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# AGE AT IMMIGRANT ARRIVAL AND CAREER MOBILITY: EVIDENCE FROM VIETNAMESE REFUGEE MIGRATION AND THE AMERASIAN HOMECOMING ACT

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Age at Immigrant Arrival and Career Mobility: Evidence from Vietnamese Refugee Migration and the Amerasian Homecoming Act

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## ABSTRACT

We study the long-run career mobility of young immigrants, mostly refugees, from Vietnam who moved to the United States during 1989-1995. This third and final migration wave of young Vietnamese immigrants was sparked by unexpected events that culminated in the Amerasian Homecoming Act. Characteristics of the wave also minimized selection effects regarding who migrated. Small differences in the age at arrival, specifically being 14-17 years old on entry compared to 18-21, resulted in substantial differences in future economic outcomes. Using Census Bureau data, we characterize the different career profiles of young vs. older immigrants, and we quantify explanatory factors like education, language fluency, and persistence from initial employers.

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# 1 Introduction

The economic assimilation of immigrants into the labor markets of receiving countries is important for both the prosperity of the immigrants and their families and for the firms and communities that surround them. Language fluency, education/skill credentials, and cultural distance shape outcomes at the individual level (e.g., Ansala et al., 2020, 2022; Arendt et al., 2021). Immigrants may also face barriers like occupational licensing or, commonly in the case of refugees, wholesale restrictions on work authorizations (e.g., Chin and Cortes, 2015). The depth and traits of existing migrant co-national populations further influence job choices of new arrivals (e.g., Edin et al., 2003; Beaman, 2012).

This study quantifies the importance of age at arrival for long-run economic outcomes, contrasting immigrants arriving from Vietnam as young teens (14-17 years old) versus a bit older (18-21) during the 1989-1995 period. These individuals came from very challenging conditions in Vietnam and faced continued hardship in America upon arrival. Yet, they mostly prospered, especially the youngest arrivals. We build a new data platform using administrative records to characterize the long-term economic consequences and career profiles linked to age at arrival. This platform allows a novel comparison of the explanatory power of factors like educational attainment, language fluency, and initial conditions for future career trajectories.

We build on prior seminal studies about age of moves and upward mobility, spanning the international work of Bleakley and Chin (2004, 2010) to the within-region moves of Chetty et al. (2016). While prior studies mostly focus on childhood, we consider the 14-21 age range that still contains critical periods of development. Neal (2018) shows that the window for investing in skills that enable effective learning (distinct from productive skills) closes around age 17. These types of skills are essential for economic integration, but evidence for them is obscured in self-selected migration data due to moves typically linked to high school or college attendance. The natural experiment we study minimizes these selection effects, showing a starkly different pattern that confirms the importance of the early teen years.

The 1989-1995 period marked the third and final wave of mass immigration from Vietnam to America. It is a compelling research laboratory given its scale and exogenous features. The migration wave was due in large part to the 1987 Amerasian Homecoming Act (AHA), which followed rapidly from unlikely and unanticipated events. Features of the AHA minimize selection effects regarding migration choices, especially immigration for schooling. By fortuitous

coincidence of timing, AHA-linked migration also occurred at the same time that the Longitudinal Employer Household Dynamics (LEHD) Database commenced. By linking these arrivals into the LEHD, we can observe decades of subsequent career history.

At the center of the third wave are Amerasians, defined to be those born in Vietnam to a mother from Vietnam and a US service member or civilian father stationed there during the Vietnam War. During the war and for years after, neither the United States nor Vietnam took responsibility for the well-being of Amerasians. Very few were initially able to migrate to America, as many fathers did not know of the children, nor claim them if they did. Amerasians also frequently suffered from prejudice and poverty in Vietnam due to their partial American parentage, being dismissed by some as "dust of life" (Bui Doi) or "children of the dust" (Lamb, 2009). A series of unlikely events following from a single photograph, however, culminated in the AHA legislation that facilitated the migration of more than 25,000 Amerasians and 70,000 accompanying relatives starting in late 1988 and being mostly complete by 1995 (Lee, 2015). Expectations for their future prospects were low, with a *Los Angeles Times* article in 1989 poignantly headlined: "Most of them are unwanted, jobless and homeless, but children of U.S. servicemen still hope for a better life in the land of their fathers: Amerasians: Vietnam's misbegotten legacy." (Esper, 1989). Section 2 provides a detailed history of Amerasians and the AHA-linked immigration wave.

Our sample includes immigrants from Vietnam to America who arrived during the 1989-1995 period and with birth years consistent with the AHA requirements. These individuals are identified using information collected in the Decennial Censuses and the American Community Surveys (ACS). In addition to Amerasians, this sample captures siblings allowed to migrate with the Amerasian. It also includes similarly aged individuals being admitted from Vietnam during the wave under other visa categories, the majority of whom were admitted as refugees. The sample is further developed in Section 3, along with our relationship to other studies. For ease of reference, we label this 1989-1995 group hereafter as "AHA immigrants".

Section 4 analyzes career mobility and assimilation using the repeated cross-sections available with public data, a synthetic cohort technique launched by Cortes (2004). From comparable and very poor initial positions circa 1990, small differences in age upon arrival matter greatly for future economic outcomes. AHA immigrants arriving at ages 14-17 achieve the same college completion rates as US natives and mostly similar income levels over the next three

decades, whereas those arriving at ages 18-21 improve but have long-term gaps in language fluency, education, and incomes. Wage gains for the young arrivals are due to being in higher wage occupational groups vs. differences within occupations. Younger migrants are also more likely to marry a US-native and/or a college-educated spouse.

Consistent with removing selection effects, these patterns are quite different than what one observes using raw contemporaneous migration from countries similar to Vietnam, where older arrivals tend to perform as well as or better than young arrivals. Section 4 further quantifies that stronger language fluency and education levels explain over half of the career variation between young and older arrivals. Extensions show that the explanatory power of fluency and education for future outcomes is particularly strong for those aged 16-17 at arrival, while the largest advantages for the youngest arrivals of 14-15 years old are only partly explained.

Section 5 examines the longitudinal career histories of AHA immigrants using the LEHD from the early 1990s through 2014. We confirm the findings derived from the public data, and we verify they hold when isolating individuals observed in one of the cluster sites used to aid AHA settlement soon after their arrivals to the United States. We then develop a panel that characterizes the full employment history of AHA immigrants from 2000 to 2014. Younger arrivals show stronger workforce attachment, more time in larger companies, and less time spent in firms owned by Vietnamese co-nationals or employing many Vietnamese workers. There is no difference in rates of entrepreneurship, and more of the cumulative wage differential follows from person-level upward mobility than establishment-level upward mobility. In addition to education and fluency, traits of an individual's first employer also matter, evidence of hysteresis. While local conditions matter for overall assimilation, they do not explain much of the age-related differential.

The last section concludes the paper. As we will further elaborate after reviewing the literature, our special setting allows us to isolate a large wave of migrants during their teen years, quantifying age at arrival effects during these critical years more closely than before. Additionally, studies using employer-employee data have begun documenting features like frequent hiring of co-nationals (e.g., Andersson et al., 2014; Åslund et al., 2014; Kerr and Kerr, 2021). Our setting allows parsing how much of the future career profiles and upward mobility of immigrants arriving under difficult conditions depends upon their individual-level human capital attainment (language fluency, education level) vs. initial traits (e.g., type of first em-

ployer, location in a cluster site). Finally, and most simply, Vietnam was the largest source country of refugees to the United States during the final decades of the 20th century (Chin and Cortes, 2015). This study provides one of the first analyses of the labor market outcomes for this group, providing a useful case study for other cases of large-scale migration waves under dire circumstances, which unfortunately remain far too common and may even increase with looming challenges like climate change.

## 2 AHA and Immigration from Vietnam

This section provides a short description of the exceptional story of the AHA legislation and the third wave of immigration from Vietnam to America. Appendix A provides a detailed account and references.

The Vietnam War led to three large waves of migration to the United States. The first spike was in 1975 as the war ended, and the second surge came with the 1979 Orderly Departure Program. As relations between the United States and Vietnam further deteriorated during the 1980s, immigration declined substantially. A series of unlikely and unexpected events, centering on Amerasians, sparked a final wave from 1989-1995. Panel A of Figure 1 shows these three waves as present in the 2015-2019 American Community Survey through years of arrival.

Following the war, Amerasians faced very rough conditions. They were often treated as outcasts in Vietnam, visible reminders of the war. Many Amerasians survived with their mothers on the fringes of Vietnam's conservative society; others were abandoned. The United States also turned its back on the Amerasians, in large part because few US fathers knew of and/or would claim them. Vietnam argued the children were American citizens, were not discriminated against, and should not be viewed as political refugees. For its part, the United States refused them citizenship (which, in contrast to Vietnam's patrilineal society, focuses more on the mother's citizenship) and erected barriers to prevent large-scale migration. The total immigration prior to the AHA is estimated at 6,000 Amerasians and 11,000 relatives (Esper, 1989).

Le Van Minh's photo, however, changed the lives of many. In October 1985, Audrey Tiernan photographed Le, an abandoned Amerasian stricken with polio, in Ho Chi Minh City. Appendix Figure 1 shows Tiernan's photo and later pictures of Minh. This photo was

published alongside an article about the plight of Amerasians in the New York newspaper *Newsday*. Upset, four students from Huntington High School in Long Island circulated a petition in 1986 to bring Minh to the United States for medical attention, ultimately collecting 27,000 signatures. The students asked their Democratic congressman, Representative Robert Mrazek, for help. In 1987, Mrazek flew to Ho Chi Minh City with the goal of helping Minh. Yet, Mrazek was overwhelmed once he saw how many Amerasians were experiencing similar hardships. Lamb (2009) noted: "Some called him "Daddy." They tugged at his hand to direct him to the shuttered church where they lived. Another 60 or 70 Amerasians were camped in the yard. The refrain Mrazek kept hearing was, "I want to go to the land of my father."'

Deeply moved, Mrazek worked with Republican Senator John McCain to introduce the bipartisan AHA legislation. With very limited legislative review[1], the AHA was passed by Congress in 1987, took effect in March 1988, and was fully implemented by 1989. It allowed Amerasians born during 1962-1975 to migrate to America. The law initially was set to expire in two years, but it was later extended. The AHA led to a third migration wave, with one source at the time estimating 20,000 Amerasians and 50,000 family members resettled during 1989-1993 alone (Branigin, 1993). Panel B of Figure 1 shows official counts of Amerasian arrivals.

Critical changes embedded in the AHA unlocked the third wave. Whereas prior policies only allowed an Amerasian to migrate as an individual and required a US sponsor, the AHA allowed the full migration of the Amerasian's family and did not require a US sponsor. Additionally, the AHA dropped requirements of documentation to prove US parentage, with many cases being processed using physical facial features only. In early years of the program, an estimated 95% of applications were approved. While the law did not officially declare Amerasians to be refugees, it provided them similar types of assistance. This included upfront travel assistance provided by the International Organization for Migration, eliminating financial barriers.

Most Amerasians applying under the AHA program were very poor, spoke little English,

[1] Rep. Mrazek recounted in Thomas (2021): "I drafted the entire piece of legislation, which included a several hundred million dollar appropriation for the transition program in the Philippines, with just my personal staff and the assistance of the House Legislative Counsel. Before its passage in the continuing resolution of 1987, the bill received no public hearings or other serious consideration in the House or Senate. ... the Amerasian Homecoming Act was passed in spite of opposition by the State Department of the Reagan administration, the House Judiciary Committee (the committee responsible for immigration legislation), and the Senate Judiciary committee. However, it was reviewed by the many nongovernmental agencies that would have to play a role in finding landing spots in the United States for thousands of families, and they were enthusiastic."

and had limited education. If accepted and lacking a US sponsor, as most migrants were, they were sent the Philippines Refugee Processing Center near Morong, Bataan, Philippines for a six-month program on the English language and a "Cultural Orientation" program (GAO, 1994). Afterwards, the Amerasian and accompanying family members were sent to resettlement centers in one of 55 cluster site cities across the United States, where a resettlement agency assisted with short-term housing, administrative appointments with banks and government departments, school enrollment, and training and welfare assistance while adults searched for jobs. Appendix Figure 2 shows a map of some of the resettlement centers located outside of California.

Some reports suggest that all but approximately 400 Amerasians ultimately migrated to the United States (Isenberg, 2020). While this figure is impossible to know precisely, the consensus view is that the vast majority of Amerasians took advantage of the opportunity. The improved relations allowed US officials to have a presence in Vietnam to interview Amerasians. The changing attitudes of America towards Vietnam with the AHA also provided for a final surge of refugee-based admissions. Rep. Mrazek phrased the period as a "mass exodus" (Thomas, 2021). After 1995, refugees admissions from Vietnam precipitously declined.

# 3 Sample Design and Literature Review

## 3.1 Sample Design

Our sample comes from the 1990 and 2000 Decennial Censuses and the 2005-2019 American Community Surveys (ACS) (Ruggles, 2021). We consider individuals born in Vietnam during AHA-eligible years who arrived during the 1989-1995 period. We further require immigrants be 14-21 years old at arrival. The youngest possible migrant with the AHA program would have been 14 years old, and we exclude those over age 21 at arrival to focus on youth making education and career choices. Our primary analyses compare "young arrivals" (14-17 years old) with "older arrivals" (18-21 years old).[2]

These samples encompass Amerasians, their accompanying siblings of similar ages, and other youth arrivals from Vietnam during the surge period. Using population weights, we follow approximately 60,000 immigrants from the surge, which is an expected size for the

[2] The future education attainment and income levels of immigrants arriving at age 22 and older during the 1989-1995 window are lower than the levels of those who migrated at age 21 or younger. While accompanying family members could be younger than 14, we do not analyze them in this paper.

overall inflow in this age range. The data do not contain visa information to distinguish among these cases, and conditioning on a known US father would not be helpful as very few Amerasians were re-united. Regardless, the non-Amerasian youth from Vietnam faced quite similar conditions. Calculations using State Department arrivals data suggest that two-thirds of all immigration during 1989-1995 from Vietnam was Amerasian- or refugee-based, and this is likely a lower bound for 14-21 year olds given the AHA program's structure.

The unexpected nature of the third wave and the low barriers for Amerasians and their families minimize selection effects that are common when youth migrate. Upon arrival, these immigrants held many traits common with refugees, but they gained immediate and unrestricted access to US schools and the labor market. Additionally, as very few anticipated returning to Vietnam, they had a strong incentive to assimilate into the US labor market. These features of the AHA wave and our panel data minimize selection effects caused by return migration in cross-section studies of immigrant assimilation (Rho and Sanders, 2021).

While participation was near universal, it is nonetheless important to contemplate what selection features might still remain. We demonstrate later that migration for older arrivals is typically positively selected due to migration for schooling in America. To the degree that our data capture some of this effect in addition to our focal AHA wave, this would lead to a positive selection on older arrivals. On the other hand, older arrivals could be negatively selected to the degree that some declined to emigrate under the AHA program because they had an established life in Vietnam that they did not want to uproot. For young arrivals, the primary potential selection appears to be efforts to place children into families that had an AHA-eligible child so that the placed child could also come to America as an accompanying sibling. To the degree that these efforts to latch onto the AHA program focused on more talented children, positive selection would be possible. We analyze later the 1990 Census and find evidence of comparable (and very challenging) conditions for young and older arrivals.

### 3.2 Literature Review

Starting with Chiswick (1978), a vast literature considers the arrival and assimilation of immigrants and refugees into host countries and their workplaces. Our work most closely builds upon studies examining the impact of age at arrival for migrant outcomes, the roles of language proficiency and education in achieving assimilation into the labor market, and the entry points

and career paths of immigrants through firm-level data.

A first literature considers how the arrival ages of migrants shape outcomes in their host country. Immigrants arriving at younger ages typically achieve better later-life outcomes (Friedberg, 1992, 2000), including educational attainment, acculturation, and health. Studies find that younger arrivals become more proficient in the host country language, with subsequent implications for careers (e.g., Myers et al., 2009; Heath and Kilpi-Jakonen, 2012). Chiswick and Miller (2002) describe the complementarity of language skills with other forms of human capital. Central to this literature, Bleakley and Chin (2004, 2010) find that children who arrive to the United States at younger ages, when English language acquisition is easier, display higher future rates of intermarriage and less ethnic enclave residence. Language proficiency has been in turn linked to the labor market success of migrants (e.g., Dustmann and Fabbri, 2003).

For refugees in particular, Chiswick et al. (2006) find that refugees have the lowest English language proficiency among immigrants. However, refugees often have greater incentive to learn English because they are unable to immediately return to their origin country (Chin and Cortes, 2015; Abramitzky et al., 2023). Arendt et al. (2021) and Foged et al. (2022) use discontinuities in programs available to refugees in Denmark for learning the Danish language to establish causally the beneficial impacts of language proficiency for immigrants and their children. Federman et al. (2006) measure how state-level English language proficiency requirements shape the degree to which Vietnamese refugee manicurists take up work.

A second, complementary channel links immigrant age at arrival to education outcomes. Böhlmark (2008) finds that declines in Sweden for school performance begin after arrival ages of nine years old, and Ansala et al. (2020) use sibling comparisons among immigrants to Finland to establish a causal role for the age at arrival. Evans and Fitzgerald (2017) find that refugee children who enter the United States before age 14 have similar educational outcomes as their native counterparts, while those entering at age 18 and older have poorer outcomes. These studies consistently find weakening education outcomes with older age at arrival, especially after age ten or thereabouts, and particularly adverse effects for context- and language-specific studies.[3]

[3] Related studies for education include Friedberg (1992, 2000), Gonzalez (2003), Chiswick and DebBurman (2004), Cortes (2006), Ohinata and Ours (2012), and Hermansen (2017). See also Stiefel et al. (2010), Zhang and Ye (2017), and Alexander and Ward (2018).

The importance of an individual's age when moving for subsequent human capital development is also exhibited in two complementary research spaces. Abramitzky et al. (2021) find that the children of immigrants in the United States show stronger upward mobility than their native counterparts, suggesting children have more time to make their human capital transferable and undergo linguistic integration before entering the labor market. In the context of domestic mobility, Chetty et al. (2016) and Chetty and Hendren (2018) conclude that moving children from a high- to a low-poverty neighborhood before age 13 increases college attendance and earnings and reduces single parenthood rates. See also Chyn (2018) and Deutscher (2020).

A third literature considers the longitudinal career paths of refugees, along with other migrants, and the role of factors like initial location in shaping these trajectories (e.g., Chiswick et al., 2005; Capps et al., 2015). In the US context, Cortes (2004) pioneered using synthetic cohorts across repeated cross-sections captured by household surveys to study refugee career profiles. Comparative and historical work includes Bevelander and Pendakur (2012), Abramitzky and Boustan (2017, 2022), and Ansala et al. (2022). Important reviews of this literature with respect to refugees include Chin and Cortes (2015), Brell et al. (2020), and Hatton (2020). As we are studying migrants who arrive at age 21 or younger and are provided complete work authorization, our setting will not consider important themes for adult assimilation like occupational downgrading, recognition of credentials, and visa restrictions.

