The Impact of Refugees on Native Students' Educational Outcomes

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Children account for roughly half of the world's refugees, and there is uncertainty about how their resettlement may affect native children's educational outcomes. This paper studies how the inflow of refugees at the end of the Vietnam War affected native children's academic achievement and post-secondary educational attainment. To identify the causal effect, I use novel data from the U.S. National Archives that contain refugees' first county of destination, which was determined by resettlement agencies and was uncorrelated with previous schooling conditions. I find precise zero or small positive effects on native children's test scores and educational attainment.

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Globally, the total number of refugees has doubled over the last 10 years (UNHCR, 2019). Most refugees come from poor countries, and the increase in the number of asylum seekers has been met with broad criticism in many countries, as there is concern about how absorbing these refugees will affect the host countries

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financially. Refugee resettlement is a contentious issue worldwide: 60 percent of Germans want to restrict the number of refugees admitted into the country (Gedmin, 2019); anti-immigration parties have gained ground in European countries such as Belgium and Switzerland; and refugee support is decreasing in Peru, Ecuador, and Colombia (Esipova, Ray and Pugliese, 2020). In the United States, refugee admissions have reached the lowest levels since 1980, amid a decade that has seen the highest global number of refugees since World War II (Pew Research Center, 2019). The lack of political support in the United States for admitting refugees is, however, not a new development. In 1979, four years after the end of the Vietnam war, a *New York Times* survey reported that more than 60 percent of adults in the United States disapproved of the federal government's plan to double the number of Southeast Asian refugees admitted in 1980, while more than 70 percent of U.S. adults opposed allowing Cuban refugees to settle in the Unites States. (Pew Research Center, 2017).

As children comprise roughly half of the refugee population (UNHCR, 2021), refugees' resettlement has also raised concerns about the strain imposed on the school systems in the host countries. A common justification for restricting refugee inflows is that refugee children may have negative spillover effects on the academic success of their public school classmates (Card, 2009). However, these growing concerns are generally based on anecdotal evidence of class disruption (Ballatore, Fort and Ichino, 2018; Bossavie, 2020), as there is no consensus in the empirical literature on the effect that an inflow of refugees has on native students.

I contribute to the literature by answering this question in a causal framework. I harness a natural experiment generated by the largest historical inflow of refugees to the United States: the resettlement of over a quarter million Southeast Asian refugees in the five years following the end of the Vietnam War, and use this episode to determine the effect that refugees have on native students academic success. I argue that the suddenness and the magnitude of the refugee inflow

in 1975, together with the lack of widespread immigration from the Indochinese Peninsula and the number of voluntary agencies involved in the refugee resettlement resulted in quasi-random variation, since the assigned location of these refugees was uncorrelated with local characteristics. Because of these factors, the resettlement of Vietnamese refugees in particular, and to a lesser extent the Cambodian and Laotian refugees relocated to the United States in the late 1970s, can be used to gain a better understanding of the causal effects that refugee children have on the educational outcomes of their native classmates.

Two unique factors suggest that the relocation assignments of these Southeast Asian refugees were uncorrelated with county characteristics. First, with the help of nine voluntary agencies, the federal government distributed refugees widely across the United States, albeit with the specific intent of avoiding a concentration of refugees in a single geographic locale. Congress instructed the agencies to disperse refugees across the entire country, but stipulated that the agencies should avoid settling the refugees in economically depressed areas (U.S. Congress, 1975; Haines 1985). Voluntary agencies achieved this goal by dispersing refugees both across states and widely within states (Refugee Task Force, 1976); in 1975, Southeast Asian refugees were resettled in over 60 percent of U.S. counties. Second, there were no clear guidelines established among the voluntary resettlement agencies as to how refugees would be distributed. Although the Committee on Migration and Refugee Affairs from the American Council of Voluntary Agencies for Foreign Service (ACVAFS) was created to allocate individual cases between the resettlement agencies; in practice, the number of refugees resettled by each voluntary agency depended mainly on the decisions of junior personnel who were working at the resettlement camps (Zucker, 1982).[1]

My research design also helps overcome two additional challenges. First, hardly

[1]The success of the dispersal policy meant that the share of refugees was generally below 1.5 percent of the county population. Nevertheless, it is worth noting that this is the largest inflow of refugees in U.S. history; even for more recent — and more concentrated — influxes of refugees, their county population share is generally below 1 percent. For instance, Figlio and Özek (2019) study the influx of Haitian refugees in Florida and define the exposed schools as those where the share of refugees is above 1 percent of the grade-school population.

any available data sources directly identify refugees. Second, most sources only record refugees' current locations, making it difficult to disentangle the effect that refugees have on their communities from the reasons why they choose to settle in a specific location. This is important, as the historical records show that over 40 percent of Southeast Asian refugees ultimately moved to a different county between their time of arrival and 1981, and almost 30 percent moved to a different state within the same period.[2] Ignoring self-selection would lead to a negative bias if refugees self-select into economically disadvantaged areas so, to account for selection, researchers have generally exploited variation over time in the same location or used prior settlement locations as an instrumental variable. To address these issues, I use novel data from the U.S. National Archives which contain records of refugees at the individual level, including their first destination county, which was determined by the voluntary agencies.

My work complements that of Morales (2020), who uses administrative data from a Georgia school district to study the impact of having an additional refugee student in the classroom. I focus on the effect of refugee inflows from a migration perspective, examining the effect of the largest inflow of refugees on native students' overall educational outcomes, both academic achievement in the K-12 classroom as measured by math and reading scores on aptitude tests, as well as the highest educational attainment beyond high school. Although Morales's sample only includes one school district, using administrative data enables her to measure the share of refugees at the grade level.[3] She finds that an increase in the share of refugees in a school cohort has a small positive effect on native students' math test scores, but no effect on English language test scores.

My paper is related to a broader literature that studies the effect of immigrants

[2]These numbers are based on the migration rates of a random subsample of approximately 83,000 refugees for whom there is additional information on their 1981 location in the data from the U.S. National Archives.

[3]An important advantage of having a nationally representative sample is that my sample includes both public and private schools, so my estimates measure the effect of an inflow of refugees on native students' academic achievement, including natives' response to refugee student presence such as transferring to a private school.

on native children's academic success. The results of these studies are mixed. Earlier research, such as Betts (1998) and Betts and Lofstrom (2000), found that minority students were less likely to complete high school when living in states or metropolitan areas with a higher fraction of immigrants. However, more recent evidence that controls by immigrants' residential sorting suggests a positive relationship: although immigrants, by competing for educational resources, may lower the native students' benefit gained from attending school, ultimately, the inflow of unskilled immigrants increases the return to education by widening the wage gap between the high school graduates and high school dropouts (McHenry, 2015; Hunt, 2017). That said, after controlling by native students' responses to the arrival of immigrants or to native flight, Figlio et al. (2021) show that there is a positive correlation between the presence of immigrants and U.S.-born students' academic achievement. Moreover, the largest positive effects are concentrated among disadvantaged native students; this result, suggests that the presence of immigrants does not reduce the quality of education.

Nevertheless, as explained in detail in section I.C, refugees fleeing from war differ from economic migrants in important ways, so their effect on native students should be studied separately. For instance, economic migrants are associated with voluntary migration decisions motivated by the opportunity for economic gains, while refugees are associated with forced migration and dependency on welfare assistance (Jacobsen, 2005). In addition, refugees differ from economic migrants in the expected length of migration. International law protects refugees from being sent back to countries where their lives and freedoms would be endangered (UNHCR, 2016). These two differences are likely to result in different selection patterns in the migration process and the human capital investment decisions made by each group after migrating, so the relative effect that refugees and economic migrants have on native students should be studied separately.[4]

[4]For instance, Green and Iversen (2020) examine the effect of refugees on the educational attainment of native students in Norway. They find that an increase in the share of refugees has a small negative effect on disadvantaged native students' test scores. The authors explain that the effect results from

In the context of my research question, the ideal strategy used to identify the effect of refugees would be a difference-in-differences analysis, comparing the outcomes of native students before and after the refugee inflow in areas with different concentrations of refugees (a measure of the intensity-of-treatment). Data limitations make this approach impossible, so I approximate a difference-in-differences framework by combining multiple micro studies from the National Center for Education Studies (NCES) and comparing the outcomes of native students who were exposed to a high fraction of refugees against those who were exposed to a lower fraction of refugees.[5]

I use two nationally representative studies to study the effect that the inflow of Southeast Asian refugees to the United States in the second half of the 1970s had on native student's educational outcomes. First, I use the 1971 and 1975 cross-section from the National Assessment of Educational Progress (NAEP) to show that the counties that ultimately received different shares of refugees were comparable before the arrival of the first refugees. Then I estimate the effects on NAEP cross sections collected after the inflow of refugees in 1978, 1980, and 1982; and in the High School and Beyond Longitudinal Survey (HS&B), which follows a cohort of 10th grade students beginning in 1980.

The results show that the inflow of refugees did not affect the academic achievement of native students. These estimates are precise enough to rule out negative effects of a magnitude larger than a –0.05 standard deviations on native students' test scores.[6, 7] Moreover, I find that, if anything, the inflow of refugees from

the refugee groups who are more likely to be at risk which, they suggest, may come from the absence of compensatory resources at the school level. Moreover, the authors document that the presence of economic migrants is not associated with similar negative effects.

[5]NCES micro studies surveyed a different set of counties over time so individual counties were surveyed only once between 1971 and 1982.

[6]Specifically, the confidence interval of the effect on all students in 1980 and 1982 at a 90 percent significance level do not include values below –0.05 standard deviations.

[7]The literature on peer effects generally finds these effects are greater than 0.05 standard deviation (in absolute values). For instance, Sacerdote (2001) finds that having a college roommate with a one standard deviation higher GPA is associated with a 0.05 increase in the student's own score. Likewise, Carrell and Hoekstra (2010) find that in primary school, attending school with one more troubled boy (defined as a child living in a household with domestic violence) decreases boys' test scores by 0.06 standard deviations.

