HHS Public Access

Author manuscript

Ann Am Assoc Geogr. Author manuscript; available in PMC 2020 September 30.

Published in final edited form as:

Ann Am Assoc Geogr. 2016 ; 106(4): 891–908. doi:10.1080/24694452.2015.1135725.

State-Scale Immigration Enforcement and Latino Interstate Migration in the United States

Mark Ellis[*], **Richard Wright**[†], **Matthew Townley**[*]

[*] Department of Geography, University of Washington

[†] Department of Geography, Dartmouth College

Abstract

In the late 2000s, several U.S. states and local governments enacted legislation to make work and life difficult for unauthorized immigrants within their jurisdictions. We investigate how these devolved immigration enforcement laws affected the migration of Latinos to these states. We find that after these hostile policies came into effect, noncitizen and naturalized Latinos from states without such policies were much less likely to move to states with them than in the 1990s. U.S.-born Latinos exhibit migration aversion to hostile states, albeit at a weaker level. Fear of discrimination and the blending of Latinos with different legal status within families might account for this broad Latino group migration response. Hostile policies produced no significant change in the interstate migration patterns of a control group of U.S.-born whites. A counterfactual analysis indicates that absent these enforcement regimes, the migratory redistribution of Latinos to hostile states from other states in the late 2000s would have continued the dispersive pattern of the late 1990s. We draw parallels between our research and state policy effects on U.S. internal migration for other groups.

Abstract

A finales de la década del 2000, varios estados y gobiernos locales de los EE.UU. aprobaron medidas legales para hacer difíciles el trabajo y la vida a inmigrantes ilegales dentro de sus jurisdicciones. Investigamos en qué grado afectó la aplicación de estas leyes a la migración de latinos hacia estos estados. Hallamos que luego de la aplicación de tales políticas hostiles, los latinos no nacionalizados y los naturalizados en estados que no aplicaban aquellas políticas tenían menos inclinación que en los años 1990 a desplazarse a estados que sí lo hacían. Los latinos nacidos en los EE.UU. exhiben aversión migratoria hacia estados hostiles, aunque con un grado mucho menor. El temor a la discriminación y la mezcla de latinos con estatus legales diferentes dentro de la familias podrían ser la explicación a la respuesta migratoria de este grupo latino más amplio. Las políticas hostiles no produjeron cambio significativo alguno en los patrones de migración interestatal en un grupo de control formado por blancos nacidos en los EE.UU. Un análisis hipotético indica que sin estos regímenes de aplicación de las leyes, la redistribución migratoria de latinos a estados hostiles desde otros estados, a finales de la década del 2000, habría continuado el patrón dispersivo de finales de los 1990. Trazamos paralelos entre nuestra

investigación y los efectos de la política estatal sobre la migración interna americana para otros grupos.

Keywords

borders; interstate migration; Latinos; state-scale immigration enforcement; undocumented immigrants

Keywords

ronteras; migración interestatal; latinos; regulación de la inmigración a escala estatal; inmigrantes indocumentados

For much of the twentieth century, Latinos concentrated in the Southwest of the United States. In the 1990s, this settlement pattern changed (Lichter and Johnson 2009). States in the Southeast, Midwest, and Intermountain West saw rapid growth in their Latino populations (Saenz 2005). Immigration to these new destination states directly from abroad and internai migration of U.S.- and foreign-born Latinos fueled this dispersion (Riosmena and Massey 2012).

The emergence of these new immigration destinations occurred in a national political climate that, although not friendly to Latino immigrants, was less hostile to them than today. More specifically, they occurred before the implementation of state and local policies targeting unauthorized immigrants. Federal authority over immigration has been in place since the late nineteenth century, but recent frustrations over Congressional intransigence on immigration, and especially the presence of unauthorized immigrants, drew certain states and municipalities to step up their roles in immigration enforcement. Some places passed laws offering sanctuary and protection to vulnerable immigrants; others designed policies to make working and living in a particular place harder than before (Rodríguez 2008). Such state- and local-level hostile policies arose mostly after 2007 and are disproportionately found in places where the rates of foreign-born population growth rates, mostly Latino, have been highest (Walker and Leitner 2011).

This article focuses on Latino migration within the United States and investigates whether antagonistic state-scale policies disrupted their 1990s interstate migration patterns. We ask whether the states that adopted hostile laws in the late 2000s have become less attractive destinations to Latino internal migrants than they were in the 1990s. We expect that people in the United States without authorization will exhibit the greatest migration avoidance response to state policies that we characterize as hostile. We are also curious about the effects of these policies on all Latinos, suspecting that these statutes also deterred U.S.-born and naturalized-citizen Latinos from moving to these states. Of the 11.5 million estimated unauthorized immigrants in the United States in 2011, 73 percent were Latino (59 percent were from Mexico and 14 percent from Central America; Hoefer, Rytina, and Baker 2012). Activists and legislators who are intolerant of unauthorized immigration almost certainly have these numbers in mind when they argue for and implement policies designed to make life difficult for “illegals,” likely perceiving the Latino population in their areas as

disproportionately unauthorized. Given these perceptions, U.S.-born and legally resident foreign-born Latinos might choose not to migrate to certain states out of fear that these policies increase the risk of discrimination against, or enmity toward, all Latinos or all immigrants (Flores 2014, 2015). Additionally, they might live in mixed-status families and want to minimize risks to unauthorized family members by not moving to states with such laws. In 2008, 3.8 million unauthorized immigrant adults lived in such legally ambiguous families, mostly with their U.S.-born children but also with other authorized immigrants and U.S.-born people (Passel and Cohn 2009).

Prior research shows that state-level policies designed to make life uncomfortable for unauthorized immigrants increase the outmigration rate of noncitizen Latinos, the subgroup likely to include most of the unauthorized, more than for U.S.-born and naturalized Latinos (Ellis et al. 2014). This article shifts attention from outmigration to inmigration and assesses whether these laws altered where Latino migrants moved to within the United States in the late 2000s. Changes in Latino destination choice should be most apparent for moves initiated in 2007 and later. To explore the possibility of such a migration response we leverage a study that collated data on state and local immigration policies from 2002 to 2009 and grouped states according to the number and intensity of these policies within them (Leerkes, Leach, and Bachmeier 2012). The resulting typology identified a cluster of states most hostile to unauthorized immigrants in 2007 and subsequent years.

Previous research on federal-scale immigration policy showed how it affected where Latino immigrants settle or move within the United States. Increased federal border enforcement activity in the Southwest initiated by the Immigration Reform and Control Act (IRCA) of 1986 was further enhanced in the 1990s (Nevins 2010). Many unauthorized Mexican and Central American immigrants responded by finding other means of entry, crossing elsewhere, usually to the east, and by heading into the interior rather than the Southwest to minimize the risk of detection (Durand, Massey, and Capoferro 2005; Massey and Capoferro 2008; Bohn and Pugatch 2015). IRCA might also have stimulated internal migration through its amnesty program, freeing those who benefited to move from gateways to new destinations in search of economic opportunity (Hernández-León and Zúñiga 2000). This article complements research on federal policy effects by exploring whether a different scale and geography of immigration enforcement, this time by state governments in the late 2000s, changed the geography of where Latinos, including those who are immigrants, move to within the United States.

Our finding that state-scale immigration laws have redirected the internal migration of Latinos within the United States away from states that have become antagonistic toward unauthorized immigrants is new. The results reported here not only alert scholars to the effects of state-scale immigration regimes on Latino settlement patterns but also highlight the role of subnational laws as determinants of internal migration more generally. As such, the article makes a contribution to a diverse literature on the state-policy determinants of internal migration in the United States that includes, for example, investigations of the effect of welfare programs, higher education policies, and occupational licensing on where and how frequently people move (e.g., Pashigian 1977; Morgan 1983; DeJong, Graefe, and Pierre 2005). This broader literature also encompasses the effect of state policy regimes

historically hostile to minority groups, most notably African Americans. We elaborate on connections between our article and that body of work in the conclusions.

