

The Latinx Great Migration and its Effects on School Segregation

Hedvig Horváth ¹ Jamie McCasland ²

¹University College London

²University of British Columbia

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Motivation: Latinx demographic transition in the US

- Fraction of non-Hispanic whites has fallen from 75% in 1990 to less than 60% today (U.S. Census Bureau, 1992, 2020)
 - More pronounced in schools (NCES 2021): Children of color outnumber non-Hispanic white students since 2014

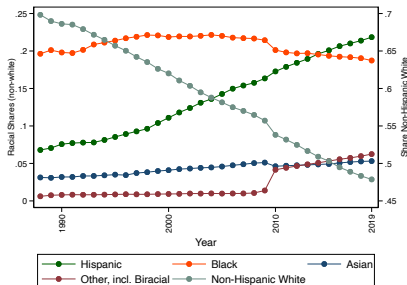


Figure: Student Racial Shares Outside CA and TX

- Multi-group environments may have specific segregation dynamics (e.g. San Miguel (2005); Fouka, Mazumder and Tabellini (2021))

Research Question

- Does increased diversity (i.e. increasing Hispanic student share) lead to more integrated schools or to greater racial isolation of black and Hispanic children?
 - policies mitigating these effects?
 - mechanisms?

Preview of (preliminary) findings and further directions

- Large (exogenous) inflows of Mexican immigrants into the US increase segregation within school districts.
- We present evidence consistent with histories of court-ordered desegregation plans having mitigated these negative effects.
- Potential mechanisms (next steps):
 - White flight?
 - White people living in districts with a history of court-ordered desegregation plans dislike diversity less? (Kaplan, Spenkuch and Tuttle 2021; Billings, Chyn and Haggag 2021)

- School segregation and achievement. School segregation
 - is associated with larger achievement gaps (Reardon et al. 2019);
 - negatively affects minority achievement (e.g. Guryan 2004; Reber 2010; Johnson 2011; Antman and Cortes 2021; Cutler and Glaeser 1997; Card and Rothstein 2007; Hanushek, Kain and Rivkin 2009)
- Latinx migration and school segregation. Latinx migration
 - is the most important determinant of recent rising trends of schools segregation (Caetano and Maheshri 2021);
 - causally increased school segregation within Californian districts before 2000 (**Cascio and Lewis 2012**)
- Shift-share instruments to study the effects of migration (Methods)
 - e.g. Card (2001); Cascio and Lewis (2012); Fouka, Mazumder and Tabellini (2021); Borusyak, Hull and Jaravel (2019)
 - combined with network links and migration push factors: e.g. Munshi (2003); Boustan (2010); Chalfin (2014); **Derenoncourt (2021)**

This Paper

- Focus on post-2000 period
 - Mexican migration to the US peaks in the 2000s
 - New destinations of Mexican migrants within the US
=> exclude CA and TX

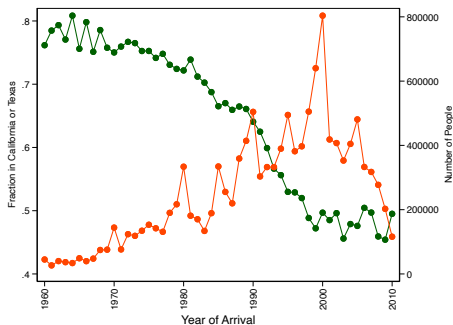


Figure: Destination Choice of Mexican Migrants

- Thought Experiment: What happens to racial segregation within a school district when there is an (exogenous) influx of Hispanic students?
- 3 empirical strategies:
 - 1 fixed-effect panel regressions
 - 2 simple shift-share instruments à la Cascio and Lewis (2012)
 - 3 shift-share instruments augmented with network links and migration push factors à la Derenoncourt (2021)

- 1 NCES Common Core Data on schools
 - Elementary schools only
 - Focus on variance ratios, which measure isolation with an adjustment for underlying shares (Monarrez, Kisida and Chingos 2021)
- 2 US Census 1990, 2000, 2010
- 3 Mexican push-factor data from *INEGI* and University of Delaware
- 4 Mexican Migration Project migrant files
- 5 EMIF border surveys (counts of migrants)
- 6 Reardon (2012) data on court-ordered desegregation plans and their dismissals

