market performance, depending on the number of years that have passed since their immigration, and on their country of origin. They thus illustrate that taking these two factors into account will improve the measurement of the fiscal impact of refugee immigration.

3 - Method

This study follows in a long tradition of studies of the fiscal net contributions of immigrant groups in a fairly large number of Western countries. The net contribution of an immigrant group can hardly be described as an interesting measure in itself. The policy-relevant object of interest is instead the fiscal *effect* of the presence of the immigrant group, i.e. whether allowing the group to immigrate has strengthened or weakened public finances, and to what extent. For several reasons, the two are unlikely to be fully equivalent. For example, to the extent that the immigrant group crowds out others on the labor market, the net contribution may be a positively biased estimate of the effect of the presence of the group. Or, on the other hand, to the extent that there are economies of scale in the provision of certain public goods, it may instead be a negatively biased estimate. Several other similar mechanisms may also exist, and in sum it is difficult to assess if the true fiscal effect of the presence of a group is more positive or more negative than the group's fiscal net contribution. (Rowthorn, 2008; Preston, 2014)

This study follows the majority of previous studies in this literature, in simply estimating the fiscal net contribution, and trusting this to be at least a fair proxy for the effect of interest. A minority of studies take the alternative approach of attempting to explicitly model the most important dynamic mechanisms that create the difference between the net contribution and the effect. The obvious weakness of this strategy is that there are many candidate mechanisms, and the exact form is not well known for any of them. Hence the outcomes of this modelling may differ hugely depending on which assumptions are made. This in turn also implies that researchers have considerable scope to influence the outcomes of the exercise, through their choices of what to model and how to model it.³

3.1 – Measuring fiscal net contributions

I measure fiscal net contributions using data from Statistics Sweden's *Linda* database for 2015. The database collects information from various public sources for a random sample of three per cent of the Swedish total population, and a supplement sample of twenty per cent of the

³ In Ruist (2017), I give an example of two different studies of very similar cases of immigration, where the estimated effects differ by a factor of a whopping sixty.

foreign-born population. Hence together, these two samples comprise approximately 22.4 per cent of the foreign-born population. A small number of individuals reportedly residing in households with no disposable income is excluded from the analysis, as they are most likely not present in the country.

For foreign-born residents, the database includes information on the reason for immigration, hence allowing those who immigrated as refugees or family members of refugees to be identified. However for those who immigrated before 1990, this variable has poor coverage. Hence I also classify as refugees all immigrants who either immigrated from Hungary or Romania in any year before 1990, or from Afghanistan, Chile, Ethiopia, Lebanon, Somalia, or Syria in 1975–1989. The resulting total refugee population in 2015 consists of 690,000 individuals, or 7.0 per cent of the total Swedish population.

Fiscal net contributions of refugees are estimated by identifying, to the extent possible in the data, from which individuals different public revenues originate, and to which individuals public costs are targeted. Conceptually, a large majority of public revenues, and also a substantial part of costs, may be ascribed to certain individuals or groups of individuals. On the revenue side this is true for income taxes, payroll taxes, property taxes, and consumption taxes. On the cost side it is true for direct transfers, as well as the costs of welfare services such as schools and hospitals. For many of these items, the data also allows the individual source or target to be identified. In other cases, known statistical relations at the group level may be applied. Finally the calculations ascribe parts of revenues and costs equally across all individuals in the country. This is partly where identifying an individual source or receiver is conceptually possible, yet not so in the data. But it is also because substantial shares of public costs, such as defense, infrastructure, international aid, and central administration, are most reasonably viewed as being targeted to all residents of the country to the same extent.

In more detail, the analysis ascribes public revenues and costs across the population as follows:

Income and property taxes, and transfers: These are directly observed at the individual level.

Payroll taxes: These are calculated as the individual's labor income multiplied by the relevant (age-dependent) payroll tax rate. Finally all values are scaled to make total payments correspond to those reported in the government's annual fiscal report.

