

**JUE Insight: White Flight from Asian Immigration:
Evidence from California Public Schools**

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January 2023

Abstract: Asian Americans are the fastest-growing racial group in the US but we know little about how Asian immigration has affected cities, neighborhoods and schools. This paper studies white flight from Asian arrivals in high-socioeconomic-status Californian school districts from 2000-2016 using initial settlement patterns and national immigrant flows to instrument for entry. We find that, as Asian students arrive, white student enrollment declines in higher-income suburbs. These patterns cannot be fully explained by racial animus, housing prices, or correlations with Black/Hispanic arrivals. Parental fears of academic competition may play a role.

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I. Introduction

Asian Americans are the fastest-growing racial group in the United States, nearly doubling from a population of 12 million in 2000 to 22 million in 2019 (Budiman and Ruiz, 2021). Yet, we know very little about how Asian arrivals affect cities, towns, neighborhoods and school districts within US metropolitan areas. Areas may undergo “white flight” from Asian arrivals, as has been documented for previous waves of Black and Hispanic in-migration. Alternatively, Asian arrivals may be an anchor that attracts new population.

Why might patterns of attraction or flight from Asian arrivals be different than for other minority groups? On one hand, Asian Americans are more educated than other racial groups: 54 percent of Asian Americans ages 25 and up hold at least a Bachelor’s degree, compared to 33 percent of the US population. As a result, Asian American students are widely considered to be a “model minority” who “possess an inherent cultural orientation and work ethic that other non-Whites supposedly lack,” a factor that could attract white families to areas with high Asian populations (Chou and Feagin, 2010; Jiménez and Horowitz, 2013). On the other hand, growing sociological evidence points to stereotypes about Asian families that might prompt white flight – including the notorious idea of an “Asian Tiger mother” (Chua, 2011). In particular, some white parents worry that their own children will suffer from competition in schools with high Asian enrollment or that the curriculum will emphasize academics at the expense of sports or other priorities (Louie, 2004; Lee and Zhou, 2015; Lung-Amam, 2017; Warikoo, 2022).

Concerns about competition with Asian students may be particularly acute in high-income or high-socioeconomic-status (SES) suburban school districts. Recent journalistic accounts of regions like suburban New Jersey or the Bay Area highlight these anxieties. Hwang (2005) reports that: “Many White parents say they’re leaving because the schools are too academically driven and too narrowly invested in subjects such as math and science at the expense of liberal arts and extracurriculars like sports and other personal interests [...]. The [...] schools, put another way that parents rarely articulate so bluntly, are too Asian.”¹

¹ Similar accounts can be found in Spencer (2015), Do (2017) and Enjeti (2017). Journalists record parental complaints about Asian students like: “There are too many kids here good at math... Asian parents take their kids for extra tutoring. It’s not fair for the “regular” kids. The high school is too competitive. My kids won’t get into a good college because of all of the Asians” (Enjeti, 2017).

This paper offers the first empirical analysis of white flight from Asian arrivals in US metropolitan areas. We focus on high-SES suburban school districts and use enrollment data from the state of California between 2000 and 2016. California offers a particularly useful setting because it is home to one third of the Asian American population in the US, and Asians represent 15 percent of the state population.

We begin by establishing the correlation in our sample of high-SES suburban districts between Asian entry and white departures within districts over time. We find that the arrival of one Asian student into a high-SES district is associated with 0.6 white departures. Of course, Asian entry into a school district is not random. Asian immigrants may choose to settle in districts that white households are already leaving, if these departures prompt housing prices to fall. In this case, ordinary least squares (OLS) estimates would be *biased toward* finding white flight. Alternatively, Asian households may be attracted to the same improvements in local amenities that pull white families to a school district (e.g., a new principal or school building). In this case, OLS estimates will be *biased away* from finding white flight.

We address these concerns by instrumenting for Asian arrivals using a shift-share instrument, as adapted to the immigration setting by Card (2001). Our instrument makes use of the fact that Asian immigrants from particular countries- or regions-of-origin – South Asia, China, the Philippines, Vietnam, Korea, and Japan – clustered in certain towns or neighborhoods in California’s metropolitan areas in the baseline year (2000). Two of these groups (South Asians and Chinese) subsequently had high inflows, two had lower inflows (Koreans and Japanese) and two were in-between. Districts with a higher initial percentage of high-inflow groups received more Asian immigrants over the subsequent years, both overall and after controlling for initial Asian share.

We continue to find evidence of white flight when instrumenting for Asian arrivals: the enrollment of one Asian student leads to 1.5 white departures on average. The fact that white flight is larger with instrumental variable (IV) estimates than with OLS suggests that OLS estimates are biased away from white flight due to unobserved amenities that attract both white and Asian households.

One key assumption underlying our instrument is that unobserved factors associated with the initial distribution of Asian immigrants across districts are uncorrelated with other factors – like neighborhood or school quality – that may determine white location choice in subsequent

years. We test this assumption in three ways. First, we control for initial Asian share interacted with year fixed effects (Borusyak, Hull and Jaravel, 2022). In this case, we compare two districts with similar Asian density that differ only in the composition *within* their Asian population. Second, we identify a series of other baseline school district characteristics that are correlated with initial Asian share using a LASSO model, and then control for interactions between these characteristics and year fixed effects (as suggested by Goldsmith-Pinkham, Sorkin, and Swift, 2020). Third, we select *all* available Census variables related to initial age distribution and initial household income to use as controls, rather than relying on the specific variables selected by LASSO. Our results are robust to allowing differential trends in enrollment across school districts according to each of these baseline attributes.

The second part of the paper then considers mechanisms that could explain the differential response to Asian arrival across high-SES suburban school districts. We start by ruling out three possible mechanisms: a correlated rise in black or Hispanic students, direct antipathy or distaste for Asian classmates, or housing market dynamics. First, we do not find any empirical association between Asian arrivals and black/Hispanic entry to the district. Second, survey data shows that white respondents with higher education levels exhibit *lower* aversion toward Asian Americans, a pattern that could not explain the concentration of white flight in high-SES districts. Third, as with any new population to an area, Asian arrivals may increase local housing prices. However, the pace of white flight from suburban areas – a departure rate of 1.5 to one – implies that white households are motivated by concerns beyond the housing market (Boustan, 2010).

We then turn to the most likely explanation for the balance of the observed white flight from Asian arrivals in high-SES suburban districts: concerns over academic competition in schools. We document that Asian arrivals lead to test score gains for the full student body in these high-SES districts, but do not boost most measures of test scores for white students. In other words, the learning of white students appears unaffected but the relative performance in the class for the average white student would fall with Asian entry, potentially raising parental concerns about academic competition. Finally, we document that white flight takes place primarily through white departures from the district overall, rather than from substitution from public schools to local charter or private schools.

Existing literature on preferences for high-performing peers is mixed. Some papers find that households have preferences for higher-quality peers (Black, 1999; Deming, Hastings, Kane,

and Staiger, 2014; Sacerdote, 2011; Abdulkadiroglu, Pathak, Schellenberg, and Walters, 2020). However, in other contexts, parents seek to avoid districts where their children would not be ranked at the top of the class (Cullen, Long, and Reback, 2013; Bui, Craig, and Imberman, 2014; Antecol, Eren, and Ozbeklik, 2016). A growing literature suggests that earning a higher rank, even in elementary school, predicts future educational and economic success (Elsner and Isphording, 2017; Denning, Murphy and Weinhardt, 2018; Murphy and Weinhardt, 2020). Concern about grading on a curve may have been particularly relevant in high-SES suburban districts in California, where being at the top of one's high-school class guaranteed admission into one of the Universities of California under the "top-percent policy," which was in place between 2001 and 2011 (Bleemer, 2021).

Our work also relates to several past studies on white/native flight from minority entrants. Many papers have examined white/native flight from non-whites/immigrants as a whole without differentiating responses to a particular racial or ethnic group (Card, 2001; Betts and Fairlie, 2003; Crowder and South, 2008; Crowder, Hall, and Tolnay, 2011; Saiz and Wachter, 2011; Sá, 2015; Farre, Ortega, and Tanaka, 2018). Other papers focus on Hispanics (Cascio and Lewis, 2012; Caetano and Maheshri, 2017), or on African American migrants from the South to the North (Boustan, 2010; Shertzer and Walsh, 2019; see also Card, Mas, and Rothstein, 2008 and Blair, 2016 on neighborhood tipping points). The estimates of white/native flight from the most closely related studies range from 1.4 to 2.7 white departures for each minority arrival. Our estimate of white flight from Asian arrivals falls on the low end of this range. Despite similar out-migration responses from various minority groups, we point here to different mechanisms, focusing on fear of academic competition. We also contribute to the small literature in economics on Asian Americans more broadly, most of which has focused on labor market performance (Chiswick, 1983; Hirschman and Wong, 1986; Suzuki, 1989; Sue and Okazaki, 1990; Suzuki, 2002; Hilger, 2017).

II. Trends in Asian immigration to the US

Modern immigration to the United States from Asian countries began after the passage of the 1965 Immigration and Naturalization Act. This law overturned nearly a century of immigration bans, directed first at the Chinese and then at other Asian countries of origin. Since then, Asian

Americans have increased from less than one percent of the U.S. population in 1960 to around 4 percent by 2000 and close to 7 percent in 2019.