Panel Regressions

	URM Variance Ratio	Hispanic-White Variance Ratio	Black-White Variance Ratio
District Share Hispanic	0.09*** (0.01)	0.15*** (0.02)	0.06*** (0.01)
1988 Dep Var Mean	3.90	1.94	3.73
System FE	X	X	X
Year FE	X	X	X
Observations	113407	113397	113397

Errors clustered at the district level. Time varying covariates include district share black, log total enrollment and number of elementary schools in the district. Mean change in hispanic share between 1988 and 2019 is 12 percentage points.

Estimating equation: $Y_{it} = \beta_0 + \beta_1 \text{Hisp}_{it} + X'_{it} \Gamma + \lambda_i + \eta_t + \epsilon_{it}$

Simple Shift-Share Identification Strategy

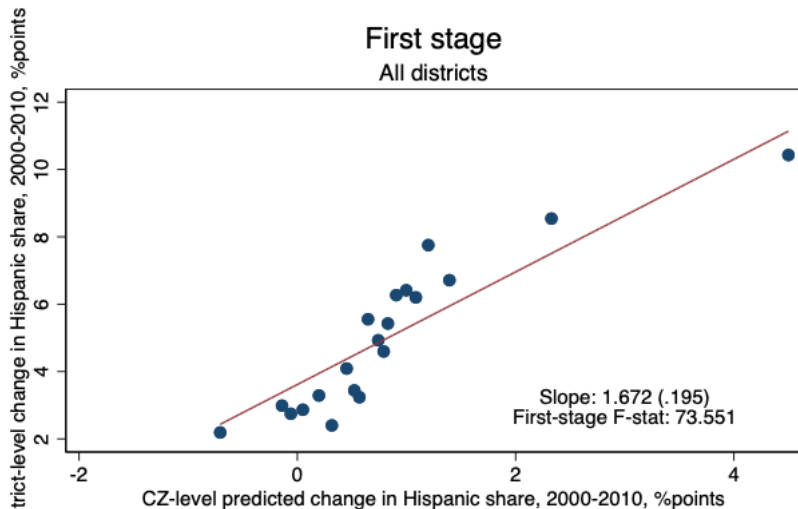
Following Cascio and Lewis (2012), we assign migrant flows from Mexico between 2000 and 2010 to destinations in proportion to 2000 Mexican-born shares, the start of the period during which destination choices moved away from California and Texas, constructing our instrument as follows:

$$\alpha_{cz}^{2000} = \frac{\text{mex}_{cz}^{2000}}{\text{mex}_{us}^{2000}}$$

$$\Delta \text{mex}_{cz}^{2000-2010} = \alpha_{cz}^{2000} \times \text{mig}^{2000-2010}$$

$$\Delta \text{share}^{2000-2010} = \frac{\text{mex}_{cz}^{2000} + \Delta \text{mex}_{cz}^{2000-2010}}{\text{pop}_{cz}^{2000} + \Delta \text{mex}_{cz}^{2000-2010}} - \frac{\text{mex}_{cz}^{2000}}{\text{pop}_{cz}^{2000}}$$

Simple Shift Share - First Stage



CA and TX excluded, elementary schools only. Year 2011 sample of districts and CZs

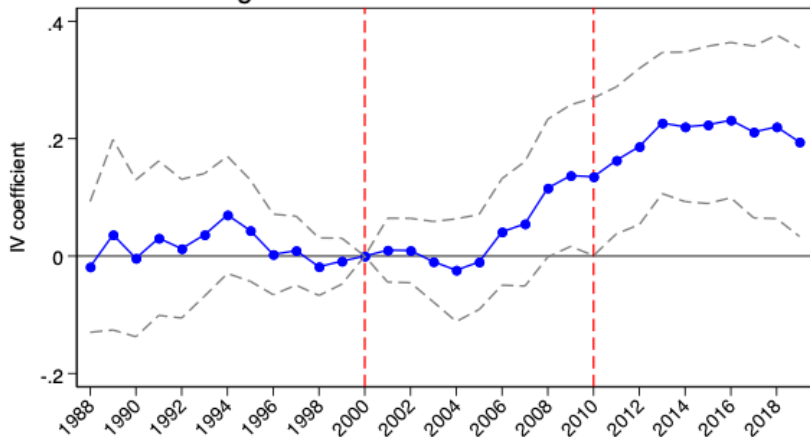
Standard errors clustered at the CZ level. Unweighted.