Consumption taxes: These are assumed to be proportional to household income, by separate factors for each income decile, which were estimated by Statistics Sweden for 2009. Finally all values are scaled to make total payments correspond to those reported in the government's annual fiscal report.

Corporate taxes: An individual's contribution to these is assumed to be proportional to their labor income.

Public consumption: Average public consumption in the areas of child care, education, health, social assistance, and culture/leisure have been estimated by Statistics Sweden for 2013 by age, gender, and seven groups of countries of origin. These values are multiplied by a markup of 5 per cent to account for nominal cost inflation (this markup roughly corresponds to average nominal cost inflation as reported by municipalities in the Swedish Association of Municipalities and Regions' *Kolada* database).

Crime and justice: Following Ruist (2015), and the sources mentioned therein, public spending on crime and justice is assumed to be 2.5 times as high per capita for refugees as for the rest of the population.

Labor market: Following Ruist (2015), and the sources mentioned therein, public spending on labor market programs – apart from those specifically targeted to newly-arrived refugees (which are included in the next item) – is assumed to be twice as high per capita for refugees as for the rest of the population.

Integration: These costs are mainly incurred during a refugee's first time in Sweden. They are evenly distributed across all refugees who immigrated in 2013-15.

All other public revenues and costs, including the public sector's total surplus in 2015, are distributed equally across the total population.

Ideally, to forecast future fiscal net contributions of refugees who arrive today, taking age, years since arrival, and country of origin into account, refugees' net contributions would first be calculated, according to the details given above, for all possible combinations of these three variables. Together with predicted age-specific mortality rates, these values could then be applied to forecast future net contributions of a current refugee inflow with any distribution over the three variables.

Due to Sweden's three-decade long history of fairly high refugee immigration, and to the large high-quality data set, what the data permits is not so far from this ideal case. However, the number of observations in the resulting three-dimensional matrix becomes fairly small or even nonexistent for certain combinations of variable values. This is mostly because relatively few refugees have been in the country for more than thirty years, or are above 65 years of age. It is also because refugee immigration from most countries has only been high during limited periods of time. Hence, a certain amount of aggregation and assumptions must be made to eliminate any holes in the three-dimensional matrix. Specifically, I do the following three adjustments:

- 1. Between having spent 30 years in the country, and retiring at the age of 65 (if the latter does not happen first), annual net contributions are assumed not to change over time.
- 2. Net contributions of refugees who are 65 years old or above are not directly estimated from refugees in the data. They are instead estimated from the corresponding age-specific values in the total population, minus the difference in public pension payments between all natives and all immigrants (11,000 kronor per year).
- 3. Net contributions are estimated for two groups of countries. The first consists of those countries of origin which, among the major refugee-sending countries, have had the strongest historical labor market performance (Former Yugoslavia, Ethiopia, Eritrea, and Iran). The second consists of those which have had the weakest (Iraq and Somalia). Together, these two groups then represent an exaggerated interval of possible outcomes for the average refugee. In some periods, the average refugee will be closer to the more positive end of this interval, in other periods to the more negative. But since all inflows tend to be mixed, none of these endpoints is likely to be reached.

When forecasting future net contributions of current refugee immigrants, the age distribution of the current inflow is taken to be that of the combined Swedish 2011–15 inflow. Age-specific mortality rates are assumed to follow those of the total Swedish population (yet for computational simplicity they are set to zero below fifty, and to one at one hundred years of age).

4 - Results

Table 1 reports cross-sectional results from 2015, i.e. an estimate of the fiscal net contribution of the entire Swedish refugee population, which in that year corresponded to 7.0 per cent of the total population. The first column shows a summary of Swedish public finances in 2015.

Revenues and costs were 1,794.6 billion kronor each (with the aggregate fiscal surplus included among "Other" costs). The vast majority of revenues were income (and property), payroll, and consumption taxes. Important costs were public pensions, and the costs of the education and health systems. Yet the single largest item on the cost side is "Other". This to a large extent reflects the large share of public costs that are considered targeting the country's entire population to the same extent.