Around 60 percent of the Asian population in the U.S. is made up of three main country- or region-of-origin groups: Chinese, Filipinos, and South Asians. Vietnamese, Japanese and Koreans are the next largest groups. On average, households headed by Asian Americans earn 38 percent more than the national median but there is substantial variation across groups (Budiman and Ruiz, 2021).

In recent years, new Asian arrivals have been increasingly bypassing older enclave neighborhoods in central cities – the old “Chinatowns,” “Little Tokyos,” or “Manilatowns” – to move to suburban locations (Alba, Logan, Stults, Marzan and Zhang, 1999; Lin and Robinson, 2005; Li, Skop, and Yu, 2007; Li, 2008). Some Asian immigrants opt for integrated suburbs, while others settle in “ethnoburbs” like Cupertino or San Gabriel, California (a term coined by Li [2008]), suburbs with a high density of Asian population and amenities that cater to Asian communities.

In California schools, Asian enrollment has been growing in suburban districts while holding steady or declining in central city or non-metropolitan districts. **Appendix Figure 1** documents that Asians make up 14 percent of students in suburban districts and only 8 percent of enrollment in central city districts as of 2017.

Although our focus is on *white* flight, it is important to keep in mind that California’s schools are majority Hispanic. **Appendix Figure 2** documents enrollment counts by year for four racial/ethnic groups in central cities and suburbs: Whites, Asians, Hispanics and Blacks. Hispanic students make up the majority of students, even in suburban districts, followed by white students and then Asian students. It will thus be important to assess whether Asian arrivals affect the number of Black and Hispanic students in a district, which could be a proximate cause of white flight.

III. Estimating the effect of Asian student arrivals on white student departures

A. Estimation strategy

Our goal is to estimate how an increase in Asian enrollment in a school district affects the number of white enrollments. We define $White_{d,t}$ as the number of white students enrolled in

district d in year t ($t = 2000-2016$). We then estimate the relationship between $White_{d,t}$ and $Asian_{d,t}$ as follows:

$$White_{d,t} = \alpha_0 + \alpha_1 \cdot Asian_{d,t} + \alpha_2 \cdot Total_{d,t-1} + \pi_t + \delta_d + \nu_{d,t} \quad (1)$$

Fixed effects by district and year control for a set of time-invariant attributes in each district – such as experienced teachers or a high-quality sports program – that may attract households (δ_d), and common annual trends (π_t) as school enrollment in California grows over time. We thus interpret the coefficient α_1 as the association between *changes* in Asian enrollment and *changes* in white enrollment within a district over time. In our core specification, we also control for a district’s total enrollment in the previous year ($Total_{d,t-1}$), as growing regions will likely attract large inflows of students in all demographic groups, but we show robustness to dropping this control or lagging this control by more than one year below.

In this OLS specification, the coefficient α_1 cannot be interpreted as the causal effect of Asian entry on white departures. Both Asian and white families may be attracted to a district by positive realizations of the error term $\nu_{d,t}$ (e.g., the appointment of a new superintendent of schools or building a new high school building), biasing α_1 upward. Alternatively, Asian families could be attracted to falling housing prices in neighborhoods that white families are leaving for other reasons. This reverse causality could lead α_1 to be biased downward.

To address these concerns, we use the shift-share instrument to predict inflows of Asian immigrants into a district based on initial settlement patterns and national immigrant inflows. In particular, we establish the initial share of a country-of-origin group (say, Chinese-born) nationwide who are living in each California school district in the year 2000. We then assign new immigrant inflows from that country to school districts as if the new entrants followed the settlement patterns established in the base year. This instrument has power to predict new population flows because immigrants are attracted to locations, in part, by established networks from their country of origin (Munshi, 2003). New arrivals who follow pre-existing settlement patterns, rather than reacting to contemporaneous changes in job opportunities or local amenities, should be exogenous to realizations of the error term $\nu_{d,t}$.

Our goal is to predict the entry of Asian students at the school district level for each year t . Let $Share_{j,d,\tau}$ be the share of all residents in country group j nationwide (e.g., Chinese, Filipino)

who live in district d in base year τ ($=2000$). Let $Flow_{j,t}$ denote the national inflow of country-of-origin group j in year t .

The predicted inflow of Asian students into district d in year t is computed as follows:

$$\Delta \widehat{AsianEnr}_{d,t} = \frac{AsianEnr_{d,\tau}}{AsianPop_{d,\tau}} \left[\sum_j (Share_{j,d,\tau} \times Flow_{j,t}) \right] \quad (2)$$

We first multiply the national flow ($Flow_{j,t}$) by the initial share ($Share_{j,d,\tau}$) to allocate some portion of the national arrivals to school district d for each country-of-origin group j , and we then sum across all countries j . We then multiply this sum by $\left(\frac{AsianEnr_{d,\tau}}{AsianPop_{d,\tau}} \right)$, reflecting the ratio of Asian school enrollment to Asian population in the base year. This scaling factor is needed to adjust for the fact that national inflows include residents of all ages, while our interest is in children of school age (mean of ratio = 0.28).

Given our predicted inflow to a district ($\Delta \widehat{AsianEnr}_{d,t}$), we then generate a measure of predicted Asian enrollment in each year (a stock variable) by advancing forward the baseline Asian enrollment in a district in year τ ($= 2000$) with our predicted inflows in each year t :

$$AsianPred_{d,t} = AsianEnr_{d,\tau} + \sum_{i=\tau+1}^t \Delta \widehat{AsianEnr}_{d,i} \quad (3)$$

Our first-stage equation thus uses predicted Asian enrollment as an instrument for actual Asian enrollment. We will likely over-predict actual entry because our predicted change in enrollment does not account for graduations or other departures from the district.

One concern with our instrument is that districts with high levels of initial Asian settlement may differ from neighboring areas in other ways that are persistent and that might lead districts to grow or shrink over time. Following Goldsmith-Pinkham, Sorkin, and Swift (2020), we thus consider associations between the baseline share of Asian immigrants settling in the district and other local attributes. We use a LASSO model and a set of more than 50 Census attributes to search for possible correlations (see Abramitzky, et al. (2023) for an example of this methodology).² We

² The variables we consider include: population density, share of population by education category, employment and unemployment rates, industry and occupation shares, median housing income, owner-occupancy rate, median rent, length of commute, age distribution, and so on.

find that districts with high initial Asian shares are also more likely to have a high share of the population with a Bachelor’s degree, a high share elderly (non-veteran, age 65+), high median rent and above average household size. We show results below that include each one of these correlated attributes interacted with year fixed effects to document that changes in white enrollment are not being driven by correlated demographic attributes.

B. Data

OLS analysis: We draw annual enrollment data by school district from the California Department of Education (DOE). Enrollment counts are reported by race/ethnic group for each school and grade level, which we then aggregate to the school district. School districts can be “unified” (that is, containing grades K-12) or may cover only elementary or secondary grades. For consistency, we use the 2000 Census data combined with the Missouri Census Data Center’s MABLE Geocorr 2000, which provides a crosswalk between Census tracts and school district boundaries, to group together elementary districts that feed into neighboring secondary or unified districts (see Data Appendix, Section A for details).

We then classify school districts into “rural,” “suburban” and “central city” (see Data Appendix, Section B for details). Our analysis sample is based only on those districts classified as suburban. Finally, we use two sources of information to subdivide suburban districts by initial (2000) income or socioeconomic status: (a) using data available from DOE, we create a socioeconomic status index based on academic performance (API) and share of students who receive free or reduced-price lunch, (b) we use Census data to classify districts by median income. Our main results focus on high-SES districts, defined as being above median on these SES or income metrics within the suburban sample.

Instrumental variables analysis: Our instrument relies on two sources of data by country/region of origin: Asian population by school district in the year 2000 to establish baseline shares and annual immigrant entry from 2000 to 2016 to measure national flows. Our country-of-origin groups include: South Asian, Chinese, Filipino, Japanese, Korean and Vietnamese.³ These

³ We map the following countries of migrant origin to the Census and California DOE ethnic categories: Bangladesh, India, Pakistan → South Asian; China, Taiwan, Hong Kong → Chinese; Japan → Japanese; Korea, Democratic People’s Republic of Korea → Korean; Vietnam → Vietnamese; Philippines → Filipino.

six groups represented 92.3 percent of the Asian population in California as of the 2018 American Community Survey.

To count residents by country-of-origin at the school district level, we use the 2000 Census data, which provides the number of residents in each tract, and aggregate at the school district level (see Data Appendix, Section A for more detail). Finally, we divide this district population counts by total national population by country-of-origin to compute the share of residents settled in each district in 2000.

Appendix Figure 3 displays the shares of each Asian country-of-origin population who live in each public school district in California. Asian populations are concentrated in the major cities along the coast. **Appendix Figure 4** zeroes in on one major metropolitan area (San Francisco Bay area) in order to demonstrate the substantial variation in ethnic clusters across school districts. The Chinese population is more concentrated in San Francisco proper and Oakland, for example, while the South Asian population is more concentrated in San Jose.

We use the Department of Homeland Security (DHS) Yearbook of Immigration Statistics to measure annual inflows (new entry) by country-of-origin group each year.⁴ **Appendix Figure 5** demonstrates that South Asian, Chinese and Filipino immigrants make up the largest annual inflows. Although the inflows are subject to some common shocks (e.g., growth from 2003-2006), the magnitude and timing of these upticks and downturns vary by country-of-origin group. Because the DHS data track only inflows and not outflows, we also compile national changes in populations from each country-of-origin from annual American Community Survey (ACS) data.