The New Geography of the U.S. Latino Population

Latinos remain disproportionately concentrated in a limited number of U.S. states but are more dispersed now than ever before. In 1990, the ten states with the largest Latino populations were, in descending rank order, California, Texas, New York, Florida, Illinois, New Jersey, Arizona, New Mexico, Colorado, and Massachusetts. Together, these states were home to 87.3 percent of all Latinos in the United States. Latino immigration sustained this concentration: 91.1 percent of the population of all foreign-born Latinos and 89.6 percent of the subset of foreign-born Latinos who had arrived in the five years prior to 1990 lived in these ten states.[1] With the exception of Massachusetts, these ten states remained the most populous Latino states in 2000 and 2010.[2]

Although the stability in top ten state rankings suggests that Latinos remain heavily concentrated in these traditional states, it conceals considerable post-1990 dispersion. Between 1990 and 2000, the share of the total Latino population in the top ten states fell to 82.3 percent. Foreign-born Latinos drove this decline. The top ten state share of foreign-born Latinos fell by 11 percentage points between 1990 and 2000 to 82.6 percent in 2000. This drop was even more pronounced among Latinos who arrived in the five years before the census. The top ten's share of this newcomer population fell by 17.2 percentage points to 72.2 percent between 1990 and 2000. This dispersion trend continued through 2010 but the changes were more modest. In 2010, 69.5 percent of foreign-born Latino newcomers who arrived in 2005 or later settled in the top ten states—a 3.4 percentage point decline since 2000 and only a fifth the size of the equivalent drop in the 1990s.

Latinos dispersed in the 1990s to states that previously had relatively small Latino populations. Among the ten states with the fastest growing Latino populations in the 1990s, only one—Nevada—is proximate to the traditional Southwest regional concentration of Latinos. The remaining nine states included two in the Midwest—Minnesota and Nebraska—and seven in the Southeast: Kentucky, Tennessee, Arkansas, Alabama, Georgia, South Carolina, and North Carolina. North Carolina registered the fastest Latino growth rate in the 1990s at 394 percent (Saenz 2005).

Direct immigration from abroad played an outsized role in this redistribution. The share of direct Latino immigration from abroad relative to total Latino migration inflow (i.e., the sum of internal and international inflows) into the ten fastest growing Latino states in the 1995 to 2000 period was 50 percent higher than in the other forty states. Yet even though direct immigration comprised a much larger fraction of the total migration stream into these fast-growing states, it still accounted for only 32.1 percent of their total Latino inflow—U.S.- and foreign-born—during this time. The remaining 67.9 percent of Latino migrants to these states were internal, from other U.S. states and territories. These percentages underscore the

1. The data used in the calculation of the statistics here are the U.S. Decennial Census Public Use Microdata Samples from the IPUMS-USA project (Ruggles et al. 2015).
2. Washington replaced Massachusetts as the tenth ranked state in 2000. In 2010, Georgia entered the top ten, displacing Washington.

crucial role of internal migration in Latino dispersion from traditional states of residence. Five of the largest Latino states—California, Texas, New York, Illinois, and New Jersey—experienced a net loss of Latinos through internal migration between 1995 and 2000. Some of the largest internal net migration gains of Latinos in the same time period were where Latino populations were growing fastest, including North Carolina, Georgia, Nevada, and Minnesota (Saenz 2005).

The literature on new immigrant destinations offers clues as to why Latino immigrants and their U.S.-born counterparts opted to move to these fast-growing states in the 1990s. As mentioned, increased border enforcement in the Southwest after IRCA in 1986 displaced border crossing and migration flows to the east (Massey and Capoferro 2008). Shortly after this, California, the preeminent destination and state of residence for Latinos, lost some of its luster for both new arrivals and longer term residents after it was especially hard hit by the recession of 1990 and 1991, from which it only slowly recovered. California not only had diminished employment prospects but also became less politically welcoming to immigrants at this time, adopting new regulatory regimes to make life and work more difficult and expensive for them (Light 2006). Simultaneously, other parts of the country, particularly Southeastern states, did not have these policies and offered employment prospects to workers in industries such as meat packing, construction, carpet manufacturing, retail, and services (e.g., Hernández-León and Zúñiga 2000; Kandel and Parrado 2005; Parrado and Kandel 2008, 2011). This combination of forces induced new immigrant arrivals and Latinos already in the United States to leave California for the Southeast and Midwest, where they previously had little presence. Others followed as the density of network contacts in new destinations increased information and decreased migration costs for friends and family contemplating a move (Card and Lewis 2005; Leach and Bean 2008).

Hostile Contexts of Reception

The growth of Latinos in these new destinations introduced new forms of racial and ethnic diversity and segregation into communities where whites were either the overwhelming fraction of the population or where white-black racial dynamics were the norm (Lichter et al. 2010; Park and Iceland 2011; Hall 2013). In new destination neighborhoods, schools, and workplaces, the newly arrived have triggered cultural, economic, and political challenges for public and private institutions tasked with serving these populations (Winders 2005; Nelson and Hiemstra 2008; Marrow 2011; Leitner 2012).

There is also enhanced resistance to immigrant newcomers within new host communities where Latinos, regardless of their nativity or immigration status, are frequently stereotyped as not only foreign but also unauthorized. These racializations had mushroomed by the mid-2000s and in select states and localities activists and politicians had become sufficiently organized to enact a series of laws designed to make life difficult for the unauthorized within their jurisdictions (e.g., Wells 2004; Varsanyi 2008). The most extreme of these included requirements for universal employment verification and mandatory legal status checks for a variety of state licensing services, such as driver’s licenses (e.g., Garcia et al. 2011; Lofstrom, Bohn, and Raphael 2011). Some states, most notably Arizona with its SB1070, signed into law in 2010, attempted to go further by criminalizing the presence of

unauthorized immigrants in the state (Campbell 2011). The U.S. Supreme Court ruled in June 2012 against the legality of most of the provisions of SB1070, by extension undermining copy-cat laws passed in other states that followed Arizona's lead (Chisti and Hipsman 2013). Federal courts, however, have generally sustained the constitutionality of other state immigration laws on employment verification and licensing (Chisti and Bergeron 2011).

State and local immigration policies are not new to the United States. A patchwork of these laws existed until the federal government asserted its constitutional prerogative in the management of immigration during the late nineteenth century (Zolberg 2006). The current phase of state and local immigration policymaking signals a renewed challenge to federal authority over immigration after over a century of relative inaction on the issue. California's Proposition 187 was, in retrospect, a precursor for these actions against unauthorized immigrants. This 1994 referendum authorized many of the same sorts of provisions included in the present phase of state restrictionism, such as requiring law enforcement and other California officials to check people's immigration status. Proposition 187 was never implemented because of a federal legal challenge that the state decided, eventually, not to fight.

Immigrant dispersion from California accelerated in the 1990s partly because it had become a less welcoming place for immigrants. Many who left were from Mexico and Central America and possessed few formal skills. They were disproportionately unauthorized and working at the margins. At the time, other states offered better employment prospects and lower living costs and had no sign of these unfriendly policies. The situation with respect to the geography of these policies is now reversed. Several of those states to which immigrants, mostly Latinos, moved in the 1990s have become more inhospitable, whereas California and other traditional states of immigration have become more accommodating.

There is a growing body of research on the disposition of states and localities toward unauthorized immigrants (e.g., Coleman 2007, 2009, 2012; Varsanyi 2008, 2010; Walker 2014). Multiple factors affect where and when these policies are promoted, although the interaction of a rapid growth rate in foreign-born populations and a Republican-leaning jurisdiction appear to be the most important drivers (e.g., Ramakrishnan and Wong 2010; Walker and Leitner 2011). Our interest here is not in deepening understanding of why these policies were adopted in some places and not others but in determining whether these laws have affected where Latinos migrate within the United States. We expect those most directly subjected to them, unauthorized Latinos, to have changed their migration patterns to avoid states that have taken up unwelcoming stances toward the unauthorized. Other Latino subgroups, the U.S. born and foreign born with residence rights (e.g., naturalized Latinos), might also adjust their destination choice to avoid discrimination or because of family ties. Hostile state laws increased the interstate outmigration rates for those most affected by them, foreign-born Latinos without citizenship (Ellis et al. 2014). This article shifts focus from outmigration to destination choice and asks this: Have these employment verification and other restrictionist policies affected where Latinos move to in the United States, especially for the subset most likely affected by them?

