The Latinx Great Migration and its Effects on School Segregation

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PRELIMINARY DRAFT / EXTENDED ABSTRACT
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Abstract

By 2020, children of color under 18 outnumbered non-Hispanic white children in the United States (Vespa and Armstrong, 2020). In this paper, we estimate the effect of this historic demographic transition during which the U.S. has seen its Hispanic population almost triple over the last three decades, on US school segregation. Merging data from the Mexican Migration Project, the Mexican census, the EMIF border survey, the U.S. Census, and NCES Common Core Data on schools, and building on Derenoncourt (forthcoming), we use a shift-share instrument that combines 1990-2000 network links between Mexican states and U.S. MSAs with exogenous Mexican state-level out-migration shocks to isolate variation in the percentage change in Hispanic student shares in U.S. schools districts. We find that for each percentage point increase in the Hispanic student share, the multi-group Theil index of school segregation rises by 0.2 or about 0.3 standard deviations. This effect is driven by school districts without a history of court-ordered desegregation plans. We also present evidence consistent with a "white flight" in response to the arrival of Hispanic students. Ongoing work will attempt to unravel the underlying mechanisms, in particular, the role of policies such as court-ordered desegregation plans or school finance reforms in mitigating the negative effects of racial diversification on school segregation.

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1 Introduction

The United States has recently undergone a dramatic demographic transition, among the largest in its history. The fraction of the population that is foreign-born is approaching its historic peak (see Figure 1), and the fraction of non-Hispanic whites has fallen from 75% in 1990 to less than 60% today (U.S. Census Bureau, 1992, 2020). Among school-age children, the transition is particularly pronounced. According to NCES public school enrollment statistics (Table 203.50 in De Brey et al. (2021)) children of color now outnumber non-Hispanic white students since 2014. More than a quarter of pre-K through grade 12 students in American schools are now Latinx, and these children outnumber African-American students 2 to 1. Grappling with whether (and where) increased diversity is reflected in more integrated schools and whether (and where) increased diversity instead leads to greater racial isolation of black and Hispanic children is a topic of ongoing interest and debate for economists and policymakers alike (Caetano and Maheshri, 2021; Rabinowitz, Emamdjomeh and Meckler, 2019). This paper contributes to this debate by showing that large (exogenous) flows of Mexican immigrants into US metropolitan areas increase multi-group segregation within metro-area school districts. We present evidence consistent with histories of court-ordered segregation plans having mitigated these negative effects.

School segregation by race and ethnicity is an important outcome to study. Reardon et al. (2019) argue that it is one of the strongest predictors of achievement gaps, along with parental income and education. A sizeable literature has found a causal link between segregation and worse academic and life outcomes for black students.[1] For instance, Guryan (2004), Reber (2010) and Johnson (2011) use court-ordered desegregation plans after the Brown decision to identify negative effects of segregation on black achievement, dropout rates and later life socioeconomic and health outcomes. Cutler and Glaeser (1997), Card and Rothstein (2007) and Hanushek, Kain and Rivkin (2009) exploit observational variation in segregation and use panel methods to reach similar conclusions. Given the history of racial segregation in the United States, these papers perhaps justifiably focus on a two-group paradigm, studying the behavioral responses of white parents and the pernicious effects of racial isolation on the outcomes of African-American school children. In some cases, this paradigm has been updated to group black and Hispanic children, but rarely has the focus shifted to the multi-group paradigm necessitated by such a dramatic demographic transition. Notable exceptions include Caetano and Maheshri (2021), who find that Hispanic immigration explains more of the rise in school segregation in urban areas between 2002 and 2018 than other factors, and Fuller et al. (2019), who find that in school districts enrolling at least 10% Latinx students, these children have become less exposed to white peers between 1998 and 2010.

Still, we know very little about how migration trends shape school segregation. Cascio and Lewis (2012) use a standard shift-share instrument to show that in California between 1970 and 2000, white parents

[1] See Fryer (2011) for a review.

exited public schools in response to Hispanic immigration inflows in proportions similar to those observed in response to black migrants from the South before 1970. We build on this analysis in two aspects. First, we focus on the period after which the destination patterns of Mexican migrants to the United States shifted dramatically, bringing large migrant inflows into school districts with long and complex histories of backlash against school integration and high-profile legal and legislative strategies to desegregate schools. Before 1990, nearly 80% of Mexican migrants settled in California or Texas. That fraction fell to under 50% by 2000 (Card and Lewis, 2007), generating a diaspora that spread into MSAs across the South, Midwest, Northeast, and Mountain West (see Figure 3b). Focusing on a sample excluding California and Texas and population changes between 2000 and 2010, we study how the arrival of a new identity group affects segregation in a more diverse set of American cities.

Second, following the identification strategy employed to study outflows of African-Americans from the South in Boustan (2010) and Derenoncourt (forthcoming), we exploit exogenous changes in destination school district-level Hispanic student shares between 2000 and 2010 using push factor instruments at the Mexican state level to predict total Mexican state level out-migration by year and assigning inflows to cities using information on destination choices of migrants between 1990 and 2000. Our identification strategy advances on a standard shift-share instrument and does not rely on an assumption that pre-existing shares of Hispanic students or Mexican immigrants are exogenous. Instead, identification comes from the exogeneity of economic shocks in Mexican sending states pushing potential migrants to settle in US MSAs according to pre-existing network links, which may be endogenous (Borusyak, Hull and Jaravel, 2019).

We find that for each percentage point increase in the Hispanic student share, the multi-group Theil index of segregation (which is invariant to compositional changes and which we have scaled to range between 0 and 100) rises by 0.2 or about 0.3 standard deviations. This effect is driven by school districts without a history of court-ordered desegregation plans, where it is associated with increases in the variance ratio (a measure of isolation adjusted for compositional shifts) of both black and Hispanic students from white students. In school districts with histories of court-ordered desegregation plans, these point estimates go in the opposite direction, though we are currently underpowered to precisely estimate decreases in isolation in these districts.

We present suggestive evidence that an intermediate mechanism in the districts driving increases in segregation is the exit of white students in response to the arrival of Hispanic students, mirroring the findings of Cascio and Lewis (2012) in California. We are yet to fully explore the ameliorating histories of court-ordered integration plans, though there is an intriguing possibility that historical experience grappling with integration may facilitate the integration of new identity groups.

Whether inflows simply exacerbate white flight as in California in the 80s or reconfigure the racial paradigm in a multi-group setting is an empirical question. Recent work by Fouka and Tabellini (2020)

suggests that Mexican migration improves whites' perceptions of blacks, increases support for pro-black policy, and decreases anti-black hate crimes. Related work has found that counties with recent large increases in Hispanic populations had larger Trump vote shares in 2016 (Newman, Shah and Collingwood, 2018). In addition to updating our understanding of racial segregation in American schools for the twenty-first century, this project contributes to our understanding of the social effects of changing population shares in settings with incumbent minority groups.

The rest of the paper is organized as follows. Section 2 summarizes features of the Latinx Great Migration after 1990 underpinning our identification strategy. Section 3 describes the datasets we use and details our empirical strategy. Section 4 discusses the main results and outlines ongoing and future work.

2 The Latinx Great Migration after 1990

The Immigration and Nationality Act of 1965 repealed immigration quotas by origin country, thereby opening U.S. borders to migrants outside of Northwestern Europe. This resulted in a surge of immigration from Mexico, and most recently from China and India, as shown in Figure 1. Currently, the foreign-born share of the U.S. population nearly surpasses the record-high levels at the turn of the 20th century, while the fraction of school-aged Hispanic children more than doubled in the last three decades. This phenomenon is what we refer to as the "Latinx Great Migration," and the effect of which we study in this paper.

More specifically, we narrow down the time span of our research to post-1990. Around this time, a significant shift occurred in the typical destinations of Mexican migrants, potentially due to the amnesty granted by the 1986 Immigration Reform and Control Act (IRCA) to undocumented people who had been living in the U.S. for at least 5 years. As Card and Lewis (2007) observe in Census data, after 1990 the fraction of Mexicans settling down in California or Texas, two traditional gateway states, falls below 50%. Panel A of Figure 2a confirms this shift in destinations in the Mexican Migration Project dataset that we use in this paper. The U.S. Census Bureau's maps in Figures 3a-3b also nicely illustrate the result of the shift: while California and Texas remain the two states with the largest shares of Hispanic population in 2010, the 2000 to 2010 *change* is largest in the Midwest and the South. Therefore, we also restrict our focus to cities *outside* of California and Texas.

The new destination locations of Mexican migrants include cities such as Atlanta and Denver, among others. These location choices could hardly be treated as exogenous; it is more likely that workers were "pulled" to these places with strong labor demand in some locally booming industries of manufacturing.[2] Given the potential endogeneity of these location choices, we exploit this variation in new settlement patterns to establish network links between Mexican sending states and U.S. destination cities. Building on these

[2]As Card and Lewis (2007) describes, around the same time, migrants became also more likely to take manufacturing jobs, instead of working in agricultural occupations as was most common previously.

links, we then exploit arguably exogenous economic and social Mexican state-level "push factors" to predict changes in the Hispanic student population in U.S destination cities.