Vietnam, Laos, and Cambodia increased native students' likelihood of completing post-secondary education and obtaining a graduate degree. I find similar estimates when I identify the effect using cross-cohort variation in the share of refugees by county and age instead of relying on geographic variation in the share of refugees. It is reassuring that using a more common, completely different source of variation, I find similar estimates. To address additional concerns about attenuation bias given the high internal U.S. migration rates among refugees, I estimate the effects obtained from measuring the share of refugees at the county level in 1980 with information from the Census Summary Files, using the initial county of settlement as an instrument. As before, the coefficients on the test scores are small and never statistically significant at traditional levels.

In general, the evidence suggests that there are no negative effects on native students' K-12 academic achievement or attainment from the inflow of Southeast Asian refugees. There is also no evidence of a negative effect on native students' behavior and motivation in high school, or on their labor market outcomes during their first decade as working adults. It is worth highlighting that the Southeast Asian refugees that came to the United States in the mid-to-late 1970s share similar demographic characteristics with refugees currently referred to the United States by the United Nations High Commissioner for Refugees, as both groups are positively selected.[8] In each case, over 35 percent of adult refugees have completed college, while about 10 percent of them have no schooling. Moreover, 95 percent of refugee children were enrolled in school in 1980 and the rate is just as high today. Because of these similarities, studying the effect of Southeast Asian refugees on U.S. children in 1980 may shed light on the effect of allowing a similar number of UNHCR vetted refugees to enter the United States in the current setting.[9]

[8]This comparison is based on ACS data from the top 10 refugee sending countries: the Democratic Republic of Congo, Syria, Burma, Iraq, Somalia, Bhutan, Iran, Afghanistan, Ukraine, and Eritrea (Igielnik and Krogstad, 2017).

[9]Although there is still no detailed information on the socio-economic characteristics of Afghan refugees, given the similarities between the fall of Saigon, in 1975, and the fall of Kabul, in 2021, and the nature of the evacuation process, studying the effect of Southeast Asian refugees on U.S. children

The remainder of the paper is organized as follows. Section I provides background information on the inflow of refugees from Vietnam. It first discusses the resettlement process on which the identification strategy relies. Then, it goes over the mechanisms through which refugee children affect native children's academic achievement, and how they differ from those of economic migrants. Section II describes the data, while section III goes over the identification strategy and the evidence of its validity. Section IV presents the results and section V concludes.

I. Background

A. Southeast Asian Refugees

The Southeast Asian refugees from the countries affected by the Second and Third Indochina Wars, came to the United States in three main waves. The first one was after the fall of Saigon on April 30, 1975, when refugees left the country under an evacuation effort organized by the United States government. The second one, in 1978–1979, was in response to the Sino-Vietnamese conflict, the Vietnamese invasion of Cambodia, and the border war between China and Vietnam; this evacuation was organized by Vietnamese authorities in response to international pressure. The third one, in 1988–1992, with the introduction of the Amerasian Homecoming Act in 1988 and the 1989 Humanitarian Operation Program, which allowed Vietnamese who were or had been detained in re-education camps to resettle in the United States (Parsons and Vézina, 2018). However, there was a substantial number of refugees who left their countries independently between these waves (Haines, 1985).

During the first wave, in 1975, refugees were airlifted to staging areas in the Pacific. Then, they were transported to one of four processing centers in the continental United States: Camp Pendleton (California), Camp Chaffee (Arkansas), Eglin Air Force Base (Florida), and Indiantown (Pennsylvania). Finally, they

in 1980 may also shed light on the effect of allowing a similar number of Afghan refugees to enter the United States today.

were settled in communities under the sponsorship of voluntary agencies (Haines, 1985). Refugees from the later waves experienced harder transitions. They were subject to merciless policies from the North Vietnamese government such as "re-education camps" and "agricultural collectives" (Cargill and Huynh, 2000). Then, refugees traveled in boats, often assaulted by pirates, to Thailand where they stayed in refugee camps for long periods of time.

The Southeast Asian refugees who reached the United States in the fist wave were highly qualified. The statistics from the 1975 Task Force Report to the Congress in 1975 suggests that over 70 percent of the household heads spoke some English and that 36.7 percent of this group spoke it well. The report also states that 27.4 percent of household heads had a college degree, while 16.6 percent of all refuges over 18 years of age had a college degree, and 2.9 percent had a graduate degree. Looking at their characteristics in the 1980 Census shows a similar picture: 36 percent of all the refugees from Vietnam, Cambodia, and Laos had at least some college education. This is very similar to the almost 39 percent share of native working-age adults, aged 18 to 65, with some college education at the time.

The overall evidence, therefore, suggests that even though Southeast Asian refugees were exposed to war, which usually reduces educational attainment and human capital accumulation, the group that reached the United States in the first wave, was highly qualified relative to their counterparts that stayed in Vietnam, Laos, and Cambodia. Nevertheless, the 1980 Decennial Census shows that there was a large share of adult refugees who did not complete high school. On average, 37 percent of working-age refugees had dropped out of high school while the share of working-age natives who had dropped out of high school was 25 percent in 1980. This may be in part because of the significant variance in educational attainment among the refugees from Cambodia, Laos, and Vietnam; for instance, Haines (1985) reports that 14 percent of Vietnamese refugees had college degrees while only 7 percent of Laotian refugees had the same level of education. Moreover,

refugees' education levels vary depending upon the year a refugee came to the United States. Specifically, given the nature of the evacuation process, the share of highly qualified refugees from urban areas and professional backgrounds was higher in the first wave than over the following years (Haines, 1985).

In regard to employment history, over two-thirds of Southeast Asian refugees used to work in white-collar occupations before being resettled in the United States, while only about half of the U.S. population of working-age held the same type of jobs at that time (Haines, 1985). Moreover, over 30 percent of household heads from the first wave of refugees worked in professional and technical occupations, while the share of workers in the same sectors was 15 percent for the U.S. general population.[10]

As noted above, the Southeast Asian refugees who came in the first wave often came as a family, so the adults in these families likely passed on attitudes regarding schooling and education to their children. Regarding the characteristics of refugee children. Table A1 shows that, on average, refugee children were younger than natives in the same age groups. The table also shows that refugee children attended schools at a similar rate as natives. Moreover, the refugee children who were attending school were less likely to attend private and Catholic schools than their native counterparts.

B. The Refugee Resettlement Process as a Natural Experiment

There are two main reasons why I claim that the initial dispersal of refugees to counties was exogenous and can be used as a natural experiment. First, unlike the Cuban refugee population that was concentrated in Miami, there were significant efforts to disperse Southeast Asian refugees throughout the United States (Refugee Act 1975; Haines, 1985). Given the nature of the exodus of refugees, the 1975 Refugee Act was designed to rapidly guarantee that the necessary funds

[10]The Task Force Report indicates that 7.2 percent of household heads were medical professionals, and another 24 percent worked in professional, technical, and managerial occupations.

were available to reimburse local governments and voluntary agencies for expenditures related to the resettlement of refugees. However, the "Hearings before the Subcommittee on Immigration, Citizenship, and International Law of the Committee on the Judiciary House of Representatives" also emphasized the instructions given to the initial nine voluntary agencies working on the resettlement: Southeast Asian refugees should be dispersed as evenly and equitably as possible throughout the United States, while avoiding resettlement in economically hard-pressed areas.[11] In practice, this resettlement policy meant that Southeast Asian refugees were initially assigned widely across the country, with refugees ending up living in over 60 percent of counties by the end of 1975.

Second, although refugees were resettled across the United States, the effect of their influx on the native population can be identified, as there was variation in the fraction of refugees as a percentage of the 1975 population across counties. Since there was no uniform structure among the nine voluntary agencies for assigning the refugees in processing center and, since there were significant differences in the resettlement strategies across voluntary agencies, this heterogeneity led to variation in the share of refugees across the country.[12] Zucker (1982) explains that the number of refugees, as well as which refugees were resettled where, were decisions determined by junior-level personnel from the participating voluntary agencies. Likewise, Parsons and Vézina (2018) describe the resettlement procedure as a chaotic process, where the proactiveness of the voluntary agents in each camp determined the number of refugees resettled by them. Essentially, the resettlement of Southeast Asian refugees was a random process that naturally led to geographic variation in the share of refugees.

[11]The nine voluntary agencies were:U.S. Catholic Conference Migration and Refugee Services, American Fund for Czechoslovak Refugees, Church World Service*, Lutheran Immigration and Refugee Service*, United Hias Service INC.*, International Rescue Committee*, American Council for Nationalities Services, and Travelers Aid-International Social Services. (* These agencies are currently resettling refugees.)

[12]The voluntary agencies had different strategies for assigning refugees, and these various approaches affected the places where refugees were resettled (Office of Refugee Resettlement, 1984). For instance, the International Rescue Committee (IRC) assigned refugees from their regional offices, while the United States Catholic Conference (USCC), the Lutheran Immigration and Refugee Services (LIRS), and Church World Services resettled refugees through churches and church committees.

The 1975 Task Force Report to the Congress confirms that the Office of Education's Refugee Task Force (part of the then U.S. Department of Housing, Education, and Welfare Office of Education) achieved a wide distribution of refugees both across states and within states by the end of 1975. The report documents that after the initial resettlement, there were fewer than 10 refugee students per school in over 85 percent of the K-12 schools that enrolled Southeast Asian refugee children. Moreover, at the end of 1975, only 28 U.S. school districts (out of 864 schools that applied for transitional assistance grants) had more than 100 refugee students.

Over the next eight years, refugees from Cambodia, Laos, and Vietnam continued to arrive in the United States. In principle, I could also use the second and third waves of Southeast Asian refugees to identify the effects that refugee children have on the educational outcomes of native students. But there is a reason I do not. In these later waves, there was significant share of refugees who were resettled with prior refugees or other family sponsors, so these later refugees may have had some choice over their initial resettlement destination. Therefore, to avoid the potential self-selection bias from incorporating the later waves of refugees, in the main specifications I identify the effect based solely on the first wave of Southeast Asian refugees.