Social capital and access to networks are important. Edin et al. (2003) show that refugees in Sweden assigned to live in areas where their ethnic concentration is greater had higher earnings than refugees assigned elsewhere. Similar effects were noted for early Vietnamese refugees in the United States (e.g., Finnan, 1982; Starr and Roberts, 1982). In a later study, Beaman (2012) finds that there is lower occupational mobility and earnings potential when a high concentration of refugees in the same network are resettled in the same area at the same time. These weaker outcomes are due to higher competition among the similar refugees. In contrast, there is higher occupational mobility and earning potential when a refugee is resettled in an area where there are more tenured members of their network already resettled there. Similarly, Dagnelie et al. (2019) shows that refugees found jobs quicker when they were settled into US locations where a large number of their compatriots are business owners rather

than employees.[4,5]

Finally, a young but rapidly growing literature uses firm-level data to consider first jobs and career trajectories over firms. This research finds high rates of immigrant workers matching into firms with other immigrants, but is inconclusive on whether this is beneficial in the long-run.[6] In the United States, Garcia-Perez (2011) shows that small firms are especially likely to hire immigrants. Kerr and Kerr (2021) observe co-national hiring was highest (at 45%) among businesses with five or more employees that are led by Vietnamese immigrants. Ethnic communities and networks play an important role.[7] Arellano-Bover and San (2023) consider the unconstrained assimilation of Jews migrating from the former Soviet Union to Israel using employer-employee data and AKM methodologies.

Our work contributes to these various studies in several ways. First, while important, causal links between age at arrival, language skills, and educational attainment have been established, the emphasis of the literature has been more on younger ages than the critical teen years we study. Selection on who migrates is particularly high during late teen years, with many immigrants coming specifically for schooling. Our AHA-linked setting provides a special laboratory for disentangling these effects given the size of the migration wave and the extent to which the unexpected opportunity was almost universally taken.

Second, the link of the synthetic cohorts into 20+ years of true longitudinal data from the employer-employee records affords a much deeper insight into the career profiles that sit behind the earnings gaps measured in the household surveys. We are not aware of a study covering a similarly long span. We can additionally measure the extent to which individual human capital (education, language proficiency) vs. other initial conditions (e.g., traits of first employer, being

[4] Studies of the implications of refugees for local labor markets include Del Carpio and Wagner (2015), Tumen (2016), Clemens and Hunt (2019), Van Der Werf (2021), and Mayda et al. (2022). Hamalainen and Sarvimaki (2016) consider labor market policies and integration. We also relate to a vast literature on the economic opportunity associated with international migration (e.g., Borjas, 1994; Clemens, 2011; Docquier and Rapoport, 2012).

[5] Buggle et al. (2023) develop a structural model where networks can have push and pull influences on refugee migration decisions from difficult settings.

[6] For example, den Butter et al. (2007), Hellerstein and Neumark (2008), Andersson Joona and Wadensjo (2009), Garcia-Perez (2011), Hellerstein et al. (2011), Nicodemo and Nicolini (2012), Andersson et al. (2014), Åslund et al. (2014), Tomaskovic-Devey et al. (2015), Daunfeldt and Fergin-Wennberg (2018), Hammarstedt and Miao (2020), Ansala et al. (2020), Orefice and Peri (2020), Burstein et al. (2020), and Kerr and Kerr (2021). Brinatti and Morales (2023) more generally consider welfare consequences from differences over firms in their relative rates of employing immigrants.

[7] For example, Portes and Wilson (1980), Munshi (2003), Kalnins and Chung (2006), Fairlie et al. (2010), Patel and Vella (2013), and Kerr and Mandorff (2023).

located in a cluster site) explain the later career profiles and the realized upward mobility. We believe this approach can be useful for studying other migration waves closely (e.g., former Yugoslavia, Iraq, Myanmar), as well as for other purposes with data recorded in the household surveys.

# 4 Analysis of Censuses and American Community Surveys

## 4.1 Initial Conditions in 1990

The 1990 Decennial Census takes place early in the AHA immigration wave and measures initial conditions for the AHA immigrants arriving in the United States during 1987-1990. (Unlike the ACS and the 2000 Decennial Census where we can restrict to the AHA immigrants arriving in 1989 and later, the 1990 Census only recorded the arrival range 1987-1990.) Table 1 shows panels for personal traits, family traits, and location traits. In Panel A, only half of the AHA immigrants speak English well, and the young AHA immigrants have fewer years of schooling. About 37.9% of the older AHA immigrants have entered the labor force, with an effective unemployment rate above 15%, while only 6.9% of the young AHA immigrants are seeking work.

Panel B presents the living conditions of the households, which in some cases contain more than one family unit. AHA immigrants are living in poor households. Households for young and older AHA average 44.9% and 54.2%, respectively, of the average household incomes of their metropolitan areas.[8] Older AHA immigrants have higher household incomes and home values, although only the former is statistically significant. (Dollar values in this section and the next are converted to 2021 levels.) Reports of welfare support in rows 10 and 12 also suggest young AHA are living in tougher conditions. Young AHA immigrants are 4.5x more likely to be in households receiving welfare support than others in their surrounding cities, compared to 2x more likely for the older AHA immigrants.

Rows 14-21 show that the households are of similar size and that the heads of households have similarly low levels of education, English fluency, and employment rates. The latter similarity is important for the analyses ahead, as it confirms that the young AHA immigrants are not sorted into households with a stronger observable tendency toward education. If

[8] For comparability on initial conditions, these estimates exclude the focal AHA individual's earnings where they exist. The values are $44,205 and $57,424 for young and older immigrants, respectively, without these exclusions (46.3% and 59.4% of the MSA average).

anything, the families of young AHA exhibit less fluency and lower education attainment. No young AHA are declared heads of household in the 1990 Census, while about 4% of older AHA are.

With caution, rows 22-30 in Panel B provide traits on household structure. Census enumerators assign relationships within the family unit being surveyed and do not know biological relationships. Thus, a designated "mother" can be a biological mother, a stepmother via marriage, or an unmarried individual/partner who the enumerator assigns as a mother relationship for an individual. The same ambiguity is true for "father", which is especially important in the AHA immigrant context. Stepfathers could migrate with an Amerasian stepchild. We do not present these figures as representing biological relationships, only to observe whether the adult composition of the AHA households for young versus older immigrants shows significant differences.

Young AHA immigrants are 9% more likely to be living with a social or biological mother, while the presence of a father is 4% more likely. These differences are mostly explained by older AHA immigrants being 6% less likely to live in households where an adult over the age of 30 is present. Finally, only 1% of the young and old AHA immigrants are living in a household with a father present who is a US-born native and Vietnam War veteran. These shares match the broad understanding that very few AHA immigrants joined a US-native father, suggesting their future assimilation is best thought of as assimilation of young immigrants from rather difficult circumstances than the reuniting of families.

Panel C presents traits of the locations where the family is living. 79% and 83% of young and older AHA immigrants, respectively, are living in cities with AHA cluster sites. There are practically no differences between the typical economic conditions surrounding young and older AHA immigrants. The coethnic marriage rates by Vietnamese immigrants to other Vietnamese in the MSAs housing the young and older AHA immigrants are also the same. The last row shows the young and older AHA immigrants are equally likely to be residing in the Public Use Micro Area (PUMA) part of their MSA that holds the largest percent of Vietnamese (restricted to MSAs with five or more identified PUMAs). The similarity suggests that residential segregation is not different for the young vs. older AHA immigrants. In short, young and older AHA immigrants appear almost randomly assigned over locations.

### 4.2 Language Fluency and Education Trajectories

We next analyze future outcomes evident in the 2000 Decennial Censuses and the 2005-2009, 2010-2014, and 2015-2019 ACS waves for young and older AHA immigrants. We run regressions with each dataset separately and then combine estimates into Figures 2a and 2b for a visual representation. Appendix Table 1 provides descriptive values for the results shown in this section, and Appendix Table 2a records the coefficients and standard errors of the values plotted in figures.

Our baseline regressions take the form for person $i$ living in state $s$,

$$Y_{i,s} = \eta_s + \beta X_i + \gamma_1(0,1)YoungAHA_i + \gamma_2(0,1)OlderAHA_i + \epsilon_{i,s} \quad (1)$$

where $YoungAHA_i$ is an indicator variable for AHA immigrant aged 14-17 at arrival and $OlderAHA_i$ is an indicator variable for AHA immigrant aged 18-21 at arrival. The comparison group in these estimations includes native-born individuals of similar ages.

We include state fixed effects $\eta_s$ in estimations to account for the greater representation of AHA immigrants in cluster receiving states, especially California. The $X_i$ controls include a linear age term and an indicator variable for gender. We cluster standard errors by state.

Panel A of Figure 2a models as the outcome variable an indicator variable for speaking English well, which virtually all US-born natives do. Both young and older AHA immigrants begin with almost a 50% lower likelihood of speaking English well, as shown in Table 1. By 2000, when AHA immigrants are 25-32 years old, the language gaps for young and older AHA immigrants have diminished to about 20% and 33%, respectively. These gaps further shrink at a slow pace through the end of the sample, when most young AHA immigrants are in their mid 40s. For reference, the ages of AHA immigrants included in this study are reported below the horizontal axis in each panel.

Panel B considers reported years of schooling. The 1990 point is included for completeness, with the young AHA having modestly higher relative education than the older AHA immigrants, with both groups falling below the US-born average. More interesting is the divergence that follows. Young AHA immigrants almost close the gap to US natives, hovering at about 0.2 years less, whereas the older AHA immigrants lose ground and typically show more than a year's gap.[9]

[9] In Table 1, young AHA immigrants have 1.2 years less schooling than older AHA immigrants. The difference

Panels C and D of Figure 2a continue by showing the share who completed high school (Grade 12 of schooling) and those who completed college education (defined to be 4+ years of college education in our data).[10] For high school completion, there is a 9% lower rate for the young AHA immigrants and a 20% lower rate for the older AHA immigrants in 2000. The differences between these groups and to similarly aged US natives are significant. For the AHA immigrants who complete high school, a disproportionate share go on to complete college. Thus, the college completion rate of the young AHA immigrants is quite similar to US natives, while the older AHA group lags by about 14%.

Before proceeding, we reflect upon these education results. IPUMS data do not measure the accumulated quality of education for an individual, just the reported years of schooling. It is quite likely that 12 years of schooling for an AHA immigrant, being split across Vietnam and America, provided a lower skill base for the US labor market than 12 years of schooling by a typical US native. Consistent with this, the language proficiency gaps are larger than schooling gaps. We will also soon observe that the wage gaps for AHA immigrants relative to US natives typically exceed what labor economists estimate as the return to an additional year of schooling. These interpretation questions only relate to comparability to US natives; the very sizable gaps that open up between the young and older AHA immigrations are not affected.

### 4.3 Wage and Total Incomes

Figure 2b turns to wage incomes. In Panel A, we include all individuals with non-missing wage records and allow for zero wages. In Panel B, we consider log wages that are conditional on employment. Sizable gaps exist in 2000 for both immigrant groups relative to US natives. By 2005-2009, much of the gap has closed for the young AHA immigrants, while the wage gap for older AHA immigrants widens. The young AHA immigrants are even measured to be at parity to US natives in a log specification given the reduced emphasis on the very top incomes. Sampling may be somewhat over-stating the true relative movement from 2000 to 2005-2009 in terms of the young AHA immigrants' wages. Figure 2a shows that the highest

in specification (1) is a consequence of the linear age term that controls for the typical education acquired with age. Younger US natives also have obtained fewer years of schooling than their older peers in 1990, as most are still completing their schooling.

[10] Beyond fluency and years of schooling, 1990 values are dummied out given that features like college completion rates or wage incomes have little meaning/comparability at that early point.

relative educational attainment for the young AHA immigrants is in 2005-2009.

Post 2010, both AHA immigration groups lose ground relative to the incomes of US natives. Nominal wages for the young and older AHA immigrants continue to rise during the 2010s, but they do not keep pace with the averages of US natives. In 2015-2019, young AHA immigrants earn about 11%-12% less than US natives and older AHA immigrants earn over 22% less.

Panels C and D show similar patterns when looking at total incomes. To explore the full distribution, Figure 3 plots the share of young and older AHA individuals in 2015-2019 by the deciles of the US income distribution (natives included). Reflecting that these individuals still earn less than the US average, both distributions have an excess mass at below-median incomes. The relative gains for the young AHA immigrants compared to those entering at just a few years older has come by shifting some of this below-median mass into the top three deciles. These distributions demonstrate that the gains experienced came through many young AHA immigrants being able to achieve above-average outcomes, versus a small number of extremely high outcomes.

The results presented are robust to a variety of specification checks: using person weights from IPUMS, focusing just on arrivals by 1991, dropping controls, and similar.

### 4.4 Expanded Comparison Points

Figures 4a and 4b extend the analyses in Figures 2a and 2b, with Appendix Table 2b tabulating values. Our baseline specification (1) models effects relative to the average US native, which seems the most natural and policy-relevant baseline. In these expanded comparison figures, we modify the specification to introduce a third indicator variable for US-born minorities (including Asian Americans). The United States has long struggled with persistent racial education and income gaps, and so a comparison across white and non-white native groups provides further context.

We also expand the sample by including a comparison group of immigrants who are of the same birth years and time arrivals to America as the AHA immigrants, but who have entered through more typical channels (often in pursuit of high school or college educations). We consider immigrants from 30 countries with a non-English primary native language and with GDPs per capita in 1988 that fell within 70% of Vietnam as measured by the World Bank. The countries are Albania, Benin, Bhutan, Burkina Faso, Central African Republic, China,

Egypt, Gambia, Ghana, Guinea, Guyana, Haiti, India, Indonesia, Kenya, Kiribati, Lesotho, Madagascar, Nicaragua, Niger, Nigeria, Pakistan, Philippines, Rwanda, Solomon Islands, Sri Lanka, Sudan, Togo, Uganda, and Zambia. We include a fourth indicator variable to measure their outcomes.

The future education and income levels achieved by non-Vietnamese immigrants contemporaneous to the AHA surge is comparable to and perhaps even exceeds the levels of white US natives. This is not too surprising given that many of these immigrants have self-selected to come to the United States for education and possible future employment. They frequently come from wealthier backgrounds in their home countries. Appendix Figures 3a and 3b further show that the outcomes of older arrivals within this peer country group are at or above the outcomes for young arrivals, the opposite of the pattern observed for the AHA-linked inflows.

For the AHA-linked admissions, which came from poorer baseline conditions in Vietnam, the young AHA immigrant outcomes sit in between those of the US-born whites and the US-born minorities. The older AHA immigrants tend to have lower educational attainment than US minorities, especially for finishing high school, but the income levels of the two groups ultimately track together closely.

### 4.5 Extensions and Social Outcomes

Table 2 reports coefficients from a simplified regression that compares the young AHA immigrants to the older ones,

$$Y_{i,s} = \eta_s + \beta X_i + \gamma(0,1) YoungAHA_i + \epsilon_{i,s}. \tag{2}$$

Each row in Column 1 reports the $\gamma$ coefficient and standard error from a separate regression. The first four rows document English language fluency and education, rows 5-7 consider employment status, and rows 8-11 consider incomes. The table focuses on the 2015-2019 ACS dataset. These results are very similar to those shown in the earlier figures, with any small differences deriving from covariates like state fixed effects adjusting for the sample being restricted to AHA immigrants.

Row 12 shows that marriage is equally likely for the young and older AHA immigrants by 2015-2019.[11] Interestingly, aligned with their own higher education levels, we measure

[11] Marriage can be estimated in two ways in IPUMS. We use the spouse identifier for this purpose to align with the variations that follow. Results are similar however marriage is defined.

the young AHA immigrants are 6.6% more likely to have married a college graduate. They are also 4.2% more likely to have married a non-Vietnamese spouse and 2.0% more likely to have married a US native. These latter two results are suggestive of young AHA immigrants integrating more in terms of marriage outcomes, although we view them cautiously because the values for periods before 2015-2019 are more volatile than our core findings using education and income measures.

Regressions 16-21 consider living conditions. While home ownership is equally likely, young AHA immigrants own higher valued properties. Among renters, it also appears that the young AHA immigrants might be occupying higher priced units. The final two rows suggest that despite these differences, young AHA immigrants are not disproportionately living outside the PUMA of their MSA which houses the most Vietnamese nor living in PUMAs with significantly different Vietnamese concentration per capita. These latter estimations are again restricted to MSAs with five or more PUMAs.

These results are quite robust. The differentials are very similar when dropping state fixed effects (to allow for endogenous spatial choices[12]) or including MSA fixed effects (to narrow peer comparisons). They are nearly identical if adding a quadratic age term to the linear age control. Weighting individuals also produces very similar outcomes.

Columns 4-6 next repeat specification (2) for rows 5-21 with added indicator variables for English language fluency, completing high school, and completing college. These estimations thus ask how much of the variation in incomes and other outcomes can be explained by differences in fluency and education. These controls can explain the majority of the young arrival mobility difference. The $\gamma$ coefficients are often half or less of their values in Column 1, and the Adjusted $R^2$ values rise significantly (on average, by 0.056). Most estimates are no longer statistically different from zero, although the larger sample in the next section using the LEHD will tighten standard errors.

While our main estimates focus on a young vs. older comparison, Tables 3a and 3b disaggregate our sample into four age-at-arrival bins: 14-15, 16-17, 18-19, and 20-21 years old. We

[12] In the 2000 Census, young AHA arrivals are slightly more likely to move MSAs from 1995 to 2000 than older arrivals (15.5% vs 15.1%). The most common move corridors are across nearby MSAs, such as moving from San Jose to Oakland. Mobility of AHA immigrants is modestly towards MSAs with more Vietnamese immigrants, and college degree attainment is correlated with being in MSAs with higher shares of college degree holders among the local population. Beyond these features, mobility patterns are not systematically linked to MSA population, home values, average wage levels, etc. MSAs of residence in 1995 and 2000 also have very little explanatory power for AHA success as a whole and for differentials between young and older arrivals.

model separate indicator variables for the first three categories, with 20-21 serving as the reference category. Table 3a studies the base regression similar to Columns 1-3 of Table 2. Effects are almost always monotonic in the age at arrival. Those arriving at 14-15 years old stand out even compared to those arriving at 16-17 years old. While sometimes precisely estimated, differences between those 18-19 and 20-21 years old at arrival are modest.

In Table 3b, we add the fluency and education controls. These attributes explain most of the wage and social differences for those arriving at 16-17 years old compared to 18-19 years old or the reference category of 20-21 years old. By contrast, while the differentials diminish in size, the explanatory power of education and fluency is weaker for the future outcomes of those arriving at 14-15 years old. This finding aligns with there being greater capacity in early teenage years to assimilate, although our data cannot separate among potential root causes (e.g., more years of schooling in America could bring non-linear returns in cognitive skills, social and cultural skills, or both). Across estimations, education usually has more explanatory power than fluency, but both matter.