3 Data and Methods

Our data is drawn primarily from five key sources: First, Mexican state-level push factors come from the University of Delaware geo-located rainfall histories; the Mexican Migration Project (MMP) community survey, which collects data socioeconomic, crime and demographic variables; and INEGI (Instituto Nacional de Estadística y Geografía, the Mexican Census agency), including the INEGI National Survey of Occupation and Employment (ENOE) and the Population Survey on Mortality. Second, Mexican state-level out-migration counts come from EMIF (Encuestas sobre Migración en las Fronteras Norte, surveys of representative samples of migrants entering the US by land or air). Third, predetermined links between Mexican origin states and US destination MSAs come from the MMP migrant level file, a survey of households in Mexican states with significant emigration histories covering emigration trips between 1990 and 2000. Fourth, school and district level racial shares and segregation measures are computed using the Common Core Data (CCD) of the National Center for Education Statistics (NCES) collected by the US Department of Education. Finally, records of court-ordered desegregation plans come from the recently updated dataset accompanying Reardon et al. (2012).

Our identification strategy builds on shift-share instrumental variables methods pioneered by Card (2001), and advanced by Boustan (2010) and Derenoncourt (forthcoming). In particular, we instrument for 2000-2010 changes in Hispanic student shares using arguably exogenous variation in Mexican state-level migration. To do so, we interact variation in location choices of Mexican migrants who moved prior to 2000 with variation in predicted out-migration from Mexican states between 2000 and 2010 using state-level economic and social push factor variables. We then link the resulting prediction of Mexican migration into select U.S. MSAs with school district-level changes in Hispanic student population in our first stage regression. Below, we describe the steps to construct our instrument in more detail.

3.1 Pre-Migration Period: 1990-2000

To construct the Mexican State-U.S. MSA links to establish predetermined migration patterns, we draw on the Mexican Migration Project's (MMP) migrant-level file, as in Munshi (2003) and Chalfin (2013). The questionnaire collects retrospective migration data about Mexican migrants who moved to or took a trip to the U.S. The variables of interest in our analysis include the MSA destinations of Mexican migrants as well as the trip year.

We construct the share of migrants from each Mexican state m who settled in MSA s between 1990 and 2000:

$$\omega_{ms}^{1990-2000} = \frac{mex_{ms}}{mex_m} \tag{1}$$

where mex_{ms} is the number of Mexicans from state m who listed MSA s as their destination between 1990 and 2000, and mex_m is the total number Mexicans migrants from Mexican state m between 1990 and 2000.

3.2 Migration Period: 2000-2010

To predict annual Mexican migration into the U.S., we use the Surveys on Migration at the Borders of Mexico (EMIF Norte) file. This survey has been carried out since 1993 with the objective of knowing the characteristics of the migratory movements at the northern border of Mexico. From this survey, we generate annual migrant counts from each Mexican State (according to the migrant's state of residence) into the United States during our migration period 2000-2010.

Using the EMIF U.S.-bound migrant counts, we predict out-migration from Mexican states using state-level push factors:

$$mig_{mt} = \beta_0 + Z_{m(t-1)}\beta_1 + \epsilon_{mt} \tag{2}$$

where mig_{mt} is the out-migration rate for Mexican state m in year t, Z_{mt-1} is a set of push factors (see below) measured in year *t-1* and $\hat{mig}_{mt}$ is the predicted out-migration rate from Mexican state m for each year.

We then generate predicted migration into U.S. MSAs by multiplying the share of pre-period migrants between each Mexican state and U.S. MSA by the predicted number of migrants leaving that Mexican state between 2000 and 2010:

$$\hat{\Delta mex_s}^{2000-2010} = \sum_{mt} \omega_{ms} \times \hat{mig}_{mt} \tag{3}$$

Under the assumption that Mexican state-level variation in annual state economic and demographic indicators are uncorrelated with destination MSA characteristics for migrants from those Mexican states, we estimate Mexican state out-migration using a machine learning based estimation. We follow Derenoncourt (forthcoming) and select the set of predictors by applying the Least Absolute Shrinkage and Selection Operator ("LASSO") algorithm to a dataset with various Mexican state push factors. Each push factor is measured in year *t-1* and used to predict migration in year *t*. As per equation (3), we obtain the annual predicted number of migrants out of each Mexican state. We then aggregate the total migrants between 2000 and 2010.

The machine selects the best predictors of out-migration from a set of variables documented in the literature to predict Mexican migration. The set of annual variables includes rainfall shocks (Chalfin, 2013; Hunter, Murray and Riosmena, 2013; Munshi, 2003; Pugatch and Yang, 2011; Riosmena, Nawrotzki and Hunter, 2018), state-level Progresa spending (Angelucci, 2004; Parker and Todd, 2017; Stecklov et al., 2005), crime variables (Basu and Pearlman, 2017; Dell, 2015; Orozco-Aleman and Gonzalez-Lozano, 2018), and various proxies for employment, development and poverty (Fernández-Kelly and Massey, 2007; Oliver, 2009; Villarreal and Cid, 2010). We also add up to four lagged versions of each variable to account for delays in migration in response to push factors.

LASSO selects the following push factor variables for a given migration year t:

- Progresa Spending (t-2)
- Homicide Rates (t-2)
- Male Excess Mortality (t-1)
- High (1SD) Rainfall Shock (t-2)
- High (1SD) Rainfall Shock (t-3)
- High (2SD) Rainfall Shock (t-2)
- High (2SD) Rainfall Shock (t-3)
- Infant Death Female (t-1)
- Maternal Mortality Rate (t-1)
- Share Unemployed (t-1)

3.2.1 First Stage Equations

We normalize the output from equation (3) by 2000 school district-level population to arrive at our final instrument, as follows:

$$\hat{\text{LGM}}_s = \frac{\Delta \hat{mex}_s^{2000-2010}}{pop_{st=2000}} \tag{4}$$

Our endogenous variable uses school district level changes in Hispanic (rather than Mexican) student population due to data availability in the NCES, as follows:

$$\text{LGM}_s = \frac{\Delta hisp_s^{2000-2010}}{pop_{st=2000}} \tag{5}$$

Together, these constitute our first stage equation, where X_s is a vector of controls:

$$LGM_s = \gamma + \delta \hat{LGM}_s + \mu X_s + \epsilon_s \tag{6}$$

3.3 Post-Period: 2010-2015

Using our instrument for Mexican migration outlined above, we turn to our analysis of the impact of Mexican migration on racial segregation within school districts between 2010 and 2015. The segregation indices included in our analysis include the Multi-Group Theil Index and the Variance Ratio. In the present paper, we have restricted our analysis to elementary grade students (Pre-Kindergarden - Grade Five) to abstract away from the potential influence of school choice among middle school and high school students.

3.3.1 Theil Index

The Theil index measures the "entropic distance" from a perfectly equal distribution of students by comparing the racial composition in the school district to the schools within that district. In this paper, we have scaled it to range from 0 to 100, where 100 is the least equal distribution of students (full segregation) and 0 is perfect equality (every school in the district has the same shares as the district itself). The mean Theil index in 2000 is 6.39, but with substantial variation [0, 74.65]. Although lacking an intuitive interpretation, the appeal of the Theil index is that it is flexible for any number of racial groups which in our paper includes 4 racial groups: White, Blacks, Hispanics, and Asians.

The Theil builds on an entropy or diversity score E for the district and e_j, the entropy scores for each school, calculated as:

$$E = \sum_{i=1}^{n} (s_i)\ ln(\frac{1}{s_i}) \tag{7}$$

$$e_j = \sum_{i=1}^{n} (s_{ij})\ ln(\frac{1}{s_{ij}}) \tag{8}$$

where the share of a group in an area is s_i for n groups and $\sum_{i=1}^{n}(s_i)$=1. A higher E indicates greater diversity. Range of E is [0, ln(n)] where n is the number of racial groups. When only one racial group is present in a school (district), then e=0 (E=0). When multiple groups have equal proportion (1/n), then E $= \sum_{i=1}^{n} \frac{ln(n)}{n} = ln(n)$, the maximum value of E.

$$Theil = \sum_{j=1}^{M} \frac{t_j}{T} \times \frac{E - e_j}{E} \tag{9}$$

where T is the student count for the whole district and t_j are the student counts for M schools j that comprise the district.

3.3.2 Isolation Index and Variance Ratio

We also include a two-group Variance Ratio in our analysis to decompose some of the racial segregation between specific racial groups. The variance ratio builds off the isolation index. he isolation index measures how clustered students from one group are among people like themselves. The question being posed here is "how hispanic is the average hispanic student's school?" Or, "how white is the average white student's school?