IV. Relationship between Asian arrivals and white departures by school district

We start our analysis by estimating the relationship between the arrival of Asian students and the departure of white students in California school districts by initial district-level socioeconomic status. **Table 1 (Panel A)** documents that the arrival of each Asian student into a high-SES suburban district is associated with 0.6 white departures (column 1, row 1). By contrast, Asian arrivals are not associated with white departures in low-SES districts (column 2, row 1).

⁴ The DHS annual inflows record the new arrivals among the individuals who obtained lawful permanent resident status in a given year; they exclude the individuals who were already on U.S. soil (e.g., on a temporary visa) and became permanent resident following an adjustment of status.

For the first stage, we predict Asian entry using the initial settlement patterns in the district interacted with new national immigrant inflows. We find a strong positive association between predicted Asian entry and actual Asian entry in high-SES suburban areas (column 1, row 3; F-stat = 56.26). However, there is *no* association between predicted Asian entry and actual entry in low-SES districts (and the F-statistic is close to zero), and so we do not interpret the IV estimates for this sub-sample.

After instrumenting for Asian arrivals, our estimate of white flight from Asian entry in high-SES districts is larger, with each new Asian student leading to 1.5 white student departures (column 1, row 2). The OLS estimate seems to be biased away from white flight due to common amenities that attract both white and Asian families to an area.⁵

Appendix Table 1 divides suburban districts by median income at baseline, rather than by SES. As above, we find white flight from high-income suburbs. However, the first stage is not as strong for the high-income sample (coeff. = 0.701, st. err. = 0.224, F-stat = 9.69). **Appendix Table 2** subdivides the above-median SES suburban districts into three further terciles representing the top 1/6th, second 1/6th and third 1/6th of the SES distribution. We find the strongest F-stat for the top 2/6th of the distribution (F-stat = 120 and 97, respectively) and document white flight for these particularly high-SES school districts.

V. Mechanisms: What determines flight from or attraction to Asian students?

Thus far, we have documented that Asian arrivals encourage white students to leave higher-SES suburban school districts. In this section, we consider a range of different mechanisms underlying these patterns, including correlated changes in Black or Hispanic student entry, direct racial animus, rising housing prices, and parental preferences against academic competition.

Correlation with Black/Hispanic entry: If Asian arrivals in a district attract other racial/ethnic groups, what might look like white flight from Asian students could in fact be driven by white responses to the arrival of Black or Hispanic students. However, **Table 1 (Panel B)** documents that there is no statistical relationship, either in OLS or in IV, between Asian arrivals and Black/Hispanic arrivals or departures in either low- or high-SES districts. The estimates are

⁵ **Appendix Figures 6 and 7** present our core results in graphical form to confirm that the results are not being driven by outliers.

not only statistically imprecise but they are also quantitatively small, suggesting 0.17 arrivals of Black/Hispanic students for every Asian arrival in high-SES districts.

Direct racial animus: Another simple explanation for white flight could be a direct distaste for interacting with Asian peers. However, this account is not consistent with the fact that white flight is only observed in high-SES school districts, given that high-income and more-educated respondents are less likely (rather than more likely) to express negative attitudes toward Asian Americans on surveys.

Table 2 compiles data from three attitudinal surveys that contain questions about Asian Americans: General Social Survey (GSS), Gallup poll, and the Implicit Association Test. We report average survey responses for white Americans, separately by respondents' completed education level: high school degree or less, some college, at least a BA. In all cases, we find that highly educated respondents are less likely to report negative attitudes toward Asian Americans. For example, the GSS asks whether respondents "feel cool" toward Americans of different racial backgrounds. Only 6 percent of respondents with a BA report feeling cool toward Asian Americans, compared to 18 percent of respondents with a high school degree or less (ratio of 3 to 1). We document a similar ratio (around 3 to 1) by education level for discomfort with a relative marrying an Asian spouse and for feeling "little or no trust" with Asian Americans from the Gallup polls.

Housing market: Even if white households have no preference against Asian peers, we might expect some white flight from Asian arrivals in a school district due to the effect of new population entry on the price of local housing.

The model of white flight in Boustan (2010) suggests that, at the extreme, if there is no construction response to new inflow, each Asian arrival will prompt exactly one white departure even under the assumption of no racial preferences. If, instead, there is partial construction response, housing market forces would prompt less than one white departure for every Asian arrival. By contrast, if Asian entry is associated with *more than one-for-one* white departures, something beyond housing prices must be the cause.

According to this benchmark, we can rule out the possibility that our white flight estimates can be explained by the housing market alone. Overall, we find a 1.5-to-one departure rate for the average suburban district, which is above the one-for-one threshold that would pertain to a pure

housing market response. This degree of white out-migration suggests that households are responding, at least in part, to a distaste for Asian peers.

School performance: After casting doubt on other explanations, we turn to the role of fear of academic competition to understand white flight from Asian arrivals.

Table 3 documents that a rising Asian share of the student body in a high-SES school district leads to an increase in overall test scores for both math and reading, but has no statistical relationship with test scores for *white* students in these districts. In this scenario, Asian arrivals would lead to a decline in the relative position of the average white student in the district.⁶

We consider three different measures of student performance. These include (a) the Academic Performance Index (API), which combines various test scores with performance on the California high school exit exam, (b) the Standardized Testing and Reporting program (STAR), which includes math and reading tests from 2-11 grade, and (c) the Stanford Education Data Archive (SEDA), which includes math and reading tests from 3-8 grades. All measures are normalized with mean zero and standard deviation of one, and are available for varying sets of years. The magnitudes imply that a one-percent increase in Asian share in the district results in a 0.06- to 0.13-standard-deviation increase in test scores, but no effect for white students alone (with the exception of statistically insignificant gains for white students on the STAR tests).

This pattern is consistent with parental concerns about academic competition with high-scoring peers as emphasized in the qualitative sociological literature and recent work documenting the importance of class rank for long-run outcomes (e.g., Lung-Amam, 2017; Warikoo, 2022; Elsnor and Isphording, 2017; Murphy and Weinhardt, 2020).

Where do white students go?: If white students leave the public school system when Asian students arrive, there are three options for where they might go. First, they might be enrolled in charter schools in the same district, which are tallied separately in the data. Second, they might shift from the public system to a private school without changing place of residence. Third, their families might move out of the district to another area in the state or elsewhere (or never move in).

⁶ It is possible that the null effects on white test scores reflect the net effect of two factors: (a) outflows of the most gifted white students (who are perhaps those most concerned about competition with Asian arrivals), and (b) increases in test scores for those students who do remain in the district.

Table 4 considers each of the alternative school arrangements and documents that white students were most likely to leave districts entirely as Asian students arrive. Column 1 shows that, if anything, white students were leaving local charter schools as Asian students arrived in the district. We do not have separate enrollment data by race for private schools located in the district. However, column 2 demonstrates that total enrollment in private schools falls in districts that experience inflows of Asian students. In column 3, we show that the white flight we document from public school enrollment coincides with the departure of white households with children from the district. In this case, we use Census data from 2000 and 2010 and find that each Asian arrival in a district leads to the departure of -1.5 white households with children, a number very similar to our baseline estimate.⁷

VI. Robustness

In this section, we report robustness of our results to a number of different empirical choices.

First, our instrument relies on the fact that districts with high initial Asian share of the population are predicted to experience larger gains in Asian enrollment over time. Therefore, characteristic that are (a) associated with a high Asian share and (b) predicted to deter white enrollment for other reasons could confound our estimates of white flight.

We begin in **Table 5 (Panel A)** by adding a series of these initial district characteristics interacted with year indicators to allow these attributes to have their own trends. Row 1 reproduces our baseline IV coefficient. In Rows 2-3, we start by directly controlling for initial share Asian of the student body or by controlling for the share of Asian residents in the country as a whole who live in the district in the year 2000. In adding these controls, we no longer rely on variation between districts with high/low Asian shares, but instead leverage variation in high/low inflow countries-of-origin *within* the Asian population (Borusyak, Hull and Jaravel, 2022). If anything, the white flight response is somewhat larger in this case. Rows 4-7 add controls for each of the district attributes selected as correlated with baseline share Asian in the district by our LASSO model

⁷ In 2000, the average white household with children at home in California had 1.25 children of school age (ages 6-18). Around 90 percent of these children were enrolled in public school. The implied departure rate of white children from public school ($1.5 \times 1.25 \times 0.9 = 1.68$) is very close to our baseline estimate.

(share of the population with a Bachelor’s degree, share elderly (non-veteran, age 65+), average household size, and median rent). Again, results are similar to the baseline. Finally, Rows 8-12 add detailed controls for initial age groups, household income groups, or for mean/median family or household income to address differential fertility or regression to mean income. Results are unchanged.

Panel B of Table 5 presents coefficients from alternative specifications. Row 1 drops the lagged total enrollment control and row 2 instead lags total enrollment by five years. In both cases, we continue to find sizeable white flight from suburban districts. The same is true in row 3 when we use annual counts of population by country-of-origin from the ACS, rather than annual inflows from DHS immigration data, to construct the instrument for Asian entry.