Finally, Table 4 documents the occupational distribution of young and older AHA immigrants in 2015-2019. Panel A shows that young AHA immigrants are less likely to be employed in service- and production-related occupations and instead are disproportionately in occupations related to computers, engineering, and health care. Within these 12 broad occupational groups, the wages of the young and older AHA immigrants are typically quite similar, with older immigrants having a higher average in eight of the 12 groups. Thus, the overall wage advantage of young AHA immigrants comes from being disproportionately in higher wage occupational groups than from differences within the occupational groups. The remaining panels provide additional views of detailed occupations. Young immigrants have greater representation in roles like pharmacists, dentists, engineers, and teachers, and are less likely to be in the nail care sector. Looking at detailed job titles, young immigrants are more likely to be in the ten titles that include the phrase "supervisor", whereas the young and older groups are equally represented across the 22 titles that include "manager" or "management".

In summary, despite being well into their teen years, small differences in arrival age among AHA immigrants had significant impact on their educational attainment and subsequent labor market earnings. The assimilation of the youngest group is indeed quite remarkable. In Table 1, the young AHA immigrants began in 1990 in households earning 44.9% of the local

MSA average, compared to 54.2% for older AHA immigrants. In 2015-2019, the young AHA immigrants are in households earning 106.1% of their MSA's average, compared to 90.2% for older AHA immigrants. While both groups showed strong growth, the young AHA immigrants did materially better, in large part due to fluency and education differences.

Building on Table 2's framework, the next section explores confidential Census Bureau data to identify how these sizable gaps ($6,734 in wages and salary income at end of sample) developed in the labor market, the role of education/fluency in a larger sample, and the role of initial location and workplace conditions.

# 5 Analysis of Longitudinal Employer Household Database

## 5.1 Census Bureau Data

We utilize the confidential 2014 Longitudinal Employer Household Dynamics (LEHD) database, which is constructed by the Census Bureau from state-level quarterly filings by employers for the administration of state unemployment insurance (UI) benefit programs. Records identify each paid employee at an establishment and the employee's quarterly compensation; employees with multiple jobs are recorded separately by each firm. The data longitudinally follow establishments and employees. We have access to the data for 23 states/DC for this project, including states like California and Texas that received many AHA immigrants.[13] Our data extend through 2014, with start dates varying by state beginning in the early 1990s.

The person-level characteristics available in the LEHD include age, gender, race, place of birth, and citizenship status. The employment history files provide job-level earnings of each worker within the covered states, and a national indicator file contains the quarterly employment status of individuals across all US states. We exclude job observations with less than $250 in quarterly earnings. We also drop a small number of records of individuals who are 17 and younger at time of employment, beginning their careers at age 18. Throughout this section, Census Bureau disclosure requires observation counts be rounded, and all reported numbers are likewise rounded to a maximum of four significant digits.

Using unique person identifiers, we merge the 2000 Decennial Census and the ACS into the LEHD. (Unfortunately, the 1990 Census cannot currently be linked.) This merger identifies

[13] Covered states include Arizona, Arkansas, California, Colorado, Delaware, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Pennsylvania, Tennessee, Texas, Virginia, and Washington, as well as Washington D.C.

the AHA immigrants among the LEHD records, and with this link established, we can follow them across their careers. For the LEHD work, we only compare young and older arrivals. Natives and other immigrants are used to calculate the traits of the establishments, but they do not feature in the regression sample. Our sample captures 110,000 person-year observations of AHA immigrants across the full span of the LEHD, and 8,500 unique individuals when we focus on the 2000-2014 career profiles.

### 5.2 Wage Incomes

Table 5 commences by quantifying annual wage income differentials between young and older AHA arrivals among those employed. While the specification is conceptually quite similar to that used in Section 4 with the public data, for disclosure reasons we report results developed with a stacked regression that groups all years together and interacts controls with indicators for the time periods. The sample size is significantly larger in these estimations than in Section 4 because we can follow all identified AHA individuals over time.

Columns 1 and 2 show that the older AHA immigrants initially earn more in wages in the 1990s, but that the young arrivals soon surpass them. The wage differentials emerge by the early 2000s and are relatively flat thereafter. These results allow for individuals to enter and leave the sample, and we find similar outcomes when restricting on those with work careers starting in the early 1990s. Some of the largest AHA immigrant receiving states have early start dates, making our analysis quite robust to these considerations.

Columns 3 and 4 take advantage of the LEHD's career histories to isolate immigrants who are most likely to have been specifically under the AHA legislation (vs. other refugee categories) by keeping immigrants who first appeared in the LEHD in a cluster site and within three years of arrival to America. The latter condition limits likely internal mobility after arrival, but it also comes at a cost of excluding some individuals seeking higher education. About half of the sample meets these conditions, and we find quite similar wage trajectories when studying them. This comparability provides confidence in our overall estimation approach.

### 5.3 Career Histories

Tables 6 and 7 analyze the career histories of AHA immigrants across 2000-2014. Our goal is to concisely summarize a vast amount of information into digestible features of the AHA immigrant experience. We commence the characterization of careers in 2000 for two reasons.

First, AHA immigrants in 2000 are 25-32 years old, resulting in most having completed their schooling investments. Additionally, the records for LEHD states begin at different points, and the 2000 start date affords a full sample.

We use a specification of the form,

$$Y_i^{00-14} = \eta_s^{00} + \beta X_i + \gamma(0,1) YoungAHA_i + \epsilon_{i,s}. \tag{3}$$

Each row presents the $\gamma$ coefficients from regressions with the indicated outcome variable $Y_i^{00-14}$. The base specification in Column 1 compares young arrivals to the older ones, conditional on gender, a linear age term, and fixed effects for the state where we first observe an individual in the LEHD in 2000 or afterwards. The means of outcome variables for the two groups are displayed in the last two columns of the table.

The first row shows that young arrivals display 12% more quarters of employment during 2000-2014. Moreover, the next rows show that the composition of this employment is different. Young arrivals spend more of their careers in large firms and in firms with average wages higher than their state's median. By contrast, the older arrivals spend more of their time in small firms, firms with an immigrant from Vietnam as the top earner, or in firms in the nail care sector (where Vietnamese workers play a large role). There are no differences in the likelihood of young arrivals being the top earner in the establishment, a signal of likely entrepreneurship. These patterns capture that some of the differential between young and older arrivals comes through the former's higher likelihood of being employed in better establishments that are less connected to co-nationals.

The second grouping of rows provides further insight on conditions of the job using continuous variables. Row 10 confirms that when employed, the young arrivals have higher quarterly earnings. The quarterly estimate of \$2,289 compares well to the 2015-19 annual difference of \$6,734 measured in the ACS. The young arrivals tend to be 4.5% higher in the wage distribution of their establishment compared to older arrivals. Young arrivals also have a lower share of their co-workers being fellow immigrants from Vietnam.

Rows 16–22 quantify the dynamics of careers. Over the period, the young arrivals achieve their higher earnings mostly through steady incremental advancement. Young arrivals have modestly more years in which their wage income grows by 20% or more compared to prior years, but they have substantially fewer years where they experience sizable earnings declines or missing employment. Young arrivals shift over time to higher wage establishments, but this

growth is a tenth of the within-person earning growth. While we do not observe occupations in the LEHD, these patterns are consistent with Table 4's ACS depiction of young arrivals being more likely to become a supervisor at a retail outlet or manufacturing plant compared to older arrivals.

As before, we next measure in Table 7 how much the language fluency and education differentials can explain these career histories. Column 1 is a repeat of the base regression, and Column 4 incorporates the controls. Typically, these controls account for half of the career variation between young and older arrivals; adjusted $R^2$ values also rise by 0.046 on average.

Column 7 finally adds controls for the initial conditions of the individuals. We introduce an additional indicator variable for whether an individual was first observed in a city hosting a cluster site; we likewise control for whether an individual's first LEHD job (including those before 2000) was in a small firm (under 50 employees) that had a top earner from Vietnam, a small firm with a top earner not from Vietnam, a larger firm with a top earner from Vietnam, or otherwise. These controls explain a bit more of the variation (an average increment of 0.026 in adjusted $R^2$ value), consistent with persistence of initial conditions.[14] On the whole, we find that the explanatory power of education and fluency is greater than that of initial conditions.

# 6 Conclusions

The Amerasian Homecoming Act changed the lives of many. Most of the young individuals who migrated from Vietnam to America during 1989-1995 left from and arrived into very poor conditions. Yet, with limited prospect (or desire) to return migrate, AHA arrivals had strong incentives to invest in their integration into the US labor market.

Decades later, in his foreword for Thomas (2021), the AHA's architect Representative Robert Mrazek expressed some surprise at what had transpired: "A year after passage of the Amerasian Homecoming Act, I began to receive annual reports from the State Department on the practical results of this mass exodus, and I came to wonder if my work to pass the legislation had made a meaningful difference in their lives. ... It was only in 2010, when a journalist named David Lamb contacted me to say that he was researching and writing a lengthy piece for Smithsonian magazine on the current status of Amerasians, that I learned of the many success stories, the thousands who had completed their education and gone on to

[14] Arellano-Bover (2023) quantifies the general career benefits to starting with a large firm.

have happy and productive lives."

In his recollection, Rep. Mrazek also noted the heart of the issue investigated in this study. "When I first became aware of the issue in November 1986, the average age of the Amerasians in Vietnam was nearly seventeen. I felt strongly that if they weren't able to come to the United States within a few years, they would reach adulthood and their chances of adapting to a new country would be significantly more difficult."

Our study quantifies just how much Rep. Mrazek's intuition held true. In doing so, it also contributes to the existing economics literature on age at arrival effects by showing how the gradient for upward mobility persists into the teen years. The strong tilt in future economic outcomes towards young arrivals suggests policy makers should be careful about the length of time spent in the migration process. For example, the AHA migration process included six months spent in the Philippines on language training and cultural assimilation. While our variation does not allow us to evaluate the effectiveness of this approach directly, our results speak to an important opportunity cost in terms of delayed arrival into America. This delay may not be consequential for a young child or an adult, but it could make a big difference for the future of a teenager. While every mass migration wave carries its own unique features, recognition of this sensitive period can aid in policy design to provide additional supports for those arriving a bit older.

While this paper emphasizes the importance of age at arrival, both groups from Vietnam gained tremendously as a consequence of migration. Indeed, the older arrivals achieved education and income levels that are today comparable to US-born minorities of a similar age. Future work could look at factors that explain this overall level of success by comparing the AHA-linked immigrants with similarly aged peers from other refugee waves to uncover policies or conditions that shape the overall success of the wave. Several features of the AHA wave – the permanent nature of the move, the settlement assistance and immediate work authorization provided, the partial US parentage even if fathers were not reunited to children, and more – could play important roles. We also hope further research continues to discern how immigrants achieve economic integration and upward mobility through the structures of the firms that employ them.

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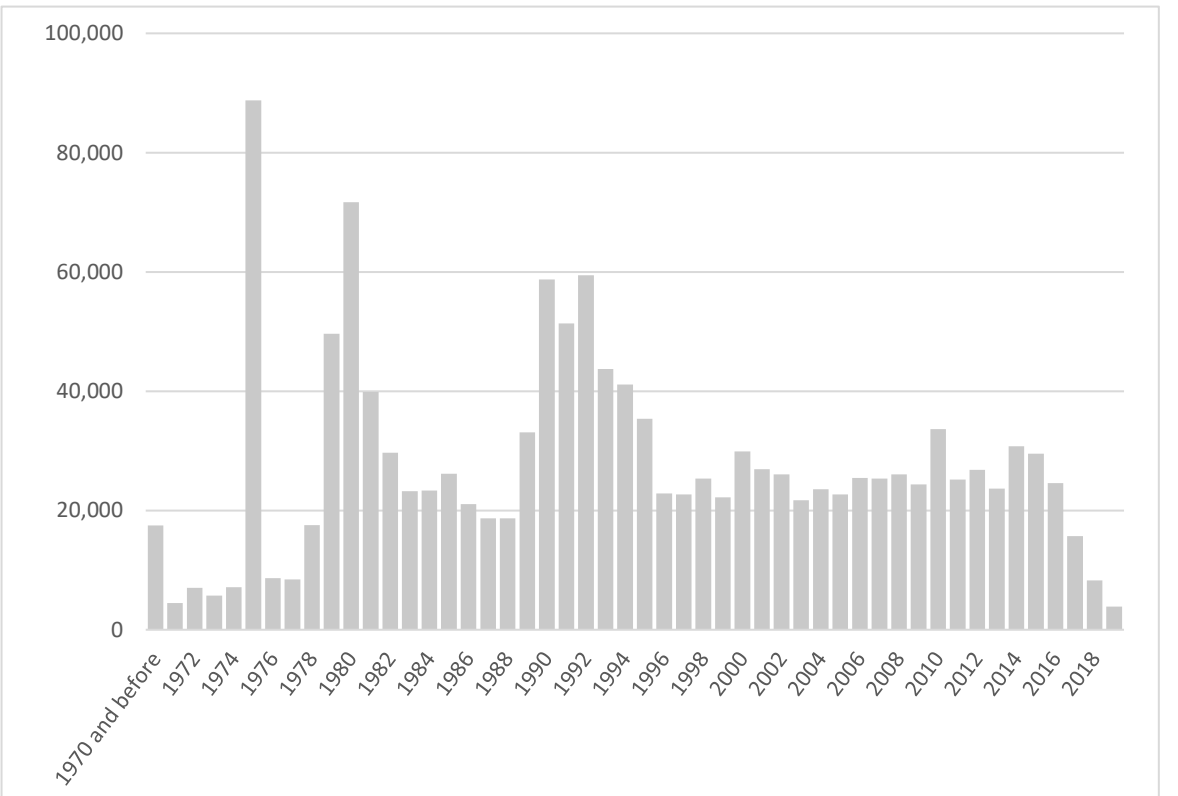
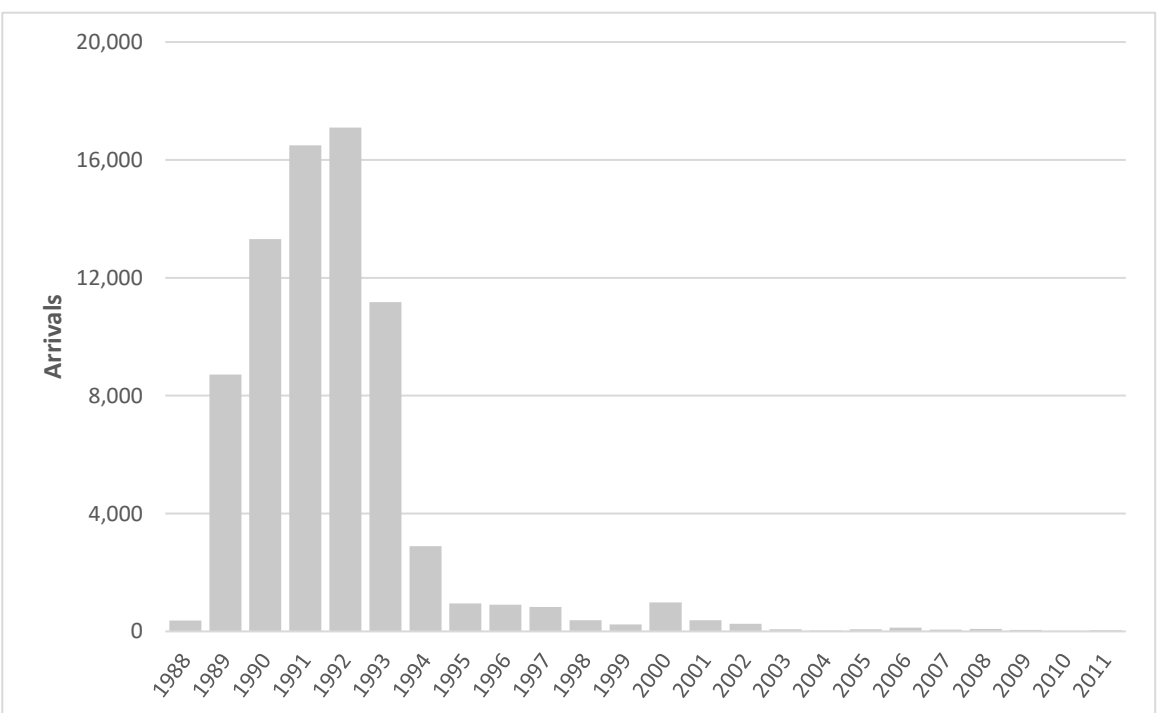
# Figure 1: Immigration from Vietnam to America

A. Arrival dates of immigrants from Vietnam as present in 2015-2019 ACS



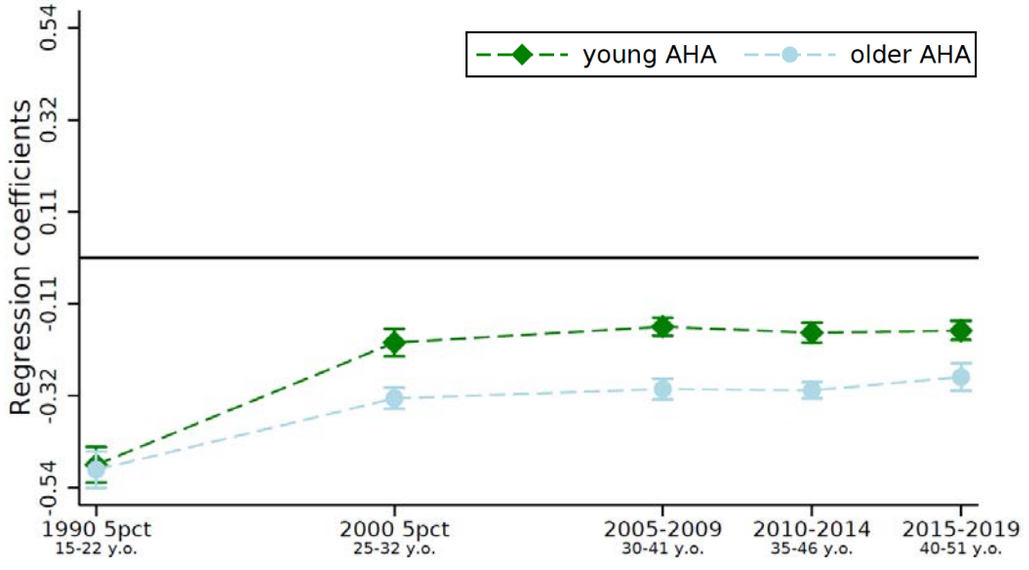

B. Official count of Amerasian arrivals



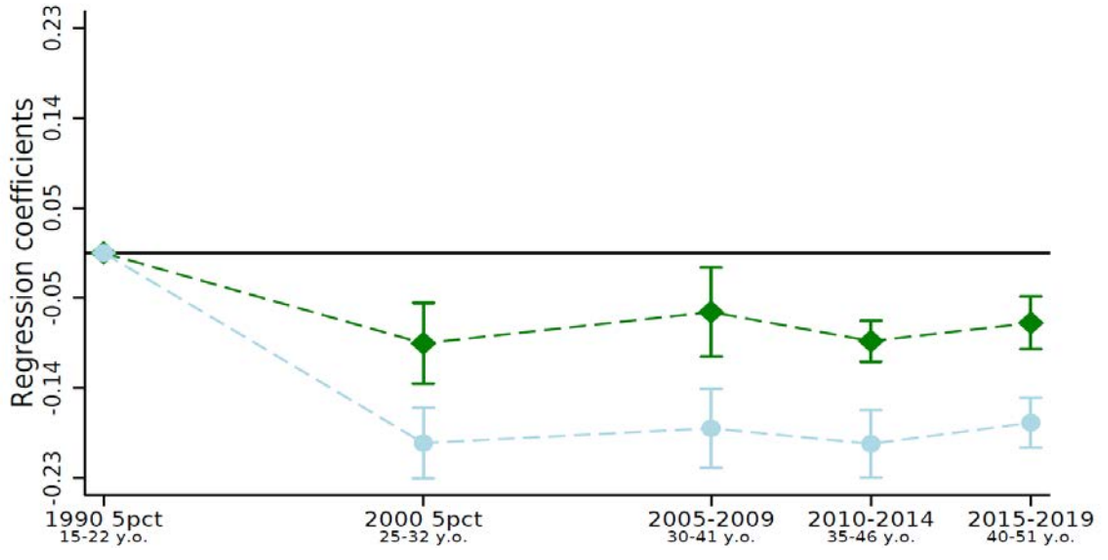

Notes: Panel A shows arrival years of immigrants from Vietnam surveyed in 2015-2019 ACS. Panel B shows assembled data on Amerasian arrivals as recorded in government documents from Office of Refugee Resettlement Reports and Secretary of State Refugee admissions reports.