In addition, a potential source of concern is secondary migration, as the Office of Refugee Resettlement estimates suggest that in 1983, eight years after the arrival of the first Southeast Asian refugees, only 75 percent of this first wave of refugees were still living in the state in which they were initially resettled.[13] Therefore, to account for the internal migration of refugees, I calculate the share of refugees at the county level in 1980 using information from the 1980 Census Summary Files and estimate the educational effect on native students using the

[13]To measure the extent of this issue, the Office of Refugee Resettlement created the Refugee State-of-Origin Report. As refugees generally applied for a Social Security Number immediately upon arrival, in this report, they used the first three digits of the Social Security Number — assigned geographically in blocks by state — to check the fraction of refugees in each state that had originally been assigned to that state, as well as the number of refugees who had migrated to other states.

initial assignment as an instrument.[14] The results are substantially the same.

C. *Refugees resettlement versus Voluntary Immigration*

An essential difference between refugees and other migrants is that voluntary migration is often motivated by economic gains, while refugees are forced to migrate, due to circumstances like natural disaster, famine, or war (Jacobsen, 2005). Although there is variation in pre-migration war experiences as some refugee children are sheltered from traumatic experiences, while others experienced multiple forms of trauma while getting to the United States (Pacione, Measham and Rousseau, 2013). Because exposure to conflict in their country of origin makes adult migrants violence-prone in their host country (Couttenier et al., 2019), a potential mechanism through which refugee children may affect their classmates is through disruptive behavior. In fact, Betancourt et al.(2012) found that over forty percent of war-affected refugee children resettled in the United States and surveyed by the National Child Traumatic Stress network had behavioral problems. The increase in disruptive behavior may negatively affect native students as previous work has found strong negative externalities in academic achievement from attending school with domestic violence victims (Carrell, Hoekstra and Kuka, 2018; Carrell and Hoekstra, 2010).

Exposure to violence also reduces academic attainment. The evidence on the effect of conflict on human capital accumulation suggests that individuals exposed to conflict obtained, on average, fewer years of education and that the education they obtain is of lower quality (e.g., Leon, 2012; Chamarbagwala and Moran 2011; Galdo, 2013; Shemyakina, 2011; Swee, 2015). Therefore, a second mechanism through which refugees may negatively affect native children is by changing the classroom composition as low-achieving students lower the academic achievement

[14] A potential source of concern in this data is that refugees moved frequently and, therefore, did not live in a given county long enough to have an effect on native children. Although there is no detailed longitudinal information, the descriptive evidence indicates that refugees moved directly to their final destination, suggesting that refugee mobility is unlikely to significantly affect the results.

of their peers (Imberman, Kugler and Sacerdote, 2012; Carrell, Fullerton and West, 2009). In addition, like economic migrants, refugee children may compete with native children for classroom resources, which may lower the quality of native education.

However, the effect of war on the education level of refugees that reach the United States is not clear, as only a select group of refugees has the resources and the ability to migrate. For instance, as there was discrimination against those associated with the former government or the American war effort, refugees in Vietnam obtained less education than they would have in the absence of the war. In practice, this prevented some children from attending college (Hung, 1985). Nevertheless, as shown in Appendix Table A2, the refugees that reached the United States were highly qualified: 37 percent of adult refugees had at least some college and 19 percent had completed high school; in contrast, only 1.0 percent and 6.7 percent of Vietnamese have completed the same education level in 1975 (Barro and Lee, 2013).

Therefore, to better understand how Southeast Asian refugee children (aged 5–18 in 1980) could have affected native students, it is useful to see their educational attainment and labor market characteristics twenty five years after their arrival. Appendix Table A3 shows that 50 percent of Southeast Asian refugees who entered the country as children have completed college or more; in contrast, only 35 percent of natives in the same age group have that education level. As Southeast Asian children, who entered the country as refugees, ended up obtaining more education than their native peers, their influx may have improved class composition and raised the academic achievement of their classmates through positive peer effects (Imberman, Kugler and Sacerdote, 2012; Carrell, Fullerton and West, 2009).

Finally, school districts could apply for grants to help cover the emergency costs of instructing Vietnamese, Laotian, and Cambodian children (Refugee Task Force, 1975*a*). Through the Refugee Transition Program, schools received $300 for each

refugee if there were fewer than 100 refugee children in total (or 1 percent of the school, whichever was smaller) and $600 per refugee above 100 (Refugee Task Force, 1975*b*). These grants aimed to cover English language instruction, special aides or tutors, additional instructional materials, and teachers' training. The amount was comparable to the transfers received for low-income families as they were based on the formula used in the Every Student Succeeds Act Title I (Refugee Task Force, 1975*a*). Importantly, though, financial assistance was restricted to Southeast Asian refugee children, so it is unlikely that it directly benefited native students. Instead, the presence of additional resources may have protected native children by preventing the schools from deviating resources from them.

II. Data

To identify the causal effect that the initial inflow of Southeast Asian refugees had on the educational outcomes of native students, it is key to have information on the assigned location of refugees, as later locations, decided by refugees, make it hard to disentangle the effect of the inflow from the characteristics of the new location that motivated refugees to move to a given county. To calculate the number of refugees by county, I use the records for all Vietnamese, Laotian, and Cambodian refugees who came to the United States beginning in 1975, information which is collected by the Office of Refugee Resettlement and kept by the U.S. National Archives and Records Administration. These data include the day, month, and arrival year as well as each refugee's birthdate. Key to this analysis, it also contains information on each refugee's first destination county which, given the context of the refugee resettlement program in 1975, was determined by the voluntary agency resettling these refugees in the United States. The population share of refugees in each county is then calculated by dividing the number of refugees assigned to each county by the 1975 county population estimates, compiled by the National Bureau of Economic Research. To determine the relevance

of using the initial assigned location against the current location, I also compute the share of refugees based on the number of Vietnamese reported to be living in each county in the 1980 Census Summary files.[15]

Although the records from the U.S. National Archives include the county and municipality of destination, data on educational outcomes was limited prior to 1980,so only a few data sets satisfy two key restrictions for this study. First, the survey must contain geographic information to determine the county in which student was living. Second, it must have information on the country of birth (or a proxy) so I can separately study the effect the refugees have on native school children. Because of this limitation, I calculated the population share of refugees at the county level instead of conducting the analysis at a smaller geographical level.[16]

To measure the educational outcomes of native U.S. students, I combine several micro studies from the National Center for Education Studies (NCES). First, I use the National Assessment of Educational Progress (NAEP), a nationally representative study of public and private schools that started in 1971. This study has repeated cross sections containing information on reading test scores administered during the school years ending in 1971, 1975, and 1980, and on math test scores given during school years ending in 1978 and 1982.[17] Each time it was conducted, the NAEP tested students who were 9 years old, 13 years old, and 17 years old attending schools in approximately 150 U.S. counties. Unfortunately for the purpose of this study, the sample of counties changed over time, so each country was only surveyed once throughout the 11-year period. The important point is that this data restriction implies that to identify the effect on natives

[15] As the 1980 Census Summary files do not have information on the number of Laotian and Cambodian refugees living in each county, I use the number of Vietnamese as proxy for the number of Southeast Asians settled in the county. Based on the U.S. Archives information, Vietnamese refugees accounted for 79.41 percent of the Southeast Asian refugees who came to the United States between 1975 and 1979.

[16] It is not possible to conduct the analysis at the metropolitan area level using Decennial Census Data as, prior to 1980, census sample sizes samples were too small: 1 percent instead of 5 percent (Hunt, 2017).

[17] I could not use data from the NAEP after 1982, as the restricted-use version does not have county information between 1984 and 1988.

students educational outcomes, I can only use geographic variation in the population share of refugees and cannot use a difference-in-differences identification strategy.

Using the NAEP data, which provide students' location at the time, I am able to compare the test scores of native students living in counties with high shares of refugees to those living in counties with low shares of refugees. First, to show that these counties were comparable prior to the inflow of Southeast Asian refugees in 1975, I estimate the effect on students' reading test scores using data from 1971 and 1975, before the first refugees arrived in the United States.[18] I then estimate the effects on the NAEP cross sections collected after the inflow of Southeast Asian refugees in 1978, 1980, and 1982. In addition, since the NAEP tested students ages 9 years, 13 years, and 17 years in each of the years the test was administered; I use the cross-cohort variation to estimate the effect. In particular, I calculate the population share of refugees in each age group and use the variation in the percentage of students who are refugees by age to estimate the effect.

Second, I use data from the High School and Beyond Survey (HS&B), a nationally representative panel study conducted by the National Center for Education Statistics. The HS&B follows a cohort of approximately 10,000 students beginning in 10th grade (in 1980) through their final years in high school (in 1982), and then through their post-secondary education and early labor market outcomes (until 1992). As with the NAEP, this study includes public and private schools. Unlike NAEP, the HS&B follows students over time and has students' individual scores on two standardized tests taken in the 10th and 12th grade. With these data, which provide students' location in 1980, I compare the outcomes of native students living in counties with high shares of refugees to those of native students living in counties with low shares of refugees.

An advantage of the HS&B data is it records a rich set of outcomes. The study

[18]NAEP 1975 was the 1974-1975 school year, so the final information was collected before the arrival of the first group of Southeast Asian refugees

contains information on whether students graduated from high school, applied to college, whether they started and/or completed post-secondary education, as well as their highest educational attainment. It also records information on nonacademic outcomes. Based on several questions about their motivation, interests, and grades in high school, I calculated two indices on a student's academic motivation and discipline, as well as on whether they had been suspended or were viewed as trouble-makers by their highs-school peers. In addition, I created a dummy for whether they had a child as a teen based on their date of birth and the date of birth of their oldest child. In 1980, students were also asked about their political beliefs, when they were in 10th grade and about 16 years of age. In 1984, two years after they were expected to have graduated from high school and be about 20 years old, the HS&B recorded whether a student had registered to vote and whether they had voted since they became eligible to vote on their 18th birthday.