Our shift-share design predicts that districts with high initial Asian population will gain more Asian students in years with high Asian inflow. Given the strong degree of serial correlation year-by-year in immigrant entry, it is not clear that the annual shifts provide much variation relative to five-year or decadal intervals (Jaeger, Ruist and Stuhler, 2018). Rows 4 and 5 document that we still have power to detect white flight if we instead use enrollment data every five years (years 2000, 2005, 2010 and 2015) or every ten years (years 2000 and 2010). The relevant variation in this case arises from the *initial shares*, rather than the annual shifts, thus underscoring the importance of the added initial district controls in Panel A.

One might expect that concerns about academic competition would be strongest at the high school level, rather than in elementary school, although some papers have found that class rank even in elementary school matters for later performance (Murphy and Weinhardt, 2020). Rows 6 and 7 report coefficients separately for a K-8 and a 9-12 sample. White flight from high schools is somewhat higher than from elementary and middle schools (1.8 departures vs. 1.3 departures for every Asian arrival). Finally, row 8 presents results using an instrument based on 1990 population shares. We build the 1990 shares from counts by language spoken at home (as a proxy for country-of-origin) given available variables at the tract level. The first-stage coefficient is somewhat weaker in this case ($F\text{-stat} = 17$) but the second stage estimate still implies sizeable white flight.

Appendix Table 3 considers whether the suburban white flight that we observe is responding to Asian arrivals across the board, or whether it is concentrated in response to particular sub-populations. We predict entry of each country-of-origin group in turn, using a version of the instrument in equations (2) and (3) that generates separate predictions for each group rather than

summing across groups. Panel A shows that our instrument strongly predicts South Asian and Chinese entry ($F\text{-stat} = 197$ and 38 , respectively), and has a positive and statistically significant association with the other Asian sub-groups as well. White flight is present for all groups in Panel B and ranges between 1.6 and 4 departures from every Asian arrival.

VII. Conclusions

The Asian American population has grown rapidly in the past few decades. We study the white response to Asian arrivals in high-SES suburban school districts in California, a region with a high and growing Asian population share. We find substantial white flight from Asian students entering high-SES suburban districts: on average, the arrival of one Asian students in a suburban school district leads to the departure of 1.5 white students, a rate of white flight that is somewhat lower but not too dissimilar from flight from Black/Hispanic populations documented in different settings.

Academic performance also rises with Asian entry to high-SES suburban districts. After ruling out correlated patterns of Black/Hispanic entry and direct racial animus, and confirming that housing market dynamics cannot account for the observed departure rate, we suggest that white flight from high-SES districts may be due to parental concerns about academic competition, particularly in a state like California where entry to public colleges and universities is determined in part by relative high school performance. This pattern is consistent with qualitative sociological evidence about white-Asian encounters in suburban settings, which emphasizes parental concerns about differences in educational philosophy, a deemphasis on sports and extracurricular activities in favor of academic focus, and a fear about competition for spots at the top of the class.

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Main Tables

Table 1: Asian enrollment and white/Black & Hispanic departures in suburban school districts, below- vs. above-median 2000 school districts' socio-economic status (SES) index

| Sample: | Above-median 2000 SES index (1) | Below-median 2000 SES index (2) |
|--|--|--|
| <u>A) Dep. var.: White students</u> | | |
| OLS | -0.642*** (0.0909) | 0.376* (0.226) |
| IV | -1.470*** (0.268) | 12.54 (12.15) |
| 1st stage | 1.476*** (0.196) | -0.109 (0.116) |
| Dep. var. mean | 5,472 | 2,373 |
| <u>B) Dep. var.: Hispanic and Black students</u> | | |
| OLS | -0.0660 (0.0603) | -0.0325 (0.284) |
| IV | 0.172 (0.146) | 0.298 (2.827) |
| 1st stage | 1.476*** (0.196) | -0.109 (0.116) |
| Dep. var. mean | 3,824 | 9,770 |
| Number of observations | 2,584 | 2,598 |
| Number of districts | 152 | 153 |
| F-stat on excl. IV | 56.26 | 0.86 |

Notes: The 2000 school district index encompasses school quality and the percent of students eligible to free or reduced-price meals as of 2000. All specifications include year fixed effects, district fixed effects, and the total number of students in the previous year. The unit of observation is a school district \times year. Sample restricted to suburban areas only for the 2001-2016 period. The instrument uses 2000 as base year. The inflows data used to construct the instrument come from the Department of Homeland Security. Spatial HAC (a.k.a. Conley) standard errors reported in parentheses – these standard errors are adjusted for spatial and temporal correlation within 1,000 km and 10 decades. Significance levels: * 10%, ** 5%, *** 1%.

Table 2: White Americans' attitudes towards Asian Americans, by education level

| | Share (%) of white Americans with | | | Sample size |
|---|-----------------------------------|-----------------|---------------------|-------------|
| | High school or less | Some college | Bachelor or more | |
| | (1) | (2) | (3) | |
| <u>General Social Survey (2002):</u> | | | | |
| Feeling cool towards | | | | |
| Asian Americans | 17.8 (38.3) | 10.3 (30.5) | 6.1 (24.0) | 2,134 |
| Caucasians | 6.3 (24.4) | 3.0 (17.2) | 3.6 (18.7) | 2,167 |
| <u>Gallup (2006):</u> | | | | |
| Opposing a close relative marrying an Asian | 19.7 (39.8) | 11.6 (32.0) | 6.8 (25.3) | 4,570 |
| Little or no trust in Asian Americans | 13.0 (33.6) | 9.7 (29.6) | 5.1 (22.0) | 8,418 |
| <u>Implicit Association Test (2005 & 2016):</u> | | | | |
| Asian Americans are at most moderately American | | | | |
| 2005 | 33.6 (47.3) | 29.7 (45.7) | 24.4 (43.0) | 4,399 |
| 2016 | 23.0 (42.1) | 19.5 (39.7) | 15.2 (35.9) | 6,946 |

Notes: Standard deviations in parentheses. In all surveys, the sample has been restricted to respondents who reported being "white." In the GSS survey, respondents are asked "How do you feel towards [Asian Americans / Caucasians]?" we coded the responses as "feeling cool towards [Asian Americans / Caucasians]" if they answered from "very" to "a little" cool towards them. In the Gallup survey, respondents are asked (i) "Favor/Oppose marrying an Asian person" and (ii) "Do you trust Asians?". We coded the answers as (i) "opposing a close relative marrying an Asian" if they are "very much" or "somewhat" opposed, and (ii) "little or no trust" if they report trusting them "only a little" or "not at all." In the IAT survey, respondents are asked "In your mind, how American are asian Americans? That is, how strongly are they identified with America and all things American?"; we coded the responses as "at most moderately American" if they answered "Not at all Americans," "Barely American," "Slightly American" or "Moderately American."

Table 3: Share of Asian students and test scores

| Sample: | Above-median 2000 SES index | | | | |
|---------------------|----------------------------------|---------------------|---------------------|-------------------|---------------------|
| Data source: | California DOE (2001-2012) | STAR (2009-2013) | | SEDA (2009-2016) | |
| Score: | API | Math | Reading | Math | Reading |
| | (1) | (2) | (3) | (4) | (5) |
| Dependent variable: | | | | | |
| All students | 6.629*** (2.344) | 12.50*** (4.231) | 9.814*** (2.651) | 0.126 (2.826) | 5.899*** (2.243) |
| White students | 2.526 (2.567) | 19.99 (14.86) | 12.61 (8.531) | -0.274 (3.822) | -3.304 (3.155) |

Notes: Each row in this table shows the IV results from regressing the (standardized) weighted average of a test score (displayed in the first column) on the share of Asian students in the school district. All specifications include year fixed effects, district fixed effects, and lagged total enrollment. The unit of observation is a school district \times year. Sample restricted to suburban areas only for the 2001-2016 period. The instrument uses 2000 as base year. The inflows data used to construct the instrument come from the Department of Homeland Security. Spatial HAC (a.k.a. Conley) standard errors reported in parentheses – these standard errors are adjusted for spatial and temporal correlation within 1,000 km and 10 decades. Significance levels: * 10%, ** 5%, *** 1%.

Table 4: Where do white students go?

| Dependent variable: | White students in charter schools (1) | All students in private schools (2) | White households with kids (3) |
|------------------------|---|---|--------------------------------------|
| OLS | -0.151*** (0.0531) | -0.0806 (0.0610) | -0.766*** (0.0626) |
| IV | -0.0699* (0.0409) | -0.400** (0.178) | -1.493*** (0.184) |
| 1st stage | 2.167*** (0.271) | 1.476*** (0.196) | 1.829*** (0.127) |
| Number of observations | 889 | 2,584 | 304 |
| Number of districts | 46 | 152 | 152 |
| F-stat on excl. IV | 63.21 | 56.26 | 202.88 |
| Dep. var. mean | 262 | 1,311 | 6,835 |

Notes: Sample restricted to suburban school districts that have an above-median 2000 SES index. The analysis sample is further restricted to the school districts that have at least one charter school in column (2), and to years 2000 and 2010 in column (3). All specifications include year fixed effects, district fixed effects, and the total number of students in the previous year. The instrument uses 2000 as base year. The inflows data used to construct the instrument come from the Department of Homeland Security. Spatial HAC (a.k.a. Conley) standard errors reported in parentheses – these standard errors are adjusted for spatial and temporal correlation within 1,000 km and 10 decades. Significance levels: * 10%, ** 5%, *** 1%.