The geography of subnational immigrant policy is a complex and ever-changing multiscalar blend of laws, ordinances, and agreements. Cities, counties, and states have enacted a wide variety of policies that apply to their jurisdictions, some hostile and others welcoming. Tracking the status and their impacts at the substate scale is difficult because of the number of jurisdictions involved. Examining only state policies necessarily obscures county and municipal policy variations that potentially motivate moves between these substate units. Analysis at the state scale has three advantages, however. First, state policies are easier to discover and track because there are fewer of them. Second, because of their greater jurisdictional power, states can pass laws that have much wider and deeper impact on employment, licensing, and law enforcement than at the county or municipal scales. Finally, because the pool of potential movers is much larger at the state scale than in smaller spatial units, interstate migration—and, most important, change in interstate migration—is more observable for small population groups than migration at county or metropolitan scales.

States can pursue a variety of policies aimed at making life difficult for unauthorized immigrants. Some have enacted a broad suite of these policies, and others have enacted only a limited range (Pham and Pham 2014). Defining which states are hostile to immigrants and the degree of their hostility involves integrating this variety of measures into a summary variable. Several schemes do this, most of which differentiate states or localities on their level of restrictiveness using author assessments of each area's suite of legislation (for a summary, see Gelatt, Bernstein, and Koball 2015). Leerkes, Leach, and Bachmeier's (2012) scheme is distinctive, and in our view preferable, because it differentiates the categories of state attitude toward immigrants using analytical procedures applied to this assemblage of restrictive laws rather than by author decisions. We use their scheme in our assessment of hostile state effects on migration.

Leerkes, Leach, and Bachmeier (2012) described in detail the data collection and analytical procedures used to generate this summary variable. Briefly, they integrated the prevalence of state and substate jurisdictional policies into an assessment of aggregate state hostility. They gathered annual data from 2002 to 2009 on which states had policies targeting unauthorized immigrants, including requirements for the use of the federal E-Verify program that checks authorization to work, restrictions on unauthorized immigrant access to driver's licenses, and laws designed to make it more difficult for the unauthorized to access a variety of other state services. They added in the proportion of counties and municipalities within each state that had cooperative immigration enforcement agreements with the federal government. They then factor analyzed these state variables by year, identifying a principle factor that summarized the set of restrictive measures. A cluster analysis on this factor differentiated states into three levels of restriction: Arizona, which is in a highly restrictive class of its own; a set of seventeen moderately restrictive states; and twenty-four relatively permissive states. A residual set of eight small-population states was not included in their derivation of the measure because they focused only on states that had meaningful estimates of the unauthorized immigrant population (i.e., the estimates of the unauthorized population in these eight states were unreliable because of their small size).

We adapted this scheme by differentiating states into two classes: those eighteen states that are at least moderately restrictive, which we label as hostile throughout the rest of the article,

and the rest (mostly relatively permissive but also small states not categorized for the reasons just described). We combined Arizona with all other hostile states for several reasons. It seems likely that migrants would distinguish between hostile and nonhostile states rather than among hostile states by their degree of restrictiveness. Reducing the choice set to this binary minimizes the possibility of violating the independence of irrelevant alternatives assumption in our modeling of destination choice. It is also challenging to identify a unique hostile state effect on destination choice for just one state. We solve this identification problem by including Arizona in a category with other states that share its orientation toward the unauthorized but that differ on other characteristics that might affect destination choice.

Figure 1 plots cluster results from Leerkes, Leach, and Bachmeier (2012), showing the mean factor loadings from 2003 to 2009 for our merged hostile cluster of the eighteen hostile states and the twenty-four states that are in the relatively permissive cluster. It depicts the rise in hostility after 2005 and the clear differentiation of the states into their respective categories, particularly after 2007. The set of hostile states is mapped in Figure 2. Our question is whether Latino interstate migration, especially by Latinos who are the most vulnerable to hostile state policies, has adapted to avoid these eighteen states.

Data and Key Variables

The analysis of interstate migration by subgroups of Latinos requires large sample survey data to observe sufficient numbers of movers between states. We use microdata from the decennial census in 2000 and from the American Community Survey (ACS) for the years 2005 to 2010, all supplied by U.S. Integrated Public Use Microdata Series (IPUMS-USA; Ruggles et al. 2015). These data provide observations on interstate migration from before the rise of hostile state policies through their passage and implementation in the latter half of the 2000s. We restrict the analysis to interstate migration between the lower forty-eight states and to persons between eighteen and sixty-five years of age.

Migration data in the decennial census and ACS differ in two ways. First, the decennial migration data record moves over a five-year time span, whereas the ACS annual data use a one-year migration interval. Second, the decennial migration question is derived from asking respondents where they lived five years prior to census day. The ACS is a rolling sample administered throughout the year and thus records where respondents lived one year prior to the day they answered the survey. These differences complicate comparisons between decennial and ACS migration data. Standardized measures such as effectiveness (sometimes called efficiency) scores are one solution. Pooling annual migration data from the ACS is an imperfect method for making comparisons with the five-year migration interval in the 2000 decennial, but it can give a sense of change in flow magnitude and net migration. More important, pooling the ACS data has the additional advantage of increasing the sample from which we calculate interstate migration flows in the late 2000s. Migration is a relatively rare event and the annual ACS samples yield sparse interstate migration matrices for small population subgroups. To improve the precision of the estimates we pool ACS data into two three-year samples: 2005–2007 and 2008–2010. This temporal division of the ACS data differentiates moves initiated in the period before hostile policies accelerated (i.e., migration

initiated before 2007) according to the Leerkes, Leach, and Bachmeier (2012) scheme from those initiated after those policies were more prevalent (2007 and later; see Figure 1). Model specifications include year fixed effects to control for differences between the decennial and ACS pooled samples.

Census and ACS data differentiate Latinos by nativity and citizenship status but do not identify unauthorized immigrants. We subdivide the Latino population into three mutually exclusive subgroups: U.S.-born Latinos, naturalized Latinos (foreign-born Latinos who have acquired U.S. citizenship), and noncitizen Latinos (foreign-born Latinos who are in the United States with authorization or not). There is evidence of the overreporting of naturalization in the ACS by Mexican men, older Mexican women, and recent arrivals of all groups (Van Hook and Bachmeier 2013). Thus, the naturalized Latino category might include some who are permanent residents or unauthorized. It is reasonable to assume, however, that the unauthorized proportion will be mostly in the noncitizen Latino category. Accordingly, we expect the strongest migration avoidance of hostile states by this latter group. Naturalized and U.S.-born Latinos might also alter their migration destinations in response to these laws. The reporting errors just mentioned could be a factor for these subgroups. We suspect, however, that their migration adjustments will arise mostly because citizen Latinos have family ties to the unauthorized or fear discrimination in hostile states.

Changes in the Migration Redistribution of Latinos to Hostile States

We begin with a summary of migration to hostile states from the late 1990s to 2010 for these three Latino subgroups and for a U.S.-born non-Latino white control group. Net migration or directional migration flow volumes are not useful for comparing migration patterns across population subgroups of variable population sizes because those sizes dominate the variation. Additionally, these counts are hard to compare over time because of the different time intervals for measuring migration in the decennial census and the ACS. Migration effectiveness scores mitigate these problems by standardizing migration gains or losses per 100 movers. This yields a measure independent of population size and migration interval effects.

Migration effectiveness as a standardized measure of the redistributive effects of migration is defined as

$$E_{ikt} = \frac{\mathrm{In}_{ikt} - \mathrm{Out}_{ikt}}{\mathrm{In}_{ikt} + \mathrm{Out}_{ikt}}, \quad (1)$$

where In_{ikt} is the number of inmigrants to i and Out_{ikt} is the number of outmigrants from i for group k in time interval t. E_{ikt} measures the net population change for group k in location i in time interval t per 100 migrants and ranges between −100 and 100. A migration effectiveness score of −100 means i experiences outmigration but no inmigration; a score of 100 mzeans i experiences inmigration but no outmigration. If inmigration equals outmigration then $\mathrm{E}_{ikt} = 0$, which means that migration has no effect on the redistribution of k to or from i in time t (i.e., it is “ineffective” at redistributing population).