The HS&B polled the students again in 1986 and 1992. Those follow-up surveys, collected information on the labor market outcomes of this group of students between 1984 and 1992. I use this information to calculate the average income earned between 1989 and 1992 excluding the first five years because there is large variation in income levels directly after high school graduation. I also calculated an index, centered at zero and with a standard deviation of one, based on the HS&B subjects' labor market participation rate measured every February between 1984 and 1992. Finally, I calculated an index based on their employment status in the same period.

Importantly, the NAEP and the HS&B are micro studies that have information on race or birthplace, which allows me to restrict the sample to native students. In particular, I used the race variable in the NAEP cross-sectional data to exclude students with Asian origins. Although in practice this also excludes some American-born students of Asian descent, it is the only way to guarantee that I do not have refugee students in my sample. In the HS&B, I can directly restrict

the sample to students born in the United States in order to exclude refugees.

III. Methodology

A. Empirical Specification

The basic specification is a difference model that compares the outcomes of native students living in counties with a low share of refugees against those of native students living in counties with a high share of refugees. The estimated regressions are of the form:

$$(1) \qquad Y_{ikzt} = \alpha + \beta Share_z + X_{ikz}\Gamma_1 + S_{kz}\Gamma_2 + C_z\Gamma_3 + \gamma_s + \varepsilon_{ikzt},$$

where Y_{ikzt} is the outcome of student i, in school k, in county z, in period t. $Share_z$ is the number of Vietnamese, Laotian, and Cambodian refugees who were assigned to county z in 1975, divided by the county's population in 1975. X_{ikz} represents individual characteristics, such as native students' race and their parent's educational attainment. Likewise, S_{kz} describes school characteristics: the student/teacher ratio and school size, information that is only available in the HS&B data. Finally, C_z captures certain county-level characteristics obtained from the 1970 County Books, such as the percentage of the population that is black; the median years of education; the percentage of empty housing stock; the median household income; and labor market characteristics, such as the unemployment rate and the labor force participation rate. All regressions also include state fixed effects, γ_s.

As described in section I, in 1975 Southeast Asian refugees were exogenously assigned to counties, so the effect on native students can be identified by comparing the educational and early labor market outcomes of native students based on

the share of refugees living in their county after 1975. In all regressions, the parameter of interest is β, measured as the effect of increasing the share of refugees in 1975 by one standard deviation in the county where native students were living when the outcome was measured. The effect is identified from variation across counties but within the same state due to state fixed effects.

In all the tables, standard errors are clustered at the county level, since the share of refugees is the same for all schools located in the same county. Moreover, there are many correlated outcome variables presented in some tables; whenever it is necessary, I also report the significance level adjusted for multiple hypotheses testing using Holm (1979). In addition, regressions using the HS&B longitudinal data are weighted to adjust for attrition throughout the study.

B. Identification Strategy and Baseline Statistics

The validity of the identification strategy relies on the exogeneity of the share of Southeast Asian refugees resettled across the United States. Tables 1-2 offer evidence that supports the plausibility of this assumption. The first column of Table 1 shows the correlation between the share of Southeast Asian refugees who arrived in 1975 and the characteristics of individual counties in 1970, before the inflow. This column shows that refugees were more likely to be placed in counties where the residents had higher median years of education, higher median household income, and higher labor force participation rates. This pattern is consistent with a policy placing refugees evenly across the country but avoiding resettlement in economically depressed areas, as mandated by Congress. However, it is worth highlighting that the R^2 of these regressions is low, and that 1970 county characteristics explain less than 3 percent of the variation in the share of refugees. The weakness of this model fit, therefore, offers additional evidence of the quasi-random assignment of refugees, as most of the variation appears to be idiosyncratic.

The second column of Table 1 shows a the correlation between the share of

Vietnamese refugees in 1980, based on their location in 1980, and the characteristics of counties in 1970. As before, the evidence shows that refugees were assigned to counties with higher income levels. There are small differences between the coefficients in these two columns, and the coefficients are slightly larger in the second column. This difference is not surprising, as a higher fraction of the Southeast Asia refugees who arrived between 1976 and 1980 were reunited with their families and, as a result, these later arrivals may have been able to choose to settle in locations that were better-off economically. Because of the potential for self-selection bias, I identify the effect that refugee children have on the educational outcomes of their native peers based only on the first wave of refugees who arrived in 1975 and were quickly resettled in over 60 percent of U.S. counties.

To test whether the educational outcomes of native children living in counties with higher shares of refugees are systematically different from their counterparts living in counties with lower shares of refugees, I look at relationship between the share of refugees who arrived in 1975 and the test scores of students at time t before the inflow of refugees, after controlling for 1970 county characteristics. Table 2 shows the regression results on student test scores in two school years, 1970-1971 and 1974-1975.[19] Overall, there is no evidence of a positive effect on reading test scores before the influx of refugees, indicating that variation in the share of refugees across counties is not correlated with prior student test scores. Although, because of data limitations, the set of counties included in these regressions is different from the counties included in the following section, this set of results can be thought of as a placebo test which shows that there is no correlation between the population share of refugees and native students' test scores prior to the influx. This result, therefore, suggests that the identification

[19]The test score data in the 1974-1975 school year was collected early in 1975 and the last group of students was tested in May 1975. Although Southeast Asian refugees were first evacuated from Vietnam on April 30, only 1,483 arrived in the United States before May 20. In addition, the 662 school-age refugee children who had arrived during the last week of May were still at the processing centers in the continental United States at the end of May and, therefore, were not attending school when the last native students were tested.

strategy is valid.

Looking at the first rows of Table 2, although the negative coefficients in the first row, based on 1971 test scores, and the positive coefficients in the second row, based on 1975 test scores, may suggest a positive trend, it is worth remembering that the estimates in each row are based on a different set of counties. To determine if there was a relationship between the educational attainment of natives and the population share of refugees at the national level, in additional regressions, not reported here, I looked at the association between the share of refugees who arrived in 1975 and the educational level of natives over 25 years of age, as reported in the 1980 Census Summary Tape File. I found no significant correlation between the share of refugees who arrived in 1975 and the educational attainment of adults over 25. As these adults were 20 years of age or older in 1975, these results can be viewed as an additional placebo test, as this group of adults had completed their education before the influx. Finally, to test whether the share of refugees was associated with counties that had positive economic trends, I tested whether there was a relationship between annual and total employment growth between 1970 and 1975, but found no evidence of a positive association.

IV. Results

The first set of results looks at the outcomes using the cross-section data of students from National Assessment of Educational Progress (NAEP). Table 3 presents the effect that attending grades K-12 in a county with a higher share of refugees has on native students' math and reading test scores. Each cell reports the coefficient of an independent regression. The first three columns estimate the effect on 4th, 9th, and 11th grade students using within states and across counties variation in the share of refugees. I find that a one standard deviation increase in the population share of refugees from 1975 raises 4th and 9th grade native students' test scores in mathematics by 0.03 standard deviations in 1978. The rest of the coefficients are generally not statistically significant so, overall, the

results indicate that there is no evidence of a negative effect on native students' test scores from the influx of refugee children in the schools.

I also conduct two robustness checks using information from the NAEP. First, I estimate the effect based on cross cohort variation, a common practice in the peer effects literature. To do so, I calculate the share of refugees in the same age group as the native students who are 9, 13, and 17 years old in each of the NAEP studies. The main advantage of this identification strategy is that it allows me to include county fixed effects and, thus, control for unobserved differences between counties that were exposed to different shares of refugees. These results are presented in the fourth column of Table 3. The coefficients are very close to the results shown in the first three columns and, if anything, become more positive.

Second, I estimate the effect on native students' educational outcomes by calculating a measure of exposure to refugees; this is done by interacting the share of refugees with the percentage of native students' years in grades K-12 following the inflow of Southeast Asian refugees in 1975. For instance, in the NAEP 1980, 4th grade students had interacted with refugees during all their school years, while those students in the 9th and 11th grade had been exposed to refugee students for, respectively, five out of their nine years in school and five out of their eleven years in school. Then by combining all the information from NAEP 1978, 1980, and 1982, I can estimate the effect while including both county and year fixed effects. These results are presented in the fourth column of Table 3. The coefficient is very similar to the previous columns, indicating that including the county and year fixed effects does not change the estimates. Overall, the estimates from Table 3 show the same consistent pattern. It is worth highlighting that the estimates in the first column come from the variation in the share of refugees that results from the dispersal policy, while the estimates in columns two through four come variation in the students' age distribution. The consistency between the initial estimates and those from the second type of variation — which allow for

the inclusion of country and year fixed effects — increases my confidence in the identification strategy.

Now I turn to the results using information from the High School and Beyond Survey (HS&B). Table 4 presents the effect of attending grades 6-12 in a county with a higher share of refugees on native students' test scores.[20] To understand the role of self-selection coming from secondary migration or residential sorting after the initial placement, Panel A shows the estimates when data on the share of refugees comes from the U.S. archives, while Panel B shows the results when data on the share of refugees comes from the 1980 Census Summary Files — a contemporaneous measure which is the usual way of measuring of the number of immigrants in the literature. The left panel shows the results for the average test score for native students in the 10th grade, in 1980, while the right panel shows the results for the 12th grade, in 1982. Columns (1) and (4) report the estimates for all students, columns (2) and (5) report the results for students with parent with low education or those who at most finished high school, and columns (3) and (6) report the results for students whose parents have a high education level, or those parents who have any type of post-secondary education.[21, 22] In this table, and in all subsequent tables, each cell contains the results of a separate regression that controls for county characteristics and state fixed effects. In addition, these estimates as well as all estimates using the HS&B, include individual and school characteristics.

The results presented in panel (A) of Table 4 show that an increase of one standard deviation in the share of refugees, on average, increases native students' test scores by 0.007 standard deviation in 1980 and decreases it by 0.003 in 1982.

[20] This cohort of native children finished the 5th grade in 1975, when the first Southeast Asian refugees arrived in the United States.

[21] The high education group includes students whose parents started any type of post-secondary education regardless of the degree. That is, it includes students whose parents at least started a two-year associate, a four-year bachelor, or a higher degree

[22] I split the regressions by these two parental educational groups, as children with parents who started post-secondary education are more likely to pursue post-secondary education. This distinction, therefore, allows me to study the effect that the presence of refugees may have on a group of students for which the extensive margin — meaning the decision to start post-secondary education or not — was less important.