The second column shows for each item the amount that is ascribed as originating from or targeting refugees. It shows that refugees contributed 92.0 billion in revenues, but were the target of 133.5 billion in costs. The difference at the bottom line is thus a net public cost of 41.5 billion kronor, which quite exactly equals 1.0 per cent of Swedish GDP in the same year. The last two columns assist the understanding of which items drive this total net cost. The third column shows "counterfactual" refugee values. This implies what the corresponding number would have been, if refugees had been similar to the total population. In other words, it is simply the values in the first column multiplied by refugees' population share of 7.0 per cent. Finally the last column shows the difference between the second and third columns. Hence it shows how much larger or smaller a factual value is compared with the counterfactual.

The last column thus shows that refugees' negative fiscal net contribution in 2015 is mostly created on the revenue side. Of the total deficit of 41.5 billion kronor, about four-fifths, or 33.7 billion, are due to revenues per capita being lower for refugees, and only one-fifth is due to costs per capita being higher. Differently put, refugees make up 7.0 per cent of the population, contribute 5.1 per cent of the revenues, and are the target of 7.4 per cent of the costs. Hence the total deficit is mostly a direct consequence of refugees' low employment rates (and, less importantly, lower average incomes for those who are employed).

On the cost side there are large differences between different cost items. Since few refugees are old, they are strongly underrepresented as recipients of public pensions and "social costs", which are primarily for elderly care. On the other hand, they are the sole targets of the "Integration" and "Refugees' introduction benefits" costs. They are also strongly overrepresented as receivers of social assistance and housing allowances, where they receive almost half the total amounts.

The forecasted annual fiscal net contributions of the average refugee who immigrates today, by years since immigration, are shown in Figure 3. Separate curves are shown for those from the countries with the strongest and weakest historical labor market performance. Both curves

show large deficits in the first few years after immigration. In these years, as we have seen, average income and hence tax payments are very low. Large sums are also spent on integration programs aiming at building up the labor market skills of the newly arrived. As these are phased out and employment rates start climbing in the following years, the net deficit decreases rapidly. The group with the strongest performance reaches zero after about 15 years. A period of about 25 years follows, where the average net contribution of this group is positive. After about 40 years in the country, as more refugees reach retirement age, the net contribution becomes negative again. Finally it approaches zero as the numbers of years since immigration approaches one hundred and fewer are still alive.

For the group with the weakest historical performance, the period of positive average net contributions is basically absent. The group's curve only touches zero from below, after around 20–30 years in the country, before again becoming more negative. Yet it is immediately clear from the figure, that also for the strongest group, the positive contributions after 15–40 years in the country are much too small to balance the negative contributions of the earlier and later years. In other words, also these refugees do not pay for their own costs over their lifetimes.

Refugees who arrive today are on average quite young. Their estimated remaining lifetime in Sweden on arrival is 58.3 years. Over this period, the average yearly fiscal net contribution is estimated at –53,000 kronor per year for the group with the strongest historical labor market performance, and –94,000 kronor per year for the group with the weakest. By comparison, Swedish GDP per capita in 2015 was approximately 430,000 kronor, and public sector revenues were 180,000 kronor. The interval between these two groups should be interpreted as a wide interval of possible outcomes for the average refugee in a cohort, since refugee immigrants in a period have never belonged exclusively to either of these two groups. Another point of comparison is the net contribution of the average refugee in the country in 2015, which according to the calculations was –60,000 kronor. This value is thus within the interval, but much closer to its less negative number.

These forecasted values may be somewhat exaggerated in the negative direction though, if we take into account that the structure of the fiscal sector might need to change in the future. Swedish public finances are comparatively strong, and the last two decades have seen gradually falling public debt. Also, in contrast to what is the case in several other European countries, a substantial share of the ageing of the population due to large post-WWII baby boom cohorts has already happened in Sweden (the baby boom started earlier in Sweden, which was not

directly involved in the war). However, some ageing of the population still remains, and it is likely that this will imply that the average revenues/costs ratio conditional on age will need to increase in the future.