The isolation index sheds light on a particular aspect of school segregation: the extent to which students in a particular demographic subgroup are isolated from students in other demographic subgroups when attending a particular school, and is calculated as:

$$Isolation = \sum_{i=0}^{n} [\frac{x_i}{X} \times \frac{x_i}{t_i}] \tag{10}$$

However, the isolation index can only be meaningfully interpreted with reference to the racial composition of the district in which the school is located. We use the variance ratio (which is simply an adjustment of the isolation index) to account for the racial composition of the school districts.

$$VR = \frac{I - P}{1 - P} \tag{11}$$

where P is the share of the racial group in the district and I is the isolation index. A higher value of the variance ratio VR indicates a higher level of segregation within the school district. The variance ratio ranges from 0 to 100 and is interpreted as the percent segregation in the school district. For example, within districts that had a past court-ordered desegregation plan, the Black-White Variance Ratio is 13.04. This means that the districts are 13 percent as they could be. Like the Theil index, the variance ratio also takes into account variation in racial composition making comparisons between districts possible (Monarrez, 2020).

4 Results and Future Work

The key finding of our preliminary analysis is that exogenous increases in the Hispanic student share are associated with increases in segregation. This finding is true if we use the multi-group Theil index (Table 4), the black-white variance ratio (Table 5), the Hispanic-white variance ratio (Table 6), and a variance ratio that pools black and Hispanic students as underrepresented minorities and white and Asian students as is common in the literature (Table 9). In each case, this effect is driven by school districts with no history of court-ordered desegregation plans.

We find little movement on isolation of Hispanic from Asian students (Table 8) and less segregation

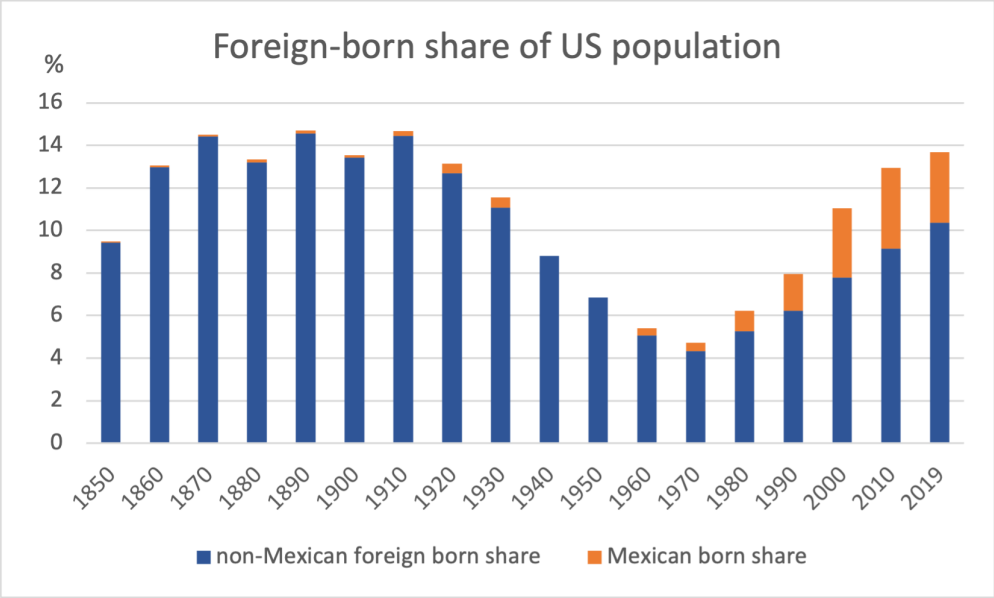
between black and Hispanic students (Table 7), both of which are consistent with mechanisms driven by the responses of white parents to the inflows of Hispanic children. In Table 10, we show that increases in Hispanic student share lead to decreases in the white student share, also consistent with this white flight mechanism.

In ongoing work, we hope to unpack whether and how histories of court-ordered segregation plans may ameliorate the segregating effects of migrant inflows. The possibility that histories of integration efforts may make it easier to integrate new arrivals is intriguing: As Reardon et al. (2012) documents, many school districts with a history of court-ordered desegregation plans had been released from their orders before our post-period of 2010-2015, and release resulted in a gradual resegregation of black students. Are the effects of court orders more persistent for Latinx students or are our results are driven by districts that had not dismissed their plans?

In addition, we hope to explore alternative/complementary mechanisms, such as changes in school finance reform, the effects of English-leaner curricular needs, and further evidence on residential and school-choice white flight. Future plans include investigating if increases in segregation documented here translated into lower (higher) test scores for black or Hispanic (white) students.

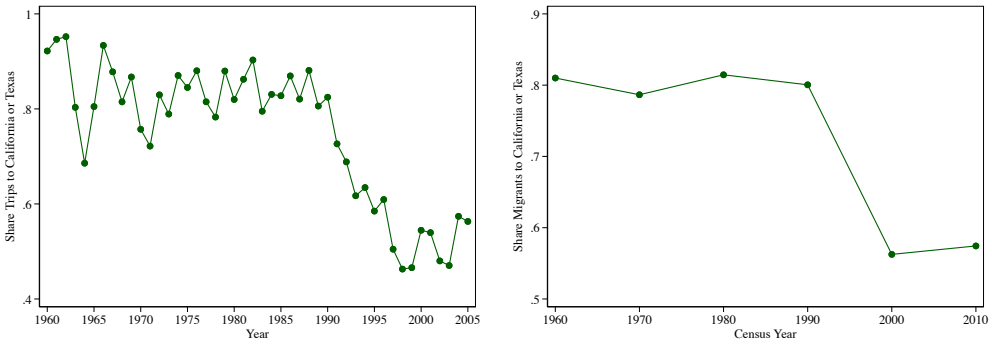
5 Figures

Figure 1: Foreign-Born Share of U.S. population



Notes: This figure illustrates two of the most significant demographic transitions in U.S. history: the large inflows of European migrants at the turn of the 20th century, and the increasing volume of immigration from Latin-America and Asia since 1965. The top country of origin of this second episode has been Mexico, the effect of which we study in this paper. Source: Gibson and Jung (2006), Survey (2010, 2019).

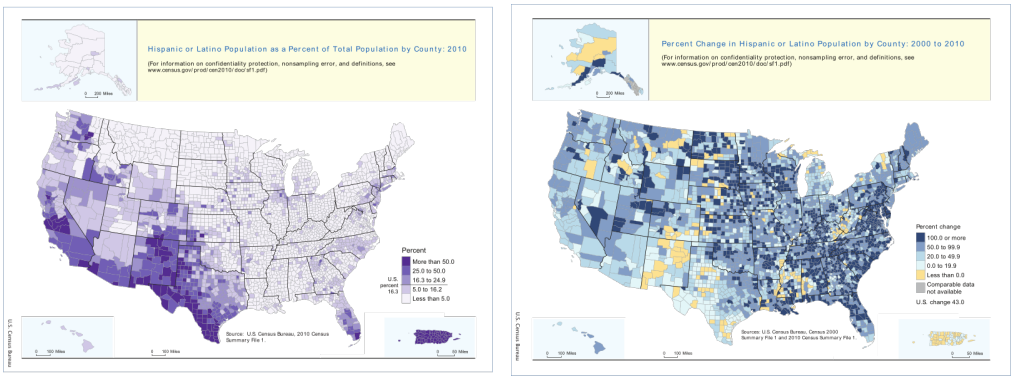
Figure 2: Destination Choice of Mexican Migrants



(a) CA/TX Share (MMP) (b) CA/TX Share (US Census)

Notes: Panel A depicts the fraction of all trips from Mexican sending states to US MSAs with destinations in California or Texas in the Mexican Migration Project's (MMP) migrant file. Panel B depicts the fraction of all US-resident migrants from Mexico in the last five years who are residing in California or Texas at the time of the decadel US Census.

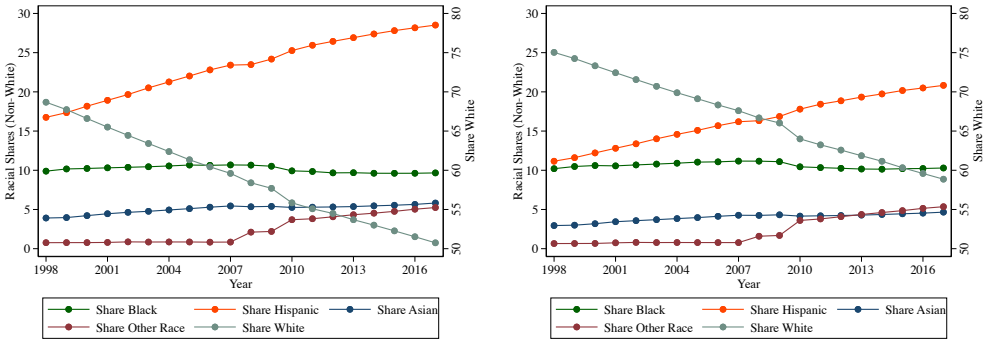
Figure 3: Hispanic Population in the U.S.