Figure 2a: Language proficiency and schooling of young vs. older arrivals relative to all US natives

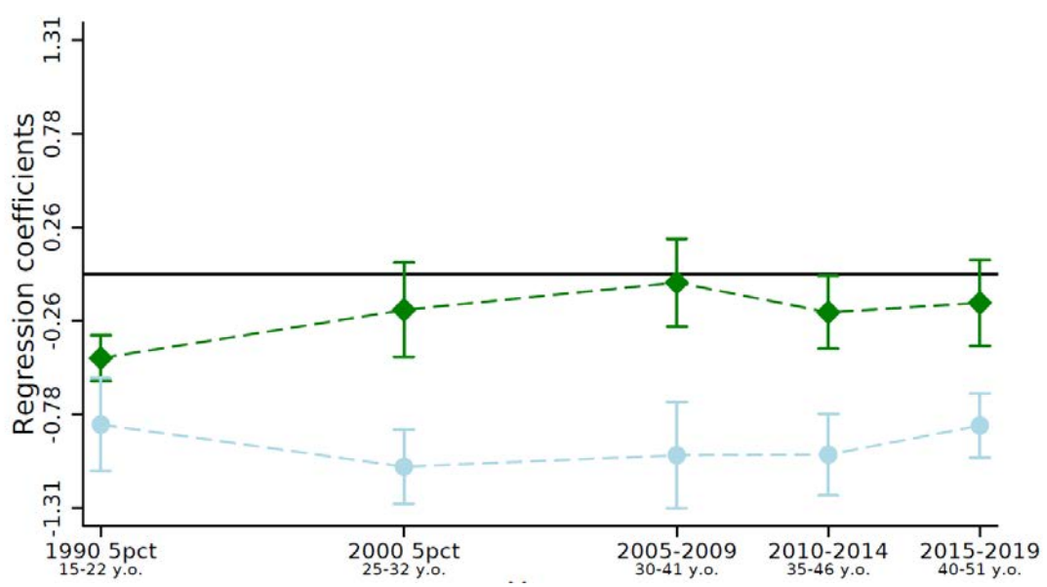
A. Share of group who speaks English well



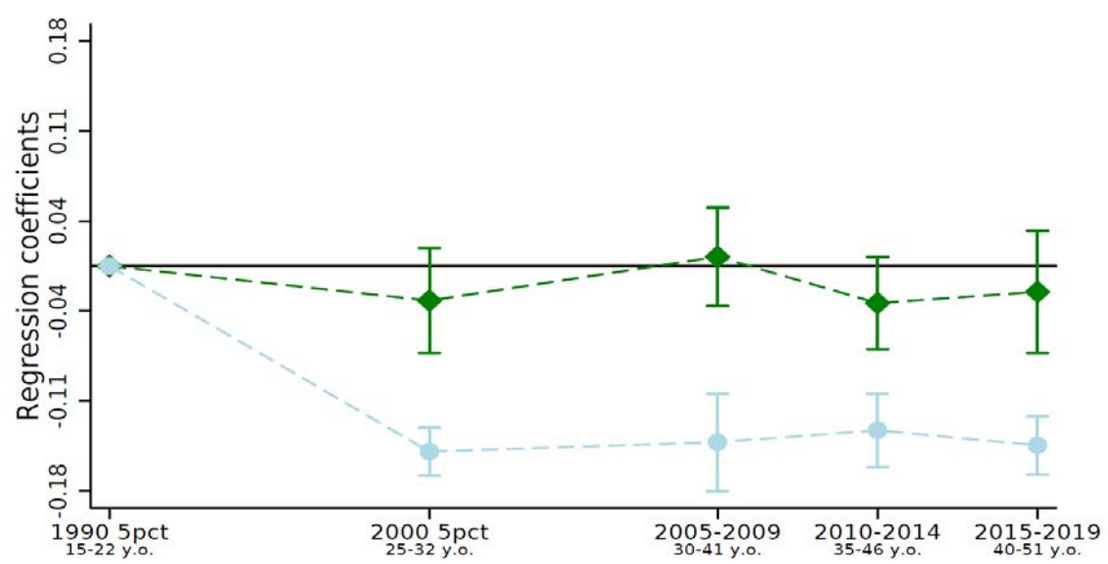

C. Share of group with completed high school education




B. Years of education



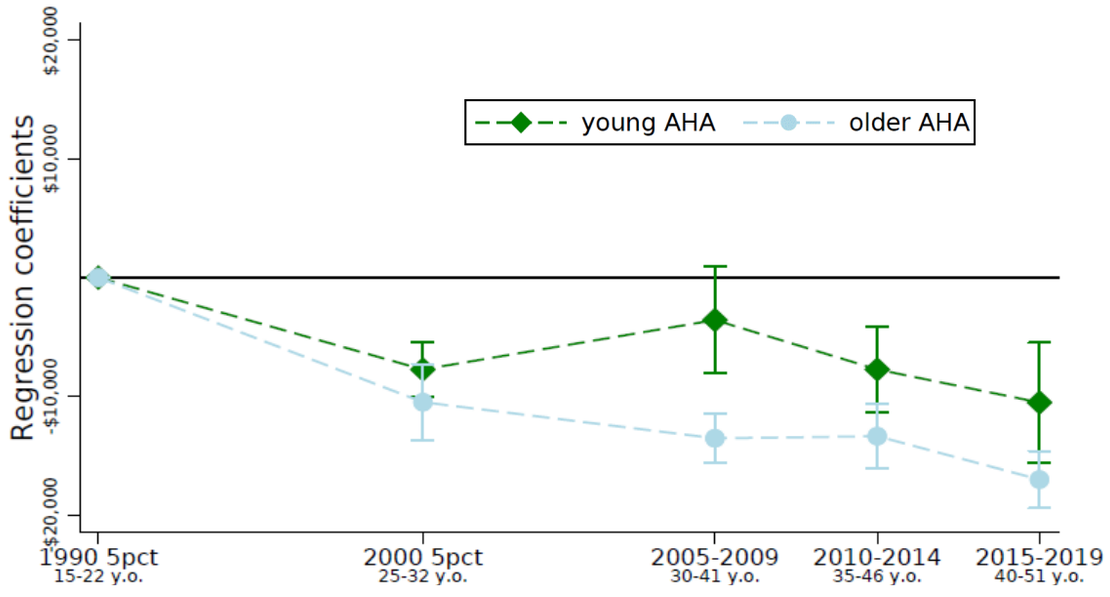

D. Share of group with completed college education



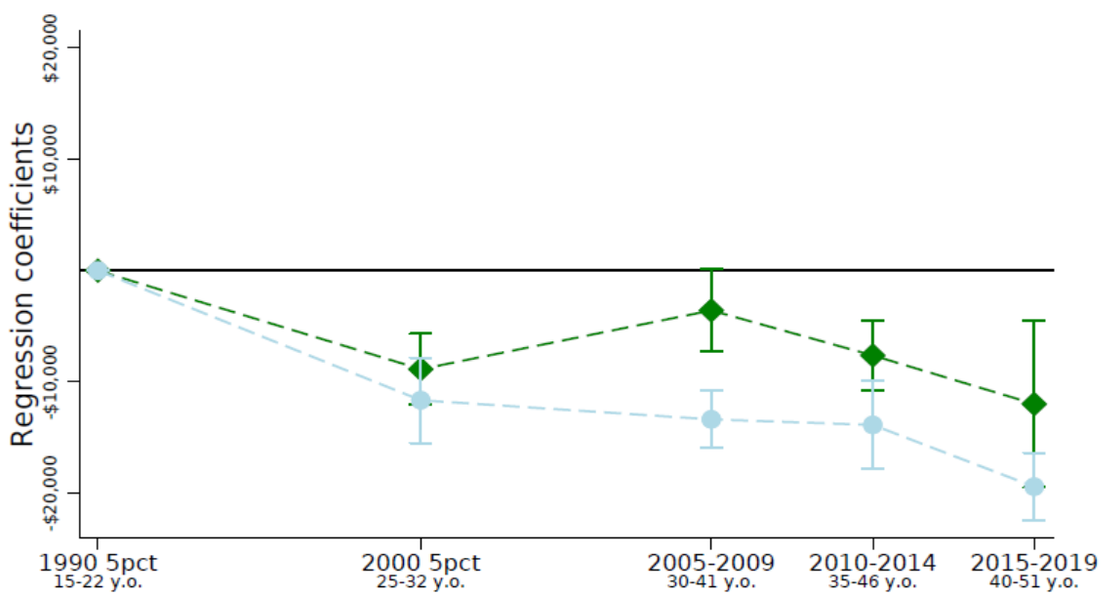

Notes: Data combine Decennial Censuses from 1990, 2000, and the 2005-2009, 2010-2014, and 2015-2019 American Community Surveys. Ages of group in each time period are included in text below x-axis. Coefficients are measured relative to US natives. Regression controls include gender control, a linear age term, and state fixed effects. Regressions are unweighted and report 95 percentile confidence intervals with standard errors clustered by state.

Figure 2b: Wages and income of young vs. older arrivals relative to all US natives

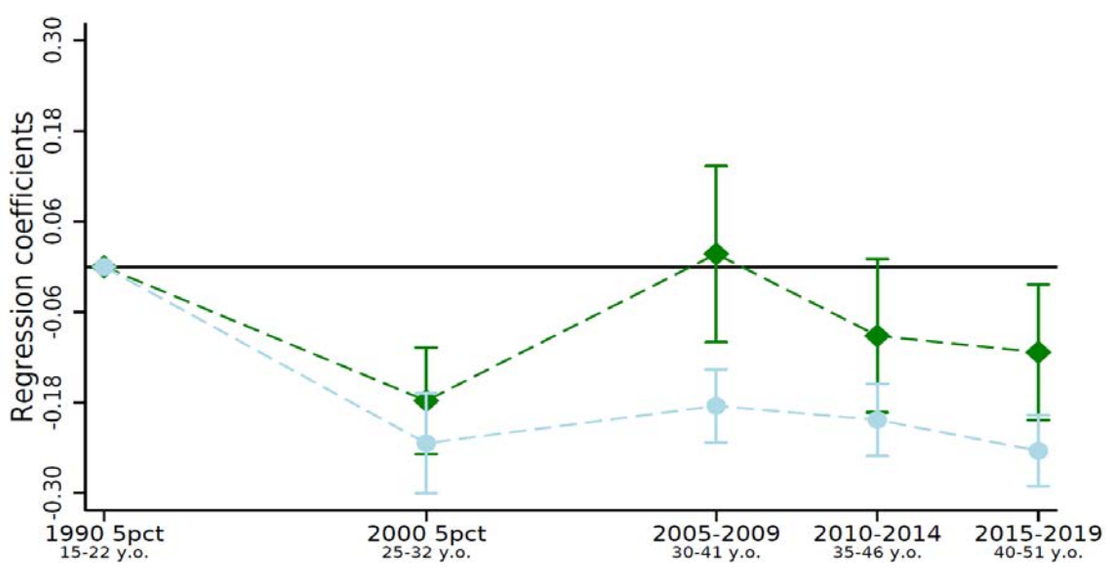
A. Linear income from wages



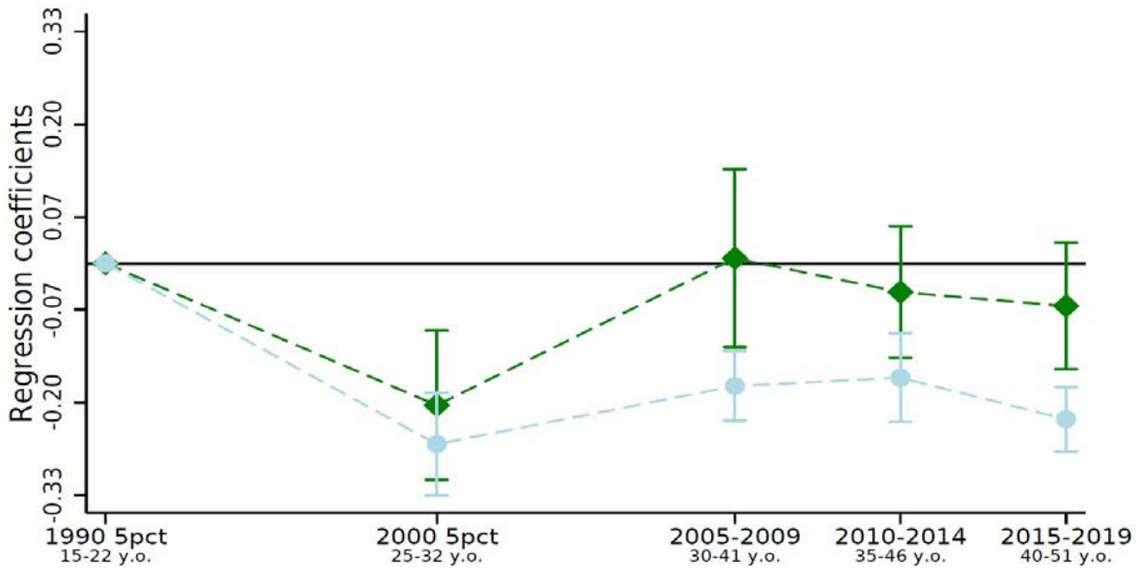

C. Linear total income




B. Log income from wages

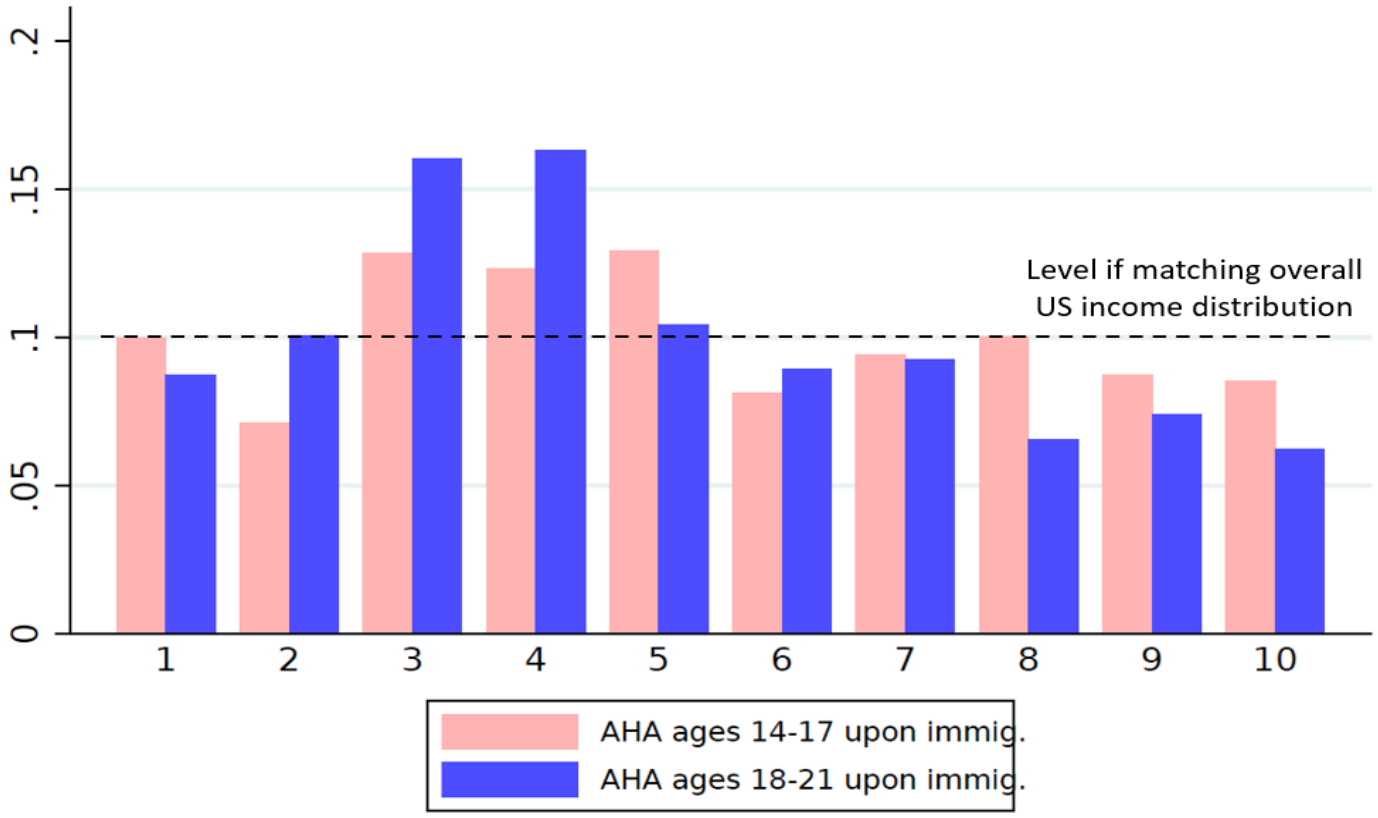



D. Log total income



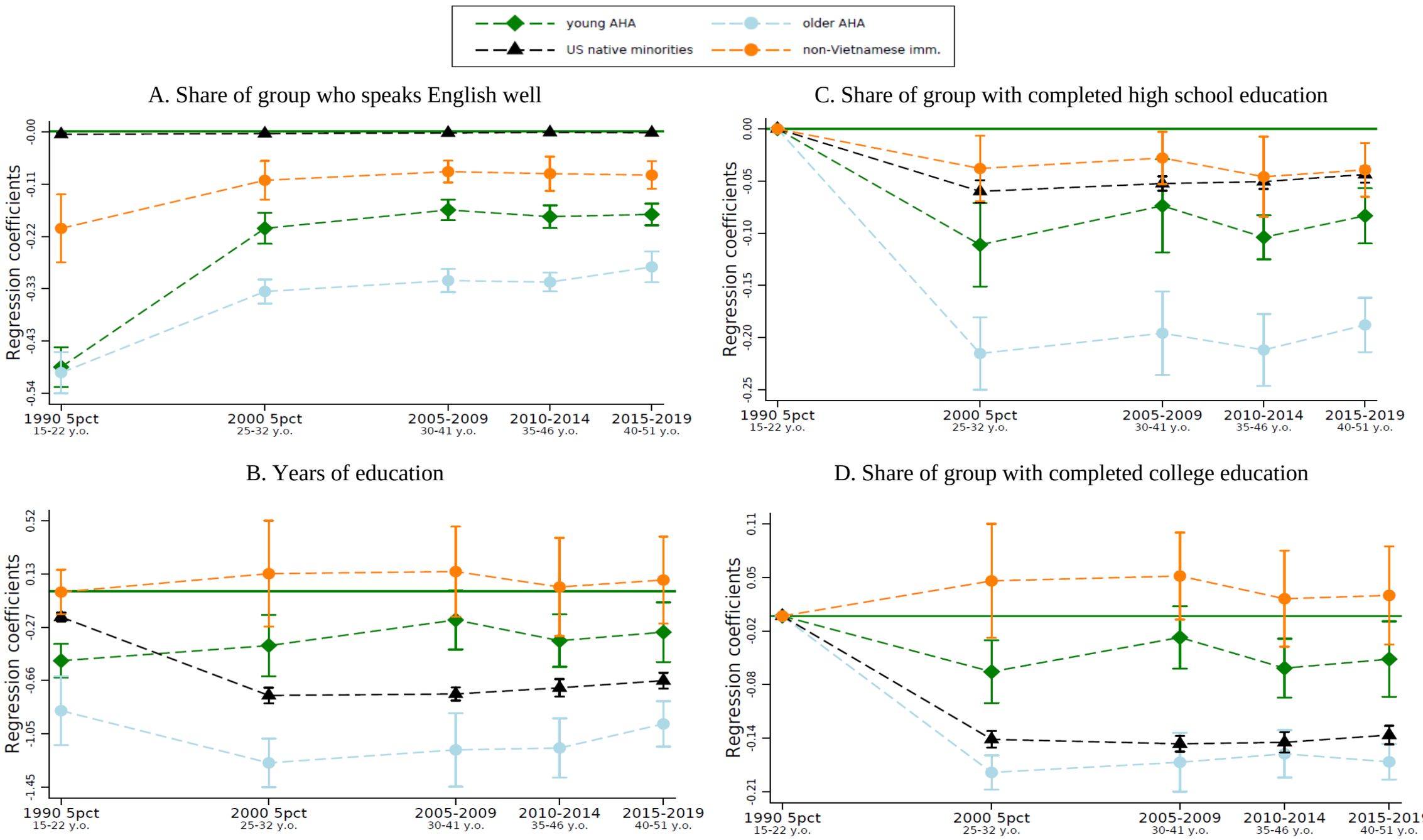

Notes: See Figure 2a.