Figure 3 charts E_{ikt} for hostile states, where i is the set of hostile states and k is one of the three Latino subgroups or U.S.-born whites). We demarcate three time intervals t as follows: the five-year migration between 1995 and 2000 from the 2000 decennial census microdata; pooled annual migration in 2004–2005, 2005–2006, and 2006–2007 from the 2005, 2006, and 2007 ACS microdata; and pooled annual migration in 2007–2008, 2008–2009, and 2009–2010 from the 2008, 2009, and 2010 ACS microdata. Under these definitions In_{ikt} refers to the flow into hostile states from the rest of the country by group k in time interval t; Out_{ikt} refers to the flow out of these eighteen states by k in the same time period.

Before commenting on the differences between the groups in Figure 3, note two common trends. First, migration effectiveness is positive for each of the three groups of Latinos and U.S.-born whites into the set of hostile states in all time periods.

This means that internal migration is redistributing the population of these four groups into hostile states throughout the time period in question. Second, for all groups, effectiveness is highest in the 1995 to 2000 period and then declines. These trends suggest commonalities in the relative attractiveness of these states across groups and in the diminished redistributive power of migration in the latter half of the 2000s.

Despite these shared characteristics, the groups differ in the size of the 1995 to 2000 peak in effectiveness, the differences between that peak and the decline in effectiveness in subsequent years, and the timing of the decline. For U.S.-born whites in the 1995 to 2000 period, effectiveness peaks at a net gain of 20 people per 100 movers in and out of the set of future hostile states. This is less than half that recorded for naturalized and noncitizen Latinos during these years, however. This is the height of the 1990s dispersion of Latinos across the country, and the effectiveness scores suggest that the states yet to become hostile experienced a net gain of 47 for every 100 migrants of each of these two groups in this period—a substantial redistributive trend. U.S.-born Latinos occupy a midpoint between U.S.-born whites and foreign-born Latinos in 1995 to 2000, redistributing to future hostile states faster than the former group but slower than the latter.

By 2005 to 2007, U.S.-born white migration effectiveness in hostile states dropped from its 1995 to 2000 level and fell slightly again in the subsequent period. The trends for U.S.-born and naturalized Latinos are different and, unlike for whites, the timing and magnitude of their declines are consistent with a hostile policy effect. The level of migration effectiveness to hostile states for both of these groups holds steady through 2005 to 2007 (i.e., before these states implemented most of their policies) but falls in 2008 to 2010 to levels approximating those for U.S.-born whites. The magnitude of this decline is greater for naturalized Latinos but the pattern is similar for both groups.

Noncitizen Latino migration effectiveness declines between 1995 to 2000 and 2005 to 2007, but even in the mid-2000s they register significant redistribution to hostile states ($E_{ikt} > 30$). In 2008 to 2010, however, this redistribution ground to a halt. Noncitizen Latino migration effectiveness in hostile states in this period is considerably lower than for any other group, including U.S.-born whites. Although all Latino groups have considerably diminished migration redistribution to hostile states in 2008 to 2010, the drop to near zero effectiveness

for noncitizen Latinos is suggestive of a greater response by those most at risk from antagonistic policies directed at unauthorized migrants.

Modeling Changes in Latino Interstate Migration

The migration effectiveness results indicate a rapid decline in the redistribution of Latinos to states through internal migration after they adopt policies hostile to unauthorized immigrants. We now measure the size and significance of these hostile policy effects by year in a multivariate framework that controls for other potential determinants of migration patterns.

The changing geography of state economic conditions is probably the greatest potential confounding effect. These conditions have fluctuated considerably in the last two decades. California's economy was slow to recover from the early 1990s recession while "new destinations" for Latinos, particularly in Southeastern states, were more economically vibrant. The Great Recession, which ran officially from December 2007 through June 2009, did not follow this pattern. Many of the states that offered economic opportunities for migrating Latinos in the 1990s suffered the biggest increases in unemployment. North Carolina and Georgia had the fastest growth in foreign-born populations in the 1990s and are the new destination states with the greatest number of immigrants, most of whom are Latino. Both states saw their unemployment rates more than double between 2007 and 2009. North Carolina's unemployment rate reached 11 percent in March 2010 and Georgia's rate peaked at 10.5 percent in December of the same year (U.S. Bureau of Labor Statistics, 1990–2014a).

Although these rates were surpassed in California, where unemployment exceeded 12 percent for more than a year starting in late 2009, the key point is that the Great Recession severely reduced job prospects in both gateways and new destination states. Under these changed conditions, new destinations might have lost some of their allure and gateways could be more retentive of their Latino populations than in the recent past (Ellis, Wright, and Townley 2014). Or a new pattern of internal migration redistribution could be emerging that reflects the space economy upheavals and opportunities triggered by the economic collapse of the late 2000s. The central issue is whether hostile policy effects are affecting this geography of Latino migration redistribution net of ruptures in the space economy in the late 2000s.

To measure this possibility, we estimate separate interstate models of destination choice for each of the four groups—U.S.-born whites, U.S.-born Latinos, naturalized Latinos, and noncitizen Latinos. The model estimates the effects of independent variables on m_{ijt}, the number of migrants from state i to state j in year t:

$$m_{ijt} = f\left(o_i + \delta_j + \gamma_t + \sigma d_{ij} + \alpha_j + \beta x_{jt} + \lambda h_j \cdot p\right). \quad (2)$$

As a destination choice model, this specification includes a standard set of controls for spatial structure, including a measure of distance between states (miles between state population centroids from the U.S. Census Bureau [2010]), d_{ij}, and a dummy variable if the

destination is an adjacent state, aj, to reflect the greater likelihood of moving to a neighboring state. Rather than include a standard battery of other origin and destination characteristics known to condition destination choice, we include origin and destination state fixed effects, o_i and δj. These control for aspects of states that generate and attract migrants that are stable over the time, such as relative population size, climate, physical amenities, and other fixed but unobserved origin and destination characteristics. These are time-invariant fixed effects, meaning that there are forty-eight dummy variables for each origin state and forty-eight for each destination state. To allow for variation over time, the model includes year fixed effects, γ_t. These compensate for the different sample sizes and variation in aggregate migration volumes across the 2000 decennial census and 2005 to 2010 annual ACS microdata. There are six-year fixed effect parameters (the decennial census year is the excluded category) because the model uses each ACS year in the estimation.

The fixed effects and spatial separation measures control for the spatial structure of interstate migration. The year fixed effects allow aggregate migration volume to fluctuate but have no capability to adjust the geographic orientation of flows in response to changing destination conditions, such as space economy transitions. The vector xj_t captures these dynamic effects and includes three measures of economic conditions: unemployment rate, employment growth, and housing affordability. Unemployment rates and employment growth are related, of course, but they can diverge. States with growing labor markets might have higher unemployment rates because more people are drawn into the labor force to look for work. Unemployment rates might be lower in slow-growth states because workers have dropped out of the labor force. We use the state's annual rate of unemployment recorded in the year of migration departure (U.S. Bureau of Labor Statistics, 1990–2014a). For ACS data this is the year before the survey (e.g., for ACS 2005 data this is the rate in 2004). For the decennial census sample, we use the unemployment rate at the midpoint, 1998, to capture better conditions faced by movers early and late in the five-year migration interval. We experimented with average unemployment rates over the 1995 to 2000 period and the results were very similar to the 1998 midpoint measure. Our employment growth measure is growth in total state employment between the year of migration departure and arrival (U.S. Bureau of Labor Statistics, 1990–2014b). For ACS data this is growth between the year prior to the ACS survey and the year of the ACS survey. The decennial measure is five-year employment growth between 1993 and 1998, which replicates the midpoint strategy used in matching five-year migration interval data to state unemployment rates.

Our final economic measure is housing affordability, which is the most important component of the cost of living in different states (Ley 2007). After taking into consideration labor market conditions, migrants might opt for destinations where the cost of housing relative to wages is low. Our measure of affordability is median house price (from the decennial U.S. Census in 1990 and 2000 and the ACS in 2005–2010) divided by state per capita income in the year of departure (U.S. Bureau of Economic Analysis 1990–2014). There was no ACS in 2004, so median house price for that year is the linearly interpolated value between the 2000 decennial census state median and the 2005 ACS state median. We used median house price in 1998 for the decennial migration data; it is the linearly interpolated value between 1990 and 2000 decennial census state median values.