IV: shift share IV with 2000 shares and 2000-2010 EMIF counts as shifts.

Controls: division effects; 2000 (baseline) VR, black share.

Simple Shift Share - Outcomes

Change in URM-White/Asian Variance Ratio



CA and TX excluded, elementary schools only.

Standard errors clustered at the CZ level.

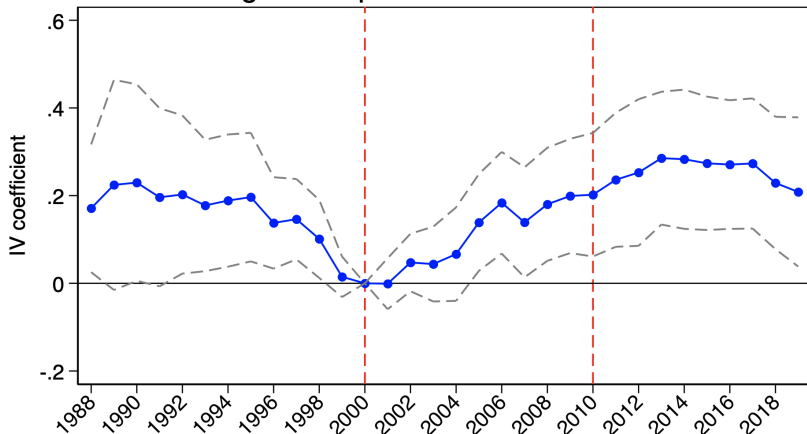
IV: shift share IV with 2000 shares and 2000-2010 EMIF counts as shifts.

Controls: division fes, 2000 dep var, share black.

First-stage F-stat ~ 73.916

Simple Shift Share - Outcomes

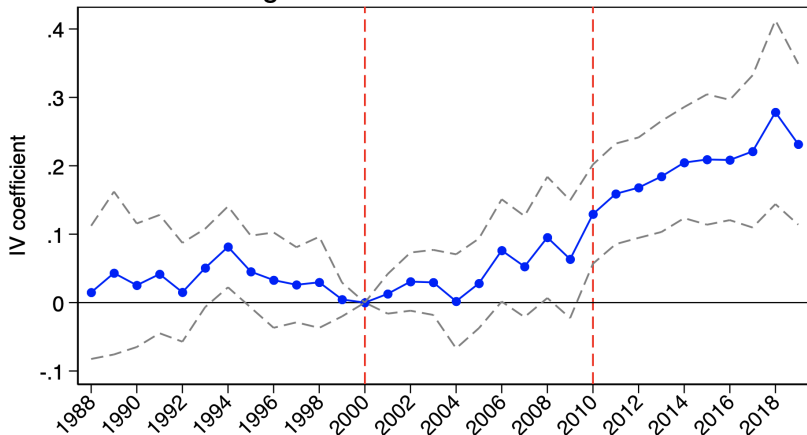
Change in Hispanic-White Variance Ratio



CA and TX excluded, elementary schools only.
Standard errors clustered at the CZ level.
IV: shift share IV with 2000 shares and 2000-2010 EMIF counts as shifts.
Controls: division fes, 2000 dep var, share black.
First-stage F-stat ~ 58.86

Simple Shift Share - Outcomes

Change in Black-White Variance Ratio



CA and TX excluded, elementary schools only.
Standard errors clustered at the CZ level.
IV: shift share IV with 2000 shares and 2000-2010 EMIF counts as shifts.
Controls: division fes, 2000 dep var, share black.
First-stage F-stat ~ 78.132