Figure 3: Distribution by US income deciles in 2015-2019



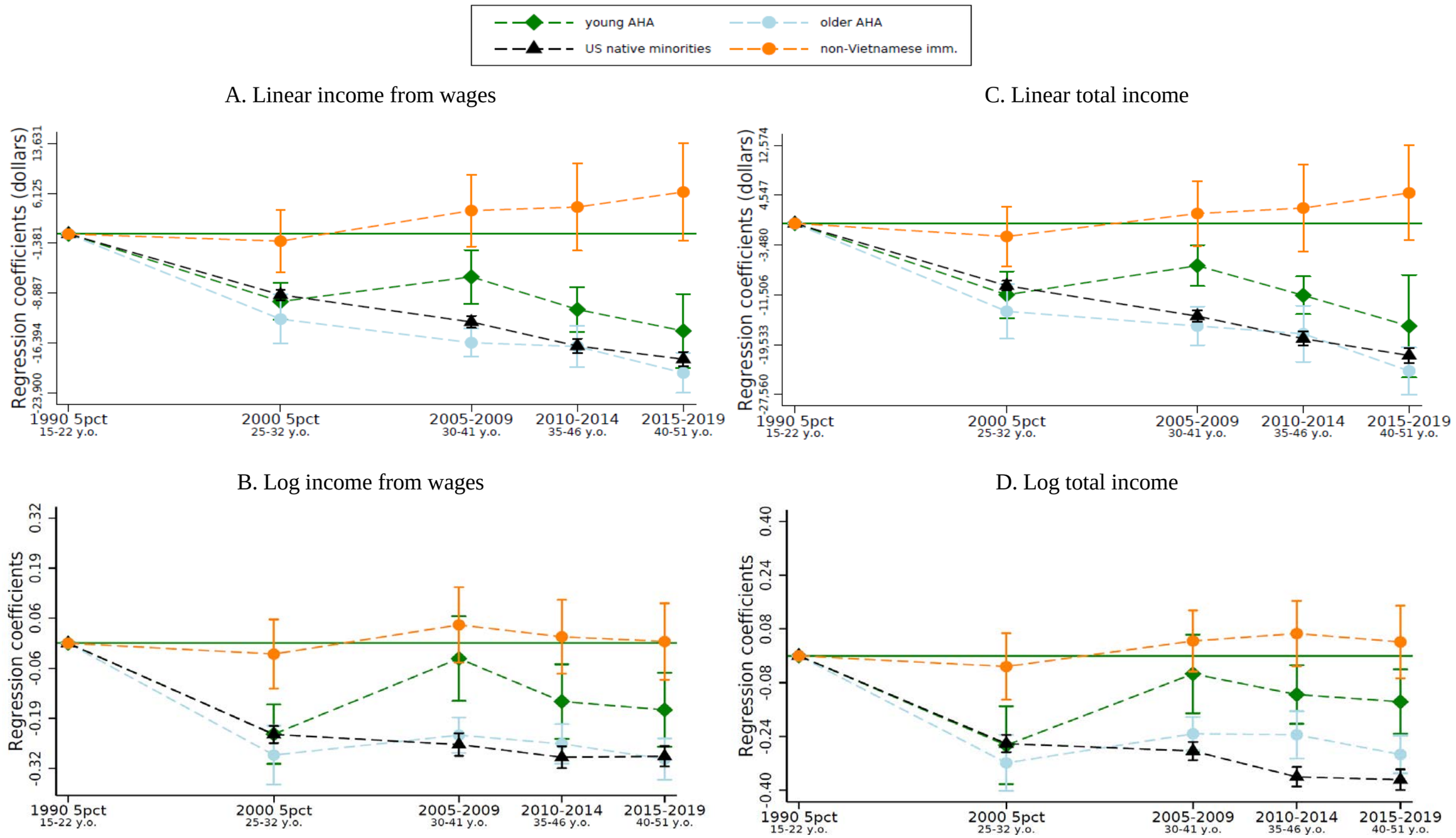

Notes: Data plot distributions of young and older arrivals by income decile in 2015-2019 American Community Survey.

# Figure 4a: Extended analysis of language proficiency and schooling relative to white US natives




Notes: See Figure 2a. The reference group in these graphs is white US natives of similar ages as AHA immigrants. The non-Vietnamese immigrant comparison group includes immigrants to the United States at the same time and age range as the AHA wave from 30 countries of similar 1988 GDP per capita to Vietnam and having a non-English native language.

# Figure 4b: Extended analysis of wages and income relative to white US natives




Notes: See Figure 4a.

Table 1: Comparison of young and older immigrants in 1990

| | | Young | Older | p-value |
|---|---|---|---|---|
| | | (1) | (2) | (3) |
| | | A. Personal traits | | |
| 1 | Share who speaks English well | 50.41% | 50.50% | 0.981 |
| 2 | Years of education | 9.64 | 10.87 | 0.000 |
| 3 | Share employed | 4.16% | 31.96% | 0.000 |
| 4 | Share unemployed | 2.77% | 5.93% | 0.054 |
| 5 | Share not in labor force | 93.07% | 62.10% | 0.000 |
| | | B. Family traits | | |
| 6 | Average total household income (2021$) | $42,874 | $52,456 | 0.011 |
| 7 | …relative to MSA average shown in Panel C | 44.89% | 54.21% | |
| 8 | Average home value | $265,957 | $296,711 | 0.154 |
| 9 | …relative to MSA average shown in Panel C | 73.05% | 79.31% | |
| 10 | Average welfare support | $1,007 | $444 | 0.032 |
| 11 | …relative to MSA average shown in Panel C | 258.78% | 116.06% | |
| 12 | Share obtaining welfare support | 14.58% | 6.49% | 0.002 |
| 13 | …relative to MSA average shown in Panel C | 451.58% | 202.97% | |
| 14 | Avg. number of people in family unit | 5.23 | 5.13 | 0.635 |
| 15 | Share group quarters | 1.74% | 2.65% | 0.415 |
| 16 | Share head of households in family with trait: | | | |
| 17 | …less than high-school education | 39.60% | 34.87% | 0.183 |
| 18 | …high-school / some college | 47.15% | 50.21% | 0.404 |
| 19 | …college degree | 11.51% | 12.27% | 0.761 |
| 20 | …speaks English well | 45.85% | 50.37% | 0.221 |
| 21 | …in labor force and employed | 54.58% | 58.11% | 0.329 |
| 22 | Share of households with the trait: | | | |
| 23 | …Mother is present (social or biological) | 61.70% | 52.28% | 0.009 |
| 24 | …Father is present (social or biological) | 52.93% | 48.53% | 0.228 |
| 25 | …Own siblings are present (social or biological) | 60.85% | 54.19% | 0.071 |
| 26 | …US-born native as head or spouse of head | 8.10% | 4.69% | 0.117 |
| 27 | …Father is US-born native and Vietnam War veteran | 1.07% | 0.62% | 0.500 |
| 28 | …Adult over age 30 is present | 89.37% | 83.44% | 0.024 |
| 29 | Father's age range | [22,71] | [22,72] | |
| 30 | Mother's age range | [24,66] | [28,68] | |
| | | C. Location traits of MSA | | |
| 31 | Population | 4,822,049 | 4,910,300 | 0.788 |
| 32 | Share in AHA cluster site | 78.68% | 83.04% | 0.149 |
| 33 | Avg. household income | $95,517 | $96,756 | 0.214 |
| 34 | Avg. wage earnings | $33,844 | $34,348 | 0.204 |
| 35 | Avg. home value | $364,060 | $374,106 | 0.376 |
| 36 | Avg. welfare support | $389 | $383 | 0.657 |
| 37 | Share obtaining welfare support | 3.23% | 3.20% | 0.677 |
| 38 | Share of age 21+ who are college educated | 24.25% | 24.79% | 0.200 |
| 39 | Share in California | 44.34% | 44.22% | 0.972 |
| 40 | Share of VNM immig. married to VNM | 85.17% | 85.35% | 0.847 |
| 41 | Resides in PUMA with most Vietnamese | 22.86% | 24.13% | 0.722 |

Notes: Table compares traits of 358 young immigrants (representing 7,300 immigrants using person weights) in 1990 who arrived to the United States at 14-17 years old compared to 537 older immigrants (representing 10,851 immigrants using person weights) who arrived at 18-21 years old. Tabulated values use survey weights. Dollar values have been converted into 2021 equivalent figures. Total household income in Row 6 excludes any earning from focal AHA individual.

Table 2: Comparison of young versus older immigrants in 2015-2019 American Community Survey

| | | Regressions with base controls | | | Regressions adding controls for education and fluency | | | | Mean values | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Coeff. | SE | Adj R2 | Coeff. | SE | Adj R2 | n | Young | Older |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1 | (0,1) Speaks English well | 0.092 | (0.018) +++ | 0.020 | n.a. | | | 2924 | 83.15% | 72.13% |
| 2 | Years of education | 0.611 | (0.096) +++ | 0.052 | n.a. | | | 2661 | 13.68 | 13.07 |
| 3 | (0,1) High school completion | 0.086 | (0.013) +++ | 0.025 | n.a. | | | 2924 | 86.24% | 77.35% |
| 4 | (0,1) College completion | 0.097 | (0.023) +++ | 0.046 | n.a. | | | 2924 | 35.75% | 23.57% |
| 5 | (0,1) Employed | -0.006 | (0.024) | 0.018 | -0.016 | (0.027) | 0.028 | 2924 | 83.97% | 84.80% |
| 6 | (0,1) Unemployed | -0.008 | (0.004) + | -0.004 | -0.007 | (0.005) | -0.004 | 2924 | 1.33% | 2.87% |
| 7 | (0,1) Not in labor force | 0.014 | (0.022) | 0.029 | 0.023 | (0.025) | 0.039 | 2924 | 14.70% | 12.33% |
| 8 | Total personal income (2021$) | $7323 | (2908) ++ | 0.046 | $2126 | (3537) | 0.210 | 2924 | $51,978 | $45,662 |
| 9 | Log total personal income | 0.131 | (0.041) +++ | 0.039 | 0.019 | (0.049) | 0.187 | 2652 | 10.6 | 10.4 |
| 10 | Wage and salary income | $6734 | (2108) +++ | 0.048 | $1532 | (2195) | 0.221 | 2924 | $46,866 | $40,742 |
| 11 | Log wage and salary income | 0.115 | (0.040) +++ | 0.047 | -0.003 | (0.053) | 0.227 | 2251 | 10.6 | 10.5 |
| 12 | (0,1) Married | 0.019 | (0.018) | 0.005 | 0.007 | (0.017) | 0.014 | 2924 | 75.28% | 73.18% |
| 13 | …To college educated spouse | 0.066 | (0.022) +++ | 0.016 | 0.021 | (0.029) | 0.185 | 2924 | 27.39% | 21.00% |
| 15 | …To non Vietnamese spouse | 0.042 | (0.012) +++ | 0.007 | 0.033 | (0.013) ++ | 0.018 | 2924 | 10.91% | 8.11% |
| 14 | …To US native spouse | 0.020 | (0.010) + | 0.016 | 0.014 | (0.010) | 0.026 | 2924 | 4.90% | 3.59% |
| 16 | (0,1) Home ownership | 0.005 | (0.025) | 0.022 | -0.015 | (0.031) | 0.063 | 2875 | 80.40% | 80.32% |
| 17 | Home value | $69,617 | (17741) +++ | 0.246 | $49,634 | (14176) +++ | 0.286 | 2400 | $416,375 | $397,878 |
| 18 | Log home value | 0.095 | (0.033) +++ | 0.276 | 0.045 | (0.032) | 0.317 | 2400 | 12.7 | 12.6 |
| 19 | Monthly gross rent paid | $70.0 | (38.5) + | 0.107 | $72.6 | (40.2) + | 0.120 | 439 | $1,536 | $1,466 |
| 20 | (0,1) Resides in PUMA with most VNM | -0.028 | (0.029) | 0.024 | -0.024 | (0.028) | 0.028 | 2645 | 16.35% | 17.79% |
| 21 | Per capita share of Vietnamese in PUMA | -0.001 | (0.002) | 0.525 | -0.001 | (0.001) | 0.525 | 2645 | 0.114 | 0.103 |

Notes: Table reports regression results using the 2015-2019 ACS files. The coefficients, standard errors, and adjusted R-squared values are from an indicator variable for a young AHA immigrant arrival in 1989-1995 at 14-17 years old compared to the reference category of those arriving at 18-21 years old. Base controls include state fixed effects, gender, and a linear term in age. Education controls include indicator variables for completing high school and college. Fluency control is an indicator variable for speaking English well. Regressions are unweighted and report standard errors clustered by state. +++ = 1%, ++ = 5%, and + = 10% statistical significance.

Table 3a: Base analysis using disaggregated age at arrival bins compared to immigrants 20-21 years old at arrival

| | | 14-15 years old at arrival | | 16-17 years old at arrival | | 18-19 years old at arrival | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Coeff. | SE | Coeff. | SE | Coeff. | SE | Adj R2 | n |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | (0,1) Speaks English well | 0.151 | (0.022) +++ | 0.112 | (0.016) +++ | 0.050 | (0.016) +++ | 0.022 | 2924 |
| 2 | Years of education | 1.004 | (0.191) +++ | 0.596 | (0.117) +++ | 0.115 | (0.070) | 0.053 | 2661 |
| 3 | (0,1) High school completion | 0.179 | (0.029) +++ | 0.094 | (0.022) +++ | 0.043 | (0.021) ++ | 0.028 | 2924 |
| 4 | (0,1) College completion | 0.141 | (0.044) +++ | 0.103 | (0.030) +++ | 0.024 | (0.017) | 0.046 | 2924 |
| 5 | (0,1) Employed | 0.032 | (0.023) | -0.017 | (0.022) | -0.004 | (0.021) | 0.019 | 2924 |
| 6 | (0,1) Unemployed | -0.007 | (0.006) | -0.002 | (0.004) | 0.009 | (0.007) | -0.004 | 2924 |
| 7 | (0,1) Not in labor force | -0.026 | (0.022) | 0.020 | (0.022) | -0.005 | (0.015) | 0.029 | 2924 |
| 8 | Total personal income (2021$) | $17,297 | (4072) +++ | $8,234 | (3350) ++ | $4,836 | (1890) ++ | 0.048 | 2924 |
| 9 | Log total personal income | 0.302 | (0.062) +++ | 0.146 | (0.056) ++ | 0.082 | (0.035) ++ | 0.040 | 2652 |
| 10 | Wage and salary income | $17,028 | (4729) +++ | $7,067 | (2514) +++ | $4,100 | (1713) ++ | 0.050 | 2924 |
| 11 | Log wage and salary income | 0.385 | (0.079) +++ | 0.125 | (0.053) ++ | 0.109 | (0.044) ++ | 0.051 | 2251 |
| 12 | (0,1) Married | 0.006 | (0.034) | 0.027 | (0.022) | 0.007 | (0.013) | 0.004 | 2924 |
| 13 | …To college educated spouse | 0.099 | (0.048) ++ | 0.061 | (0.023) +++ | 0.005 | (0.012) | 0.016 | 2924 |
| 15 | …To non Vietnamese spouse | 0.073 | (0.030) ++ | 0.032 | (0.014) ++ | -0.003 | (0.013) | 0.007 | 2924 |
| 14 | …To US native spouse | 0.053 | (0.024) ++ | 0.004 | (0.009) | -0.012 | (0.008) | 0.018 | 2924 |
| 16 | (0,1) Home ownership | -0.014 | (0.021) | -0.004 | (0.022) | -0.019 | (0.019) | 0.022 | 2875 |
| 17 | Home value | $135,436 | (30059) +++ | $70,236 | (18009) +++ | $24,524 | (14714) | 0.248 | 2400 |
| 18 | Log home value | 0.203 | (0.075) +++ | 0.102 | (0.030) +++ | 0.048 | (0.019) ++ | 0.277 | 2400 |
| 19 | Monthly gross rent paid | $67.2 | (178.6) | $100.3 | (41.4) ++ | $38.7 | (60.8) | 0.103 | 439 |
| 20 | (0,1) Resides in PUMA with most VNM | -0.027 | (0.033) | -0.028 | (0.037) | -0.000 | (0.015) | 0.023 | 2645 |
| 21 | Per capita share of Vietnamese in PUMA | 0.009 | (0.002) +++ | 0.000 | (0.001) | 0.006 | (0.002) ++ | 0.525 | 2645 |

Notes: See Columns 1-3 of Table 2. Table reports baseline regression results using four age at arrival bins. Individuals arriving aged 20-21 are the reference category.