This may be done in many different ways, and hence it is difficult to assess how it will affect the numbers calculated here. But to give a sense of the magnitudes involved, I have also used the same method to forecast the average annual fiscal net contribution over the lifetime of a native person that is born today. The result was an annual net contribution of -17,000 kronor. Hence it is possibly more appropriate to make a rough correction by subtracting this number from the -53,000 and -94,000 kronor that were reported for the two refugee groups.

5 - Discussion: The fiscal cost of solving the problem

The numbers reported here may be used to provide an estimate of the fiscal cost of increased refugee immigration in Europe. The structure of the fiscal sector is different in different European countries, implying that the Swedish case is not fully representative. Quite possibly, refugees' labor market performance may also differ between countries, but there exists no data that enables a good assessment of this. Yet the challenge of refugees having low employment rates and high probabilities of needing public financial support appears to be present all over Europe (Fasani, Frattini, and Minale, 2018), and it is quite likely that the Swedish case at least provides a reasonable order of magnitudes of what the corresponding fiscal net costs per refugee are also in other countries.

In June 2018 the UNHCR reported that the number of refugees (not counting Palestinians) in need of assistance in Asia and Africa was 13 million. This corresponds to 2.6 per cent of the population of the EU. To most likely err on the negative side of truth, I assume that if all these refugees would be received in Europe, they would perform like the group with the weakest historical labor market performance in the analysis that has been presented in this paper. The average annual fiscal net cost over the lifetime of members of this group that was reported in the previous section corresponded to 22 per cent of Swedish GDP per capita. Multiplying this

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⁴ Bevelander (2011), and Ruist (2018) report that refugees who are resettled to Sweden from a third country typically have weaker labor market performance than those who arrived as "spontaneous" asylum seekers. Hence the historical populations on which the estimates in this paper are based, which are very strongly dominated by spontaneous asylum seekers and their family members, are likely to have undergone some positive selection. However, as shown in Ruist (2018), the differences between these two categories is small in comparison with the large differences between countries of origin.

share with an immigration rate of 2.6 per cent, the average annual cost of receiving all these refugees would be approximately 0.6 per cent of GDP in the European Union.

In other words, if the EU would receive the entire – record-high – stock of international refugees in Asia and Africa, the implied average annual fiscal cost over these refugees' average lifetime would be only slightly above half of Sweden's fiscal net cost of its 2015 refugee population. This average over 58 years obscures much variation though. Figure 3 showed that the net cost was considerably higher in the first years after immigration. Yet the Swedish example provides relevant information also about peak costs. The hypothetical refugee immigration volume of 2.6 per cent of the population of the EU corresponds almost exactly to the combined Swedish refugee immigration (including family members) per capita in the four years 2014–17. According to Figure 3, the fiscally most costly years relating to this record-high inflow should be the years 2016–18. In other words, it is most likely that no Western country has ever had a fiscal net cost due to refugee immigration that has been as high as that in Sweden in 2016–18. Yet in spite of this, Swedish public revenues exceeded costs in each of these years. Without doubt, public finances would have been even stronger in the absence of the high refugee immigration. But the example shows that even at their historical peak, it has been possible to cope with the fiscal costs of refugee immigration without major problems.