Push-Factor Identification Strategy

Following Derenoncourt (2021), we use LASSO to select Mexican state level push-factors and predict Mexican state-level out migration, assigning predicted migrants from each Mexican state m to each MSA s in accordance with destination histories between 1990 and 2000, constructing our instrument as follows:

$$\text{mig}_{mt} = \beta_0 + \text{Push}_{m(t-1)}\beta_1 + \epsilon_{mt}$$

$$\omega_{ms}^{1990-2000} = \frac{\text{mex}_{ms}}{\text{mex}_m}$$

$$\Delta \text{mex}_s^{2000-2010} = \sum_{mt} \omega_{ms} \times \text{mig}_{mt}^{\hat{}}$$

$$\Delta \text{share}^{2000-2010} = \frac{\Delta \hat{\text{mex}}_s^{2000-2010}}{\text{pop}_s^{2000}}$$

- 1 Lagged Rainfall shocks (Chalfin 2013; Hunter, Murray and Riosmena 2013; Munshi 2003; Pugatch and Yang 2011; Riosmena, Nawrotzki and Hunter 2018)
- 2 Lagged Progresa spending (Angelucci 2004; Parker and Todd 2017; Stecklov et al. 2005)
- 3 Lagged homicide rates (Basu and Pearlman 2017; Dell 2015; Orozco-Aleman and Gonzalez-Lozano 2018)