Nevertheless, the effect is never statistically significant when judged at traditional levels. The results from panel (B) indicate that, overall, the influx of Southeast Asian refugee children did not significantly affect native students' learning outcomes. These cases show that selection bias does not play an important role in identifying the effect that refugee children have on their native counterparts.

I now consider how an exposure to refugees students in grades 6-12 may influence the post-secondary educational outcomes of native students. The first column of Table 5 shows that the inflow of refugees had no effect on native students' likelihood of completing high school. The next columns show the effect on native students' post-secondary educational outcomes. The results indicate that the inflow of refugees did not influence native students' choices to apply to or start college, but the influx of refugees did induce natives students to complete college. A one standard deviation increase in the share of refugees raised by 2 percentage points, or 4.5 percent, the likelihood that native students would complete any type of post-secondary education; it also increased the probability of completing a bachelor and a graduate degree by 2.3 and 2.5 percentage points respectively.

As before, to determine the effect of residential sorting after the initial placement, the second panel shows the results using the share of refugees based on the 1980 Census Summary Files. Interestingly, there is no evidence of a positive effect on panel (B), which highlights the importance of the novel information from the National Archives. in each panel, there are several differences that contributed to which refugees were counted (and where they were counted), and these differences may result in differences when measuring the effects that refugee children may have on native schoolchildren. First, some of the refugees may have moved from their initial assigned location. For instance, if they self-select into locations that are worse off economically, which can proxy for lower quality schools, this will bias the results negatively. Second, the average skill level of refugees from Vietnam, Laos, and Cambodia decreased over time, so refugees' effect may vary depending on their skills. Finally, there is a higher share of refugees in 1980, as refugees from

Southeast Asia continued arriving in the United States after 1975. This latter point may be important if there is a tipping point beyond which natives react to the presence of refugees.

To disentangle the differences in the effect on native students' educational attainment between the two panels in Table 5, Table 6 estimates the effect separately for the first and the second wave of refugees, while Table 7 addresses the bias introduced by self-determined residential sorting by refugees. The results from Table 6 suggest that the positive effect on native students' educational attainment comes mainly from the first wave of refugees. Nevertheless, the estimates from the second wave of refugees — which was twice the size of the initial wave and was composed of refugees who, on average, had lower educational levels — show that the refugees who arrived later may have induced natives whose parents had low levels of education levels (finished high school or less) to drop out of high school. As mentioned before, selection bias, an increase in the number of refugees, or the change in the characteristics may all be driving these results. Therefore, to shed some light on the difference in these estimates, in Table 7 I instrument the share of refugees living in each county in 1980 with the share of refugees assigned to that county in 1975. The results show that there is no evidence of a negative effect. In fact, the only coefficient that is statistically significant is the effect of obtaining a graduate degree. This finding suggests that the negative effect coming from the second wave of refuges in Table 6 is the result of self-selection into economically worse off locations; it is not due to a different effect from the second wave of refugees.

There are also several ways to measure the share of refuges. I explore if these various methods make a difference and show the results of this analysis in Appendix Table B1. In the first row of each panel the share of refugees is calculated by dividing the total number of refugees by the total population in 1975 in that county, as measured by the population estimates from the National Bureau of Economic Research. In the next three rows, I count the number of refugee chil-

dren (between 0 and 18 years in 1975 in the second row, 6 and 18 years old in the third row, and 16 to 12 years old in the fourth row) and divide this amount by the estimated number of children in the same age group who are living in the county. The advantage of using a more precise age group is that the children are closer in age (and grade) to the children included in the High School and Beyond sample. However, refugee children may not necessarily attend the typical grade for their age so looking at broader groups may be more relevant. In addition, there is higher measurement error when the age groups become smaller. Overall, the results are robust and tell the same story. As expected, the coefficients are a little bit bigger with the smaller age groups and more statistically significant. For instance, the coefficient on completing any type of post-secondary education goes from being statistically significant at the 10 percent level to being significant at the 5 percent level.

To test the robustness of these results, I estimate the regression by only including counties that received at least one refugee in Appendix Table B2. In this case, the identification comes only from changes in the intensity of the population share of refugees in the county as opposed to the extensive margin — meaning whether a county did or did not receive refugees. The coefficients are slightly higher in this sample and show the same pattern — an increase in the population share of refugees raises the likelihood of natives completing post-secondary education. Likewise, the effects are essentially identical when I exclude California, the state that received the highest number of Southeast Asian refugees, from the sample in Appendix Table B3.

As an additional check to the main results, I study the effect on socio-emotional and socio-political outcomes to determine whether there are other differences in outcomes that are not captured by high school test scores. First, I study the effect on socio-emotional outcomes and present the results in Appendix Table C1. I can find no evidence that the inflow of refugees affected native students' motivation or interest in school, the likelihood of having a disciplinary incident, or the prob-

ability of having a child while attending school. Then, to study whether there was any effect on other non-academic outcomes after high school, in Appendix Tables C2 and C3 I look at the likelihood of voting as well as the effect on native student's political beliefs. The estimates indicate that being exposed to a higher share of refugees during grades 6-12 raised by 1 percentage point the likelihood that native students, whose parents had high level of educational attainment, would register to vote, and increased all the native sutdents' likelihood of voting in the 1988 presidential election by the same amount. Moreover, the results shown in Appendix Table C3 suggest that the influx of refugees also influenced native students' political beliefs, as students living in areas with more refugees were more likely to express radical or conservative political views as opposed to liberal or moderate political beliefs. This is an interesting result, as great voter participation is considered a positive externality of education. However, the presence of refugees may also directly influence students' political participation.

The results in Tables 8 and 9 look at the impact that the inflow of refugees had on native students' labor market outcomes over the next decade, between 1983 and 1992, when this group of students were young adults. Both tables look at whether attending grades 6-12 when there was a higher share of refugees living in their county affected natives' outcomes as young adults. Table 8 focuses on total income, labor force participation, and employment, while Table 9 studies their income sources in 1992. As before, there is no evidence that the presence of refugee children had a negative effect on native students' early labor market outcomes. If anything, attending schools with refugee children decreased the likelihood of being in public assistance in 1992 among children whose parents had low education.

V. Conclusion

Worldwide, there are currently over 12.5 million certified refugee children, yet, we still know very little about how refugee inflows affect the educational oppor-

tunities available in the host countries, especially how the presence of refugee children may affect the educational outcomes of native school children. This is an important consideration, as concerns about the costs that refugees impose on local communities have been growing, motivated, in part, by the potential negative spillover effects that refugee children may impose on their classmates. I shed light on this question by using a natural experiment generated by the largest inflow of refugees in U.S. history: the migration of Southeast Asian refugees that began in 1975 at the end of the Vietnam War. Importantly, in 1975, refugees were assigned to counties by voluntary agencies on a quasi-random basis. By using information on their initial assignment, I am able to make substantial inroads on overcoming the selection bias that is inherent in previous studies of refugee impacts, and thus limits the conclusions that can be drawn from this previous work.

Using information on initial placement, I find that, contrary to common perceptions, an inflow of refugee students does not impose negative effects on native students' educational outcomes. Rather, the refugee presence in schools generates positive spillovers, and seems to affect the likelihood that native students complete post-secondary degrees. This unexpected finding is driven by my ability to harness quasi-random variation in refugees' location: when I use information on individuals' location choices just five years after their initial placement, the estimated effect on native educational outcomes is negative.

I also provide provisional evidence that these positive spillovers are driven by two main channels: first, like the refugees who are currently arriving in the United States through placement by the United Nations High Commissioner for Refugees (UNHCR), the Southeast Asian refugees who arrived in 1975 were positively selected. As described in Section I, this first wave of refugees were disproportionately families headed by at least one adult with a college degree who worked in a white-collar occupation. Moreover, in counties where the native students came from families with less education than the incoming refugees families had, attending elementary and high school with refugee children may have had a pos-

itive effect on the native students' educational outcomes, as and having peers with more parental education has been shown to increase their classmates' academic success. Second, the small transfers from the federal government to school districts with a high share of refugee students may have protected native students by providing schools with enough resources to incorporate refugees into their classrooms without negatively affecting the educational quality provided to native school children.

Taken together, my estimates suggest that the current concerns about the impact of refugees on native children's opportunities are likely overstated. More generally, my study highlights the importance of taking immigrants' location choices into account when examining their impacts on host communities. Moving forward, research designs that circumvent selection bias will be critical to understanding this important phenomenon.

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VI. Figures and Tables

Table 1—Relationship between the Share of Refugees at the County Level and 1970 County Characteristics

	U.S. National Archives 1975 Share	1980 Census Summary Files
Percentage Black	-0.0003	0.0001
	(0.0002)	(0.0002)
Median Years of Education	0.0079	0.0086
	(0.0020)	(0.0036)
Percentage of Empty Housing	-0.0004	-0.0013
	(0.0006)	(0.0004)
Logarithm of Median Household Income	0.0300	0.0836
	(0.0178)	(0.0233)
Unemployment Rate in 1970	0.0012	0.0016
	(0.0007)	(0.0011)
Labor Force Participation Rate	0.0004	-0.0005
	(0.0002)	(0.0004)
F-statistic	4.9989	10.0421
P-value	0.0004	0.0000

Notes: This table contains results obtained when the dependent variable is the population share of refugees, and the independent variables are county characteristics in 1970. In column one, the share of refugees is based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement; in the second column, it is based on the count of Vietnamese in each county as recorded in the 1980 Census Summary files. All regressions include state fixed effects. Standard errors clustered at the state level in parentheses.
Source: 1970 County Books.