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Tables

Table 1. Fiscal net contribution of 2015 refugee population

			Refugees	Difference
	Total population	Refugees	"counterfactual"	refugees
Revenues	1 794.6	92.0	125.7	-33.7
Income and property taxes	678.3	28.5	47.5	-19.0
Payroll taxes	471.8	27.3	33.0	-5.8
Consumption taxes	508.6	28.2	35.6	-7.5
Corporate taxes	119.2	6.9	8.3	-1.5
Other	16.7	1.2	1.2	0.0
Costs	1 794.6	133.5	125.7	7.8
Public pensions	332.5	6.3	23.3	-17.0
Social assistance Refugees' introduction	10.0	4.7	0.7	4.0
benefits	3.3	3.3	0.2	3.1
Housing allowances	5.2	2.4	0.4	2.0
Child allowances	24.3	1.0	1.7	-0.7
Parental leave benefits	34.4	3.7	2.4	1.2
Unemployment benefits	25.6	5.4	1.8	3.6
Sick leave benefits	35.1	3.0	2.5	0.5
Early retirement	38.4	3.5	2.7	0.8
Disability allowances	1.3	0.1	0.1	0.0
Other transfers	7.2	0.8	0.5	0.3
Child care	72.9	1.4	5.1	-3.7
Education	175.8	14.1	12.3	1.8
Health	207.5	12.4	14.5	-2.2
Social costs (primarily	115.0	2.8	8.1	-5.3
elderly care) Culture and leisure	27.1		1.9	-3.3 -0.2
		1.7		
Crime and justice	40.4	6.4	2.8	3.6
Labor market	67.8	8.9	4.7	4.1
Integration	12.7	12.7	0.9	11.8
Other	558.2	39.1	39.1	0.0
Difference	0.0	-41.5	0.0	-41.5

Note: All numbers are measured in billion kronor.

Figures

Men Women 80 80 Mean income (% of reference) 20 40 60 Mean income (% of reference) 20 40 60 5 10 15 Years since immigration 5 10 15 Years since immigration 15 1982-86 1987-91 1982-86 1987-91 1992-96 1997-2001 1992-96 1997-2001 2002-06 2007-11 2002-06 2007-11

Figure 1. Refugees' average income by sex, immigration period and years since immigration

Notes: Data is from Statistics Sweden's *Linda* database, years 1983–2015. The sample only includes refugees (not those who immigrated as family members) who were 20–50 years old when immigrating. Average income is measured in per cent of the median income of 20–50 year old native men in the same year. Separate curves are shown for separate immigration periods.

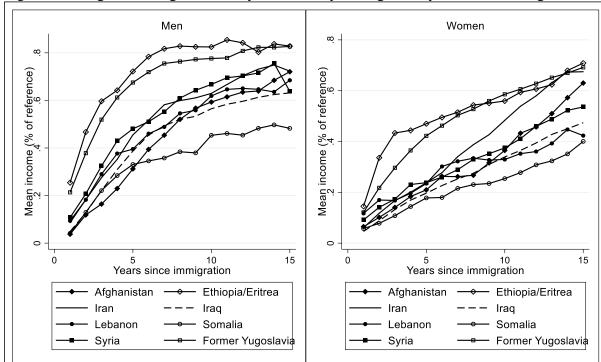


Figure 2. Refugees' average income by sex, country of origin and years since immigration

Notes: Data is from Statistics Sweden's *Linda* database, years 1998–2015. The sample only includes refugees (not those who immigrated as family members) who immigrated in 1997–2001, and were 20–50 years old when immigrating. Average income is measured in per cent of the median income of 20–50 year old native men in the same year. Separate curves are shown for separate countries of origin.

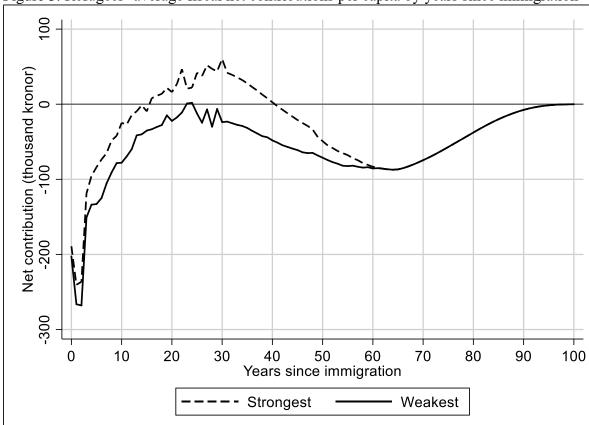


Figure 3. Refugees' average fiscal net contributions per capita by years since immigration

Notes: "Strongest" refers to refugees from the countries of origin with the strongest historical labor market performance (Former Yugoslavia, Ethiopia, Eritrea, and Iran). "Weakest" refers to those with the historically weakest performance (Somalia, Iraq).