Push factor Shift Share - First Stage

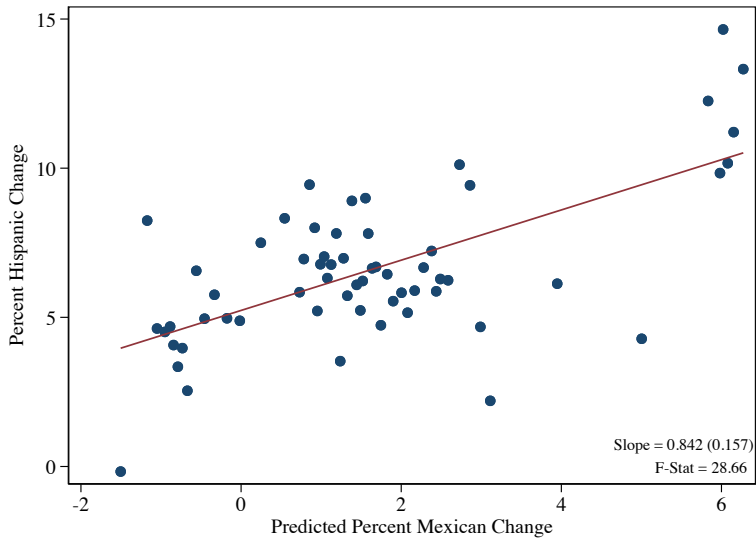


Figure: Change in URM-White/Asian Variance Ratio

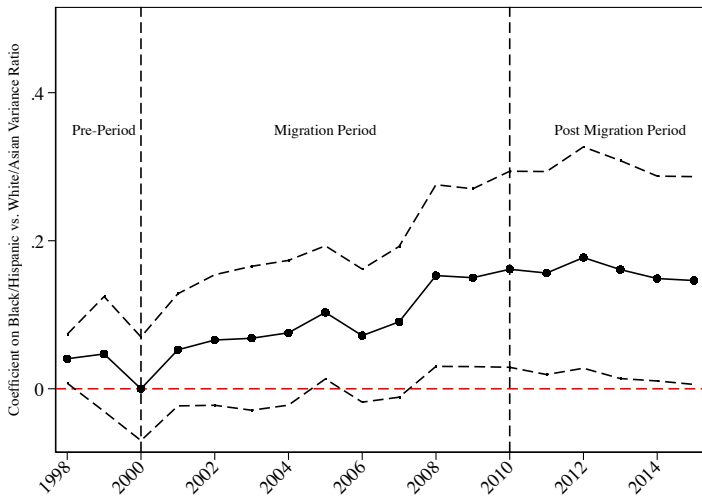
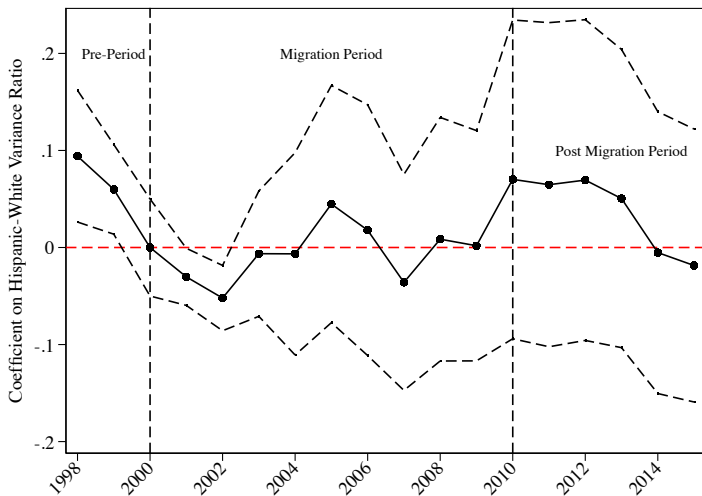
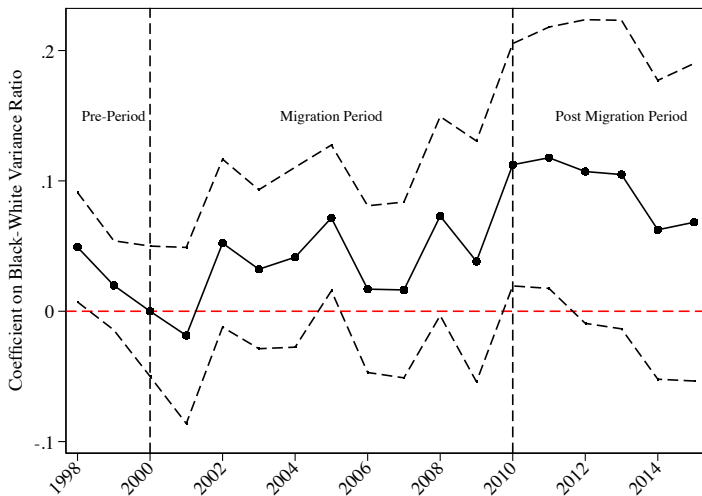