Table 3b: Table 3a adding controls for education and fluency

| | | 14-15 years old at arrival | | 16-17 years old at arrival | | 18-19 years old at arrival | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Coeff. | SE | Coeff. | SE | Coeff. | SE | Adj R2 | n |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | (0,1) Speaks English well | n.a. | | | | | | | |
| 2 | Years of education | n.a. | | | | | | | |
| 3 | (0,1) High school completion | n.a. | | | | | | | |
| 4 | (0,1) College completion | n.a. | | | | | | | |
| 5 | (0,1) Employed | 0.017 | (0.025) | -0.029 | (0.025) | -0.008 | (0.019) | 0.028 | 2924 |
| 6 | (0,1) Unemployed | -0.006 | (0.006) | -0.001 | (0.004) | 0.009 | (0.007) | -0.004 | 2924 |
| 7 | (0,1) Not in labor force | -0.012 | (0.024) | 0.030 | (0.025) | -0.001 | (0.014) | 0.039 | 2924 |
| 8 | Total personal income (2021$) | $9505 | (3551) ++ | $2603 | (4021) | $3247 | (1595) ++ | 0.211 | 2924 |
| 9 | Log total personal income | 0.123 | (0.046) ++ | 0.018 | (0.062) | 0.035 | (0.033) | 0.187 | 2652 |
| 10 | Wage and salary income | $9266 | (3716) ++ | $1445 | (2834) | $2549 | (1557) | 0.221 | 2924 |
| 11 | Log wage and salary income | 0.184 | (0.063) +++ | -0.004 | (0.062) | 0.062 | (0.042) | 0.228 | 2251 |
| 12 | (0,1) Married | -0.012 | (0.035) | 0.014 | (0.021) | 0.002 | (0.013) | 0.013 | 2924 |
| 13 | …To college educated spouse | 0.033 | (0.055) | 0.012 | (0.031) | -0.009 | (0.015) | 0.184 | 2924 |
| 15 | …To non Vietnamese spouse | 0.060 | (0.031) + | 0.023 | (0.013) + | -0.006 | (0.012) | 0.018 | 2924 |
| 14 | …To US native spouse | 0.045 | (0.024) + | -0.003 | (0.010) | -0.014 | (0.008) + | 0.028 | 2924 |
| 16 | (0,1) Home ownership | -0.048 | (0.022) ++ | -0.028 | (0.028) | -0.029 | (0.018) | 0.063 | 2875 |
| 17 | Home value | $103,705 | (31056) +++ | $47,425 | (15523) +++ | $15,757 | (15105) | 0.287 | 2400 |
| 18 | Log home value | 0.122 | (0.073) | 0.042 | (0.030) | 0.023 | (0.020) | 0.317 | 2400 |
| 19 | Monthly gross rent paid | $74.3 | (176.8) | $100.5 | (43.8) ++ | $37.7 | (62.9) | 0.116 | 439 |
| 20 | (0,1) Resides in PUMA with most VNM | -0.021 | (0.032) | -0.024 | (0.035) | 0.001 | (0.015) | 0.028 | 2645 |
| 21 | Per capita share of Vietnamese in PUMA | 0.009 | (0.003) +++ | 0.001 | (0.001) | 0.006 | (0.002) ++ | 0.525 | 2645 |

Notes: See Columns 4-6 of Table 2. Table reports regressions adding controls for education and fluency while using four age at arrival bins. Individuals arriving aged 20-21 are the reference category.

Table 4: Occupations of young and older immigrants in 2015-2019 ACS

| | | Young | Older | Differential |
|---|---|---|---|---|
| | | (1) | (2) | (3) |
| | | A. Percent distribution over broad occupational categories | | |
| 1 | Computer, Engineering, and Science | 16.37 | 12.85 | 3.52 |
| 2 | Healthcare Practitioners and Technical | 7.63 | 4.23 | 3.40 |
| 3 | Sales and Related | 6.26 | 4.27 | 1.99 |
| 4 | Education, Legal, Comm. Service, Arts, Media | 3.86 | 2.45 | 1.41 |
| 5 | Installation, Maintenance, and Repair | 3.50 | 2.75 | 0.75 |
| 6 | Office and Administrative Support | 6.11 | 5.53 | 0.58 |
| 7 | Farming, Fishing, and Forestry | 0.44 | 0.44 | - |
| 8 | Management, Business, and Financial | 9.51 | 9.69 | (0.18) |
| 9 | Construction and Extraction | 1.54 | 2.60 | (1.06) |
| 10 | Transportation and Material Moving | 2.96 | 4.24 | (1.28) |
| 11 | Production | 12.47 | 16.88 | (4.41) |
| 12 | Service | 29.36 | 34.07 | (4.71) |
| | | B. Detailed occupations with highest over-representation of young arrivals | | |
| 13 | Pharmacists | 2.72 | 1.13 | 1.59 |
| 14 | Civil engineers | 1.70 | 0.43 | 1.27 |
| 15 | Dentists | 1.19 | 0.38 | 0.81 |
| 16 | Elementary and middle school teachers | 1.02 | 0.27 | 0.75 |
| 17 | Automotive service technicians and mechanics | 1.70 | 0.97 | 0.73 |
| | | C. Detailed occupations with highest under-representation of young arrivals | | |
| 18 | Manicurists and pedicurists | 15.62 | 18.42 | (2.80) |
| 19 | Other personal appearance workers | 0.17 | 0.97 | (0.80) |
| 20 | Stockers and order fillers | 0.00 | 0.70 | (0.70) |
| 21 | Comp. num. controlled tool operators/programmers | 0.17 | 0.76 | (0.59) |
| 22 | Sewing machine operators | 0.17 | 0.65 | (0.48) |
| | | D. Detailed occupations with supervisory or managerial key words | | |
| 23 | 10 occupations related to first-line supervisors | 5.27 | 4.10 | 1.17 |
| 24 | 22 occupations related to management | 5.61 | 5.65 | (0.04) |

Notes: See Table 2. Table compares occupations of employed AHA immigrants in 2015-2019.

# Table 5: Dynamic wage analysis in LEHD

| | Full sample regression with basic controls | | Column 1 with education x year and language fluency x year controls | | Sample with LEHD start ≤ 3 years of arrival to US and first located in cluster city | | Column 3 with education x year and language fluency x year controls | |
|---|---|---|---|---|---|---|---|---|
| | (1) | | (2) | | (3) | | (4) | |
| | A. Log annual earnings among employed across all jobs | | | | | | | |
| (0,1) Young arrival x | | | | | | | | |
| 1993-1994 | -0.215 | (0.091) ++ | -0.152 | (0.100) | -0.129 | (0.125) | -0.070 | (0.131) |
| 1995-1999 | -0.046 | (0.027) + | -0.024 | (0.029) | -0.030 | (0.031) | 0.018 | (0.026) |
| 2000-2004 | 0.191 | (0.036) +++ | 0.101 | (0.025) +++ | 0.316 | (0.062) +++ | 0.236 | (0.051) +++ |
| 2005-2009 | 0.175 | (0.029) +++ | 0.061 | (0.023) +++ | 0.256 | (0.057) +++ | 0.125 | (0.043) +++ |
| 2010-2014 | 0.152 | (0.025) +++ | 0.025 | (0.017) | 0.207 | (0.074) +++ | 0.067 | (0.062) |
| Adjusted R2 | 0.297 | | 0.366 | | 0.344 | | 0.400 | |
| | B. Raw annual earnings among employed in constant 2014 dollars | | | | | | | |
| (0,1) Young arrival x | | | | | | | | |
| 1993-1994 | -$817 | (301) +++ | -$455 | (345) | $33 | (289) | $107 | (322) |
| 1995-1999 | $366 | (322) | $208 | (401) | $860 | (256) +++ | $764 | (280) +++ |
| 2000-2004 | $5,183 | (537) +++ | $2,602 | (298) +++ | $5,666 | (1253) +++ | $5,216 | (1132) +++ |
| 2005-2009 | $6,881 | (599) +++ | $2,483 | (370) +++ | $5,389 | (1708) +++ | $4,630 | (1592) +++ |
| 2010-2014 | $6,795 | (829) +++ | $928 | (467) ++ | $2,874 | (2683) | $1,978 | (2570) |
| Adjusted R2 | 0.270 | | 0.436 | | 0.444 | | 0.458 | |

Notes: Data combines LEHD files from 1993-2014. The sample is limited to immigrants arriving at ages 14-21, living in an LEHD state where data is available no later than 1993, and currently earning at least $250 per quarter in their main job. Coefficients for young arrivals (interacted with year dummies) are measured relative to older arrivals. Regression controls include gender (interacted with year dummies), a linear age term (interacted with year dummies), and state x year fixed effects. Regressions are unweighted and cluster standard errors by state. In Columns 2 and 4, education (high school and college dummies) and language fluency are measured only at the time of an individual's response in Census or ACS. Columns 1 and 2 contain 110,000 observations; Columns 3 and 4 contain 50,500 observations (rounded per Census Bureau disclosure requirements). In Panel B, values above the 99th percentile are top coded to the percentile value. Disclosure conducted under FSRDC Project Number 1571. (CBDRB-FY23-P1571-R10504).

Table 6: Career histories across 2000-2014 LEHD

| | | Regressions with base controls | | | Mean values | |
|---|---|---|---|---|---|---|
| | | Coeff. | SE | Adj R2 | Young | Older |
| | | (1) | (2) | (3) | (4) | (5) |
| 1 | Share of quarters employed in LEHD | 0.1229 | (0.010) +++ | 0.223 | 68.6% | 66.5% |
| 2 | … in SEINs of 0-20 employees | -0.0269 | (0.011) ++ | 0.030 | 23.6% | 27.7% |
| 3 | … in SEINs of 21-1000 employees | -0.0407 | (0.011) +++ | 0.021 | 42.7% | 45.6% |
| 4 | … in SEINs of 1001+ employees | 0.0676 | (0.010) +++ | 0.021 | 33.7% | 26.8% |
| 5 | … in SEINs that are high-tech NAICS (NSF definition) | -0.0084 | (0.008) | 0.042 | 23.3% | 23.0% |
| 6 | … in SEINs in NAICS 812113 (nail care) | -0.0174 | (0.004) +++ | 0.033 | 5.3% | 8.1% |
| 7 | … in SEINs that have mean wages higher than state median | 0.0626 | (0.016) +++ | 0.060 | 79.2% | 72.3% |
| 8 | … in SEINs where focal individual is top earner | 0.0012 | (0.007) | 0.024 | 6.0% | 7.4% |
| 9 | … in SEINs where a co-ethnic individual is top earner | -0.0242 | (0.012) ++ | 0.038 | 17.4% | 20.9% |
| 10 | Average quarterly earnings when employed | $2,289 | (243) +++ | 0.055 | $10,170 | $8,722 |
| 11 | … Log average quarterly earnings when employed | 0.2662 | (0.036) +++ | 0.078 | 8.79 | 8.64 |
| 12 | … Average percentile of individual in SEIN wage distribution | 4.492 | (0.331) +++ | 0.053 | 49.35 | 47.59 |
| 13 | Average share of employees who are co-ethnic | -0.0521 | (0.012) +++ | 0.053 | 19.3% | 24.4% |
| 14 | Total number of SEINs worked for during period | 0.2503 | (0.090) +++ | 0.035 | 3.17 | 3.02 |
| 15 | … Average quarterly duration of employment at SEIN | 1.561 | (0.290) +++ | 0.032 | 15.69 | 15.92 |
| 16 | Percentage change in earnings for 2012-14 vs. 2000-02 | 0.4930 | (0.044) +++ | 0.015 | 1.262 | 0.9373 |
| 17 | Share of times when annual earnings change is | | | | | |
| 18 | … below -20% | -0.0279 | (0.004) +++ | 0.053 | 13.3% | 13.9% |
| 19 | … above +20% | 0.0254 | (0.004) +++ | 0.028 | 21.4% | 20.3% |
| 20 | … between -20% and +20% | 0.0576 | (0.004) +++ | 0.062 | 43.1% | 41.7% |
| 21 | … missing because gap between spells > 1 year | -0.0550 | (0.005) +++ | 0.064 | 22.2% | 24.1% |
| 22 | Percentage change in SEIN wage for 2012-12 vs. 2000-02 | 0.0697 | (0.010) +++ | 0.007 | 19.8% | 15.5% |

Notes: Table reports regression results that aggregate 2000-2014 LEHD files. Estimations contain 8,500 observations (rounded per Census Bureau disclosure requirements). The coefficients, standard errors and adjusted R2 values are from an indicator variable for a young arrival in 1989-1995 at 14-17 years old, compared to the reference category of those arriving at 18-21 years old. Base controls include state fixed effects of the first LEHD state observed for an individual at or after 2000, gender, and a linear term in age. Regressions are unweighted and report standard errors clustered by state. Included establishment-worker observations must exceed $250 in quarterly earnings and be the primary job of the individual. The 2012-14 vs. 2000-02 changes are top coded at the 99th percentile. Disclosure conducted under FSRDC Project Number 1571. (CBDRB-FY23-P1571-R10504).

Table 7: Explanatory power of education, fluency, and initial conditions for career histories across 2000-2014 LEHD

| | | Regressions with base controls | | | Regressions adding controls for education and fluency | | | Regressions adding controls for education, fluency, initial city being cluster site, and traits of initial employer | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Coeff. | SE | Adj R2 | Coeff. | SE | Adj R2 | Coeff. | SE | Adj R2 |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1 | Share of quarters employed in LEHD | 0.1229 | (0.010) +++ | 0.223 | 0.0982 | (0.007) +++ | 0.257 | 0.0960 | (0.006) +++ | 0.266 |
| 2 | … in SEINs of 0-20 employees | -0.0269 | (0.011) ++ | 0.030 | 0.0039 | (0.007) | 0.077 | 0.0119 | (0.006) ++ | 0.170 |
| 3 | … in SEINs of 21-1000 employees | -0.0407 | (0.011) +++ | 0.021 | -0.0329 | (0.008) +++ | 0.023 | -0.0359 | (0.008) +++ | 0.046 |
| 4 | … in SEINs of 1001+ employees | 0.0676 | (0.010) +++ | 0.021 | 0.0289 | (0.008) +++ | 0.090 | 0.0240 | (0.010) ++ | 0.116 |
| 5 | … in SEINs that are high-tech NAICS (NSF definition) | -0.0084 | (0.008) | 0.042 | -0.0298 | (0.008) +++ | 0.073 | -0.0321 | (0.008) +++ | 0.070 |
| 6 | … in SEINs in NAICS 812113 (nail care) | -0.0174 | (0.004) +++ | 0.033 | -0.0012 | (0.005) | 0.059 | 0.0012 | (0.006) | 0.115 |
| 7 | … in SEINs that have mean wages higher than state median | 0.0626 | (0.016) +++ | 0.060 | 0.0193 | (0.011) + | 0.144 | 0.0136 | (0.008) + | 0.193 |
| 8 | … in SEINs where focal individual is top earner | 0.0012 | (0.007) | 0.024 | 0.0085 | (0.005) + | 0.037 | 0.0105 | (0.004) ++ | 0.072 |
| 9 | … in SEINs where a co-ethnic individual is top earner | -0.0242 | (0.012) ++ | 0.038 | 0.0090 | (0.007) | 0.098 | 0.0154 | (0.004) +++ | 0.205 |
| 10 | Average quarterly earnings when employed | $2,289 | (243) +++ | 0.055 | $1,008 | (119) +++ | 0.239 | $949 | (113) +++ | 0.249 |
| 11 | … Log average quarterly earnings when employed | 0.2662 | (0.036) +++ | 0.078 | 0.1287 | (0.018) +++ | 0.243 | 0.1204 | (0.014) +++ | 0.261 |
| 12 | … Average percentile of individual in SEIN wage distr. | 4.492 | (0.331) +++ | 0.053 | 3.284 | (0.235) +++ | 0.077 | 3.251 | (0.239) +++ | 0.078 |
| 13 | Average share of employees who are co-ethnic | -0.0521 | (0.012) +++ | 0.053 | -0.0158 | (0.006) ++ | 0.158 | -0.0106 | (0.003) +++ | 0.249 |
| 14 | Total number of SEINs worked for during period | 0.2503 | (0.090) +++ | 0.035 | 0.1889 | (0.103) + | 0.042 | 0.1828 | (0.102) + | 0.046 |
| 15 | … Average quarterly duration of employment at SEIN | 1.561 | (0.290) +++ | 0.032 | 1.182 | (0.396) +++ | 0.036 | 1.136 | (0.439) +++ | 0.039 |
| 16 | Percentage change in earnings for 2012-14 vs. 2000-02 | 0.4930 | (0.044) +++ | 0.015 | 0.3377 | (0.041) +++ | 0.042 | 0.3332 | (0.041) +++ | 0.043 |
| 17 | Share of times when annual earnings change is | | | | | | | | | |
| 18 | … below -20% | -0.0279 | (0.004) +++ | 0.053 | -0.0219 | (0.004) +++ | 0.066 | -0.0218 | (0.004) +++ | 0.066 |
| 19 | … above +20% | 0.0254 | (0.004) +++ | 0.028 | 0.0247 | (0.005) +++ | 0.028 | 0.0248 | (0.005) +++ | 0.028 |
| 20 | … between -20% and +20% | 0.0576 | (0.004) +++ | 0.062 | 0.0371 | (0.005) +++ | 0.098 | 0.0350 | (0.005) +++ | 0.107 |
| 21 | … missing because gap between spells > 1 year | -0.0550 | (0.005) +++ | 0.064 | -0.0398 | (0.006) +++ | 0.086 | -0.0380 | (0.005) +++ | 0.096 |
| 22 | Percentage change in SEIN wage for 2012-12 vs. 2000-02 | 0.0697 | (0.010) +++ | 0.007 | 0.0411 | (0.011) +++ | 0.017 | 0.0420 | (0.012) +++ | 0.017 |

Notes: See Table 6. Education controls include indicator variables for completing high school and college. Fluency control is an indicator variable for speaking English well. The control for initial city being cluster site is measured through the LEHD. Controls for traits of initial employer include indicator variables for small Vietnamese-led firm, large Vietnamese-led firm, and small non-Vietnamese-led firm (with large non-Vietnamese-led firm being omitted category). Disclosure conducted under FSRDC Project Number 1571. (CBDRB-FY23-P1571-R10504).

# Appendix A: The Amerasian Homecoming Act

The Vietnam War and its aftermath led to the displacement of millions within Vietnam and across Southeast Asia. Despite this refugee crisis, few Vietnamese were allowed to migrate to America. As Saigon fell to North Vietnamese forces in April 1975, the US government passed the Indochina Migration and Refugee Act, a two-year evacuation and resettlement program facilitating a first wave of 130,000 Southeast Asian refugees to America, of which approximately 120,000 were from Vietnam (Ong Hing, 1992). As that program ended and hundreds of thousands of "boat people" continued to seek escape from Vietnam by sea, with estimates suggesting 10%-50% of them perishing during the journey (Wain, 1981; Zhou and Bankston, 2000), the United Nations High Commissioner for Refugees worked with Vietnam's government to develop the 1979 Orderly Departure Program (ODP). The ODP launched a second and larger wave of Vietnamese migration to America.