Table 5: Robustness of the main IV estimate to alternative specifications

| | |
|---|----------------------|
| Main estimate | -1.470*** (0.268) |
| <u>Panel A:</u> Year indicators × | |
| 2000 nationwide share of Asian residents | -1.853*** (0.437) |
| 2000 share of Asian students | -1.956*** (0.366) |
| 2000 share pop. Bachelors+ | -1.588*** (0.290) |
| 2000 share elderly (non-vet, age 65+) | -1.455*** (0.271) |
| 2000 average household size | -1.321*** (0.237) |
| 2000 median rent | -1.613*** (0.318) |
| 2000 share age groups | -1.434*** (0.247) |
| 2000 household income groups | -1.585*** (0.314) |
| 2000 average household income | -1.523*** (0.277) |
| 2000 average family income | -1.503*** (0.271) |
| 2000 median family income | -1.541*** (0.284) |
| <u>Panel B:</u> | |
| No lagged enrollment | -1.069*** (0.212) |
| Lagged enrollment by 5 years | -1.230*** (0.266) |
| ACS inflows | -1.369*** (0.250) |
| 5-year differences (2000, 2005, 2010, 2015) | -1.467*** (0.225) |
| Long difference (2000, 2010) | -1.579*** (0.214) |
| Grades K-8 | -1.319*** (0.279) |
| Grades 9-12 | -1.852*** (0.306) |
| 1990 IV | -2.085*** (0.506) |

Notes: Each row shows the IV results from a given specification, which regresses the number of White students on the number of Asian students. All specifications include year fixed effects, and district fixed effects. Except for the specifications with (no) lagged enrollment, all specifications also include lagged enrollment by one year. “2000 share age groups” corresponds to the following shares of age groups as of 2000: under 18, 18-24, 25-34, 35-54, 55-74, 75 and older. The inflows data used to construct the instrument come from the Department of Homeland Security, except for the “ACS inflows” row, which uses data from the ACS. Spatial HAC (a.k.a. Conley) standard errors reported in parentheses. Significance levels: * 10%, ** 5%, *** 1%.

Data Appendix

A. Consolidating school districts

School districts can be “unified” (that is, containing grades K-12) or may cover only elementary (K-8) or secondary grades (9-12). For consistency, we group together elementary districts that feed into neighboring secondary or unified districts – thereafter, we refer to this procedure as “consolidation.”

The first step in this process relies on Census data. We use the crosswalk from the Missouri Census Data Center’s MABLE Geocorr 2000, which provides correspondences between different levels of geographical units in the 2000 Census. The mapping between census tracts and school districts allows us to crosswalk elementary to secondary/unified school districts.

We start with the 987 unconsolidated school districts in California in the 2000 Census. Around 10 percent of these units cannot be mapped between elementary and secondary districts. First, there are 85 “orphan” elementary districts that are not associated with any secondary/unified school districts in the crosswalk. We suspect that this mapping is missing because these elementary districts feed into multiple secondary districts. We recover the mapping of 24 of these “orphan” districts by browsing school district websites or calling school district administrators to ask where the *majority* of elementary students attend secondary school (**Data Appendix Table 1** provides a list of districts collected by phone calls). Second, three “double feeder” elementary districts are explicitly marked in the data as feeding into multiple secondary/unified school districts. We exclude these 66 districts (61 remaining “orphan districts” and 5 “double feeder” districts), leaving 921 unconsolidated school districts.

Next, we merge these 921 unconsolidated districts in the Census data with the 943 school districts from the California Department of Education (DOE) enrollment data. From the 943 districts in the DOE sample, the merge drops 56 “orphan” districts, six “double feeder” districts, 20 districts that were created after 2000 (the Census data is from 2000, so these districts did not exist back then) and one district that is not present in the Census data, leaving a sample of 860 unconsolidated districts. The Census data provides the necessary crosswalk to consolidate these districts into either “unified” or joint elementary/secondary (or elementary/unified) pairs. The result of this consolidation process is 415 consolidated school districts.

B. Defining suburban school districts

To classify suburban districts, we first limit the sample to the (unconsolidated) districts in counties included in the Metropolitan Statistical Area (MSA) definitions for the year 2000 provided by IPUMS. We classify the largest school district (in terms of total enrollment) in each metropolitan area as a school district located in a “central city.” We define the remainder of the districts as “suburban.” We classify school districts that are located in counties that are not included in an MSA definition as “rural.” Finally, when we consolidate school districts (as explained in the

previous section), we assign the urbanicity status of the unified or secondary school districts to the consolidated school district.¹ Among our 415 consolidated school districts, 305 are classified as “suburban,” 80 as “rural” and 30 as “central city.”

¹ There are 14 consolidated districts that have a conflicting categorization. These correspond to cases when an elementary school district is classified as non-suburban but the secondary/unified school district it feeds into is classified as suburban, and vice versa.

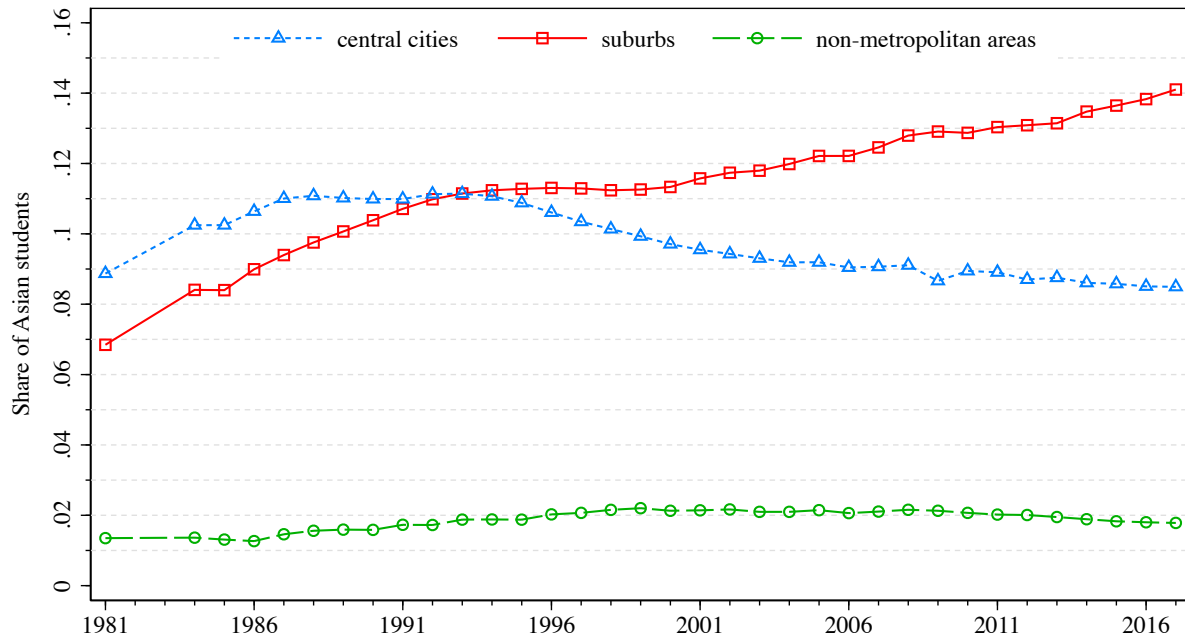
Data Appendix Table 1: “Orphan districts” mapping

| Elementary District | Secondary or Unified District |
|-----------------------------------|-------------------------------|
| Alvina Elementary | Caruthers Unified |
| Big Creek Elementary | Sierra Unified |
| Burrel Union Elementary | Riverdale Joint Unified |
| Camptonville Elementary | Nevada Joint Union High |
| Cayucos Elementary | Central Union High |
| Cutten Elementary | Eureka City Unified |
| Freshwater Elementary | Eureka City Unified |
| Garfield Elementary | San Leandro Unified |
| Gratton Elementary | Hughson Unified |
| Hermosa Beach City Elementary | Manhattan Beach Unified |
| Kneeland Elementary | Eureka City Unified |
| Knights Ferry Elementary | Oakdale Joint Unified |
| Lake Elementary | Orland Joint Unified |
| Manzanita Elementary | Gridley Unified |
| Mission Union Elementary | Soledad Unified |
| Monroe Elementary | Caruthers Unified |
| Pine Ridge Elementary | Sierra Unified |
| Plaza Elementary | Orland Joint Unified |
| Pope Valley Union Elementary | Saint Helena Unified |
| Raisin City Elementary | Caruthers Unified |
| Roberts Ferry Union Elementary | Waterford Unified |
| San Miguel Joint Union Elementary | Paso Robles Joint Unified |
| South Bay Union Elementary | Sweetwater Union High |
| Valley Home Joint Elementary | Oakdale Joint Unified |

Notes: Mappings obtained in some cases by browsing school district websites; in most cases, by calling each school district and asking administrators. Elementary districts feed to multiple districts for secondary school, but for simplicity, we map to the district which administrators say most students end up attending.

