

Social Networks and Economic Outcomes: Evidence from Refugee Resettlement Programs

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Many of an individual's decisions are influenced by the group of people with whom he or she interacts. Friends, neighbors, classmates, co-workers, and other social contacts are believed to play a fundamental role in one's decision to study, work hard, or commit a crime. They are also thought to play a role in outcomes such as the likelihood of finding a job. Identifying and quantifying such effects is challenging, however.

Economists have adopted different approaches to studying how interactions through social networks affect individual outcomes. Traditionally, the neighborhood has been used as the unit of analysis, on the assumption that the neighborhood is where most social interactions happen. Recent work has studied neighborhood effects by relying on information collected from refugee resettlement programs. The idea is that the social and economic prospects of newly arrived refugees, such as the probability of finding a job, can be attributed to the neighborhood characteristics where the refugees end up residing.

Robert McKenzie, a visiting fellow at the Brookings Institution, has observed, "Refugees don't just come to nations; they move to cities." Cities play an undeniable role in the resettlement of refugees and on their long-run social and economic prospects. This statement, however, can be narrowed down even further: Refugees actually move not only into cities, but also into neighborhoods.

Most refugee resettlement programs around the world are intended to help refugees make a smooth economic transition into their new communities. Understanding how social interactions operate is, therefore, key to evaluating the effectiveness of those programs. Insights from the research on neighborhood effects are valuable to the extent that they may contribute to the design and implementation of effective immigration and refugee policies. This has become an extremely sensitive issue considering the number of individuals fleeing their home countries worldwide has recently reached record numbers.

Quantifying the Effect of Social Networks

The social and economic outcomes for refugees who settle in new locations in a country depend on a variety of forces. Recent academic work has focused on the influence of social interactions at the neighborhood level. A long strand of the literature has examined how neighborhood characteristics affect labor market prospects, education and health outcomes, and criminal activities of residents.

For researchers, identifying and quantifying the effects of social interactions on individual behavior are made more

difficult by multiple causation. Any attempt to do so must take into account the fact that households with different characteristics commonly sort themselves into different types of locations. Suppose that one would like to examine whether residing in a deprived neighborhood (for example, a neighborhood with a high unemployment rate) affects a resident's labor market opportunities. To quantify the impact of the neighborhood on individual outcomes, the researcher has to take into account that this type of neighborhood might attract individuals with characteristics that would make him or her less likely to find a job. For instance, individuals who select to reside in those high unemployment neighborhoods may tend to be low-skill workers or are already unemployed. If this is the case, poor neighborhoods and poor labor market outcomes will be positively associated. But it is not necessarily correct to conclude that neighborhood characteristics are the cause of the poor outcomes. In order to assess how the neighborhood affects individual outcomes and to determine the precise causality, an exogenous or random allocation of individuals across neighborhoods is required.

To overcome this problem, some novel research has used data collected through "social experiments." In a social experiment, individuals or households are randomly assigned into two groups: a group that receives the treatment or participates in the program under study (the treatment group) and another group that does not (the control group). An advantage of this kind of approach — for example, when evaluating the effect of neighborhoods on outcomes — is that the assignment of individuals is random, so the differences across neighborhoods where people reside can be reasonably viewed as exogenous. The experiment thus minimizes the chances of observing outcomes influenced by the fact that some types of individuals or households may prefer a neighborhood with certain characteristics.

Two main types of social experiments have received most of the attention. The first one is the Moving to Opportunity (MTO) experiment. MTO is a federal housing voucher program targeted to low-income households residing in poor neighborhoods. This program offered housing vouchers to randomly selected households residing in poor areas to pay for their housing rents. Those vouchers, however, could only be used in low-poverty neighborhoods. The experiment was conducted in five cities (Baltimore, Boston, Chicago, Los Angeles, and New York) from 1994 to 1998, and it intended to study the social and economic effects on low-income households from moving to low-poverty neighborhoods.

Other research has used data collected from refugee

resettlement programs. The idea is that since locations are not selected by refugees, the assignment of refugees across different locations is exogenous. The conclusions of this research on refugee resettlement may not only help in the design and improvement of policies concerning refugees, an issue that has received a lot of attention in the last couple of years worldwide, but also shed light on how social networks and neighborhoods affect individuals' outcomes in general.