Changes in labor market and housing affordability conditions might not be the only factors with the potential to reorient foreign-born Latino migration flows over the time period of the analysis. The geography of social networks for Latino immigrants within the United States has dispersed across the country in the last thirty years. Growth in immigrant Latino populations in new destinations has deepened the pool of social capital in these places, potentially reinforcing their attraction to prospective Latino inmigrants in a cumulative causation process (Massey 1990). This mechanism was a factor in accelerating the growth of Mexican populations in new destinations in the 1990s (Card and Lewis 2005). It could have driven change in the geography of Latino internal migration flows between the 1990s and 2000s. Alternatively, Latino internal migrants might be dispersing across the country and moving to states where there are better economic opportunities than in states with high percentages of foreign-born Latinos. If this is true, then labor market opportunities rather than the density of social capital are driving their migration geography. We allow for either of these possibilities by including in xj_t the percentage of state population that is foreign-born Latino as a predictor. For the ACS data, this is measured in the year of migration departure. For the decennial migration data, we repeat the procedure for the economic measures and estimate this state percentage for 1998 from a linear interpolation between the 1990 and 2000 decennial census values.

Unemployment, employment growth, housing affordability, and state percentage foreign-born Latino enter the model as ratios of origin and destination values of these variables (Davies, Greenwood, and Li 2001). The expectation is that migrants will move from states with low to high employment growth rates; from states with high to low unemployment rates; and from states with low to high affordability. We expect foreign-born Latinos to move from states with low percentages of foreign-born Latinos to states with high percentages of this group if the availability of own-group social capital governs where they move within the country.

The baseline model described thus far controls for the gravity model-based structure of interstate migration exchange and allows for change in the directionality and volume of migration with shifts in the spatial distribution of economic opportunity and foreign-born Latino social capital. To this baseline, we add a dummy variable, h_j, indicating whether the destination is one of the eighteen hostile states mapped in Figure 2. The interaction of this dummy and a categorical variable for time period, p, is our primary focus of interest. As in Figure 3, p measures three periods—1995 to 2000, 2005 to 2007, and 2008 to 2010—with 1995 to 2000 as the excluded category. We expect to see a significant depressive effect on Latino migration to hostile states (especially by noncitizens) expressed in the coefficient vector λ for p = 2008 to 2010; that is, when the policy differentiation between hostile and other states widened considerably (see Figure 1).

This would indicate, net of all other effects, that Latino interstate migrants are avoiding hostile states. We also test an alternative specification of the hostile-state effect, h_j, defining it equal to one if one of the eighteen hostile states is a destination and the origin is one of the other states (i.e., those states that are relatively permissive or unclassified). Whereas our initial hostile state specification tests to see whether hostile effects influence destination choice regardless of origin, this second specification narrows the focus to whether hostile

state laws alter the migration destination calculus of those whose origin is outside the set of hostile states. Migrants from states that are relatively permissive might be less willing to move to a hostile state than migrants who come from such places and have experience navigating the difficulties that hostile policies pose for work and daily life.

The model is a zero-inflated Poisson in which the destination choice component includes all of the baseline model's predictors and alternately tests different specifications of the hostile state variable. The inflation component includes origin and destination-state fixed effects (i.e., dummy variables for each origin and destination state), year fixed effects, distance between state centroids, and a dummy for adjacent state. The objective of the inflation component—a logit model—is to predict the probability that a flow is zero in the origin–destination matrix. Interstate migration is a relatively rare event and the ACS is a 1 percent sample of that migration. Zero migration flows between many pairs of states are highly likely under these conditions for subgroups of the Latino population, especially between states where Latino populations are small.

Results

This model generates more than 200 coefficients, most of which are state and year fixed effects that do not speak to the question of interstate migration adjustment to state-scale immigration policies. Table 1 thus presents only the subset of coefficients of interest from the poisson or flow component of this model for each of the four groups. The first specification for each group is the baseline model without hostile state dummy variable interactions, the second adds an interaction between the hostile state dummy variable and time period to this baseline, and the third combines the baseline and an interaction between the flow from the set of relatively permissive or unclassified states to the set of hostile states and time period. The coefficients are presented in exponentiated form (i.e., as risk ratios), which means that they measure the multiplicative effect of the independent variable on migration flow: Effects greater than one increase migration and those less than one decrease it. Coefficient significance levels are calculated with robust standard errors to correct for overdispersion.

All three models for all groups produce expected effects for distance and adjacent state. The distance impedance effect is broadly similar for all groups: Migration volumes decline by a multiplicative factor of 0.99 per mile. Adjacency boosts the migration flow for U.S. whites by a multiplicative factor of just over 3, whereas for all subgroups of Latinos it only increases it by a factor between 1.7 and 1.9. Latinos are more likely than U.S. whites to go further afield than neighboring states, which is likely a reflection of their distinctive concentration in widely spaced clusters of states.

Unemployment rate and employment growth destination-origin ratio estimates conform to expectations for all groups: Migrants move to states where employment growth is stronger and unemployment rates are lower than in their origin states. The employment growth and unemployment rate effects are strongest for noncitizen Latinos, which suggests this group's internal migration is relatively more responsive to the difference between origin and destination economic conditions. The unemployment rate coefficients for naturalized

Latinos are suggestive of migration toward places with lower unemployment but are not significant. The housing affordability ratio has the expected effect on the migration orientation of U.S.-born whites: They move from states where the ratio of house prices to wages is high to states where it is lower. For some Latino groups this variable is insignificant (U.S.-born Latinos, noncitizen Latinos), suggesting that cost of living considerations do not factor into where they migrate. For naturalized Latinos, migration is in the direction of less affordability than in the origin state (although not significant for specification c; see Table 1). Although naturalized Latinos are similar to other Latino subgroups in migrating to more vibrant labor markets, they are unlike them in choosing to go to those markets where the cost of living is higher. Importantly, the direction of the effects of these three economic variables is stable across each specification for all groups.

The ratio of the percentage foreign-born Latino in destinations to origins has no effect on the migration of U.S.-born whites; that is, there is no evidence of a migration flow for this group from states with high percentages of foreign-born Latinos to states where that percentage is lower (or the reverse). Although there is a literature suggesting that whites adjust their locations in response to large immigrant populations, of which Latinos are usually the largest group, we find no evidence of this effect (cf. Frey and Liaw 1998). Whites might be leaving states with high percentages of foreign-born Latinos, but they do not appear to be moving to states where those percentages are lower. Latino internal migrants from all three groups are not moving toward states with higher percentages of foreign-born Latinos than in the origin as social capital or network theory would suggest. In fact, they are moving to states where those percentages are lower than where they came from. After controlling for economic, spatial, and other factors likely to affect migration, internal migration is dispersing rather than concentrating these populations.

The model effects described thus far control for origin and destination conditions through fixed effects, account for spatial structure, and allow for changing economic conditions. The remaining effects—the ones of primary interest—are the interactions between hostile state categories and time period. The coefficients under column b in Table 1 include the interaction between time period and a dummy variable for hostile state destination regardless of origin; those under c test the alternative specification where time period interacts with flows to hostile state destinations from the set of relatively permissive or unclassified states (identified as “rest” in Table 1) as origins.

The models under b produce hostile state coefficients for each group that align with trend and significance expectations for each group except in one key instance. For all groups, there are no hostile state effects in the initial period (i.e., before these policies were enacted, the hostile state dummy variable has, as expected, no effect on destination choice). Over time, hostile state effects for U.S.-born whites remain insignificant, as expected. For naturalized and U.S.-born Latinos, significant reductions in migration to hostile states emerge by 2008 to 2010 when restrictionist policies were most present, although the significance of the effect is marginal for the latter subgroup. The estimate for naturalized Latinos suggests that their flows to hostile states were 33 percent lower by 2008 to 2010. The surprise is the insignificant hostile state effect for noncitizen Latinos in 2008 to 2010. The trend in hostile

state coefficients for this group is suggestive of a reduction in flow to these states by 2008 to 2010 but the estimate is statistically insignificant.