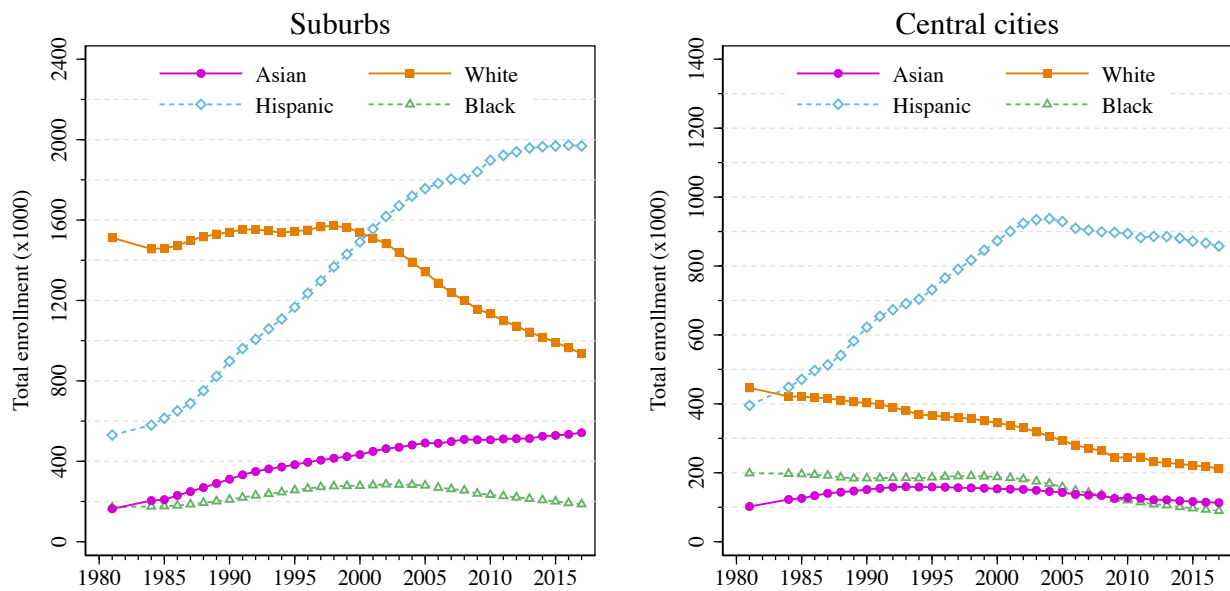
Appendix Figures

Appendix Figure 1: Share of Asian students enrolled in Californian public schools over time, by school district area type



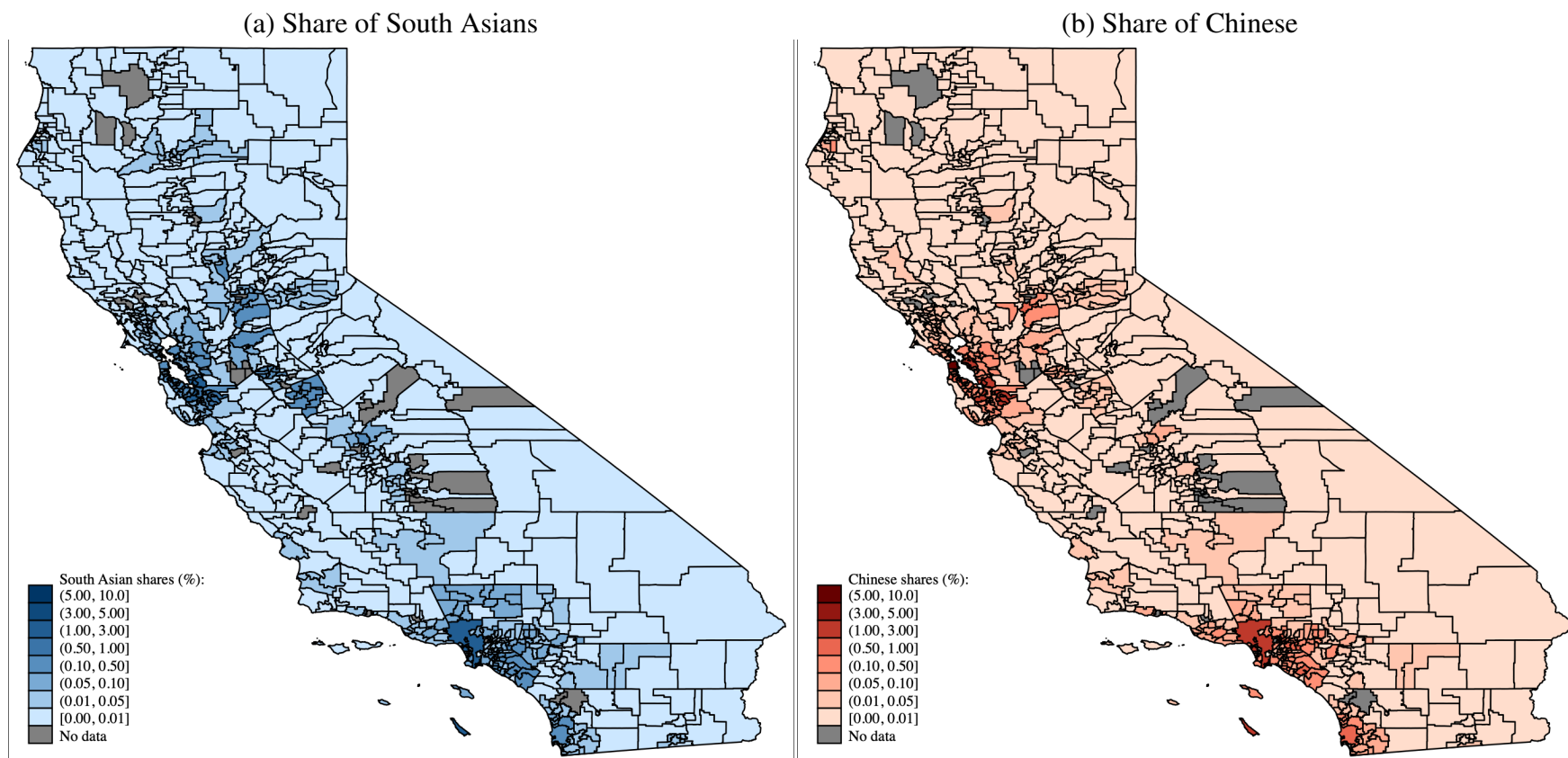
Notes: This figure displays the evolution over time of the share of Asian students in Californian public school districts, by area type. Specifically, the share of Asian students for each area is computed as follows: for each year of interest, we sum up the number of Asian students and the total number of students in the school district located in the area (i.e., central cities, suburbs, or metropolitan areas), and we then divide the sum of Asian students by the total number of students in that given area. The data come from the California Department of Education.

Appendix Figure 2: Student enrollment over time (1981-2017) in Californian suburbs and central cities, by race/ethnicity



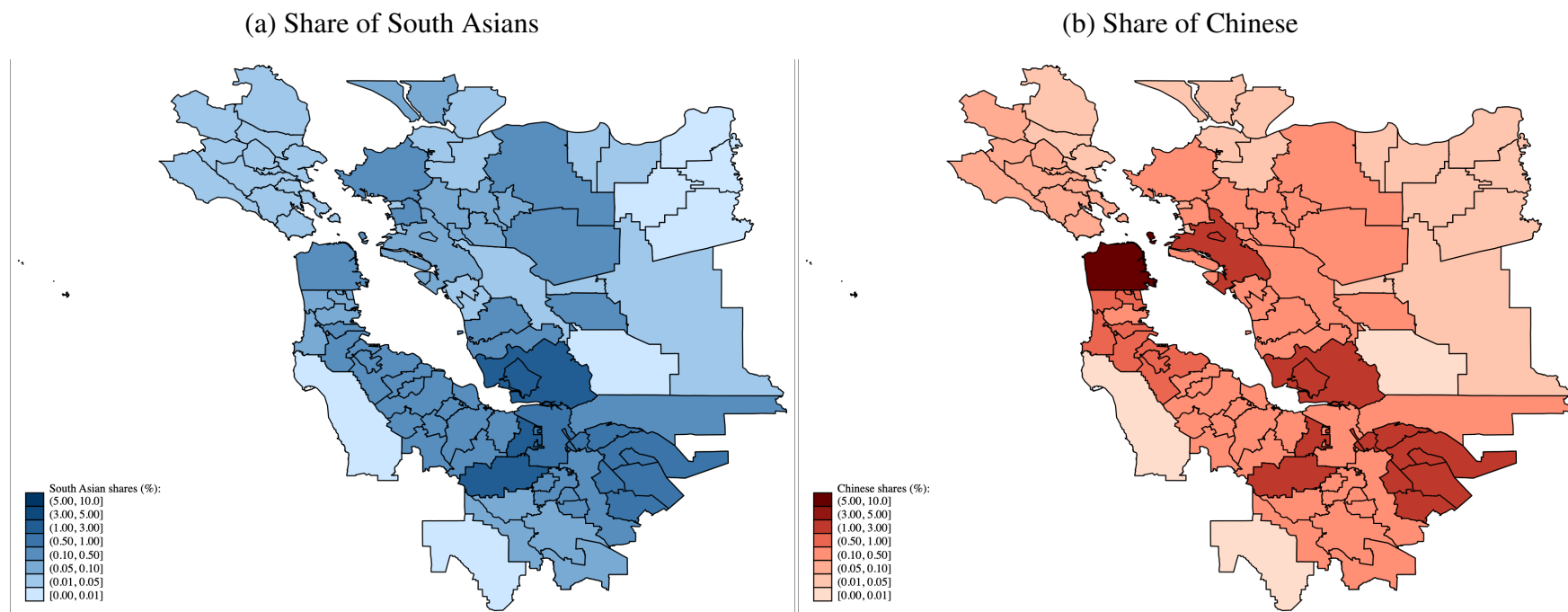
Notes: This figure displays the evolution over time of the enrollment Asian vs. white vs. Hispanic vs. Black students in Californian public school districts located in suburbs (left panel) and central cities (right panel), over the 1981-2017 period. The enrollments for students who are American Indian or Alaska Native or Pacific Islander, those with two or more races, and those without information on race are not shown, so that summing across the four groups displayed in this figure does not represent the full count. The data come from the California Department of Education.