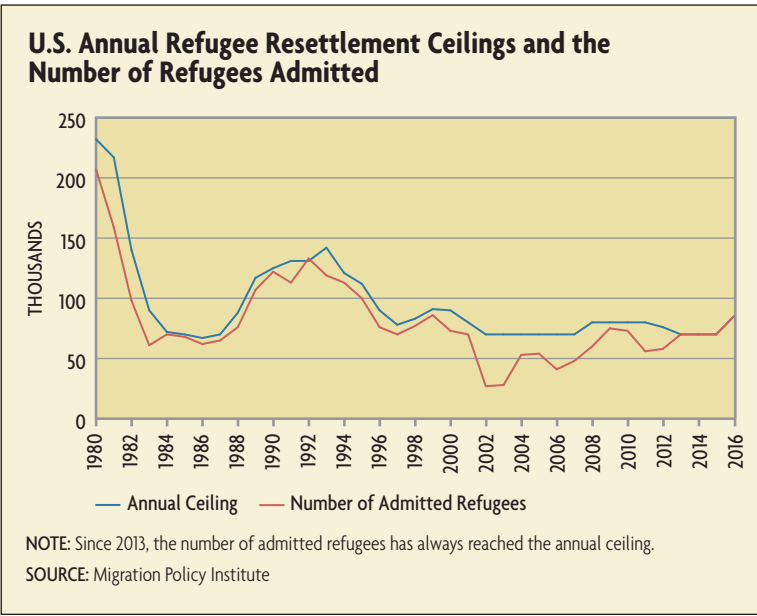
Refugee Resettlement Programs in the United States

The design and implementation of refugee resettlement programs vary across countries. In general, programs usually provide temporary assistance to newly arrived refugees and provide support throughout the settlement process. The main feature of most programs is that the assistance is intended to help refugees achieve self-sufficiency and become integrated members of the community as soon as possible. After receiving this initial support from the host government, their economic success will, among other things, be tied to the characteristics of the place where they end up residing. An appropriate evaluation of refugee resettlement programs should, therefore, take neighborhood effects into consideration.

In the United States, the Refugee Act of 1980 sets the foundation of the federal refugee resettlement program. This program determines eligibility for refugee status, establishes admissions procedures, defines the type of assistance granted to refugees, and provides guidelines concerning the resettlement process. The United States has historically led all nations in accepting and resettling refugees. Since the beginning of the European refugee crisis in 2015, however, other countries have been obligated to assume a much more important role.

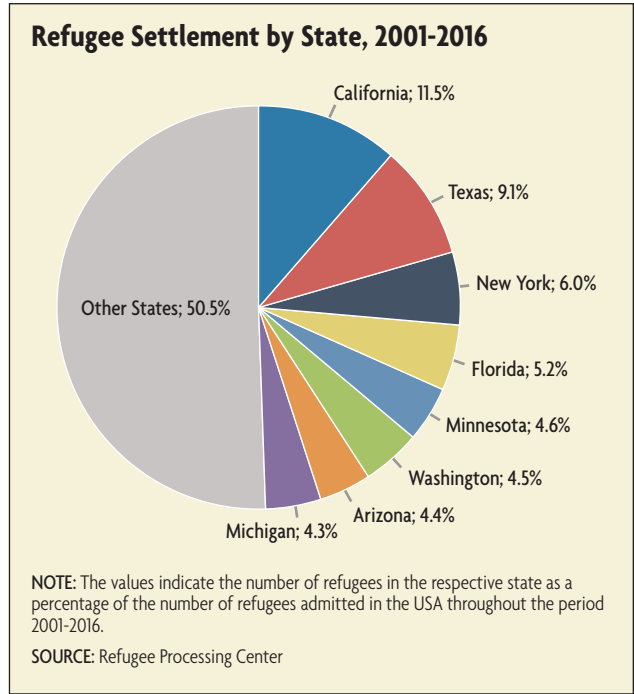
A maximum number of refugees are allowed to enter the United States every year. This ceiling is determined by the president in consultation with Congress. The highest annual ceiling was set at 231,700 admissions in 1980. This number has changed through the years for a variety of reasons, including worldwide population migration, worldwide economic conditions, and domestic political factors. From 2001 until 2015, the ceiling has fluctuated between 70,000 and 80,000. In 2016, it was raised to 85,000, and the proposed ceiling for 2017 is 110,000. The number of actual arrivals has generally fallen below the ceiling; since 2013, however, it has always reached the established maximum. (See chart.)

Federal law requires that refugee resettlement locations should be decided by the federal government in consultation with state and local governments. The federal government currently works with nine agencies to provide assistance to refugees throughout the resettling process. These agencies, jointly with their local affiliates, determine the best locations for the newly arrived refugees. The settlement decisions are



typically driven by factors such as the number of refugees already present in the community and family reunification motives. Other indicators that describe the community's capacity to absorb refugees are also taken into account. The latter includes availability of affordable housing, health and educational services, and employment opportunities.