Table 2—Relationship between the Share of Refugees and Native Students' Test Scores - National Assessment of Educational Progress

	4th Grade	9th Grade	11th Grade
Reading 1971	-0.01	-0.01	0.01
	(0.64)	(0.52)	(0.58)
	[22740]	[25170]	[23230]
Reading 1975	0.02	0.01	0.02
	(0.40)	(0.32)	(0.24)
	[19900]	[19590]	[18020]

Notes: This table shows the estimates of separate linear regressions of students' reading test scores standardized by year and by grade on the population share of refugees, based on the first-destination county of the Southeast Asian refugees who came to the United States in 1975, as recorded by the Office of Refugee Resettlement. All regressions include state fixed effects. Individual controls include: race and maternal education. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. The number of observations is in square brackets. *P*-values from standard errors clustered at the county level in parentheses. Standard errors also account for multiple imputation in student test scores.
Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP) 1971, and 1975 Reading Assessments.

Table 3—Effect of the Share of Refugees on Native Students' Test Scores - National Assessment of Educational Progress

	4th Grade	9th Grade	11th Grade	Cross Cohort	Dosage or Exposure
Math 1978	0.03	0.03	-0.02	0.005	
	(0.02)	(0.017)	(0.014)	(0.015)	
Reading 1980	-0.004	0.001	-0.001	0.03	
	(0.012)	(0.010)	(0.010)	(0.030)	
Math 1982	-0.03	-0.01	0.02	0.34	
	(0.037)	(0.018)	(0.039)	(0.049)	
Math and Reading					0.008
					(0.005)
Controls	Yes	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	No	No
County Fixed Effects	No	No	No	Yes	Yes
Year Fixed Effects	No	No	No	No	Yes

Notes: This table shows the estimates of separate linear regressions of student's reading test score (or mathematics) standardized by year and grade on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement. In the first three columns, the sample includes students from 4th, 9th, and 11th grade, respectively. The first row is based on NAEP 1978, the second one on NAEP 1980, and the third one on NAEP 1982. The effect is identified based on geographic variation of the share of refugees. All regressions include state fixed effects. Individual controls include: race and maternal education. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. In column four, the share of refugee is calculated at the age-county level, the effect is identified from cross cohort variation, and the regressions also include county fixed effect. In column five, the share of refugee is defined based on exposure (see the text for more details), and the regressions also include county and year fixed effects. Standard errors clustered at the county level in parenthesis. Standard errors also account for multiple imputation in student test scores.

Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP) 1978 and 1982 Mathematics Assessments and 1980 Reading Assessments.

Table 4—Effect of the Share of Refugees on Native Students' Test Scores - High School and Beyond

	1980			1982		
	All	Low Education	High Education	All	Low Education	High Education
Panel A: 1975 Share (Archives)						
Share of Refugees	0.007	-0.004	0.018	-0.003	-0.007	0.009
	(0.017)	(0.025)	(0.022)	(0.017)	(0.022)	(0.023)
Panel B: 1980 Share (Census)						
Share of Refugees	0.005	0.011	0.004	-0.023	-0.023	-0.015
	(0.029)	(0.030)	(0.043)	(0.023)	(0.022)	(0.035)
Number of Students	9220	3640	5300	9220	3640	5300
Number of Schools	740	710	730	740	710	730
Number of Counties	400	390	390	400	390	390
County Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Student Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
School Characteristics	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows the estimates of separate linear regressions of students' test scores standardized by year and grade on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement (panel A) and the count of Vietnamese in the 1980 Census Summary files (panel B). Columns (1) and (3) include all children. Columns (2) and (4) restrict the sample to children whose parents at most completed high school, while columns (3) and (6) restricted the sample to children whose parents have some college or more. Individual controls include: race and maternal education. School controls include: school size and student/teacher ratio. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. All regressions include state fixed effects. Standard errors clustered at the county level in parentheses.
Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

TABLE 5—EFFECT OF THE SHARE OF REFUGEES ON NATIVE STUDENTS' EDUCATIONAL ATTAINMENT - HIGH SCHOOL AND BEYOND

	High school	Post-secondary Education					
	Graduate	Apply	Start	Complete	Associate	Bachelor	Graduate
Panel A: 1975 Share (Archives)							
All	-0.003	0.003	-0.004	0.020	0.000	0.023	0.025
	(0.004)	(0.011)	(0.007)	(0.011)	(0.007)	(0.013)	(0.009)
Low Education	-0.005	-0.017	-0.016	0.015	0.013	0.014	0.000
	(0.008)	(0.020)	(0.018)	(0.021)	(0.014)	(0.019)	(0.009)
High Education	-0.004	0.015	0.003	0.029	-0.003	0.033	0.039
	(0.004)	(0.013)	(0.008)	(0.014)	(0.007)	(0.016)	(0.010)
Panel B: 1980 Share (Census)							
All	-0.004	0.006	-0.008	0.005	0.001	0.004	0.005
	(0.005)	(0.011)	(0.009)	(0.013)	(0.005)	(0.014)	(0.006)
Low Education	-0.013	0.019	-0.043	0.012	-0.002	0.013	0.004
	(0.013)	(0.023)	(0.015)	(0.018)	(0.015)	(0.012)	(0.009)
High Education	-0.001	0.008	0.007	0.005	0.001	0.006	0.009
	(0.005)	(0.016)	(0.008)	(0.015)	(0.007)	(0.020)	(0.009)
Mean	.91	.70	.88	.44	.07	.33	.13
Number of Students	5000	3870	4290	4290	4290	4290	4290
Number of Schools	730	690	710	710	710	710	710
Number of Counties	390	370	390	390	390	390	390
County Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Student Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
School Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows the estimates of separate linear regressions of students' academic attainment on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement (panel A) and the count of Vietnamese in the 1980 Census Summary files (panel B). In each column, the dependent variable is an indicator of whether the student has completed that educational level or more. Individual controls include: race and maternal education. School controls include: school size and student/teacher ratio. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. All regressions include state fixed effects. Standard errors clustered at the county level in parentheses.
Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

Table 6—Effect of the Share of Refugees on Native Students' Educational Attainment by Arrival Year - High School and Beyond

	High school	Post-secondary Education					
	Graduate	Apply	Start	Complete	Associate	Bachelor	Graduate
Panel A: All							
Share of refugees in 1975	-0.002	0.000	-0.001	0.020	0.005	0.021	0.025
	(0.004)	(0.012)	(0.008)	(0.012)	(0.008)	(0.014)	(0.010)
Share of refugees in 1976-1980	-0.003	0.009	-0.011	0.001	-0.014	0.007	-0.000
	(0.005)	(0.012)	(0.009)	(0.011)	(0.007)	(0.010)	(0.006)
Number of students	8620	5840	6500	6500	6500	6500	6500
Panel B: Parents with high school or less							
Share of refugees in 1975	0.002	-0.034	-0.007	0.011	0.015	0.018	0.001
	(0.009)	(0.021)	(0.021)	(0.022)	(0.014)	(0.021)	(0.010)
Share of refugees in 1976-1980	-0.025	0.050	-0.024	0.011	-0.006	-0.011	-0.002
	(0.012)	(0.027)	(0.020)	(0.017)	(0.012)	(0.016)	(0.009)
Number of students	3390	1860	2080	2080	2080	2080	2080
Panel C: Parents with some college or more							
Share of refugees in 1975	-0.006	0.017	0.005	0.031	0.003	0.027	0.038
	(0.005)	(0.013)	(0.008)	(0.014)	(0.008)	(0.018)	(0.011)
Share of refugees in 1976-1980	0.007	-0.004	-0.005	-0.006	-0.019	0.018	0.003
	(0.005)	(0.014)	(0.009)	(0.013)	(0.008)	(0.016)	(0.009)
Number of students	5000	3870	4290	4290	4290	4290	4290
Number of schools	730	690	710	710	710	710	710
Number of counties	390	370	390	390	390	390	390
County characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Student characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
School characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows the estimates of separate linear regressions of students' academic attainment on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975 and between 1976 and 1980, as recorded by the Office of Refugee Resettlement. Panel A includes all children, while panel B restricts the sample to children whose parents completed high school or less, and panel C restricts it to children whose parents have some college or more. In each column, the dependent variable is an indicator of whether the student has completed that educational level or more. Individual controls include: race and maternal education. School controls include: school size and student/teacher ratio. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. All regressions include state fixed effects. Standard errors clustered at the county level in parentheses.
Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

Table 7—Instrumental Variable Estimates of the Effect of the Share of Refugees on Native Students' Educational Attainment - High School and Beyond

	High school	Post-secondary Education					
	Graduate	Apply	Start	Complete	Associate	Bachelor	Graduate
Panel A: All							
Share of Refugees 1980	-0.009	0.010	-0.014	0.064	0.001	0.071	0.079
	(0.013)	(0.039)	(0.023)	(0.044)	(0.021)	(0.053)	(0.045)
Number of Students	8620	5840	6500	6500	6500	6500	6500
First Stage F	12.2	12.2	10.6	10.6	10.6	10.6	10.6
Panel B: Parents with high school or less							
Share of Refugees 1980	-0.016	-0.048	-0.043	0.040	0.033	0.035	0.001
	(0.027)	(0.054)	(0.047)	(0.052)	(0.034)	(0.048)	(0.024)
Number of Students	3390	1860	2080	2080	2080	2080	2080
First Stage F	18.9	25.4	18.4	18.4	18.4	18.4	18.4
Panel C: Parents with some college or more							
Share of Refugees 1980	-0.012	0.054	0.011	0.097	-0.009	0.109	0.130
	(0.011)	(0.056)	(0.028)	(0.067)	(0.024)	(0.080)	(0.067)
Number of Students	5000	3870	4290	4290	4290	4290	4290
First Stage F	8.9	8.7	8.2	8.2	8.2	8.2	8.2
Number of Schools	730	690	710	710	710	710	710
Number of Counties	390	370	390	390	390	390	390
County Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Student Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
School Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows the estimates of separate instrumental variable regressions of students' academic attainment on the share of refugees, as measured by the number of Vietnamese living in county in 1980 divided by the county's population in 1975. The instrument is the share of Southeast Asian refugees, based on the first-destination county of the Vietnamese, Laotian, and Cambodian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement. The first stage coefficient is 0.3. In each column, the dependent variable is an indicator of whether the student has completed that educational level or more. Individual controls include: race and maternal education. School controls include: school size and student/teacher ratio. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. All regressions include state fixed effects. Standard errors clustered at the county level in parentheses.

Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

TABLE 8—EFFECT OF THE SHARE OF REFUGEES ON NATIVE STUDENTS' LABOR MARKET OUTCOMES - HIGH SCHOOL AND BEYOND

	Average Income	Income Index	Labor Force Participation Index	Unemployment Index
Panel A: 1975 Share (Archives)				
All	0.006	0.030	-0.006	-0.028
	(0.013)	(0.024)	(0.017)	(0.026)
Low Education	0.027	0.008	0.018	-0.028
	(0.024)	(0.028)	(0.027)	(0.043)
High Education	-0.005	0.049	-0.028	-0.026
	(0.014)	(0.033)	(0.023)	(0.026)
Panel B: 1980 Share (Census)				
All	0.008	0.025	-0.016	0.011
	(0.015)	(0.038)	(0.016)	(0.026)
Low Education	0.028	-0.012	-0.025	-0.022
	(0.029)	(0.047)	(0.040)	(0.045)
High Education	0.005	0.054	-0.022	0.032
	(0.018)	(0.055)	(0.019)	(0.028)
Mean	9.54	0	.12	-.05
Number of Students	4450	2160	4590	1690
Number of Schools	720	630	720	600
Number of Counties	390	360	390	340
County Characteristics	Yes	Yes	Yes	Yes
Student Characteristics	Yes	Yes	Yes	Yes
School Characteristics	Yes	Yes	Yes	Yes

Notes: This table shows the estimates of separate linear regressions of students labor market outcomes on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement (panel A) and the count of Vietnamese in the 1980 Census Summary files (panel B). School controls include: school size and student/teacher ratio. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. All regressions include state fixed effects. Standard errors clustered at the county level in parentheses.

Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

TABLE 9—EFFECT OF THE SHARE OF REFUGEES ON NATIVE STUDENTS' INCOME IN 1992 - HIGH SCHOOL AND BEYOND

	Wage (any)	Social Security	Unemployment Compensation	Public Assistance	No Income
Panel A: 1975 Share (Archives)					
All	0.001	-0.002	-0.003	0.001	0.002
	(0.005)	(0.001)	(0.004)	(0.004)	(0.003)
Low Education	-0.006	-0.004	-0.007	-0.008	0.007
	(0.008)	(0.003)	(0.007)	(0.005)	(0.006)
High Education	0.004	-0.001	0.000	0.006	-0.001
	(0.006)	(0.002)	(0.005)	(0.005)	(0.004)
Panel B: 1980 Share (Census)					
All	-0.008	-0.002	-0.000	0.003	0.005
	(0.008)	(0.003)	(0.005)	(0.004)	(0.005)
Low Education	-0.010	-0.005	-0.004	-0.000	0.006
	(0.011)	(0.008)	(0.012)	(0.008)	(0.008)
High Education	-0.005	-0.000	0.001	0.007	0.003
	(0.011)	(0.002)	(0.008)	(0.005)	(0.005)
Mean	.89	.01	.06	.05	.04
Number of Students	4800	4800	4800	4800	4800
Number of Schools	720	720	720	720	720
Number of Counties	390	390	390	390	390
County Characteristics	Yes	Yes	Yes	Yes	Yes
Student Characteristics	Yes	Yes	Yes	Yes	Yes
School Characteristics	Yes	Yes	Yes	Yes	Yes

Notes: This table shows the estimates of separate linear regressions of students' income and welfare dependency on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement (panel A) and the count of Vietnamese in the 1980 Census Summary files (panel B). School controls include: school size and student/teacher ratio. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. All regressions include state fixed effects. Standard errors clustered at the county level in parentheses.
Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

Appendix A: Southeast Asian Refugee' Characteristics at Arrival

Table A1—Native and Refugee Children Characteristics in 1980

	Refugees		Natives	
	Mean	S.D.	Mean	S.D.
Age	11.94	3.73	12.29	3.73
School Attendance	0.92	0.27	0.94	0.24
Private School	0.07	0.25	0.11	0.31
Catholic School	0.06	0.24	0.09	0.28
Observations	5025		2342561	

Note: The sample is restricted to individuals who were 5-18 years old in 1980.
Source: 1980 Decennial Census.

Table A2—Education Level of Adult Southeast Asian Refugees (1980)

	Refugees		Natives	
	Mean	SD	Mean	SD
No Schooling	0.07	0.26	0.00	0.06
High School Dropout	0.37	0.48	0.25	0.44
High School Graduate	0.19	0.39	0.36	0.48
Some College or More	0.37	0.48	0.38	0.48
Observations	8,079		6,441,677	

Source: 1980 Decennial Census.

TABLE A3—CHARACTERISTICS OF NATIVE AND REFUGEE CHILDREN AS ADULTS IN 2000

	Refugees		Natives	
	Mean	S.D.	Mean	S.D.
Age	31.53	4.13	31.85	4.03
High School Dropout	0.14	0.34	0.12	0.32
High School Graduate	0.17	0.37	0.28	0.45
Some College	0.20	0.40	0.25	0.43
College or more	0.494	0.500	0.355	0.478
Observations	6313		2314373	

Note: The sample is restricted to individuals who were 5-18 years old in 1980.
Source: 2000 Decennial Census.

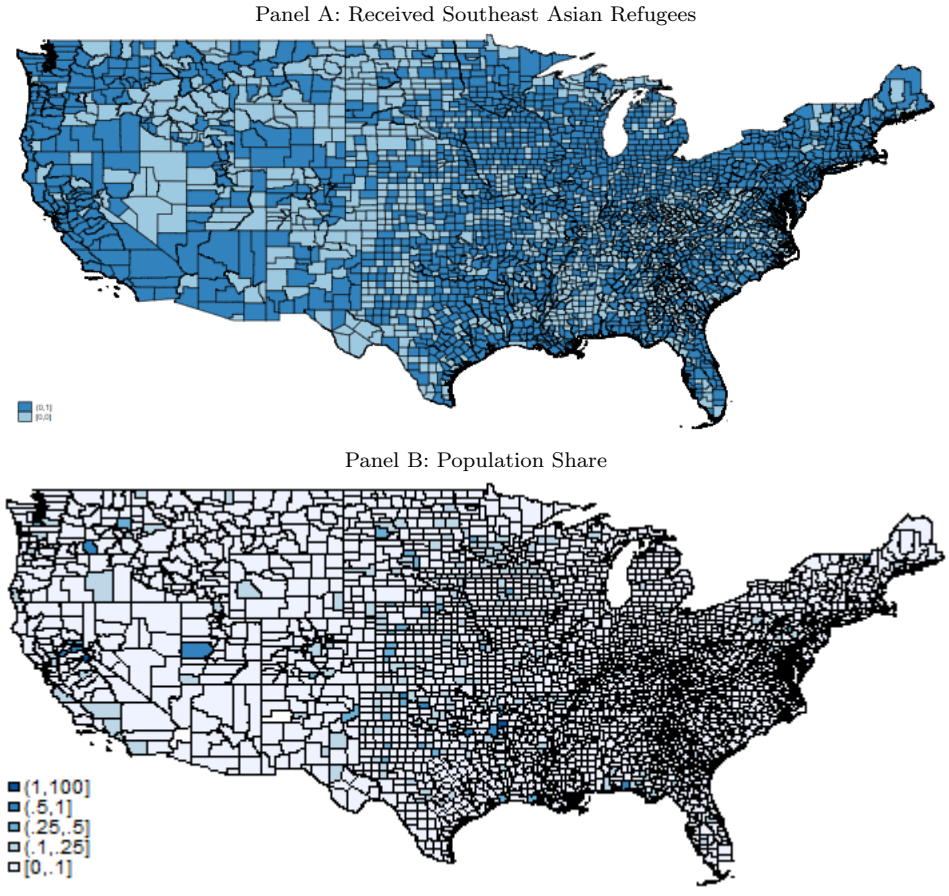

FIGURE A1. SOUTHEAST ASIAN REFUGEES IN 1975

Source: U.S. National Archives

Appendix B: Robustness Checks

Table B1—Effect of the Share of Refugees on Native Students' Academic Attainment by Source of Refugee Information - High School and Beyond

	High school	Post-secondary Education				
	Graduate	Start	Complete	Associate	Bachelor	Graduate
Panel A: All						
All	-0.003	-0.004	0.020	0.000	0.023	0.025
	(0.004)	(0.007)	(0.011)	(0.007)	(0.013)	(0.009)
0-18 Years Old	-0.004	-0.003	0.023	-0.001	0.025	0.026
	(0.004)	(0.008)	(0.011)	(0.007)	(0.013)	(0.009)
6-18 Years Old	-0.003	-0.003	0.024	-0.001	0.028	0.028
	(0.004)	(0.007)	(0.011)	(0.006)	(0.012)	(0.009)
8-12 Years Old	-0.002	-0.001	0.024	-0.002	0.028	0.025
	(0.004)	(0.008)	(0.012)	(0.006)	(0.013)	(0.010)
Panel B: Low Parental Education						
All	-0.005	-0.016	0.015	0.013	0.014	0.000
	(0.008)	(0.018)	(0.021)	(0.014)	(0.019)	(0.009)
0-18 Years Old	-0.004	-0.017	0.008	0.010	0.010	-0.002
	(0.009)	(0.018)	(0.019)	(0.013)	(0.017)	(0.009)
6-18 Years Old	-0.004	-0.016	0.011	0.008	0.019	0.001
	(0.009)	(0.017)	(0.019)	(0.012)	(0.018)	(0.009)
8-12 Years Old	-0.000	-0.014	0.013	0.007	0.020	0.001
	(0.009)	(0.016)	(0.018)	(0.011)	(0.018)	(0.009)
Panel C: High Parental Education						
All	-0.004	0.003	0.029	-0.003	0.033	0.039
	(0.004)	(0.008)	(0.014)	(0.007)	(0.016)	(0.010)
0-18 Years Old	-0.004	0.006	0.036	-0.003	0.038	0.042
	(0.004)	(0.008)	(0.013)	(0.007)	(0.016)	(0.011)
6-18 Years Old	-0.003	0.006	0.037	-0.003	0.039	0.043
	(0.004)	(0.008)	(0.013)	(0.007)	(0.016)	(0.011)
8-12 Years Old	-0.002	0.008	0.038	-0.004	0.041	0.041
	(0.004)	(0.009)	(0.014)	(0.007)	(0.017)	(0.012)
County Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Student Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
School Characteristics	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table replicates table 5. Each cell shows the estimates of a separate linear regression of students academic attainment on the share of refugees. Panel A includes all children, while panel B restricts the sample to children whose parents completed high school or less, and panel C restricts it to children whose parents have some college or more. Within each panel, the first row calculate the share of refugees including all refugees, while the following rows calculate the proportion of children (0-18, 6-18, and 8-12) who are refugees. In each column, the dependent variable is an indicator of whether the student has completed that educational level or more. Standard errors clustered at the county level in parentheses.

Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

TABLE B2—EFFECT OF THE SHARE OF REFUGEES ON NATIVE STUDENTS' ACADEMIC ATTAINMENT EXCLUDING COUNTIES WITH NO REFUGEES - HIGH SCHOOL AND BEYOND

	High school	Post-secondary Education				
	Graduate	Start	Complete	Associate	Bachelor	Graduate
Panel A: 1975 Share (Archives)						
All	-0.001	-0.005	0.024	-0.002	0.028	0.024
	(0.004)	(0.007)	(0.010)	(0.007)	(0.011)	(0.009)
Low education	-0.002	-0.019	0.012	0.008	0.014	-0.003
	(0.008)	(0.019)	(0.021)	(0.012)	(0.020)	(0.010)
High education	-0.001	0.002	0.034	-0.005	0.039	0.038
	(0.004)	(0.007)	(0.011)	(0.006)	(0.014)	(0.010)
Panel B: 1980 Share (Census)						
All	0.000	-0.028	0.023	-0.004	0.027	0.009
	(0.006)	(0.009)	(0.015)	(0.007)	(0.015)	(0.007)
Low education	-0.003	-0.061	0.011	0.004	0.003	-0.010
	(0.010)	(0.014)	(0.018)	(0.009)	(0.017)	(0.008)
High education	0.003	-0.008	0.032	-0.010	0.047	0.022
	(0.006)	(0.012)	(0.020)	(0.008)	(0.019)	(0.010)
Mean	.91	.87	.46	.07	.35	.14
Number of students	4320	3690	3690	3690	3690	3690
Number of schools	630	610	610	610	610	610
Number of counties	370	360	360	360	360	360

Notes: This table replicates table 5, but excludes counties with no refugees from the sample. It shows the estimates of separate linear regressions of students' academic attainment on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement (panel A) and the count of Vietnamese in the 1980 Census Summary files (panel B). In each column, the dependent variable is an indicator of whether the student has completed that educational level or more. Standard errors clustered at the county level in parentheses.
Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

TABLE B3—EFFECT OF THE SHARE OF REFUGEES ON NATIVE STUDENTS' ACADEMIC ATTAINMENT EXCLUDING CALIFORNIA- HIGH SCHOOL AND BEYOND

	High school	Post-secondary Education				
	Graduate	Start	Complete	Associate	Bachelor	Graduate
Panel A: 1975 Share (Archives)						
All	-0.002	-0.003	0.028	0.000	0.024	0.025
	(0.004)	(0.007)	(0.010)	(0.007)	(0.013)	(0.009)
Low Education	-0.004	-0.013	0.035	0.011	0.016	-0.003
	(0.009)	(0.019)	(0.022)	(0.014)	(0.018)	(0.009)
High Education	-0.004	0.003	0.031	-0.002	0.033	0.039
	(0.004)	(0.008)	(0.013)	(0.007)	(0.017)	(0.011)
Panel B: 1980 Share (Census)						
All	-0.003	-0.008	0.006	0.001	0.005	0.004
	(0.005)	(0.010)	(0.014)	(0.005)	(0.015)	(0.006)
Low Education	-0.010	-0.041	0.018	-0.001	0.012	-0.002
	(0.014)	(0.015)	(0.021)	(0.016)	(0.011)	(0.010)
High Education	-0.001	0.008	0.005	0.002	0.007	0.010
	(0.005)	(0.008)	(0.016)	(0.008)	(0.021)	(0.009)
Mean	.92	.88	.44	.07	.34	.14
Number of Students	4710	4070	4070	4070	4070	4070
Number of Schools	670	650	650	650	650	650
Number of Counties	340	330	330	330	330	330

Notes: This table replicates table 5, but excludes California from the sample. It shows the estimates of separate linear regressions of students' academic attainment on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement (panel A) and the count of Vietnamese in the 1980 Census Summary files (panel B). In each column, the dependent variable is an indicator of whether the student has completed that educational level or more. Standard errors clustered at the county level in parentheses.
Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

Appendix C: Additional Outcomes

Table C1—Effect of the Share of Refugees on Native Students' Socio-emotional Outcomes - High School and Beyond

	Motivation	Disciplinary problems	Teenage pregnancy
Panel A: 1975 Share (Archives)			
All	0.012	0.026	-0.001
	(0.020)	(0.027)	(0.004)
Low education	0.042	-0.021	-0.001
	(0.040)	(0.037)	(0.007)
High education	0.018	0.041	0.001
	(0.020)	(0.041)	(0.006)
Panel B: 1980 Share (Census)			
All	-0.010	0.017	0.007
	(0.020)	(0.026)	(0.006)
Low education	-0.014	-0.030	0.010
	(0.053)	(0.039)	(0.010)
High education	0.004	0.025	0.006
	(0.025)	(0.031)	(0.007)
Mean	0	-.02	.04
Number of students	4130	4220	4920
Number of schools	700	700	730
Number of counties	390	390	390
County characteristics	Yes	Yes	Yes
Student characteristics	Yes	Yes	Yes
School characteristics	Yes	Yes	Yes

Notes: This table shows the estimates of separate linear regressions of students socio-emotional outcomes on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement (panel A) and the count of Vietnamese in the 1980 Census Summary files (panel B). School controls include: school size and student/teacher ratio. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. All regressions include state fixed effects. Standard errors clustered at the county level in parentheses.
Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

TABLE C2—EFFECT OF THE SHARE OF REFUGEES ON NATIVE STUDENTS' VOTING - HIGH SCHOOL AND BEYOND

	Registered to Vote			Voted		
	1984	1986	1992	Since age 18 (in 84)	1984 Presidential Election	1988 Presidential Election
Panel A: 1975 Share (Archives)						
All	0.008	0.009	0.004	0.011	0.005	0.014
	(0.007)	(0.010)	(0.008)	(0.008)	(0.007)	(0.007)
Low Education	0.001	-0.009	0.009	0.002	-0.005	0.020
	(0.014)	(0.016)	(0.013)	(0.012)	(0.014)	(0.012)
High Education	0.016	0.021	0.004	0.021	0.014	0.015
	(0.009)	(0.011)	(0.009)	(0.009)	(0.008)	(0.008)
Panel B: 1980 Share (Census)						
All	0.001	0.015	0.001	0.002	0.014	0.023
	(0.011)	(0.009)	(0.010)	(0.011)	(0.008)	(0.008)
Low Education	0.005	0.005	-0.000	0.009	0.009	-0.001
	(0.016)	(0.017)	(0.017)	(0.014)	(0.016)	(0.017)
High Education	0.002	0.020	0.003	0.001	0.016	0.037
	(0.014)	(0.010)	(0.012)	(0.014)	(0.010)	(0.011)
Mean	.56	.69	.67	.36	.52	.57
Number of Students	5200	4820	4760	5170	4810	4770
Number of Schools	730	730	720	730	730	720
Number of Counties	390	390	390	390	390	390
County Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Student Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
School Characteristics	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows the estimates of separate linear regressions of students' political participation on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement (panel A) and the count of Vietnamese in the 1980 Census Summary files (panel B). In the first three columns, the outcome variable is an indicator for whether the student registered to vote, while in the last three columns it is an indicator for whether the student voted. School controls include: school size and student/teacher ratio. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. All regressions include state fixed effects.

Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.

Table C3—Effect of the Share of Refugees on Native Students' Political Beliefs - High School and Beyond

	Radical	Liberal	Moderate	Conservative
Panel A: 1975 Share (Archives)				
All	0.008	-0.007	-0.010	0.006
	(0.003)	(0.005)	(0.007)	(0.004)
Low Education	0.012	-0.006	-0.012	0.001
	(0.005)	(0.008)	(0.010)	(0.006)
High Education	0.010	-0.008	-0.010	0.008
	(0.004)	(0.006)	(0.011)	(0.005)
Panel B: 1980 Share (Census)				
All	0.008	-0.013	-0.005	0.004
	(0.004)	(0.006)	(0.008)	(0.005)
Low Education	0.014	-0.013	-0.007	-0.004
	(0.006)	(0.009)	(0.012)	(0.006)
High Education	0.008	-0.012	0.000	0.005
	(0.005)	(0.008)	(0.011)	(0.006)
Mean	.05	.12	.25	.06
Number of Students	5300	5300	5300	5300
Number of Schools	730	730	730	730
Number of Counties	390	390	390	390
County Characteristics	Yes	Yes	Yes	Yes
Student Characteristics	Yes	Yes	Yes	Yes
School Characteristics	Yes	Yes	Yes	Yes

Notes: This table shows the estimates of separate linear regressions of students' political beliefs on the share of refugees, based on the first-destination county of the Southeast Asian refugees who arrived in the United States in 1975, as recorded by the Office of Refugee Resettlement (panel A) and the count of Vietnamese in the 1980 Census Summary files (panel B). School controls include: school size and student/teacher ratio. County level controls, measured in 1970, include: the percentage of the population who was black, the median years of education, the percentage of housing which was empty, the natural logarithm of household income, the unemployment rate, and the labor force participation rate. All regressions include state fixed effects. Standard errors clustered at the county level in parentheses.

Source: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Longitudinal Study of 1980 Sophomores.