The alternative specifications under c produce stronger effects than under b, with coefficients and significance levels that conform to expectations for all groups. The substantially lower Bayesian information criterion values for models under c confirm that these models are the best fitting of all three specifications. As with model b, there are no effects for U.S.-born whites in any period, which provides support for the idea that the hostile state variable has no effect on the migration of our control group. In contrast, all Latino groups show strong reductions in migration to hostile states by 2008 to 2010 when moving from somewhere other than a hostile state. For naturalized Latinos, migration from nonhostile to hostile destination states in 2008 to 2010 is reduced by 48 percent; for noncitizen Latinos the reduction is 41 percent. Noncitizen Latino aversion is not the strongest reaction, as we speculated might be the case. Migrating U.S.-born Latinos also are avoiding hostile states by 2008 to 2010, but their coefficients suggest a weaker response than that by their foreign-born counterparts.

Overall, the specifications under c suggest that by 2008 to 2010 all migrating Latino subgroups became averse to migrating to hostile state destinations from nonhostile state origins. This aligns with our alternative argument that fear of discrimination or mixed-legal-status family relationships might produce a broad Latino migration response to these laws. The specifications under c also describe a dramatic reduction between the late 1990s and the late 2000s in the attractiveness of the states that passed laws targeting unauthorized immigrants. In the late 1990s, as Latinos dispersed across the country to new destinations, the baseline rest to hostile coefficient indicates that states yet to adopt hostile policies were gaining Latinos from other parts of the country. This situation reversed ten years later, especially for naturalized and noncitizen Latinos, aligning with the migration effectiveness findings (Figure 3).

A counterfactual experiment using these coefficients helps to illustrate the magnitude of the effect of hostile state policies on changes in the internal migration redistribution of Latinos to hostile states in the late 2000s. The counterfactual predicts flows in 2005 to 2007 and 2008 to 2010 using observed origin and destination economic and other information in those years but with state-scale immigration policy effects set to their 1995 to 2000 levels. This generates a pattern of interstate migration according to the changing state distribution of economic circumstances and immigrant populations in the late 2000s but without state restrictionism. We use the coefficients from the specification under c for this exercise because it is the stronger model. As before, we convert these flows to migration effectiveness scores to simplify the visual display of comparisons across differently sized groups. We compare these counterfactual effectiveness scores with those predicted using the complete set of estimates from c (i.e., with the hostile state effects from c in effect) and with the observed effectiveness scores (see Figure 4).

The observed (gray) and full model-predicted (orange) effectiveness scores show tight correspondence across groups and time periods. The greatest disparity between them is in the 2008 to 2010 period for naturalized and foreign-born Latinos where the full model

somewhat underpredicts the decline in hostile state migration effectiveness for these groups. Never-theless, the full model captures the trends in hostile state migration effectiveness across time for these two groups well: stable or modest decline in 2005 to 2007 followed by dramatic decline in 2008 to 2010.

The counterfactual predictions (blue) necessarily mirror the full model predictions in 1995 to 2000 for all groups. In subsequent periods there is little difference between the counterfactual and full prediction for U.S.-born whites, which is unsurprising. For Latinos, however, the counterfactual highlights the substantial effect of restrictionist policies on migration redistribution to hostile states. U.S.-born Latino migration effectiveness scores for hostile states would be at the level they were in the late 1990s if they had not adopted restrictionist policies. The same is true for naturalized Latinos, for whom such policies have reduced migration redistribution to hostile states by 60 percent. The counterfactual suggests that the absence of restrictionist policies would not return noncitizen Latino hostile state migration effectiveness scores quite to the levels of the late 1990s. They do, however, predict that migration effectiveness would have been three times greater without such policies. State policies have thus substantially altered the internal migration redistribution of Latinos. Without these policies, that redistribution would be close to rates observed at the peak of Latino dispersion in the 1990s.

Summary and Conclusions

The state concentration of Latinos in the United States has declined over the last few decades. Internal migration played a major role in this process, accounting for two thirds of the total migration of all Latinos—U.S.- and foreign-born—into the ten states with the fastest growing Latino populations between 1995 and 2000. This internal redistribution accelerated before the proliferation of state restrictionist policies targeting unauthorized immigrants. States that adopted these policies in the late 2000s had experienced large gains in U.S.- and foreign-born Latino populations through internal migration in the 1990s, a decade before these policies came into being.

After 2007, Latino migration from nonhostile to hostile states fell dramatically. Although these reductions were greatest for noncitizen and naturalized Latinos, they also occurred for U.S.-born Latinos. That both U.S.- and foreign-born Latinos have become averse to moving from nonhostile to hostile states means that hostile state immigration regimes deter internal migration by those not directly subject to these policies. Latinos with rights associated with citizenship might avoid hostile states because they fear states' policies enhance the possibilities of discrimination against all Latinos, or they might be part of a mixed-legal-status family in which migration decisions protect those who are vulnerable to hostile immigration laws.

The hostile state effect is weakest when measured from all origins as opposed to the smaller set of permissive (and unclassified) state origins. This implies that Latinos migrating from hostile states are less averse to choosing a hostile state destination than those migrating from nonhostile states. Perhaps the learned experience of living under a hostile immigration regime mutes the fear of moving to a state with a similar environment. Whatever the cause,

it appears that the primary effect of restrictionist state policies on Latino redistribution dynamics is reduced migration to hostile states from more welcoming origins rather than a general avoidance effect no matter the origin. Existing research on the push effects of hostile state policies finds they elevate noncitizen Latino outmigration rates from states with highly restrictionist immigration regimes (Ellis et al. 2014). These outmigration findings paired with the results of this article suggest the intriguing possibility, also observed by Watson (2013), that hostile state policies might push out noncitizen Latino populations but only weakly influence where they choose to migrate.

Recently, Connecticut (classified as hostile through 2009) moderated its stance toward unauthorized immigrants, and Alabama (classified as not hostile through 2009) moved in the opposite direction. Supreme Court decisions rendered since the period of our analysis have blunted the scope of the most far-reaching state-scale anti-immigrant actions (e.g., SB1070 in Arizona) but have left others largely untouched (e.g., employment verification). Thus, with a few exceptions, the geographical pattern of states and localities with hostile policies that emerged in the late 2000s, which we used to assess the migration response, remains in place. Although immigration reform at the federal level will reduce immigrant exposure to the most punitive provisions of state laws, such reform remains an unlikely prospect at the time of writing. Anti-immigrant politics still resonates with the core Republican electorate as the early stages of the 2016 presidential election cycle have demonstrated. Populations in the South are slowly becoming more Latino and Asian, and it seems inevitable that Republicans there who call for harsh treatment of unauthorized populations to win elections today might have to reorient their stance to be electable in the future. There is, however, little sign of this happening yet (Raines 2015).

These conditions suggest that the patterns of Latino internal migration we found in the late 2000s still hold today. Two possible sources of change post-2010 warrant further investigation. First, the Deferred Action for Childhood Arrivals (DACA) and Deferred Action for Parents of Americans and Lawful Permanent Residents (DAPA) programs, executive branch actions to provide a substantial portion of the unauthorized population relief from deportation and accessibility to work permits, could moderate aversion to moving to hostile states. The effect of these programs on destination choice, however, will depend on whether the courts lift legal suspensions against their full implementation. Second, postrecession job growth might have increased Latino migration to hostile destinations, overpowering preference for less restrictionist environments. Our findings suggest that they will not rush to these places as they did in the past when labor demand was strong, but perhaps responsiveness to such conditions has changed since the depths of the recession. Future research should also extend the examination of state policy and regional economic effects to the settlement distribution of newly arrived Latino immigrants, comparing changes in this distribution to shifts in Latino internal migration dynamics as well as to refugee populations in light of the public refusal of many state governors, at the time of writing, to accept Syrians displaced by the catastrophe in their homeland.[3]

[3]Thanks to Matt Culbert for making this point.