From 2001 to 2016, approximately 890,000 refugees were admitted into the United States. Eight states received almost 50 percent of the total number of refugees in that period. California and Texas are by far the two largest refugee hosting states, receiving 11.5 percent and 9.1 percent, respectively, of total refugees. The list continues with New York, Florida, Minnesota, Washington, Arizona, and Michigan, each state accounting for about 4 percent to 6 percent of the total number of refugees. (See chart.) In the Fifth District, North Carolina has hosted about 3 percent, while Virginia



Fifth District Refugee Admissions by City, 2001-2016

| Number | Maryland | | North Carolina | | Virginia | |
|--------|---------------|---------|----------------|---------|-----------------|---------|
| | City | Percent | City | Percent | City | Percent |
| 1 | Baltimore | 46.2 | Charlotte | 26.6 | Richmond | 17.0 |
| 2 | Silver Spring | 20.9 | Greensboro | 17.0 | Charlottesville | 13.7 |
| 3 | Riverdale | 5.0 | Raleigh | 15.7 | Roanoke | 11.7 |
| 4 | Frederick | 2.6 | High Point | 12.5 | Harrisonburg | 9.4 |
| 5 | Hyattsville | 1.8 | Durham | 7.9 | Falls Church | 7.4 |
| 6 | Rockville | 1.6 | New Bern | 7.3 | Hampton | 5.9 |
| 7 | Hagerstown | 1.4 | Asheville | 2.3 | Newport News | 5.5 |
| 8 | Columbia | 1.2 | Wilmington | 1.9 | Alexandria | 5.2 |
| 9 | Gaithersburg | 1.2 | Carrboro | 1.7 | Fredericksburg | 2.9 |
| 10 | Elkridge | 1.2 | Chapel Hill | 1.2 | Arlington | 2.1 |
| Total | | 83.0 | | 93.9 | | 80.9 |

NOTE: The values indicate the number of refugees in the city as a percentage of the number of refugees who settled in the state during the period.

SOURCE: Refugee Processing Center

and Maryland have received about 2 percent of total refugees during the period. The percentages for South Carolina, West Virginia, and Washington, D.C., are negligible.

The assignment of refugees across cities within each of the states in the Fifth District that have hosted the largest number of refugees widely differs during 2001-2016. (See table.) In Maryland, almost half of the refugees resettled in the state have located in Baltimore, while the assignment of refugees in North Carolina and Virginia seems to be more dispersed across cities. Charlotte (with almost 27 percent) and Richmond (with 17 percent) attract the highest proportion of refugees in North Carolina and Virginia, respectively, but they are followed in each case by Greensboro (17 percent) and Charlottesville (13.7 percent).

Occasionally, state and local officials have opposed the resettlement in their districts. For instance, a number of state government officials have recently indicated they will not allow the settlement of Syrian refugees in their states. It should be noted, however, states that have historically accepted large number of refugees (such as California, New York, Washington, and Pennsylvania, among others) have assured their continued participation in resettlement programs. Moreover, there seems to be conflicting opinions declared by state governors and city officials. In fact, many cities in states that oppose the new admission of refugees advocate for a higher participation in resettlement programs and welcome even larger number of refugees into their cities.

Further opposition to refugee resettlement has recently emerged at the federal level. President Trump has sought to suspend the admission of refugees; at press time, the legality of that measure is a subject of litigation.

Neighborhood Effects on Labor Market Outcomes

Part of the literature on refugee resettlement focuses on how the characteristics of the community affect labor market outcomes for newly arrived refugees. Immigrants, and particularly refugees, tend to concentrate in certain areas and reside in enclaves. Such location decisions may have both positive and negative implications regarding labor market outcomes. On one hand, labor market prospects may improve because individuals may share information about job opportunities with other network members more effectively. On the other hand, living in an enclave may reduce the incentives to acquire certain required skills (for example, the development of language skills) to become fully integrated into the host's labor market.

Early work by Per-Anders Edin and Olof Aslund of Uppsala

University and Peter Fredriksson of Stockholm University examined which of these two effects tends to dominate. In a 2003 article in the *Quarterly Journal of Economics*, they looked at the extent to which ethnic concentration in a city affects earnings of refugees from the same country of origin residing in those areas. They used data from a refugee settlement program implemented in Sweden between 1985 and 1991. The conclusions of their analysis suggested that as the size of the ethnic concentration rises, earnings increase as well. In fact, they showed that earnings increase more for low-skill individuals.

Yet their results indicated that the effect on earnings actually depends on the "quality" of the enclave: Individuals who belong to an ethnic group with higher earnings or higher self-employment rates have a higher return from residing in the enclave. Those who belong to enclaves that have a lower than average level of earnings may actually experience a negative impact on earnings.