(a) Hispanic Population, 2010 (b) Change in Hispanic Population 2000-2010

Notes: This pair of U.S. Census Bureau maps illustrate the shift in Hispanic migrants' destination choices. Before 1990, most Mexican migrants settled down in California and Texas, and still in 2010, these two states have the largest shares of Hispanic population. However, after 1990, Mexican migrants turned more towards cities outside of California and Texas, so that the change in Hispanic shares are now higher in other states. Source: Ennis and Albert (2011).

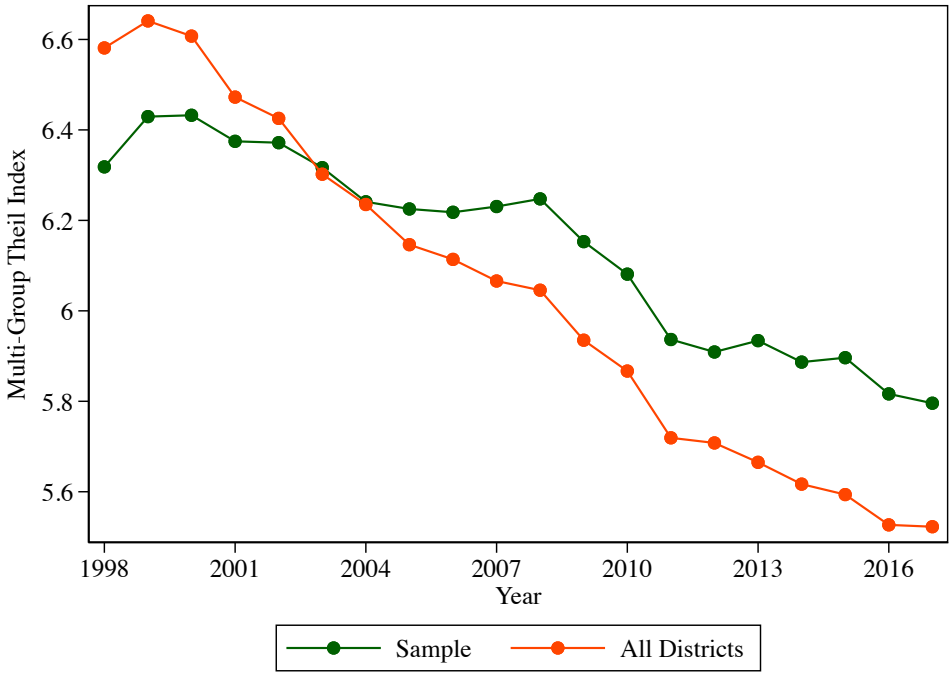
Figure 4: Student Racial Shares



(a) Sample Only (b) All Districts

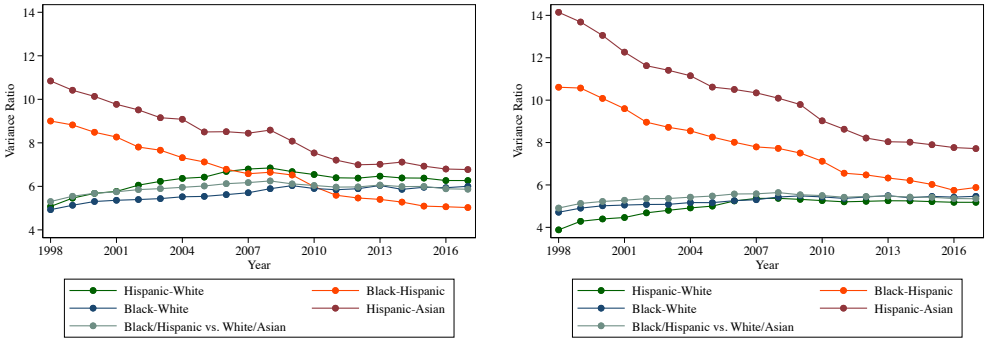
Notes: The figures show the evolution of shares of black/Hispanic/white/Asian/other students over time in our sample of school districts in MSAs outside of California and Texas with MMP representation vs. all school districts. Elementary school (pre-kindergarten to 5th grade) students only. Source: Authors' calculations from NCES CCD 1998-2015. The two panels only show level- but no significant trend differences between our sample vs. all school districts. Both illustrate the steady increase in the share of Hispanic students throughout the period, mirrored by a decline in the white student share. The small jump in the share of other race between 2009 and 2010 is due to the introduction of "2 races" as an additional category in data reporting.

Figure 5: Multi-Group Theil Index with 4 Racial Groups



Notes: The figures show the evolution of the Theil index, a multi-group measure of segregation over time in our sample of school districts in MSAs outside of California and Texas with MMP representation vs. all school districts, for 4 racial groups: black, Hispanic, white and Asian students. The Theil index is not sensitive to changes in the racial composition and has been scaled to range between 0 and 100, with a higher number meaning more segregation. Elementary school (pre-kindergarten to 5th grade) students only. Authors' calculations from NCES CCD 1998-2015. The two panels only show level- but no significant trend differences between our sample vs. all school districts. Both illustrate a steady decrease of segregation among the 4 groups.

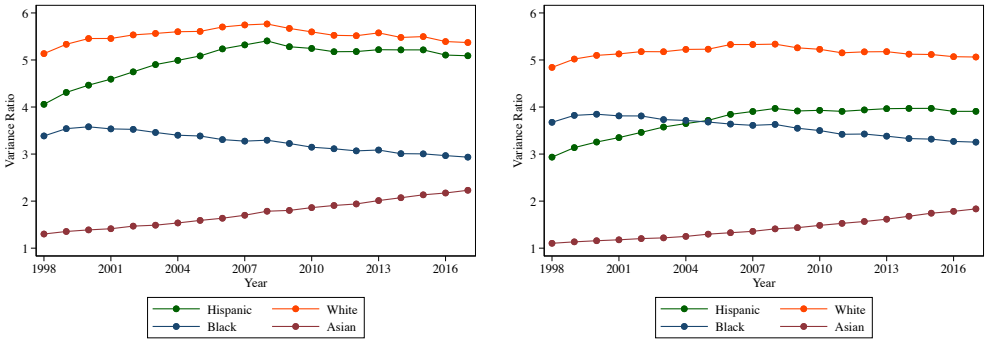
Figure 6: School Segregation Measured by the Variance Ratio



(a) Sample Only (b) All Districts

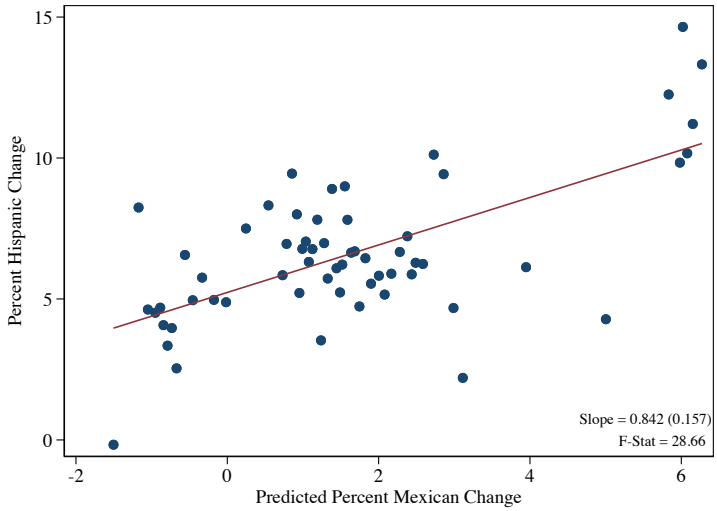
Notes: The figures show the evolution of the variance ratio, a 2-group measure of segregation over time in our sample of school districts in MSAs with MMP representation vs. all school districts, between pairs of race categories. The variance ratio is not sensitive to changes in the racial composition and has been scaled to range between 0 and 100, with a higher number meaning more segregation. Elementary school (pre-kindergarten to 5th grade) students only. Authors' calculations from NCES CCD 1998-2015. The two panels show no significant differences between our sample vs. all school districts. Both illustrate an increase and then a plateau of segregation between white and Hispanic students, and a steady decrease of segregation between black and Hispanic students.