Appendix Figure 3: Shares of South Asian (left) and Chinese (right) people in California as of 2000



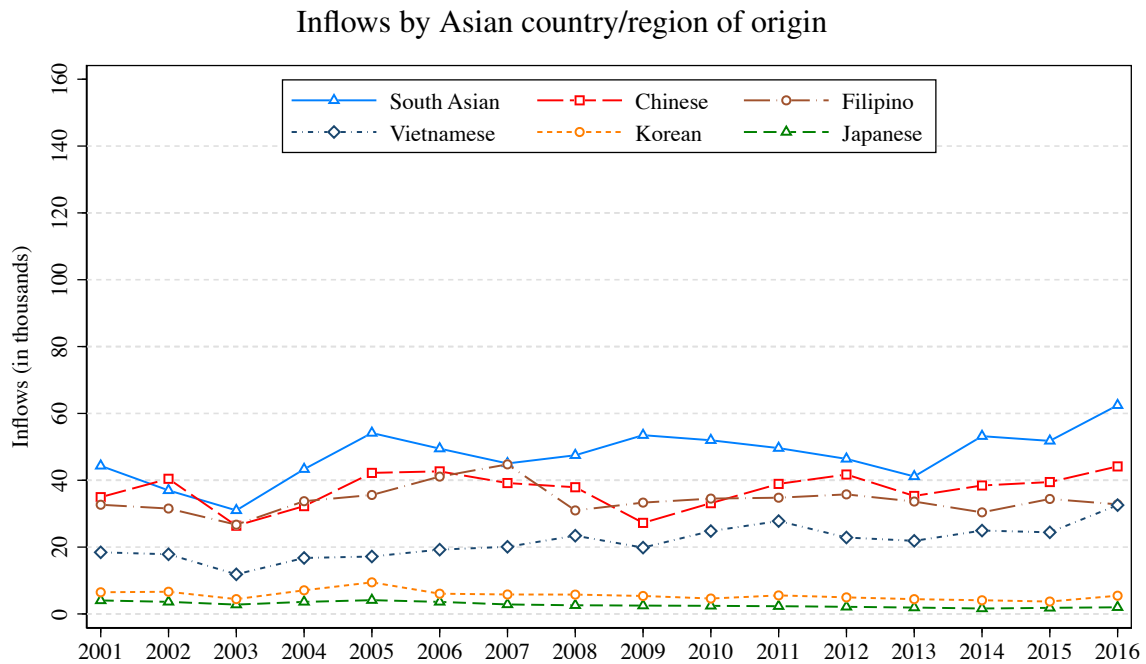
Notes: The shares have been computed as follows: South Asian (left panel) or Chinese (right panel) population in a school district divided by the nationwide population of South Asian (left panel) or Chinese (right panel), then multiplied by 100. Source: DHS & U.S. Census Bureau.

Appendix Figure 4: Shares of South Asian (left) and Chinese (right) people in the Bay area as of 2000



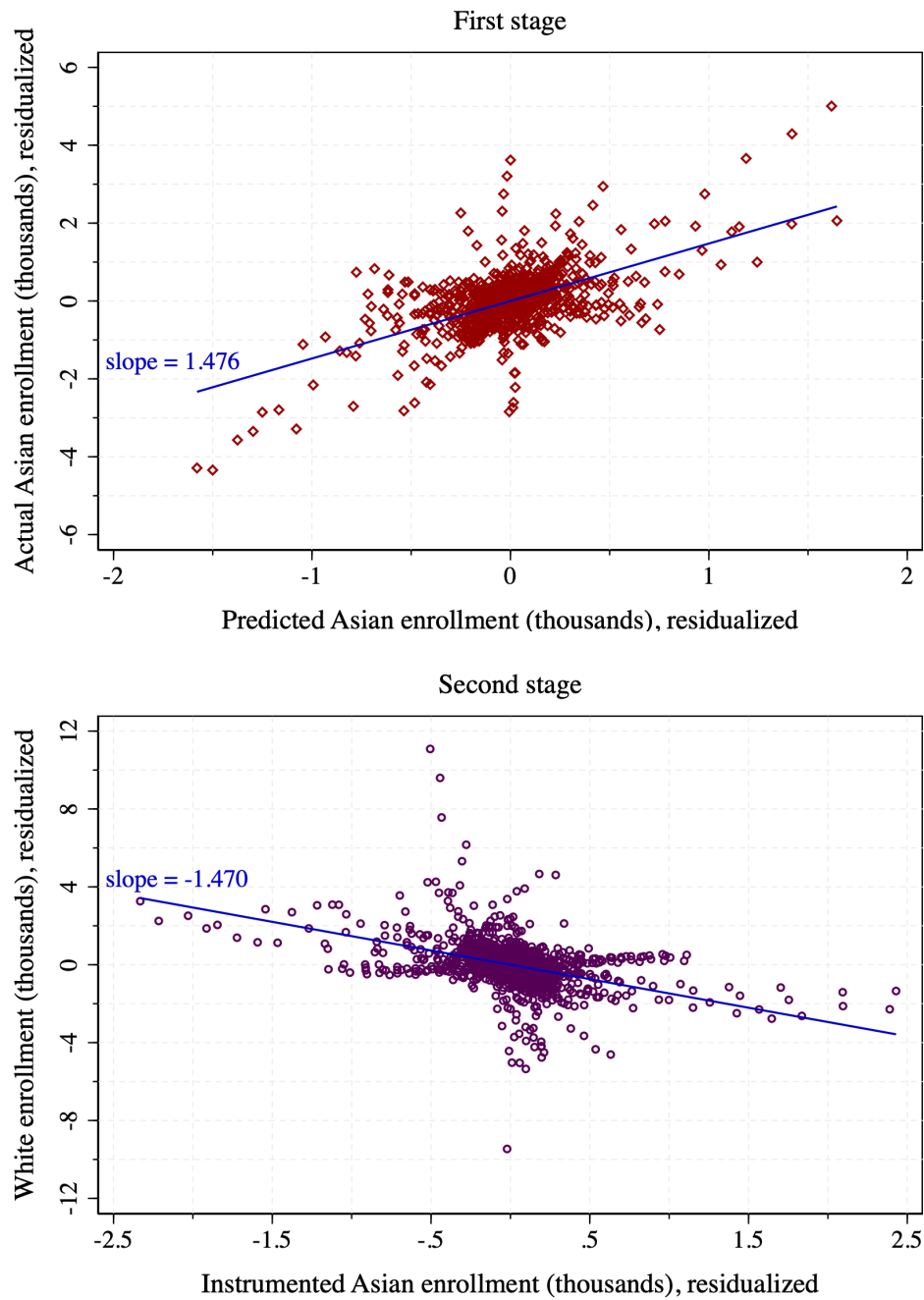
Notes: The shares have been computed as follows: South Asian (left panel) or Chinese (right panel) population in a school district divided by the nationwide population of Indian (left panel) or Chinese (right panel), then multiplied by 100. Source: DHS & U.S. Census Bureau.

Appendix Figure 5: Time series of inflows (new arrivals only), by Asian country of origin