Figure: Change in Hispanic-White Variance Ratio



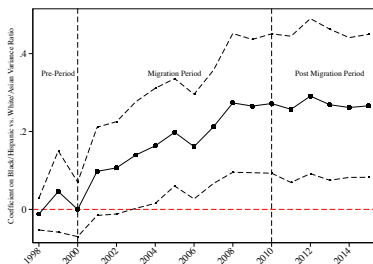
Push factor Shift Share - Outcomes

Figure: Change in Black-White Variance Ratio

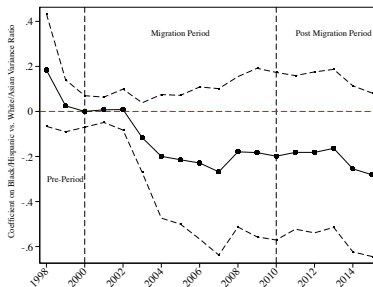


Mediating Factors - History of Court Ordered Desegregation

Figure: Change in URM-White/Asian Variance Ratio



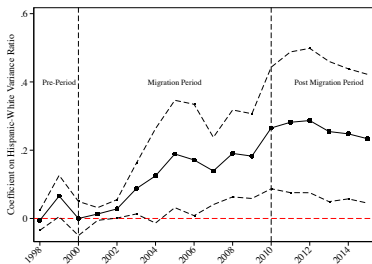
(a) No Court Order



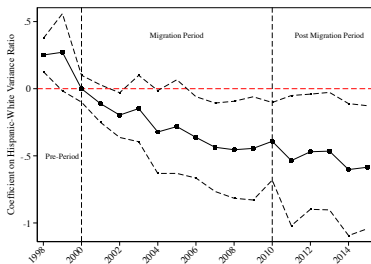
(b) Past Court Order

Mediating Factors - History of Court Ordered Desegregation

Figure: Change in Hispanic-White Variance Ratio



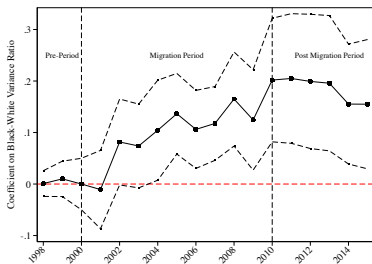
(a) No Court Order



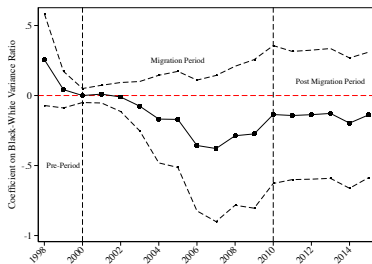
(b) Past Court Order

Mediating Factors - History of Court Ordered Desegregation

Figure: Change in Black-White Variance Ratio



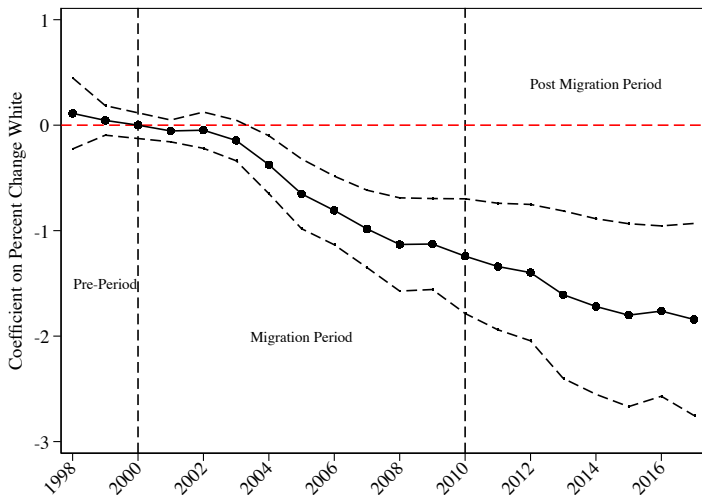
(a) No Court Order



(b) Past Court Order

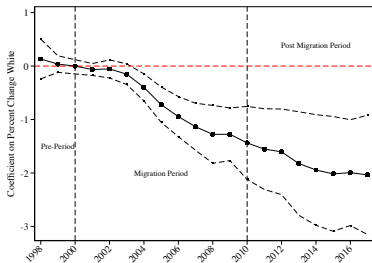
Mechanisms - White Flight

Figure: Change in White Student Share 2000-2010

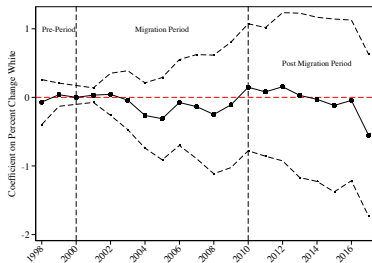


Mechanisms - White Flight Under Past Integration?

Figure: Change in White Student Share 2000-2010



(a) No Court Order



(b) Past Court Order

- Large (exogenous) inflows of Mexican immigrants into the US increase segregation within school districts.
- Histories of court-ordered desegregation plans mitigated these negative effects.
- Suggested mechanisms: white flight, which is more pronounced in districts with no history of court-ordered desegregation plans.

- Caveats to push-factor shift-share
 - only 24 Mexican sending states – do push factors capture idiosyncratic or aggregate shocks?
- Other ways to think about mechanisms or mediating factors?
 - court-orders may proxy for lower degree of racism -> check using election results?
 - school finance reforms as mediators? (Jackson, Johnson and Persico 2016; Lafortune, Rothstein and Schanzenbach 2018)
- Further outcomes?
 - link segregation results to achievement using district-level harmonized test scores from SEDA (Reardon et al. 2021)