Figure 7: School Segregation Measured by the Variance Ratio



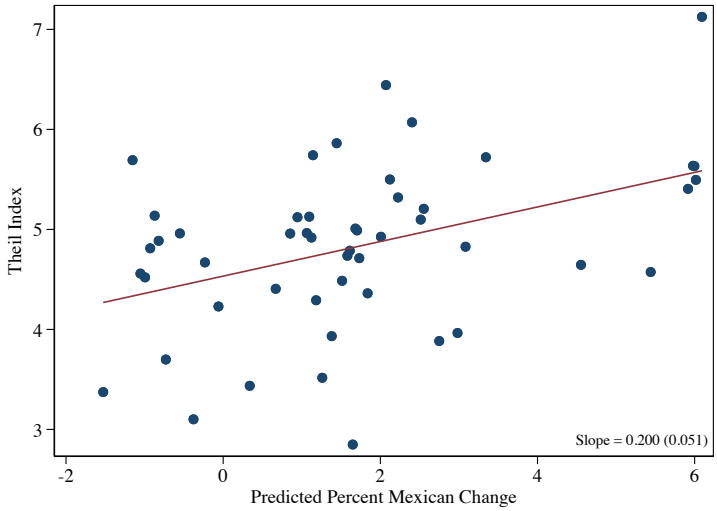
(a) Sample Only (b) All Districts

Figure 8: First Stage



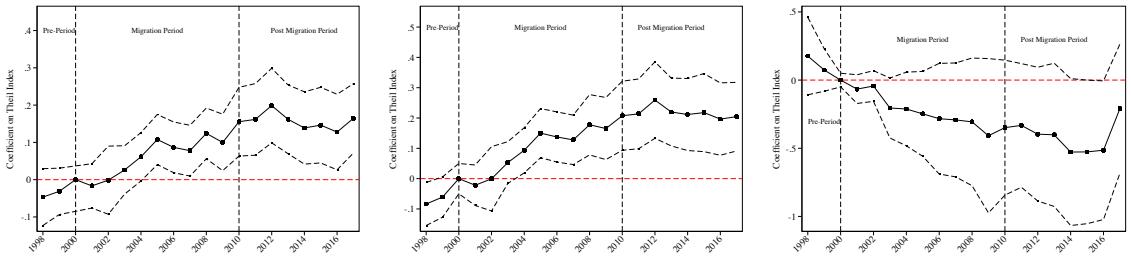
Notes: The figure shows a binned scatter plot of the first stage relationship. The instrument is the predicted change in the Mexican-born population at the MSA-level. The prediction comes from instrumenting for outmigrant counts (from the EMIF) using push factors at the Mexican state level, and apportioning them to US MSAs using preexisting origin-destination links from the MMP data. The endogenous X variable is district-level change in the Hispanic student share between 2000 and 2010. Control variables: district-level black student share and Theil index in 2000, census division fixed effects. Standard errors are clustered at the MSA level in parentheses. City-level predicted Mexican population share between 2000 and 2010 is calculated using 1990-2000 migratory patterns between Mexican sending states and U.S. destination MSAs from the MMP, and LASSO-predicted outmigration from Mexican states as predicted by economic and social "push factors" (see list in Section 3). Actual outmigration for the LASSO prediction comes from the EMIF (Norte) border crossing survey.

Figure 9: Reduced Form Relationship between the 4-Group Theil Index of Segregation and the Percent Change in Mexican Population



Notes: The figure shows the binned scatter plot of the reduced form relationship: a regression of the 4-group Theil index of school segregation in 2011 on the percent change in city-level predicted Mexican population share between 2000 and 2010. Control variables: district-level black student share and Theil index in 2000, census division fixed effects. Standard errors are clustered at the MSA level in parentheses. City-level predicted Mexican population share between 2000 and 2010 is calculated using 1990-2000 migratory patterns between Mexican sending states and U.S. destination MSAs from the MMP, and LASSO-predicted outmigration from Mexican states as predicted by economic and social "push factors" (see list in Section 3). Actual outmigration for the LASSO prediction comes from the EMIF (Norte) border crossing survey.

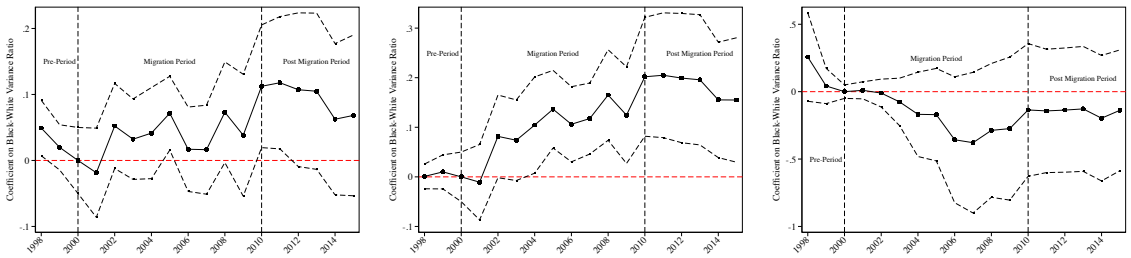
Figure 10: The Effect of 2000-2010 Percent Change in Hispanic Students on the 1998-2015 Theil Index



(a) Full Sample (b) No Court Order (c) Past Court Order

Notes: The three panels in the figure illustrate the effect of percentage change in Hispanic student share on the 4-group Theil index of school segregation over time, on three different samples. Panel (a) includes our full sample of school districts outside of California and Texas in MSAs with MMP representation. Panel (b) is for the subset of these school district that had ever had a court-ordered desegregation plan in place, while Panel (c) is for the subset of these school districts that never had a court-ordered desegregation plan in place. In each panel, each dot is a 2SLS coefficient in the IV regression of the 4-group Theil index in the respective year on the percent change in district-level Hispanic student share between 2000 and 2010, instrumented by the percent change in city-level predicted Mexican population share between 2000 and 2010. Control variables: district-level black student share and Theil index in 2000, census division fixed effects. Dashed lines depict 95% confidence intervals, generated by standard errors clustered at the MSA level. City-level predicted Mexican population share between 2000 and 2010 is calculated using 1990-2000 migratory patterns between Mexican sending states and U.S. destination MSAs from the MMP, and LASSO-predicted outmigration from Mexican states as predicted by economic and social "push factors" (see list in Section 3). Actual outmigration for the LASSO prediction comes from the EMIF (Norte) border crossing survey. Post-migration period estimates after 2010 measure the causal treatment effects of a 1 percentage point higher increase in Hispanic student share between 2000 and 2010 on multi-group school segregation. Pre-period estimates preceding 2000 are placebo treatment effects, which fluctuate around 0 under the exogeneity of our instrument (Borusyak, Hull and Jaravel, 2019). During the migration period, between 2000 and 2010, as exposure to the larger Hispanic student share increases, coefficients gradually change from 0 to the full magnitude of treatment effects. Overall, a higher Hispanic student share in the district increases within-district school segregation. These effects are largely driven by districts with no court-ordered desegregation plan ever in place, while districts with court-ordered desegregation plans in place mitigate overall effects.

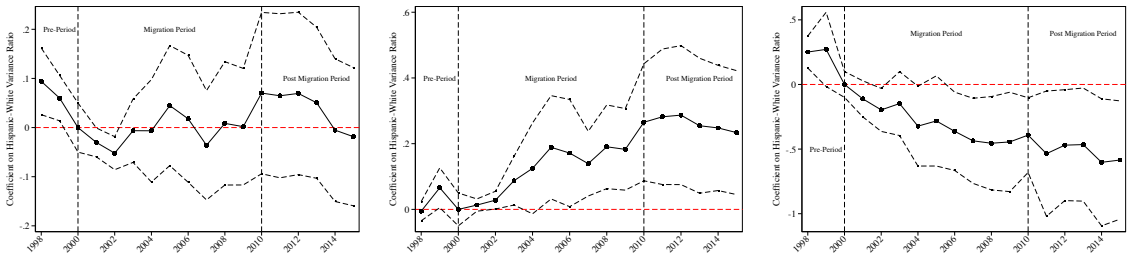
Figure 11: The Effect of 2000-2010 Percent Change in Hispanic Students on the 1998-2015 Black-White Variance Ratio



(a) Full Sample (b) No Court Order (c) Past Court Order

Notes: The three panels in the figure illustrate the effect of percentage change in Hispanic student share on the black-white variance ratio measure of school segregation over time, on three different samples. Panel (a) includes our full sample of school districts outside of California and Texas in MSAs with MMP representation. Panel (b) is for the subset of these school district that had ever had a court-ordered desegregation plan in place, while Panel (c) is for the subset of these school districts that never had a court-ordered desegregation plan in place. In each panel, each dot is a 2SLS coefficient in the IV regression of the black-white variance ratio in the respective year on the percent change in district-level Hispanic student share between 2000 and 2010, instrumented by the percent change in city-level predicted Mexican population share between 2000 and 2010. Control variables: district-level black student share and Theil index in 2000, census division fixed effects. Dashed lines depict 95% confidence intervals, generated by standard errors clustered at the MSA level. City-level predicted Mexican population share between 2000 and 2010 is calculated using 1990-2000 migratory patterns between Mexican sending states and U.S. destination MSAs from the MMP, and LASSO-predicted outmigration from Mexican states as predicted by economic and social "push factors" (see list in Section 3). Actual outmigration for the LASSO prediction comes from the EMIF (Norte) border crossing survey. Post-migration period estimates after 2010 measure the causal treatment effects of a 1 percentage point higher increase in Hispanic student share between 2000 and 2010 on the isolation of black students. Pre-period estimates preceding 2000 are placebo treatment effects, which fluctuate around 0 under the exogeneity of our instrument (Borusyak, Hull and Jaravel, 2019). During the migration period, between 2000 and 2010, as exposure to the larger Hispanic student share increases, coefficients gradually change from 0 to the full magnitude of treatment effects. Overall, a higher Hispanic student share in the district increases the within-district isolation of black students. These effects are largely driven by districts with no court-ordered desegregation plan ever in place, while districts with court-ordered desegregation plans in place mitigate overall effects.