Although our primary objective has been to investigate the effect of hostile state immigration policies on Latino internal migration, it also serves as an illustration of the impact of state and local laws on U.S. internal migration dynamics. As noted in the Introduction, others have explored these policy effects in a variety of domains but none, as far as we know, have connected state-scale hostile immigration regimes to the directionality of internal migration for an immigrant group. Perhaps the closest parallel to what we have investigated here is the Great Migration of African Americans. In the early and middle decades of the twentieth century, blacks left state-sponsored violence and deprivation in the South for opportunities in the North and West (e.g., Tolnay and Beck 1992; Wilkerson 2010). Return flows flourished in later decades when those policies and the social, political, and economic marginalization they enforced were reversed (e.g., McHugh 1987). Framed in this context, shifts in the internal migration flow of Latinos in response to hostile state laws represent a contemporary manifestation of a recurrent theme in U.S. history: the effect of hostile state legal regimes on the migration dynamics of marginalized groups in the United States. In the future, a weakening of hostile state immigration regimes, if and when it occurs, will reduce the magnitude of differences between states in their disposition toward immigrants, potentially reversing the Latino migration patterns we have found. In the event of such policy changes, researchers should study the potential migration response.

Acknowledgments

We thank the anonymous reviewers who provided useful feedback on an earlier version of this article.

Funding

The Geography and Spatial Sciences Program at the National Science Foundation funded this research through Award 0961232. The Eunice Kennedy Shriver National Institute of Child Health and Human Development provided additional support through Awards 5R24HD042828 and 5T32HD007543.

Biography

MARK ELLIS is a Professor in the Department of Geography and Director of the Northwest Federal Statistical Research Data Center at the University of Washington, Seattle, WA 98195. ellism@uw.edu. His research interests include U.S. immigration and internal migration and their relationship to urban residential segregation change and local labor market dynamics.

RICHARD WRIGHT holds the Orvil E. Dryfoos Chair in Public Affairs and, since 1985, has been a Professor of Geography at Dartmouth College, Hannover, NH 03755., richard.a.wright@dartmouth.edu. His research and teaching focuses on housing and labor markets and migration and immigration.

MATT TOWNLEY is Lead Data Scientist at spatially.com, a firm that uses sophisticated analytics to provide location-based intelligence, and a PhD Candidate in the Department of Geography at the University of Washington, Seattle, WA 98195., townleym@uw.edu. His research interests include the spatial structure of population and its relationship to health, population change, and urban dynamics.

References

Bohn S, and Pugatch T 2015 U.S. border enforcement and Mexican immigrant location choice. Demography 52 (5): 1543–70. [PubMed: 26282923]

Campbell KM 2011 The road to S.B. 1070: How Arizona became ground zero for the immigrants' rights movement and the continuing struggle for Latino civil rights in America. Harvard Latino Law Review 14:1–21.

Card D, and Lewis EG 2005 The diffusion of Mexican immigrants during the 1990s: Explanations and impacts. National Bureau of Economic Research Working Paper Series No. 11552 http://www.nber.org/papers/w11552 (last accessed 12 January 2009).

Chisti M, and Bergeron C 2011 Supreme Court upholds Legal Arizona Workers Act with limited implications for other state immigration laws. The Migration Information Source. http://www.migrationinformation.org/USFocus/display.cfm?ID=843 (last accessed 13 February 2013).

Chisti M, and Hipsman F 2013 Alabama settlement marks near end of a chapter in state immigration enforcement activism. Migrationpolicy.org http://www.migrationpolicy.org/article/alabama-settlement-marks-near-end-chapter-state-immigration-enforcement-activism (last accessed 6 November 2015).

Coleman M 2007 Immigration geopolitics beyond the Mexico-U.S. border. Antipode 39 (1): 54–76.

Coleman M 2009 What counts as the politics and practice of security, and where? Devolution and immigrant insecurity after 9/11. Annals of the Association of American Geographers 99 (5): 904–13.

Coleman M 2012 The "local" migration state: The site-specific devolution of immigration enforcement in the U.S. South. Law & Policy 34 (2): 159–90.

Davies PS, Greenwood MJ, and Li H 2001 A conditional logit approach to U.S. state-to-state migration. Journal of Regional Science 41 (2): 337–60.

DeJong GFD, Graefe DR, and Pierre TS 2005 Welfare reform and interstate migration of poor families. Demography 42 (3): 469–96. [PubMed: 16235609]

Durand J, Massey DS, and Capoferro C 2005 The new geography of Mexican immigration In New destinations: Mexican immigration in the United States, ed. Zúñiga V and Hernández-León R, 1–20. New York: Russell Sage Foundation.

Ellis M, Wright R, and Townley M 2014 The allure of new immigrant destinations and the great recession in the United States. International Migration Review 48:3–33. [PubMed: 24791036]

Ellis M, Wright R, Townley M, and Copeland K 2014 The migration response to the Legal Arizona Workers Act. Political Geography 42:46–56. [PubMed: 25018590]

Flores RD 2014 Living in the eye of the storm: How did Hazleton's restrictive immigration ordinance affect local interethnic relations? American Behavioral Scientist 58 (13): 1743–63.

Flores RD 2015 Taking the law into their own hands: Do local anti-immigrant ordinances increase gun sales? Social Problems 62 (3): 363–90.

Frey WH, and Liaw KL 1998 Immigrant concentration and domestic migrant dispersal: Is movement to non-metropolitan areas "white flight"? The Professional Geographer 50:215–31.

Gelatt J, Bernstein H, and Koball H 2015 Uniting the patchwork measuring state and local immigrant contexts. Urban Institute http://www.urban.org/sites/default/files/2000243-uniting-the-patchwork-measuring-state-and-local-immigrant-contexts.pdf (last accessed 7 February 2016).

Hall M 2013 Residential integration on the new frontier: Immigrant segregation in established and new destinations. Demography 50 (5): 1873–96. [PubMed: 23192394]

Hernóndez-León R, and Zúñiga V 2000 "Making carpet by the mile": The emergence of a Mexican immigrant community in an industrial region of the U.S. historic South. Social Science Quarterly 81 (1): 49–66.

Hoefer M, Rytina N, and Baker B 2012 Estimates of the unauthorized immigrant population residing in the United States: January 2011. http://www.dhs.gov/xlibrary/assets/statistics/publications/ois_ill_pe_2011.pdf (last accessed 7 February 2016).

Kandel W, and Parrado EA 2005 Restructuring of the U.S. meat processing industry and new Hispanic migrant destinations. Population and Development Review 31 (3): 447–71.

Leach MA, and Bean FD 2008 The structure and dynamics of Mexican migration to new destinations in the United States In New faces in new places: The changing geography of American immigration, ed. Massey DS, 25–50. New York: Russell Sage Foundation.

Leerkes A, Leach M, and Bachmeier J 2012 Borders behind the border: An exploration of state-level differences in migration control and their effects on U.S. migration patterns. Journal of Ethnic and Migration Studies 38 (1): 111–29.

Leitner H 2012 Spaces of encounters: Immigration, race, class, and the politics of belonging in small-town America. Annals of the Association of American Geographers 102 (4): 828–46.

Ley D 2007 Countervailing immigration and domestic migration in gateway cities: Australian and Canadian variations on an American theme. Economic Geography 83:231–54.

Lichter DT, and Johnson KM 2009 Immigrant gateways and Hispanic migration to new destinations. International Migration Review 43 (3): 496–518.

Lichter DT, Parisi D, Taquino MC, and Grice SM 2010 Residential segregation in new Hispanic destinations: Cities, suburbs, and rural communities compared. Social Science Research 39 (2): 215–30.

Light I 2006 Deflecting immigration: Networks, markets, and regulation in Los Angeles. New York: Russell Sage Foundation.

Lofstrom M, Bohn S, and Raphael S 2011 Lessons from the 2007 Legal Arizona Workers Act. San Francisco, CA: Public Policy Institute of California.

Marrow H 2011 New destination dreaming: Immigration, race, and legal status in the rural American South. Stanford, CA: Stanford University Press.

Massey DS 1990 Social structure, household strategies, and the cumulative causation of migration. Population Index 56 (1): 3–26. [PubMed: 12316385]

Massey DS, and Capoferro C 2008 The geographic diversification of American immigration In New faces in new places: The changing geography of American immigration, ed. Massey DS, 25–50. New York: Russell Sage Foundation.