Within this humanitarian tragedy, the "Amerasians" held a contested and neglected place. Amerasians are the sons and daughters of US service members and civilian personnel in Southeast Asia during the war period.[15] As the war drew on, many US service members formed relationships with Vietnamese women. Some of these relationships were loving and long-term; others were transactional. Many relationships resulted in children, some unknown to their fathers. Portraits of these relationships in popular US media ranged from the musical *Miss Saigon* to the Stanley Kubrick film *Full Metal Jacket*. See Doan (2017) for discussion of the portrayal of the Amerasian story.

From a young age, Amerasians and their mothers were often treated as outcasts in Vietnam. As Amerasians were mostly born to non-Asian white or black fathers, the "otherness" of Amerasian children was often visible to an ethnically homogeneous Vietnamese public. Some Amerasians were seen as visible reminders of their mothers' lack of chastity, a value prized in Vietnamese society, and others as markers of relationships with the wartime enemy of North Vietnam. One Vietnamese saying proclaimed, "Children without a father are like a home without a roof" (Isenberg, 2020), and many sayings about the Amerasians were much worse.

[15] Excepting where otherwise noted, we use the term Amerasian just with respect to those from Vietnam. The official definition of Amerasian on the 2021 instructions form I-360 by the US Citizenship and Immigration Service is "born in Korea, Vietnam, Laos, Kampuchea [Cambodia], or Thailand after December 31, 1950, and before October 22, 1982, and was fathered by a U.S. citizen." (Source: https://www.uscis.gov/sites/default/files/document/forms/i-360instr.pdf). Others have also used the term to also include children of US service members in the Philippines and Japan.

Many Amerasians who lived with their mothers survived on the fringes of society; others were abandoned. Yet, few Amerasians made it to America during and immediately after the war, first and foremost because few US fathers knew of and/or would claim them.

Early interventions like 1975's "Operation Babylift" transported between 2,000 and 3,000 Amerasians out of Vietnam (Sachs, 2011), a tiny share of Amerasians born during the period of heavy US involvement in Vietnam. To a large degree, both Vietnam and the United States turned their back on the Amerasians in Vietnam except when using them for political negotiations.[16] Vietnam argued the children were American citizens, were not discriminated against, and should not be viewed as political refugees. The ODP only applied to refugees, and it did not initially include Amerasians as American family members or those with "close ties" to the United States. Amerasians were eventually included under the "close ties" category of the ODP, and Congress passed the Amerasian Immigration Act (AIA) in 1982 to grant immigration priority to the children of American fathers in Vietnam and four other Southeast Asian countries, but this too had limited impact (Robear, 1989).

One estimate placed the total immigration from ODP and the AIA at approximately 6,000 Amerasians and 11,000 relatives (Esper, 1989). Uptake was limited due to significant restrictions on accompanying relatives, with the AIA for example not permitting biological mothers to accompany admitted Amerasians, and the challenges of proving parenthood by a US service member. Many Amerasians did not know who their father was, and other families had destroyed evidence of their connection to US service members, including photographs and letters, as the Communists moved south and took power. Thomas (2019) further notes that many US veterans feared passage of the AIA and its potential implications for them. As relations between the United States and Vietnam further deteriorated during the 1980s and the ODP program was suspended, immigration hit new lows following the second wave and very little migration of Amerasians occurred (Robear, 1989; Thomas, 2021).

Le Van Minh's photo, however, would change the lives of many, sparking American support for Amerasian immigration. In October 1985, photographer Audrey Tiernan was working in Ho Chi Minh City for *Newsday,* a daily newspaper that mostly circulated in Long Island, NY. Tiernan felt a tug on her pant leg. "I thought it was a dog or a cat," she recalled. "I looked

[16] "The care and welfare of these unfortunate children ... has never been and is not now considered an area of government responsibility" – the U.S. Defense Department 1970. "Our society does not need these bad elements" – the Vietnamese director of social welfare in Ho Chi Minh City (formerly Saigon) a decade later. Source: Lamb (2009).

down and there was Minh. It broke my heart."[17] Minh was one of many Amerasians living on the streets, ridiculed like other Amerasians for having different skin colors and American-looking features. He had been stricken by polio and abandoned by his mother at age 10. He spent days begging on the streets with a friend and nights sleeping in an alleyway. Minh reached out to Tiernan, selling a flower he had created from the wrappers of cigarette packs.[18]

Tiernan's photo of Minh was printed in newspapers and broadcasted in TV specials about the plight of Amerasians. Appendix Figure 1 shows Tiernan's photo and later pictures of Minh. As news and images of the condition of Amerasian children spread around the United States, Americans began agitating for support of these children, seen by some as having been abandoned by the United States upon its withdrawal from Vietnam. Motivated by Tiernan's photo, four students from Huntington High School in Long Island began to circulate a petition in 1986 to bring Minh to the United States for medical attention. The students ultimately collected 27,000 signatures and asked their Democratic congressman, Representative Robert Mrazek, for help. Mrazek was an alumnus of Huntington High School with no prior connections to immigration policy.

In 1987, Mrazek flew to Ho Chi Minh City with the goal of helping Minh come to the United States for medical care. Yet, Mrazek was overwhelmed once he saw how many Amerasians were experiencing similar hardships to those of Minh. Lamb (2009) noted: "Some called him "Daddy." They tugged at his hand to direct him to the shuttered church where they lived. Another 60 or 70 Amerasians were camped in the yard. The refrain Mrazek kept hearing was, "I want to go to the land of my father."" Mrazek was able to secure Minh's migration to the United States, where he stayed with foster parents in Centerport, NY, and received medical treatment. Mrazek told the high school students who had created the petition that they were "bringing Le out of a life of misery to a new life in America" (Virag, 1987). As an adult, Minh moved to San Jose and worked as a newspaper distributor (Lamb, 2009).

Deeply moved by the experience, Mrazek worked with Republican Senator John McCain to introduce bipartisan legislation titled the Amerasian Homecoming Act (AHA). The AHA

[17] The next three paragraphs pull extensively from Lamb (2009) "Children of the Vietnam War". Source: https://www.smithsonianmag.com/travel/children-of-the-vietnam-war-131207347/

[18] Minh was born in September 1971 in Cam Ranh, the site of a U.S. naval base. Minh's American father "Joe" was a corporal in the US Army and spoke Vietnamese and his mother, Le Thi Ba, was a cook in the mess hall. According to Le Thi Ba, she dated Joe for over a year and he was present at Minh's birth. They lost contact after the Viet Cong invaded the area and she fled to Saigon with Minh (Luo, 2000).

was passed by Congress in 1987, took effect in March 1988, and was fully implemented by 1989 (Congress.gov). Despite its significant change in policy, the legislation received limited review due to it being contained in a Continuing Resolution required for approval of the federal budget (Thomas, 2021). Thomas (2021, p. 210) described the reaction of Rep. Ron Mazzoli, chairman of Immigration Subcommittee of the House Judiciary Committee: "When it appeared in the House as part of the appropriation bill, Mrazek faced harsh criticism from a furious Mazzoli, who assailed a bill created by a single member of the House that never had hearings and diverged from the policy standards for U.S. relations with Vietnam. However, Mazzoli could not remove the provision without rejecting the entire continuing resolution."

The AHA allowed Amerasians fathered by US service members in Vietnam during the years 1962-1975 to migrate to America. Critically, the AHA also allowed the immigration of immediate relatives of the Amerasian and reduced documentation requirements, lowering the earlier barriers to mobility. While the law did not officially declare Amerasians to be refugees, it provided them similar types of assistance. This included upfront travel assistance provide by International Organization for Migration to eliminate financial barriers. The law initially was set to expire in two years, but it was later extended through Foreign Operations, Export Financing, and Related Programs Appropriations Acts of 1990 and 1991.

The AHA led to a third surge of immigration from Vietnam, with one source at the time estimating 20,000 Amerasians and 50,000 family members resettled during 1989-1993 (Branigin, 1993). The US State Department reported that over 10,000 Amerasian visas were issued in 1989 alone (US State Department Report, 2013), and another source placed the number at 19,000 Amerasian visas (Lakshmanan, 2003). While it was possible to migrate under AHA during 1988, the slower implementation meant only 364 admissions (inclusive of accompanying family members) occurred. The figures for 1989 and 1990 were 8,721 and 13,307 respectively.

For this early period, it has been estimated that 95% of all Amerasian applicants and their relatives were granted admission, with a peak arrival year of 1992. Following Congressional concern that up to 17% of accompanying family members for the Amerasian were fraudulent (i.e., faking to be sister or mother of the Amerasian applicant), the GAO reported to Congress that the rejection rate of applicants rose from 20% in 1991 to 80% in 1992 (GAO, 1992).[19]

The count of AHA admissions would further reach about 25,000 Amerasians and about

[19] At a seminar presentation of this paper, an Amerasian provided an anecdote of some orphaned Amerasians being adopted for the purpose of gaining access to America as an accompanying family member.

60,000 relatives by 2009. Exact figures are not known due to limited data from the time period, but 21,000-30,000 Amerasians and 55,000-70,000 accompanying relatives appear to the authors to be close to the consensus.[20] Over 93% of visas and admissions credited to AHA in government documents happen during 1989-1995 (Office of Refugee Resettlement reports, Secretary of State Refugee Admissions reports).

Most Amerasians applying under the AHA program were very poor, spoke little to no English, and had limited education. Chuong and Van (1994) surveyed 275 Amerasians who had settled into California by 1991 about their backgrounds. Only seven of these migrants knew their fathers. Prior to departure for America, 59% indicated they did not know any English, and most of the rest had poor English language skills. More than 30% had three years or fewer of schooling, and 75% had eight years or less.

The AHA procedure included several resettlement steps. Amerasians and family members first applied in Vietnam.[21] If accepted and lacking a US sponsor, as most migrants were, they were sent the Philippines Refugee Processing Center near Morong, Bataan, Philippines for a six-month program on the English language and a "Cultural Orientation" program (GAO, 1992). Anecdotal accounts also suggest some workplace training such as a McDonalds counter being built to model fast food service work. In cases where the migrant had an American sponsor and living arrangement established in the United States, they might have been able to go directly to their sponsored arrangement. Government reports differ on this detail, but, regardless, sponsored cases were rare.

Afterwards, the Amerasian and accompanying family members were sent to resettlement centers in one of 55 cluster site cities across the United States, where a resettlement agency assisted with the settling of Amerasian children and families through the provision of short-term housing, administrative appointments with banks and government departments, school enrollment, and training and welfare assistance while adults searched for jobs. Appendix Figure 2 shows a map of some of the resettlement centers that was included in a 1989 Department of State report. Some centers, including all the centers in California, are not shown.[22]

[20] Sources include: https://travel.state.gov/content/dam/visas/Statistics/AnnualReports/FY2013AnnualReport/FY13AnnualRep TableX.pdf; https://immigrationtounitedstates.org/337-amerasian-homecoming-act-of-1987.html

[21] The Vietnamese government informed Amerasians about the program, with final interviews held in Ho Chi Minh City by US officials. While efforts were made to reach all candidates, a 1992 review found gaps of awareness of the program in rural and mountainous regions. Dell and Queruben (2018) document how US military approaches during the war shaped regional views of the United States.

[22] An example of a 1991 article about a Brooklyn, NY, center:

Life was not easy for Amerasians in the United States. One estimate suggests 14% of Amerasians attempted suicide (Thomas, 2021). Seen as different from both Vietnamese and Americans, the discrimination experienced in Vietnam displayed in different ways in the United States (Mullan et al., 2002). This was evidenced even through the AHA, which deemed Amerasians not as citizens by birth as is typical for children born to Americans but as a separate category that was not given full rights. Ranard and Gilzow (1989) and Chuong and Van (1994) note the federal government provided resettlement centers with limited funds of $35,000 each, but the centers had personnel experienced in resettling Amerasians.[23] AHA inflows had measurable but small relative sizes to the new host city, on the order of 0.05% of the city's population in the 2000 Decennial Census.

Some reports suggest that all but approximately 400 Amerasians ultimately migrated to the United States (Isenberg, 2020). While this is impossible to know precisely, the consensus is the vast majority of Amerasians took advantage of the opportunity. Some Amerasians who had successfully been processed for migration near the start of the AHA program reported in interviews that they knew of Amerasians who had not applied due to interference by Vietnamese officials and costs, including travelling to Ho Chi Minh City for interviews, getting government documents, and paying bribes (GAO, 1992). While most applicants lacked documentation that proved their American paternity, immigration officers often accepted applicants with physical features like hair, eye shape, and skin color that suggested they could be Amerasian (Thomas, 2021). With the AHA passage and the momentum that followed, both the United States and Vietnam increasingly approved of Amerasians being in the United States.

https://www.nytimes.com/1991/04/18/garden/sheltering-children-of-the-vietnam-war.html

[23] Tien and Hunthausen (1990) describe in detail a refugee resettlement center in Tacoma. Once Amerasians and their families arrived, they were taken to a house by the program's office, where they could live for 2-4 weeks while long-term housing arrangements are made. In that 2-4 week period, they were further taken to: the bank to cash the reception and placement grant check they received; the social security office to get social security cards; the health department to get a health screening; the licensing department to get an alien identification card; an English as Second Language class to enroll adults for English classes; the school administration building to enroll students for public school; and the welfare office to apply for refugee assistance. The process was described as a "blur of forms" that produced information overload. Public assistance was available for 12 months only. A 1994 GAO report on Amerasian resettlement stated that around 65% of families had found work.

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# Appendix Figure 1: Photos of Le Van Minh

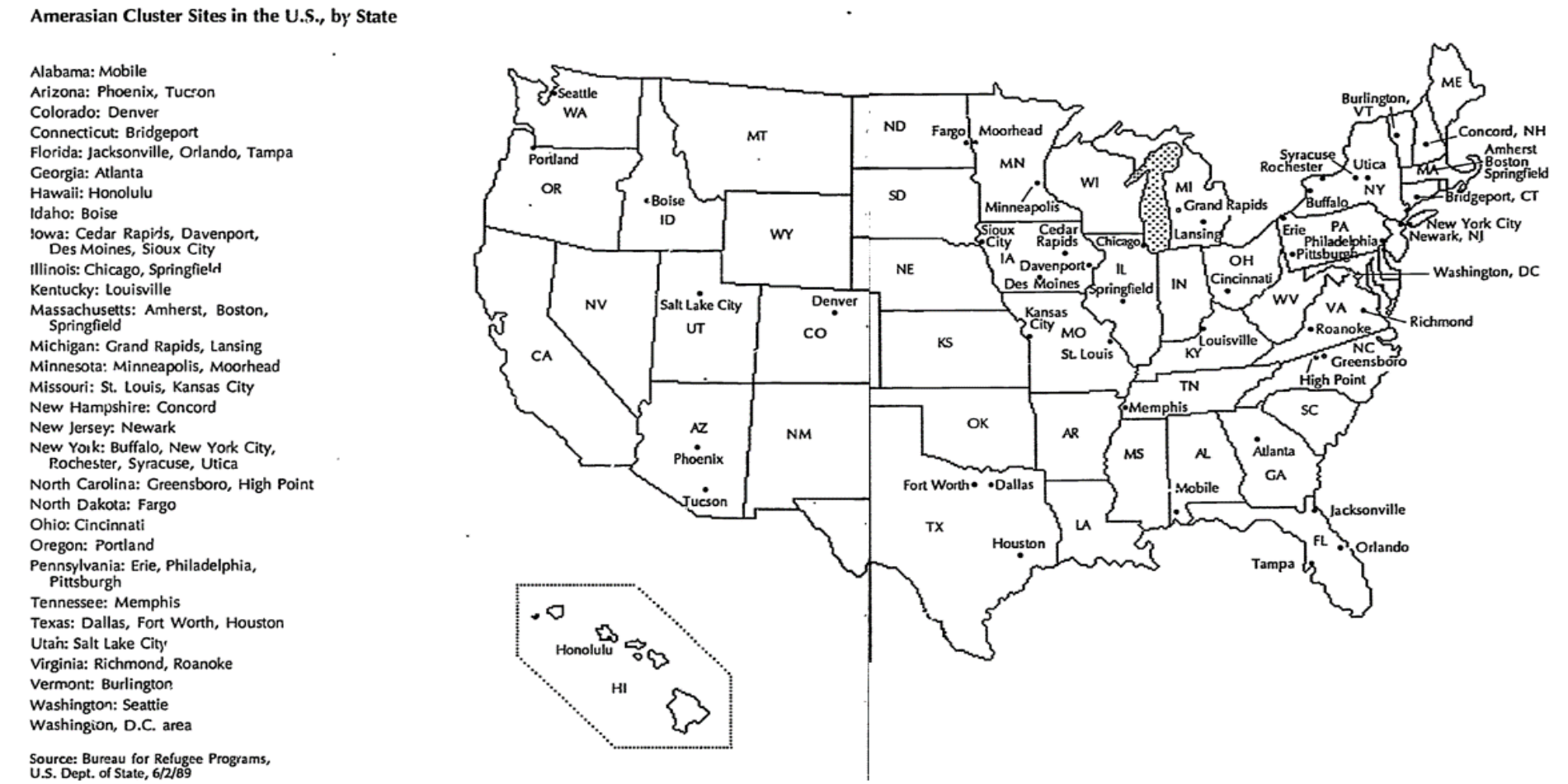
Audrey Tiernan's *Newsday* photo, 1985

Le Van Minh as an adult living in San Jose, CA

Le Van Minh with Rep. Bob Mrazek upon arrival in Long Island, NY

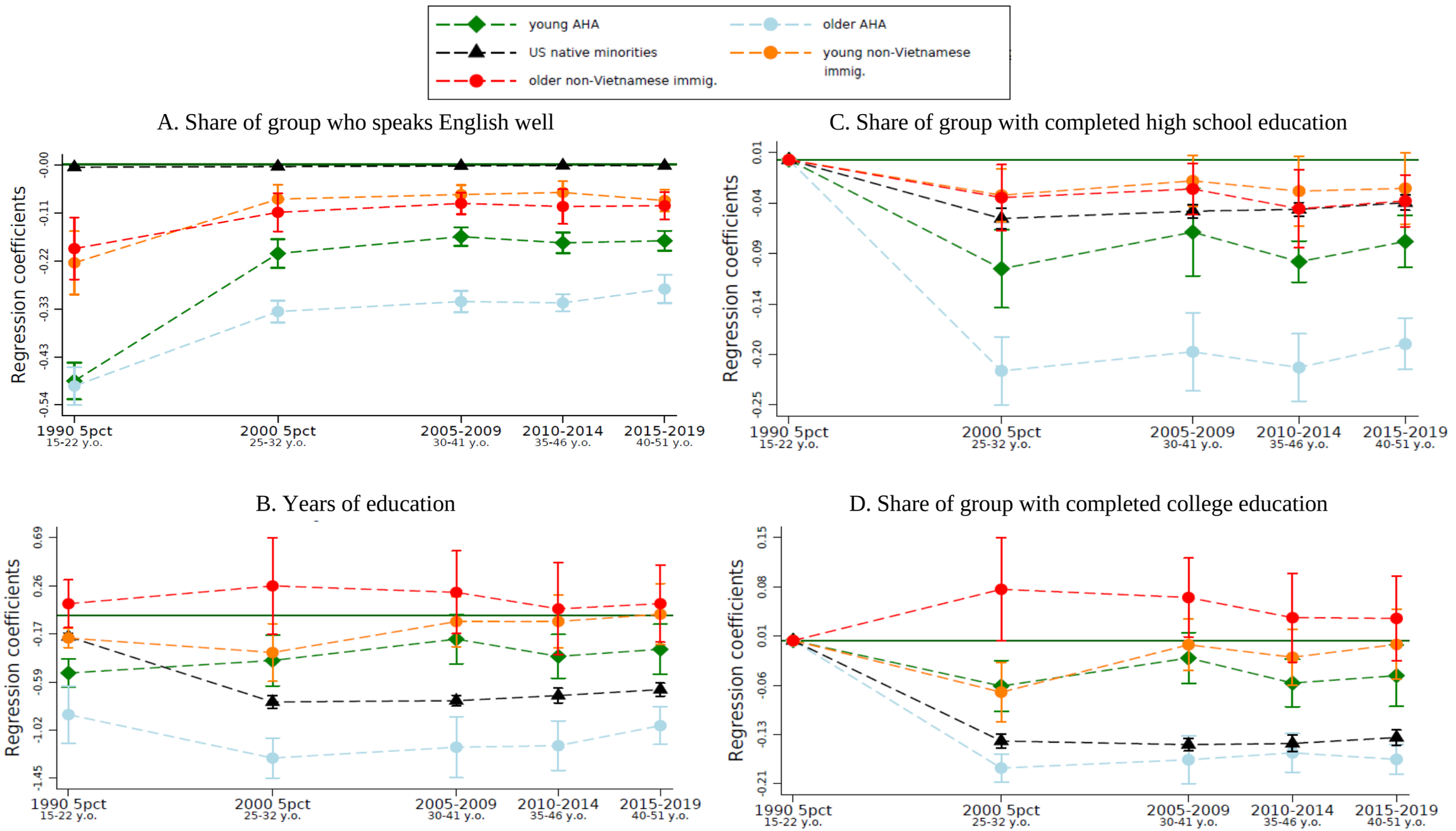

Sources: Photos by Catherine Karnow (bottom right) and Audrey Tiernan (other three). Photos included in Newsday (1986), Virag (1987) and Lamb (2009).