Figure 12: The Effect of 2000-2010 Percent Change in Hispanic Students on the 1998-2015 Hispanic-White Variance Ratio



(a) Full Sample (b) No Court Order (c) Past Court Order

Notes: The three panels in the figure illustrate the effect of percentage change in Hispanic student share on the Hispanic-white variance ratio measure of school segregation over time, on three different samples. Panel (a) includes our full sample of school districts outside of California and Texas in MSAs with MMP representation. Panel (b) is for the subset of these school district that had ever had a court-ordered desegregation plan in place, while Panel (c) is for the subset of these school districts that never had a court-ordered desegregation plan in place. In each panel, each dot is a 2SLS coefficient in the IV regression of the Hispanic-white variance ratio in the respective year on the percent change in district-level Hispanic student share between 2000 and 2010, instrumented by the percent change in city-level predicted Mexican population share between 2000 and 2010. Control variables: district-level black student share and Theil index in 2000, census division fixed effects. Dashed lines depict 95% confidence intervals, generated by standard errors clustered at the MSA level. City-level predicted Mexican population share between 2000 and 2010 is calculated using 1990-2000 migratory patterns between Mexican sending states and U.S. destination MSAs from the MMP, and LASSO-predicted outmigration from Mexican states as predicted by economic and social "push factors" (see list in Section 3). Actual outmigration for the LASSO prediction comes from the EMIF (Norte) border crossing survey. Post-migration period estimates after 2010 measure the causal treatment effects of a 1 percentage point higher increase in Hispanic student share between 2000 and 2010 on the isolation of Hispanic students. Pre-period estimates preceding 2000 are placebo treatment effects, which fluctuate around 0 under the exogeneity of our instrument (Borusyak, Hull and Jaravel, 2019). During the migration period, between 2000 and 2010, as exposure to the larger Hispanic student share increases, coefficients gradually change from 0 to the full magnitude of treatment effects. Overall, a higher Hispanic student share in the district have an ambiguous effect on the within-district isolation of Hispanic students. However, there is a clean heterogeneity between districts with and without court-ordered desegregation plans, with the latter increasing the isolation of Hispanic students and the former mitigating.

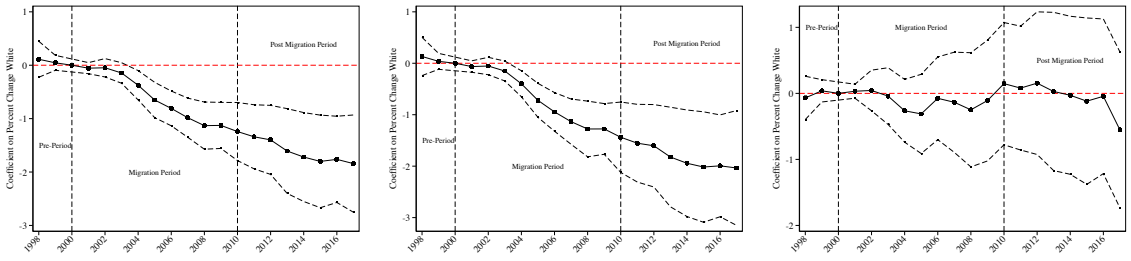
Figure 13: The Effect of 2000-2010 Percent Change in Hispanic Students on the 1998-2015 Black/Hispanic vs. White/Asian Variance Ratio



(a) Full Sample (b) No Court Order (c) Past Court Order

Notes: The three panels in the figure illustrate the effect of percentage change in Hispanic student share on the black and Hispanic vs. white and Asian variance ratio measure of school segregation over time, on three different samples. Panel (a) includes our full sample of school districts outside of California and Texas in MSAs with MMP representation. Panel (b) is for the subset of these school district that had ever had a court-ordered desegregation plan in place, while Panel (c) is for the subset of these school districts that never had a court-ordered desegregation plan in place. In each panel, each dot is a 2SLS coefficient in the IV regression of the black and Hispanic vs. white and Asian variance ratio in the respective year on the percent change in district-level Hispanic student share between 2000 and 2010, instrumented by the percent change in city-level predicted Mexican population share between 2000 and 2010. Control variables: district-level black student share and Theil index in 2000, census division fixed effects. Dashed lines depict 95% confidence intervals, generated by standard errors clustered at the MSA level. City-level predicted Mexican population share between 2000 and 2010 is calculated using 1990-2000 migratory patterns between Mexican sending states and U.S. destination MSAs from the MMP, and LASSO-predicted outmigration from Mexican states as predicted by economic and social "push factors" (see list in Section 3). Actual outmigration for the LASSO prediction comes from the EMIF (Norte) border crossing survey. Post-migration period estimates after 2010 measure the causal treatment effects of a 1 percentage point higher increase in Hispanic student share between 2000 and 2010 on the isolation of black and Hispanic students. Pre-period estimates preceding 2000 are placebo treatment effects, which fluctuate around 0 under the exogeneity of our instrument (Borusyak, Hull and Jaravel, 2019). During the migration period, between 2000 and 2010, as exposure to the larger Hispanic student share increases, coefficients gradually change from 0 to the full magnitude of treatment effects. Overall, a higher Hispanic student share in the district increases the within-district isolation of black and Hispanic students. These effects are largely driven by districts with no court-ordered desegregation plan ever in place, while districts with court-ordered desegregation plans in place somewhat mitigate overall effects.

Figure 14: The Effect of 2000-2010 Percent Change in Hispanic Students on White Flight



(a) Full Sample (b) No Court Order (c) Past Court Order

6 Tables

Table 1: Top US Destination MSA and their Top Mexican Sending States (1990-2000)

MSA Destination	*Top Sending Mexican States*	*Omega*	*State-MSA Trips*	*Total MSA Trips*
Chicago, IL	Jalisco	0.1704	629	2117
	Guanajuato	0.1714	386	2117
	Mexico	0.3797	319	2117
New York, NY	Puebla	0.3685	416	713
	Morelos	0.1344	150	713
	Tlaxcala	0.2903	41	713
Atlanta, GA	Jalisco	0.0354	130	517
	Guanajuato	0.0467	105	517
	Guerrero	0.2198	52	517
Phoenix-Mesa, AZ	Chihuahua	0.1656	139	482
	Durango	0.0842	73	482
	Guanajuato	0.0312	70	482
Portland-Vancouver, OR-WA	Yucatan	0.2901	314	360
	Morelos	0.0197	22	360
	Mexico	0.0169	14	360
Denver, CO	Yucatan	0.1045	113	352
	Chihuahua	0.0837	70	352
	Guanajuato	0.0167	38	352
Las Vegas, NV-AZ	Jalisco	0.0443	163	342
	Nayarit	0.1009	45	342
	Hidalgo	0.1006	25	342
Minneapolis-St, Paul, MN-WI	Morelos	0.2975	332	332
Philadelphia, PA-NJ	Guanajuato	0.1066	240	285
	Michoacan	0.0222	18	285
	Puebla	0.0121	14	285
Tulsa, OK	Aguascalientes	0.2625	88	88

Notes: Table 1 shows the top 10 MSA destinations in the MMP migrant level file between 1990 and 2000 (outside of California and Texas, which we exclude from our sample). Also depicted are the top sending Mexican states to that MSA, the corresponding Omega/MMP-MSA link, (see Equation 1), the total trips from that Mexican state to the MSA, and the total of trips to that MSA from any sending Mexican state, all between 1990 and 2000.

Table 2: Summary Statistics on MMP Represented MSA (Excluding California and Texas)

			Panel A: MSA Level		
Variable	***Mean***	***SD***	***Min.***	***Max.***	***Observations***
% Mexican 2000	4.395	5.148	0.418	24.550	66
% Mexican 2010	6.689	6.636	0.682	30.485	66
% Black 2000	11.768	8.583	0.367	44.273	66
% Black 2010	12.474	8.798	0.541	46.892	66
Number of School Districts	24.318	33.374	1	198	66
Share in Census Division					
- New England	1.52				66
- Middle Atlantic	18.18				66
- East North Central	19.7				66
- West North Central	9.09				66
- South Atlantic	19.7				66
- East South Central	6.06				66
- West South Central	3.03				66
- Mountain	16.67				66
- Pacific	6.06				66
			Panel B: District Level		
Variable	***Mean***	***SD***	***Min.***	***Max.***	***Observations***
% Hispanic 2000	10.09	16.42	0	99.74	1,252
% Hispanic 2010	16.98	19.69	0	99.65	1,252
% Black 2000	11.98	19.17	0	99.11	1,252
% Black 2010	12.27	18.46	0	98.93	1,252
Multi-Group Theil Index 2000	6.39	7.88	0	74.65	1,252
Multi-Group Theil Index 2010	5.69	7.06	0.03	58.91	1,252
Variance Ratio 2000 (Black/Hispanic vs. White/Asian)	5.11	9.06	0	98.85	1,252
Variance Ratio 2010 (Black/Hispanic vs. White/Asian)	5.42	8.60	0	63.72	1,252
Number of School per District	10.05	20.93	2	475	1,252
Share in Census Division					
- New England	7.59				1,252
- Middle Atlantic	28.91				1,252
- East North Central	32.43				1,252
- West North Central	9.42				1,252
- South Atlantic	7.67				1,252
- East South Central	2.00				1,252
- West South Central	2.00				1,252
- Mountain	6.79				1,252
- Pacific	3.19				1,252

Notes: This table shows descriptive statistics at both the MSA and the school district level. The MSA level observations include MSAs only within our sample i.e excluding California, Texas, and MSAs that do not have representation in the Mexican Migration Project. This leaves us with 66 MSAs that make up 1,252 school districts in our sample. MSA-level racial shares are pulled from the 2000 and 2010 US Census, whereas the district level racial shares are pulled from the NCES.