More recent work by Anna Damm of Aarhus University investigated a similar issue using data on a refugee resettlement program in Denmark. Her main objective was to examine whether residing in a deprived neighborhood negatively affects labor market outcomes for refugees. In a 2014 article in the *Journal of Urban Economics*, she found that after accounting for residence sorting, such an effect is nonexistent. Her work concluded, along the same line as Edin, Fredriksson, and Aslund, that the quality of the network, rather than its size, is more important for explaining individuals' labor market outcomes. In fact, the probability that a newly arrived refugee finds a job improves as the employment rate among co-nationals who reside in close proximity is higher.

Lori Beaman of Northwestern University provides an alternative view in which the effects of a larger network might depend on the specific structure and composition of the network. Beaman developed a model that captures how information is transmitted through the network. She used data from refugee programs administered by the International Rescue Committee that assigned refugees across various cities in the United States during the period 2001-2005. When examining the labor outcomes for recently arrived refugees, she found that their labor market outcomes (described mostly by the probability of employment and the level of wages) tended to be worse when the number of network members resettled in the same year or one year prior is larger.

Beaman found, however, that the outcomes are better for newly arrived refugees when they interact and participate in networks with a larger number of members with longer tenure in the United States. One possible interpretation of this result is that newly arrived refugees compete for the same type of jobs with other refugees that have recently relocated into the United States. As a result, this latter group might not find it beneficial to share and transmit information to the newly arrived refugees about job opportunities through the network. On the other hand, more tenured members, typically members who already have an established job, would feel less threatened by the arrival of new refugees, and they would behave more cooperatively.

Neighborhood Effects on Education and Criminal Behavior

Other work focuses on different aspects of neighborhood effects, such as their impact on education outcomes and the likelihood of engaging in criminal activities. In a paper published in the *American Economic Journal: Applied Economics* in 2011, Aslund, Edin, Fredriksson, and Hans Gronqvist found that the “quality” of the network connections helps to explain the education performance of refugees, in line with the conclusions of their previous research that focused on labor market outcomes. Specifically, their work showed that education outcomes, measured by students’ school grades, improve when the proportion of highly educated peers in the same local ethnic group is higher. They also showed that the positive effects are more important for those kids who arrived in the neighborhood when they were younger (less than 7 years old).

Research by Anna Damm and Christian Dustmann of University College London studied the connection between the level of crime at the neighborhood level and the probability of individuals later engaging in criminal

activities. They concluded, using data from the refugee settlement program implemented in Denmark, that the exposure to neighborhood crime during childhood influences the criminal behavior of individuals as adults. More precisely, they found that as the percentage of convicted criminals residing in a neighborhood rises, it becomes more likely for male refugees assigned to that neighborhood to engage in crime later in life. This effect is not observed for females, though.

Effect of Refugee Dispersal Policies on Earnings

Some countries, such as the United Kingdom, Germany, and Sweden, follow strict settlement policies that restrict the locations where newly arrived refugees can reside. One of the main goals of those policies is to reduce the concentration of refugees in a small number of densely populated cities. This objective is presumably based on the idea that higher concentrations of refugees in an area may reduce the level of integration and assimilation of immigrants.

Moreover, it has been claimed that refugees tend to impose, at least initially, a heavy fiscal burden on recipient cities. A discussion paper from the Brookings Institution prepared by Bruce Katz, Luise Noring, and Nantke Garrelts reviewed the recent refugee experience in Europe. The report highlighted the fact that refugees often disproportionately locate in a small number of cities. Such a settlement pattern has created important local fiscal imbalances, since the cities ultimately bear the cost of educating and integrating the newly arrived refugees into their communities. Refugee dispersal policies may be viewed as a way of spreading out and sharing the fiscal burden among several localities.

A few papers that evaluate the effectiveness of refugee policies suggest, however, that dispersing refugee immigrants across cities may have a detrimental effect on refugees. Edin, Fredriksson, and Aslund, in a 2004 study, found that settling refugee immigrants away from denser areas results in an important long-run earning loss for those immigrants. The goal of dispersing refugees, they concluded, is attained at a significant cost for the refugees, hurting their ability to become self-sufficient.

Many countries are making a great effort to deal with the rising number of displaced individuals around the world. Understanding the factors that determine the long-run outcomes of refugees, including their self-sufficiency and degree of integration in the host country, is key to evaluating the effectiveness of refugee resettlement programs. The academic research reviewed above may provide some guidelines on how to design and implement these policies. **EF**