# Appendix Figure 2: 1989 map of Amerasian cluster sites



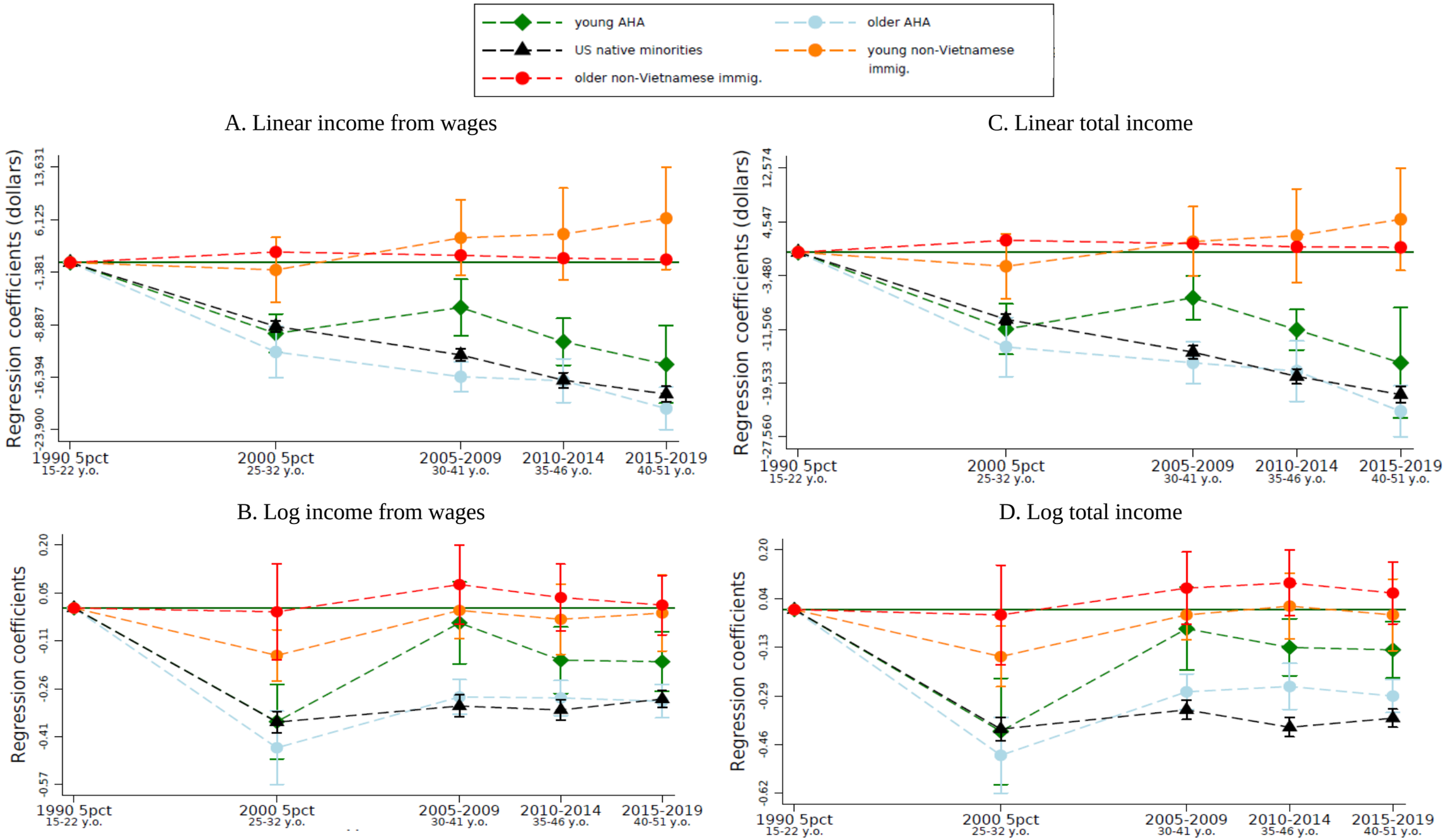

Notes: Map taken from Bureau of Refugee Programs, U.S. Department of State 1989. Some cluster sites, including all sites in California, are not included.

# Appendix Figure 3a: Figure 4a with age at arrival split for non-Vietnamese immigrant comparison group




Notes: See Figure 4a. This analysis divides the non-Vietnamese immigrant comparison group into young (immigrated at ages 14-17) and older (immigrated at ages 18-21) arrivals.

# Appendix Figure 3b: Figure 4b with age at arrival split for non-Vietnamese immigrant comparison group




Notes: See Figure 4b. This analysis divides the non-Vietnamese immigrant comparison group into young (immigrated at ages 14-17) and older (immigrated at ages 18-21) arrivals.

# Appendix Table 1: Descriptive values on key variables

| | Young AHA | Older AHA | US Natives | U.S. White Natives | U.S. Minority Natives | 30 Country Comparison |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | | A. Speaks English well | | | |
| 1990 | 50.41% | 50.50% | 99.20% | 99.33% | 98.68% | 79.58% |
| 2000 | 79.29% | 66.11% | 99.44% | 99.55% | 99.05% | 89.61% |
| 2005-9 | 83.08% | 67.94% | 99.61% | 99.68% | 99.31% | 90.73% |
| 2010-4 | 82.74% | 68.00% | 99.70% | 99.74% | 99.52% | 90.86% |
| 2015-9 | 83.15% | 72.13% | 99.68% | 99.73% | 99.47% | 90.79% |
| | | | B. Years of education | | | |
| 1990 | 9.64 | 10.87 | 11.28 | 11.34 | 11.05 | 11.31 |
| 2000 | 13.05 | 12.23 | 13.27 | 13.44 | 12.65 | 13.69 |
| 2005-9 | 13.54 | 12.57 | 13.51 | 13.66 | 12.95 | 13.96 |
| 2010-4 | 13.56 | 12.70 | 13.71 | 13.83 | 13.24 | 14.02 |
| 2015-9 | 13.68 | 13.07 | 13.83 | 13.94 | 13.38 | 14.19 |
| | | | C. High school completion | | | |
| 1990 | 3.07% | 41.50% | 54.38% | 55.69% | 49.30% | 54.90% |
| 2000 | 82.61% | 71.88% | 91.72% | 93.02% | 87.04% | 89.93% |
| 2005-9 | 88.11% | 75.32% | 93.07% | 94.06% | 89.29% | 92.85% |
| 2010-4 | 84.92% | 73.63% | 93.65% | 94.42% | 90.63% | 90.87% |
| 2015-9 | 86.24% | 77.35% | 94.21% | 94.87% | 91.56% | 91.84% |
| | | | D. College completion | | | |
| 1990 | 0.00% | 0.00% | 1.94% | 2.21% | 0.92% | 3.21% |
| 2000 | 24.51% | 14.00% | 28.34% | 31.58% | 16.71% | 37.51% |
| 2005-9 | 34.99% | 20.64% | 32.27% | 35.22% | 20.95% | 42.73% |
| 2010-4 | 32.47% | 21.61% | 33.24% | 35.84% | 22.98% | 41.42% |
| 2015-9 | 35.75% | 23.57% | 35.55% | 38.01% | 25.72% | 44.15% |
| | | | E. Wage and salary income | | | |
| 1990 | $247 | $3,455 | $8,925 | $9,504 | $6,651 | $5,416 |
| 2000 | $26,939 | $26,544 | $37,362 | $39,489 | $29,721 | $39,203 |
| 2005-9 | $41,169 | $34,008 | $45,369 | $47,985 | $35,357 | $53,791 |
| 2010-4 | $41,902 | $37,312 | $47,741 | $50,629 | $36,328 | $58,321 |
| 2015-9 | $46,866 | $40,742 | $53,180 | $56,473 | $40,016 | $65,951 |
| | | | F. Log wage and salary income for employed | | | |
| 1990 | 13.46 | 16.70 | 16.89 | 16.95 | 16.60 | 16.83 |
| 2000 | 15.04 | 15.02 | 15.44 | 15.52 | 15.12 | 15.51 |
| 2005-9 | 12.43 | 12.31 | 12.44 | 12.50 | 12.18 | 12.64 |
| 2010-4 | 11.59 | 11.47 | 11.65 | 11.71 | 11.42 | 11.82 |
| 2015-9 | 10.63 | 10.50 | 10.70 | 10.75 | 10.49 | 10.81 |
| | | | G. Share receiving welfare support | | | |
| 1990 | 14.58% | 6.49% | 2.58% | 1.80% | 5.61% | 0.73% |
| 2000 | 2.41% | 3.71% | 2.73% | 1.89% | 5.73% | 1.37% |
| 2005-9 | 1.25% | 1.90% | 1.86% | 1.39% | 3.65% | 0.73% |
| 2010-4 | 2.12% | 1.46% | 2.01% | 1.64% | 3.50% | 0.82% |
| 2015-9 | 0.97% | 1.33% | 1.51% | 1.25% | 2.55% | 0.91% |

Notes: Calculated from IPUMS data.

# Appendix Table 2a: Coefficients for Figures 2a-2b

| | Young AHA | Older AHA |
|---|---|---|
| | (1) | (2) |
| | A. Speaks English well | |
| 1990 | -0.485 (0.021) | -0.497 (0.021) |
| 2000 | -0.199 (0.016) | -0.329 (0.012) |
| 2005-9 | -0.162 (0.010) | -0.308 (0.012) |
| 2010-4 | -0.176 (0.012) | -0.311 (0.010) |
| 2015-9 | -0.171 (0.011) | -0.279 (0.016) |
| | B. Years of education | |
| 1990 | -0.469 (0.064) | -0.840 (0.128) |
| 2000 | -0.200 (0.131) | -1.076 (0.103) |
| 2005-9 | -0.048 (0.122) | -1.012 (0.148) |
| 2010-4 | -0.213 (0.101) | -1.009 (0.114) |
| 2015-9 | -0.161 (0.119) | -0.846 (0.089) |
| | C. High school completion | |
| 2000 | -0.094 (0.021) | -0.197 (0.018) |
| 2005-9 | -0.061 (0.023) | -0.182 (0.021) |
| 2010-4 | -0.091 (0.011) | -0.198 (0.017) |
| 2015-9 | -0.073 (0.014) | -0.176 (0.013) |
| | D. College completion | |
| 2000 | -0.028 (0.021) | -0.147 (0.010) |
| 2005-9 | 0.007 (0.020) | -0.140 (0.019) |
| 2010-4 | -0.030 (0.018) | -0.130 (0.015) |
| 2015-9 | -0.021 (0.024) | -0.142 (0.012) |
| | E. Wage and salary income | |
| 2000 | -$7,752 (1142) | -$10,502 (1597) |
| 2005-9 | -$3,575 (2237) | -$13,548 (1022) |
| 2010-4 | -$7,742 (1803) | -$13,369 (1354) |
| 2015-9 | -$10,530 (2522) | -$17,027 (1196) |
| | F. Log wage and salary income for employed | |
| 2000 | -0.274 (0.054) | -0.361 (0.051) |
| 2005-9 | 0.021 (0.070) | -0.220 (0.029) |
| 2010-4 | -0.101 (0.056) | -0.224 (0.026) |
| 2015-9 | -0.113 (0.044) | -0.243 (0.023) |
| | G. Total income | |
| 2000 | -$8,854 (1584) | -$11,644 (1904) |
| 2005-9 | -$3,575 (1846) | -$13,361 (1278) |
| 2010-4 | -$7,618 (1577) | -$13,859 (1977) |
| 2015-9 | -$11,975 (3736) | -$19,406 (1513) |
| | H. Log total income | |
| 2000 | -0.311 (0.081) | -0.396 (0.056) |
| 2005-9 | 0.009 (0.075) | -0.208 (0.029) |
| 2010-4 | -0.045 (0.051) | -0.179 (0.035) |
| 2015-9 | -0.060 (0.044) | -0.220 (0.023) |

Notes: See Figures 2a-2b.

# Appendix Table 2b: Coefficients for Figures 4a-4b

| | Young AHA | Older AHA | U.S. Minorities | Comp. Group |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| | | A. Speaks English well | | |
| 1990 | -0.487 (0.021) | -0.498 (0.021) | -0.006 (0.001) | -0.201 (0.035) |
| 2000 | -0.200 (0.016) | -0.331 (0.012) | -0.005 (0.001) | -0.101 (0.020) |
| 2005-9 | -0.163 (0.010) | -0.308 (0.012) | -0.003 (0.000) | -0.084 (0.011) |
| 2010-4 | -0.176 (0.012) | -0.311 (0.010) | -0.002 (0.001) | -0.088 (0.018) |
| 2015-9 | -0.172 (0.011) | -0.280 (0.016) | -0.003 (0.001) | -0.091 (0.014) |
| | | B. Years of education | | |
| 1990 | -0.514 (0.062) | -0.883 (0.126) | -0.191 (0.016) | -0.006 (0.082) |
| 2000 | -0.402 (0.113) | -1.268 (0.089) | -0.770 (0.029) | 0.130 (0.195) |
| 2005-9 | -0.212 (0.109) | -1.172 (0.135) | -0.759 (0.024) | 0.145 (0.166) |
| 2010-4 | -0.365 (0.097) | -1.158 (0.109) | -0.714 (0.032) | 0.031 (0.180) |
| 2015-9 | -0.303 (0.110) | -0.980 (0.084) | -0.661 (0.029) | 0.083 (0.160) |
| | | C. High school completion | | |
| 2000 | -0.109 (0.020) | -0.212 (0.017) | -0.059 (0.005) | -0.037 (0.015) |
| 2005-9 | -0.073 (0.022) | -0.193 (0.020) | -0.052 (0.003) | -0.028 (0.012) |
| 2010-4 | -0.102 (0.010) | -0.209 (0.017) | -0.050 (0.003) | -0.045 (0.019) |
| 2015-9 | -0.082 (0.013) | -0.185 (0.013) | -0.043 (0.004) | -0.039 (0.013) |
| | | D. College completion | | |
| 2000 | -0.065 (0.018) | -0.183 (0.010) | -0.144 (0.005) | 0.041 (0.033) |
| 2005-9 | -0.025 (0.018) | -0.171 (0.017) | -0.150 (0.005) | 0.047 (0.025) |
| 2010-4 | -0.061 (0.017) | -0.161 (0.014) | -0.148 (0.006) | 0.020 (0.028) |
| 2015-9 | -0.050 (0.022) | -0.171 (0.010) | -0.139 (0.005) | 0.024 (0.029) |
| | | E. Wage and salary income | | |
| 2000 | -$10,145 (1,380) | -$12,788 (1,841) | -$9,136 (391) | -$1,061 (2,315) |
| 2005-9 | -$6,432 (2,009) | -$16,337 (1,060) | -$13,219 (445) | $3,531 (2,684) |
| 2010-4 | -$11,338 (1,677) | -$16,910 (1,555) | -$16,835 (541) | $4,069 (3,264) |
| 2015-9 | -$14,567 (2,769) | -$20,880 (1,503) | -$18,813 (547) | $6,326 (3,637) |
| | | F. Log wage and salary income for employed | | |
| 2000 | -0.365 (0.059) | -0.449 (0.059) | -0.366 (0.017) | -0.044 (0.069) |
| 2005-9 | -0.048 (0.066) | -0.285 (0.028) | -0.315 (0.018) | 0.057 (0.058) |
| 2010-4 | -0.167 (0.053) | -0.289 (0.028) | -0.327 (0.016) | 0.018 (0.053) |
| 2015-9 | -0.172 (0.048) | -0.299 (0.027) | -0.292 (0.013) | 0.004 (0.049) |
| | | G. Total income | | |
| 2000 | -$11,477 (1,881) | -$14,148 (2,191) | -$10,015 (391) | -$2,093 (2,401) |
| 2005-9 | -$6,796 (1,641) | -$16,502 (1,544) | -$14,917 (471) | $1,598 (2,587) |
| 2010-4 | -$11,574 (1,518) | -$17,755 (2,248) | -$18,544 (565) | $2,489 (3,485) |
| 2015-9 | -$16,521 (4,098) | -$23,744 (1,900) | -$21,252 (590) | $4,921 (3,810) |
| | | H. Log total income | | |
| 2000 | -0.412 (0.090) | -0.494 (0.064) | -0.405 (0.020) | -0.050 (0.076) |
| 2005-9 | -0.065 (0.070) | -0.278 (0.030) | -0.340 (0.016) | 0.053 (0.054) |
| 2010-4 | -0.128 (0.048) | -0.260 (0.039) | -0.399 (0.016) | 0.073 (0.054) |
| 2015-9 | -0.136 (0.048) | -0.293 (0.028) | -0.368 (0.015) | 0.041 (0.054) |

Notes: See Appendix Figures 4a-4b.