Table 3. First Stage

	(1)	(2)	(3)	(4)	(5)
	Percent Increase Hispanic Students				
Predicted Percent Increase Mexican	1.201***	1.059***	1.040***	1.064***	1.116***
	(0.338)	(0.128)	(0.141)	(0.136)	(0.343)
Share Black 2000 (School District)			0.044	0.0736	-0.0554*
			(0.036)	(0.059)	(0.030)
Theil 2000 (School District)			-0.0528	-0.0361	0.00134
			(0.061)	(0.069)	(0.055)
Census Division Fixed Effects		Yes	Yes	Yes	Yes
Court Ordered Desegregation Plan				No	Yes
Observations	1,252	1,252	1,252	1032	220
adj. R-sq	0.07	0.15	0.16	0.187	0.085
F-Stat on Instrument	12.60	68.73	54.22	61.09	10.59

Notes: This table shows the first stage relationship between our instrument and the percent change in Hispanic student population. The instrument is the predicted change in the Mexican-Born population at the MSA-level. The prediction comes from instrumenting for out-migration counts (from the EMIF) using push factors at the Mexican state level, and apportioning them to US MSAs using using pre-existing origin-destination links from the MMP data. The endogenous X variable is district-level percent change in the Hispanic student population between 2000 and 2010. Control variables include 2000 district-level black student share, 2000 district-level Theil index and census division fixed effects. Standard errors are clustered at the MSA level and shown in parentheses. City-level predicted Mexican population change between 2000 and 2010 is calculated using 1990-2000 migratory patterns between Mexican sending states and U.S. destination MSAs from the MMP, and LASSO-predicted out-migration from Mexican states as predicted by economic and social "push factors" (see list in Section 3). Actual out-migration counts for the LASSO prediction comes from the EMIF (Norte) border crossing survey.

Table 4. IV 2SLS on Multi Group Theil

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Multi Group Theil								
	Full Sample			No Court Order Desegregation Plan			Past Court Order Desegregation Plan		
	Reduced Form	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*
Predicted Percent Increase Mexican	0.200***			0.266***			-0.0983		
	(0.051)			(0.065)			(0.133)		
Percent Increase Hispanic Students		0.0165	0.193***		0.0171	0.250***		0.0341	-0.0881
		(0.016)	(0.049)		(0.017)	(0.063)		(0.032)	(0.130)
Share Black 2000	0.0247***	0.0252***	0.0162*	0.00997	0.013	-0.00846	0.0188	0.0204	0.0139
	(0.009)	(0.009)	(0.009)	(0.007)	(0.009)	(0.021)	(0.027)	(0.026)	(0.026)
Multi-Group Theil 2000	0.686***	0.688***	0.696***	0.594***	0.590***	0.603***	0.772***	0.766***	0.772***
	(0.041)	(0.042)	(0.039)	(0.064)	(0.063)	(0.055)	(0.048)	(0.045)	(0.048)
Census Division Fixed Effects	X	X	X	X	X	X	X	X	X
Mean Multi Group Theil	5.53	5.53	5.53	4.43	4.43	4.43	10.69	10.69	10.69
N	1252	1252	1252	1032	1032	1032	220	220	220
adj. R-sq	0.734	0.731	0.668	0.610	0.600	0.374	0.803	0.803	0.793

Notes: Table 4 shows the IV 2SLS relationship between our instrument for increase in hispanic student population and the 4-Group Theil in the 2011 school year. We show the reduced form, the OLS and IV 2SLS estimates for the full sample of school districts in our analysis (1,252 school districts). We also show a heterogeneity cut that splits our sample into school districts that have had a past court ordered desegregation (columns 7, 8 and 9) plan prior to the year 2000 and those that did not (columns 4, 5 and 6). We always include census division fixed effects and control for the 2000 share black at the district level and the district level 4-group Theil in 2000. Standard errors are clustered at the MSA level and shown in parentheses.

Table 5. IV 2SLS on Black-White Variance Ratio

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Black-White Variance Ratio								
	Full Sample			No Court Order Desegregation Plan			Past Court Order Desegregation Plan		
	Reduced Form	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*
Predicted Percent Increase Mexican	0.130**			0.235***			-0.156		
	(0.057)			(0.065)			(0.227)		
Percent Increase Hispanic Students		0.0303	0.125**		0.0291	0.219***		0.0749	-0.143
		(0.020)	(0.054)		(0.022)	(0.061)		(0.052)	(0.234)
Share Black 2000	0.00964	0.00884	0.00446	-0.0129	-0.0123	-0.0304*	0.0163	0.019	0.00764
	(0.015)	(0.014)	(0.012)	(0.010)	(0.010)	(0.017)	(0.033)	(0.031)	(0.031)
Black-White Variance Ratio 2000	0.737***	0.739***	0.740***	0.665***	0.668***	0.677***	0.788***	0.780***	0.791***
	(0.057)	(0.057)	(0.055)	(0.094)	(0.094)	(0.084)	(0.069)	(0.066)	(0.071)
Census Division Fixed Effects	X	X	X	X	X	X	X	X	X
Mean Black-White Variance Ratio	5.05	5.05	5.05	3.35	3.35	3.35	13.04	13.04	13.04
N	1252	1252	1252	1032	1032	1032	220	220	220
adj. R-sq	0.682	0.682	0.673	0.555	0.552	0.479	0.72	0.721	0.705

Notes: Table 5 shows the IV 2SLS relationship between our instrument for increase in hispanic student population and the Black-White Variance Ratio in the 2011 school year. We show the reduced form, the OLS and IV 2SLS estimates for the full sample of school districts in our analysis (1,252 school districts). We also show a heterogeneity cut that splits our sample into school districts that have had a past court ordered desegregation (columns 7, 8 and 9) plan prior to the year 2000 and those that did not (columns 4, 5 and 6). We always include census division fixed effects and control for the 2000 share black at the district level and the district level Black-White Variance Ratio in 2000. Standard errors are clustered at the MSA level and shown in parentheses.

Table 6. IV 2SLS on Hispanic-White Variance Ratio

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Hispanic-White Variance Ratio								
	Full Sample			No Court Order Desegregation Plan			Past Court Order Desegregation Plan		
	Reduced Form	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*
Predicted Percent Increase Mexican	0.0876			0.332***			-0.778***		
	(0.088)			(0.090)			(0.257)		
Percent Increase Hispanic Students		0.00271	0.0879		0.0188	0.324***		-0.0119	-0.773**
		(0.023)	(0.092)		(0.033)	(0.096)		(0.095)	(0.314)
Share Black 2000	0.0295	0.0297	0.0283	-0.0119	-0.00928	-0.028	0.0884**	0.0817*	0.0253
	(0.026)	(0.025)	(0.025)	(0.018)	(0.019)	(0.032)	(0.037)	(0.048)	(0.050)
Hispanic-White Variance Ratio 2000	0.775***	0.777***	0.766***	0.748***	0.754***	0.700***	0.794***	0.772***	0.888***
	(0.079)	(0.080)	(0.081)	(0.134)	(0.138)	(0.123)	(0.071)	(0.066)	(0.127)
Census Division Fixed Effects	X	X	X	X	X	X	X	X	X
Mean Hispanic-White Variance Ratio	5.71	5.71	5.71	4.42	4.42	4.42	11.78	11.78	11.78
N	1252	1252	1252	1032	1032	1032	220	220	220
adj. R-sq	0.668	0.667	0.659	0.596	0.589	0.43	0.73	0.717	0.479

Notes: Table 6 shows the IV 2SLS relationship between our instrument for increase in hispanic student population and the Hispanic-White Variance Ratio in the 2011 school year. We show the reduced form, the OLS and IV 2SLS estimates for the full sample of school districts in our analysis (1,252 school districts). We also show a heterogeneity cut that splits our sample into school districts that have had a past court ordered desegregation (columns 7, 8 and 9) plan prior to the year 2000 and those that did not (columns 4, 5 and 6). We always include census division fixed effects and control for the 2000 share black at the district level and the district level Hispanic-White Variance Ratio in 2000. Standard errors are clustered at the MSA level and shown in parentheses.