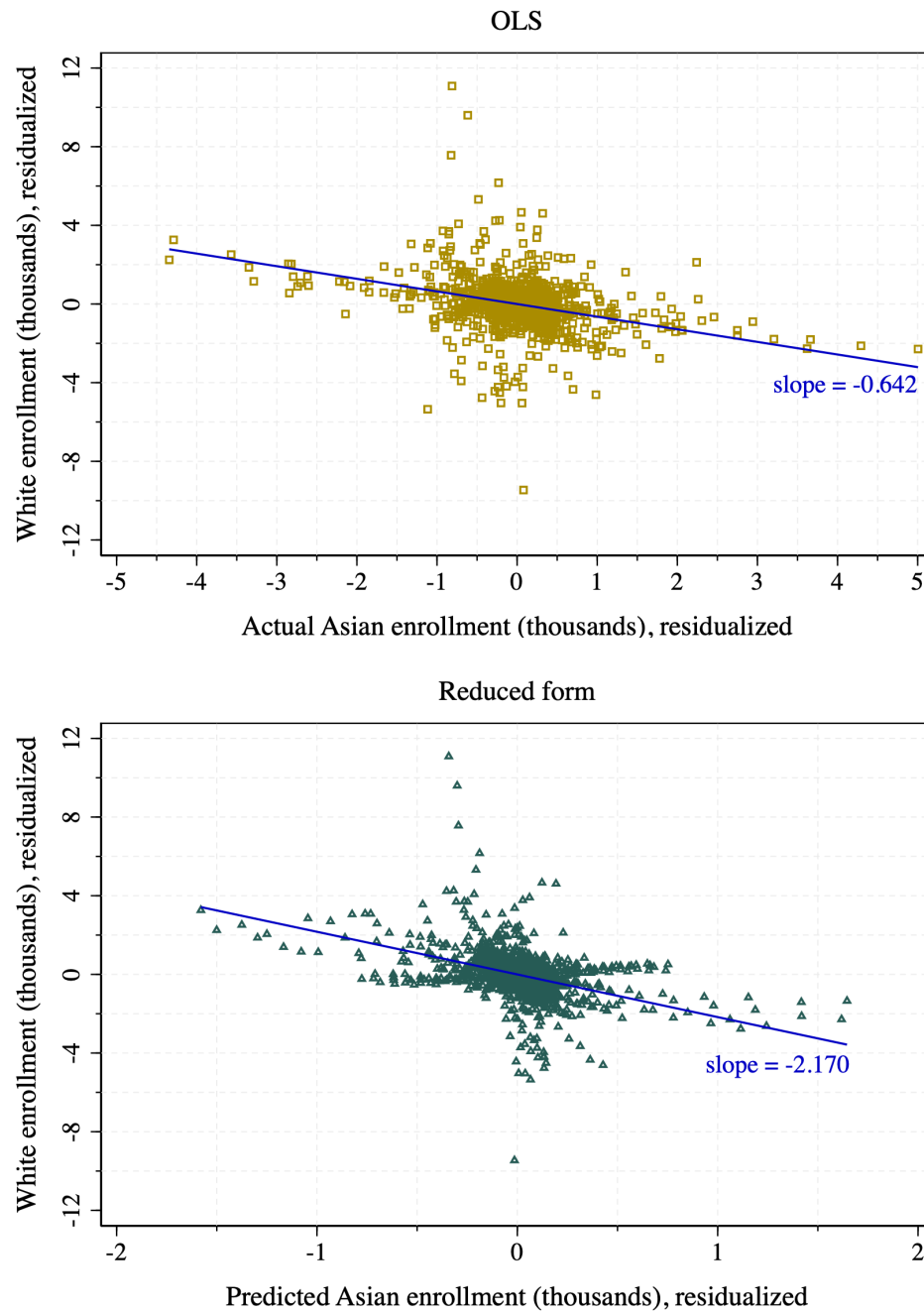
Notes: “Inflows” represent only new arrivals with a permanent resident status. Source: Department of Homeland Security. South Asian = Bangladesh + India + Pakistan; Chinese = China + Taiwan + Hong Kong; Vietnamese = Vietnam; Korean = South Korea + North Korea; Japanese = Japan. Data for 2003, 2004 and 2005 are inexistent in the raw data and have therefore been extrapolated.

Appendix Figure 6: Residualized first- and second-stage results



Notes: Both the outcome (white enrollment) and the (predicted) Asian enrollment have been residualized based on a model that includes the lagged enrollment variable and year and district fixed effects. The unit of observation is a school district \times year. Sample restricted to suburban school districts that have an above-median 2000 SES index. The instrument uses 2000 as base year. The inflows data used to construct the instrument come from the Department of Homeland Security. Spatial HAC (a.k.a. Conley) standard errors reported in parentheses – these standard errors are adjusted for spatial and temporal correlation within 1,000 km and 10 decades. Significance levels: * 10%, ** 5%, *** 1%.

Appendix Figure 7: Residualized OLS and reduced-form results



Notes: Both the outcome (white enrollment) and the (predicted) Asian enrollment have been residualized based on a model that includes the lagged enrollment variable and year and district fixed effects. The unit of observation is a school district \times year. Sample restricted to suburban school districts that have an above-median 2000 SES index. The instrument uses 2000 as base year. The inflows data used to construct the instrument come from the Department of Homeland Security. Spatial HAC (a.k.a. Conley) standard errors reported in parentheses – these standard errors are adjusted for spatial and temporal correlation within 1,000 km and 10 decades. Significance levels: * 10%, ** 5%, *** 1%.

Appendix Tables

Appendix Table 1: Asian enrollment and white/Black & Hispanic departures, below- vs. above-median 2000 median household (hh) income

| Sample: | Above-median 2000 median hh income (1) | Below-median 2000 median hh income (2) |
|--|---|---|
| <u>A) Dep. var.: White students</u> | | |
| OLS | -0.332*** (0.0770) | 0.400** (0.159) |
| IV | -1.896*** (0.419) | 3.800* (2.137) |
| 1st stage | 0.701*** (0.224) | -0.428* (0.259) |
| Dep. var. mean | 5,466 | 2,379 |
| <u>B) Dep. var.: Hispanic and Black students</u> | | |
| OLS | -0.280*** (0.0847) | -0.0147 (0.257) |
| IV | -0.394 (0.405) | -0.921 (0.798) |
| 1st stage | 0.701*** (0.224) | -0.428* (0.259) |
| Dep. var. mean | 7,147 | 6,464 |
| Number of observations | 2,584 | 2,598 |
| Number of districts | 152 | 153 |
| F-stat on excl. IV | 9.69 | 2.70 |

Notes: The 2000 school district index encompasses school quality and the percent of students eligible to free or reduced-price meals as of 2000. All specifications include year fixed effects, district fixed effects, and the total number of students in the previous year. The unit of observation is a school district \times year. Sample restricted to suburban school districts that have an above-median 2000 SES index. The instrument uses 2000 as base year. The inflows data used to construct the instrument come from the Department of Homeland Security. Spatial HAC (a.k.a. Conley) standard errors reported in parentheses – these standard errors are adjusted for spatial and temporal correlation within 1,000 km and 10 decades. Significance levels: * 10%, ** 5%, *** 1%.

Appendix Table 2: Asian enrollment and white departures in suburban school districts, subsamples by tercile of above-median 2000 SES index

| Dependent variable: | White students | | |
|---------------------|-----------------------------|-----------------------|-----------------------|
| Sample: | Above-median 2000 SES index | | |
| | Bottom tercile (1) | Middle tercile (2) | Top tercile (3) |
| OLS | -1.480*** (0.344) | -1.291*** (0.252) | -0.410*** (0.0938) |
| IV | -4.497*** (1.399) | -2.256*** (0.382) | -0.841*** (0.136) |
| 1st stage | 0.559** (0.241) | 1.129*** (0.102) | 2.102*** (0.212) |
| Observations | 850 | 850 | 884 |
| Number of districts | 50 | 50 | 52 |
| F-stat on excl. IV | 5.28 | 120.43 | 97.25 |
| Dep. var. mean | 4,551 | 4,761 | 7,040 |

Notes: All specifications include year fixed effects, district fixed effects, and the total number of students in the previous year. The unit of observation is a school district \times year. Sample restricted to school districts with an above-median 2000 index in suburban areas for the 2001-2016 period. The instrument uses 2000 as base year. Spatial HAC (a.k.a. Conley) standard errors reported in parentheses – these standard errors are adjusted for spatial and temporal correlation within 1,000 km and 10 decades. Significance levels: * 10%, ** 5%, *** 1%.

Appendix Table 3: First stage, second stage, and reduced form, using predicted IV for each Asian country-of-origin group

| (a) First-stage results | | | | | | |
|-----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Dependent variable: | Asian | | | | | |
| Asian ethnic group IV: | South Asian | Chinese | Filipino | Vietnamese | Korean | Japanese |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Predicted group-specific IV | 5.430*** (0.384) | 3.864*** (0.624) | 2.610*** (0.677) | 3.036*** (0.876) | 12.38*** (3.626) | 32.94*** (11.40) |
| Total _{t-1} | 0.205*** (0.0324) | 0.228*** (0.0324) | 0.266*** (0.0400) | 0.272*** (0.0406) | 0.290*** (0.0406) | 0.262*** (0.0394) |
| Observations | 2,584 | 2,584 | 2,584 | 2,584 | 2,584 | 2,584 |
| F-stat on excl. IV | 197.20 | 37.93 | 14.69 | 11.88 | 11.53 | 8.26 |

| (b) Second-stage results | | | | | | |
|--------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Dependent variable: | White | | | | | |
| Asian ethnic group IV: | South Asian | Chinese | Filipino | Vietnamese | Korean | Japanese |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Asian | -1.623*** (0.304) | -1.747*** (0.294) | -4.054*** (0.850) | -2.865*** (0.327) | -3.325*** (0.677) | -3.465*** (0.719) |
| Total _{t-1} | 0.489*** (0.112) | 0.526*** (0.109) | 1.206*** (0.242) | 0.856*** (0.133) | 0.991*** (0.176) | 1.033*** (0.209) |
| Observations | 2,584 | 2,584 | 2,584 | 2,584 | 2,584 | 2,584 |
| F-stat on excl. IV | 197.20 | 37.93 | 14.69 | 11.88 | 11.53 | 8.26 |

Notes: All specifications include year fixed effects and district fixed effects. The unit of observation is a school district \times year. Sample restricted to suburban school districts that have an above-median 2000 SES index. The instrument uses 2000 as base year. The inflows data used to construct the instrument come from the Department of Homeland Security. Spatial HAC (a.k.a. Conley) standard errors reported in parentheses – these standard errors are adjusted for spatial and temporal correlation within 1,000 km and 10 decades. Significance levels: * 10%, ** 5%, *** 1%.