Table 7. IV 2SLS on Hispanic-Black Variance Ratio

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Black-Hispanic Variance Ratio								
	Full Sample			No Court Order Desegregation Plan			Past Court Order Desegregation Plan		
	Reduced Form	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*
Predicted Percent Increase Mexican	-0.00753			-0.204**			0.175		
	(0.068)			(0.100)			(0.345)		
Percent Increase Hispanic Students		-0.0336	-0.0074		-0.0476*	-0.201**		-0.00132	0.16
		(0.020)	(0.066)		(0.024)	(0.090)		(0.075)	(0.309)
Share Black 2000	0.0933***	0.0946***	0.0935***	0.0319	0.033	0.0450*	0.132**	0.135**	0.141**
	(0.024)	(0.024)	(0.024)	(0.024)	(0.023)	(0.024)	(0.059)	(0.062)	(0.059)
Black-Hispanic Variance Ratio 2000	0.333***	0.331***	0.333***	0.220***	0.221***	0.208***	0.514***	0.518***	0.511***
	(0.070)	(0.070)	(0.070)	(0.049)	(0.051)	(0.047)	(0.170)	(0.170)	(0.166)
Census Division Fixed Effects	X	X	X	X	X	X	X	X	X
Mean Hispanic-Black Variance Ratio	6.52	6.52	6.52	5.59	5.59	5.59	10.87	10.87	10.87
N	1252	1252	1252	1032	1032	1032	220	220	220
adj. R-sq	0.325	0.327	0.326	0.18	0.182	0.135	0.566	0.565	0.553

Notes: Table 7 shows the IV 2SLS relationship between our instrument for increase in hispanic student population and the Hispanic-Black Variance Ratio in the 2011 school year. We show the reduced form, the OLS and IV 2SLS estimates for the full sample of school districts in our analysis (1,252 school districts). We also show a heterogeneity cut that splits our sample into school districts that have had a past court ordered desegregation (columns 7, 8 and 9) plan prior to the year 2000 and those that did not (columns 4, 5 and 6). We always include census division fixed effects and control for the 2000 share black at the district level and the district level Hispanic-Black Variance Ratio in 2000. Standard errors are clustered at the MSA level and shown in parentheses.

Table 8. IV 2SLS on Hispanic-Asian Variance Ratio

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Hispanic-Asian Variance Ratio								
	Full Sample			No Court Order Desegregation Plan			Past Court Order Desegregation Plan		
	Reduced Form	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*
Predicted Percent Increase Mexican	-0.056			-0.0734			-0.202		
	(0.107)			(0.111)			(0.238)		
Percent Increase Hispanic Students		-0.0674***	-0.0591		-0.0482**	-0.0736		-0.0940**	-0.191
		(0.022)	(0.107)		(0.020)	(0.107)		(0.046)	(0.209)
Share Black 2000	0.0812***	0.0852***	0.0846***	0.0159	0.0201	0.0227	0.130**	0.125**	0.124***
	(0.025)	(0.025)	(0.027)	(0.015)	(0.014)	(0.019)	(0.049)	(0.047)	(0.044)
Hispanic-Asian Variance Ratio 2000	0.273***	0.267***	0.268***	0.214***	0.212***	0.209***	0.413***	0.410***	0.402***
	(0.045)	(0.045)	(0.045)	(0.045)	(0.046)	(0.043)	(0.107)	(0.108)	(0.111)
Census Division Fixed Effects	X	X	X	X	X	X	X	X	X
Mean Hispanic-Asian Variance Ratio	7.81	7.81	7.81	6.94	6.94	6.94	11.96	11.96	11.96
N	1239	1239	1239	1025	1025	1025	214	214	214
adj. R-sq	0.247	0.252	0.252	0.163	0.166	0.165	0.392	0.395	0.391

Notes: Table 8 shows the IV 2SLS relationship between our instrument for increase in hispanic student population and the Hispanic-Asian Variance Ratio in the 2011 school year. We show the reduced form, the OLS and IV 2SLS estimates for the full sample of school districts in our analysis (1,239 school districts). We also show a heterogeneity cut that splits our sample into school districts that have had a past court ordered desegregation (columns 7, 8 and 9) plan prior to the year 2000 and those that did not (columns 4, 5 and 6). We always include census division fixed effects and control for the 2000 share black at the district level and the district level Hispanic-Asian Variance Ratio in 2000. Standard errors are clustered at the MSA level and shown in parentheses.

Table 9. IV 2SLS on Black & Hispanic vs. White & Asian Variance Ratio

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Hispanic & Black vs. White & Asian Variance Ratio								
	Full Sample			No Court Order Desegregation Plan			Past Court Order Desegregation Plan		
	Reduced Form	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*	*Reduced Form*	*OLS*	*IV 2SLS*
Predicted Percent Increase Mexican	0.184***			0.315***			-0.227		
	(0.058)			(0.070)			(0.170)		
Percent Increase Hispanic Students		0.0209	0.179***		0.0328	0.299***		0.0318	-0.207
		(0.023)	(0.061)		(0.031)	(0.071)		(0.045)	(0.183)
Share Black 2000	-0.0102	-0.00996	-0.015	-0.0383**	-0.0365**	-0.0561***	0.00719	0.00665	-0.00558
	(0.016)	(0.015)	(0.012)	(0.015)	(0.014)	(0.018)	(0.023)	(0.022)	(0.023)
Black & Hispanic vs. White & Asian Variance Ratio 2000	0.695***	0.697***	0.687***	0.613***	0.615***	0.589***	0.799***	0.791***	0.806***
	(0.085)	(0.085)	(0.082)	(0.123)	(0.124)	(0.108)	(0.057)	(0.054)	(0.060)
Census Division Fixed Effects	X	X	X	X	X	X	X	X	X
Mean Black & Hispanic vs. White & Asian Variance Ratio	5.30	5.30	5.30	4.17	4.17	4.17	10.63	10.63	10.63
N	1252	1252	1252	1032	1032	1032	220	220	220
adj. R-sq	0.658	0.656	0.623	0.559	0.553	0.398	0.751	0.75	0.721

Notes: Table 9 shows the IV 2SLS relationship between our instrument for increase in hispanic student population and the Black/Hispanic vs.Asian/White Variance Ratio in the 2011 school year. We show the reduced form, the OLS and IV 2SLS estimates for the full sample of school districts in our analysis (1,252 school districts). We also show a heterogeneity cut that splits our sample into school districts that have had a past court ordered desegregation (columns 7, 8 and 9) plan prior to the year 2000 and those that did not (columns 4, 5 and 6). We always include census division fixed effects and control for the 2000 share black at the district level and the district level Black/Hispanic vs.Asian/White Variance Ratio in 2000. Standard errors are clustered at the MSA level and shown in parentheses.

Table 10. White Flight

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Percent Change White Students 2000-2010								
	Full Sample			**No Court Order Desegregation Plan**			**Past Court Order Desegregation Plan**		
	Reduced Form	***OLS***	***IV 2SLS***	***Reduced Form***	***OLS***	***IV 2SLS***	***Reduced Form***	***OLS***	***IV 2SLS***
Predicted Percent Increase Mexican	-0.906***			-1.247***			0.05		
	(0.306)			(0.339)			(0.409)		
Percent Increase Hispanic Students		0.266	-0.871***		0.369*	-1.171***		-0.267***	0.0449
		(0.196)	(0.266)		(0.195)	(0.333)		(0.077)	(0.365)
Share Black 2000	-0.0790*	-0.0987**	-0.0406	-0.0842	-0.140**	0.00203	-0.0752	-0.0894*	-0.0727
	(0.043)	(0.049)	(0.051)	(0.055)	(0.064)	(0.094)	(0.059)	(0.051)	(0.051)
Multi-Group Theil 2000	-0.00246	0.00728	-0.0484	-0.0417	0.00728	-0.0839	0.0351	0.0521	0.035
	(0.061)	(0.069)	(0.085)	(0.111)	(0.120)	(0.134)	(0.073)	(0.072)	(0.071)
Census Division Fixed Effects	X	X	X	X	X	X	X	X	X
Mean Percent Change White Students	-5.03	-5.03	-5.03	-5.05	-5.05	-5.05	-4.94	-4.94	-4.94
N	1252	1252	1252	1032	1032	1032	220	220	220
adj. R-sq	0.064	0.072	0.045	0.075	0.089	0.076	0.012	0.046	0.046

Notes:*Notes*: Table 10 shows the IV 2SLS relationship between our instrument for increase in hispanic student population and the Percent change in white students between 2000 and 2010. We show the reduced form, the OLS and IV 2SLS estimates for the full sample of school districts in our analysis (1,252 school districts). We also show a heterogeneity cut that splits our sample into school districts that have had a past court ordered desegregation (columns 7, 8 and 9) plan prior to the year 2000 and those that did not (columns 4, 5 and 6). We always include census division fixed effects and control for the 2000 share black at the district level and the district level 4-Group Theil Index in 2000. Standard errors are clustered at the MSA level and shown in parentheses.

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