McHugh KE 1987 Black migration reversal in the United States. Geographical Review 77 (2): 171–82.

Morgan JN 1983 Tuition policy and the interstate migration of college students. Research in Higher Education 19 (2): 183–95.

Nelson L, and Hiemstra N 2008 Latino immigrants and the renegotiation of place and belonging in small town America. Social & Cultural Geography 9 (3): 319–42.

Nevins J 2010 Operation Gatekeeper and beyond: The war on illegals and the remaking of American boundaries. London and New York: Routledge.

Park J, and Iceland J 2011 Residential segregation in metropolitan established immigrant gateways and new destinations, 1990–2000. Social Science Research 40 (3): 811–21. [PubMed: 25589795]

Parrado EA, and Kandel W 2008 New Hispanic migrant destinations: A tale of two industries In New faces in new places: The changing geography of American immigration, ed. Massey DS, 99–123. New York: Russell Sage Foundation.

Parrado EA, and Kandel W 2011 Industrial change, Hispanic immigration, and the internal migration of low-skilled native male workers in the United States, 1995–2000. Social Science Research 40 (2): 626–40.

Pashigian BP 1977 Occupational licensing and the interstate mobility of professionals National Bureau of Economic Research http://www.nber.org/papers/w0220 (last accessed 6 November 2015).

Passel JS, and Cohn D 2009 A portrait of unauthorized immigrants in the United States. Pew Hispanic Center http://www.pewhispanic.org/2009/04/14/a-portrait-of-unauthorized-immigrants-in-the-united-states/ (last accessed 10 February 2015).

Pham H, and Pham VH 2014 Measuring the climate for immigrants: A state-by-state analysis In Strange neighbors: The role of states in immigration policy, ed. Hessick CB and Chin GJ, 21–39. New York: New York University Press.

Raines H 2015 The dream world of the Southern Republicans. The New York Times 10 July 2015. http://www.nytimes.com/2015/07/12/opinion/sunday/will-demographics-transform-southern-politics.html (last accessed 25 November 2015).

Ramakrishnan SK, and Wong T 2010 Partisanship, not Spanish: Explaining municipal ordinances affecting undocumented immigrants In Taking local control: Immigration policy activism in U.S. cities and states, ed. Varsanyi MW, 73–93. Stanford, CA: Stanford University Press.

Riosmena F, and Massey DS 2012 Pathways to El Norte: Origins, destinations, and characteristics of Mexican migrants to the United States. International Migration Review 46 (1): 3–36. [PubMed: 22666876]

Rodríguez CM 2008 The significance of the local in immigration regulation. Michigan Law Review 106 (4): 567–642.

Ruggles S, Genadek K, Goeken R, Grover J, and Sobek M 2015 Integrated public use microdata series: Version 6.0 [Machine-readable database]. Minneapolis, MN: University of Minnesota.

Saenz R 2005 Latinos and the changing face of America In The American people: Census 2000, ed. Farley R and Haaga J, 352–79. New York: Russell Sage Foundation.

Tolnay SE, and Beck EM 1992 Racial violence and black migration in the American South, 1910 to 1930. American Sociological Review 57 (1): 103–16.

U.S. Bureau of Economic Analysis, U.S. Department of Commerce. 1990–2014. GDP and personal income database. http://www.bea.gov/iTable/index_regional.cfm (last accessed 7 November 2015).

U.S. Bureau of Labor Statistics, U.S. Department of Labor. 1990–2014a Local area unemployment statistics database. http://www.bls.gov/lau/data.htm (last accessed 7 November 2015).

U.S. Bureau of Labor Statistics, U.S. Department of Labor. 1990–2014b State and metro employment, hours and earnings database. http://www.bls.gov/sae/data.htm (last accessed 7 November 2015).

U.S. Census Bureau. 2010 Mean centers of population by state, 2010. https://www.census.gov/geo/reference/centersofpop.html (last accessed 7 November 2015).

Van Hook J, and Bachmeier JD 2013 How well does the American Community Survey count naturalized citizens. Demographic Research 29:1–32. [PubMed: 24078792]

Varsanyi M 2008 Immigration policing through the back-door: City ordinances, the “right to the city,” and the exclusion of undocumented day laborers. Urban Geography 29 (1): 29–52.

Varsanyi M 2010 Taking local control: Immigration policy activism in U.S. cities and states. Stanford, CA: Stanford University Press.

Walker KE 2014 Immigration, local policy, and national identity in the suburban United States. Urban Geography 35 (4): 508–29.

Walker K, and Leitner H 2011 The variegated landscape of local immigration policies in the United States. Urban Geography 32 (2): 156–78.

Watson T 2013 Enforcement and immigrant location choice. National Bureau of Economic Research http://www.nber.org/papers/w19626 (last accessed 28 July 2015).

Wells MJ 2004 The grassroots reconfiguration of U.S. immigration policy. International Migration Review 38 (4): 1308–47.

Wilkerson I 2010 The warmth of other suns: The epic story of America’s great migration. New York: Random House.

Winders J 2005 Changing politics of race and region: Latino migration to the U.S. South. Progress in Human Geography 29 (6): 683–99.

Zolberg AR 2006 A nation by design: Immigration policy in the fashioning of America. Cambridge, MA: Harvard University Press.

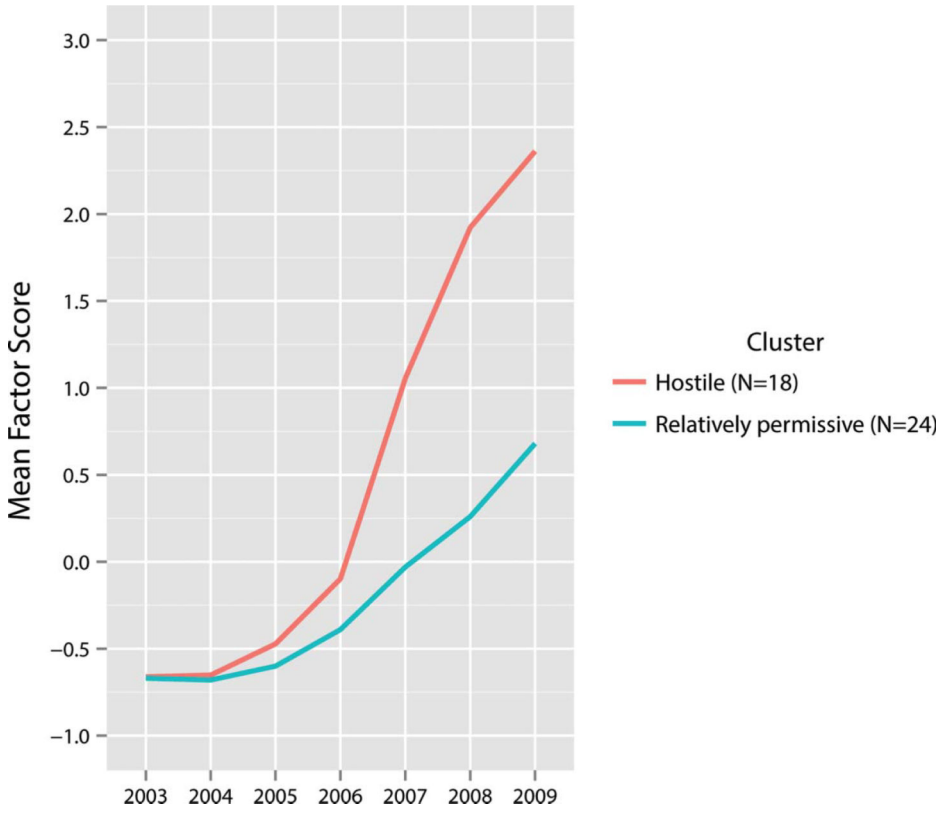

Figure 1.

Mean factor scores for hostile versus relatively permissive state clusters. *Source:* Leerkes, Leach, and Bachmeier (2012). Hostile cluster combines the moderately restrictive and highly restrictive (Arizona) clusters. Eight states with small unauthorized immigrant populations are excluded from the factor analysis (Alaska, Maine, Montana, North Dakota, South Dakota, Vermont, West Virginia, and Wyoming). (Color figure available online).

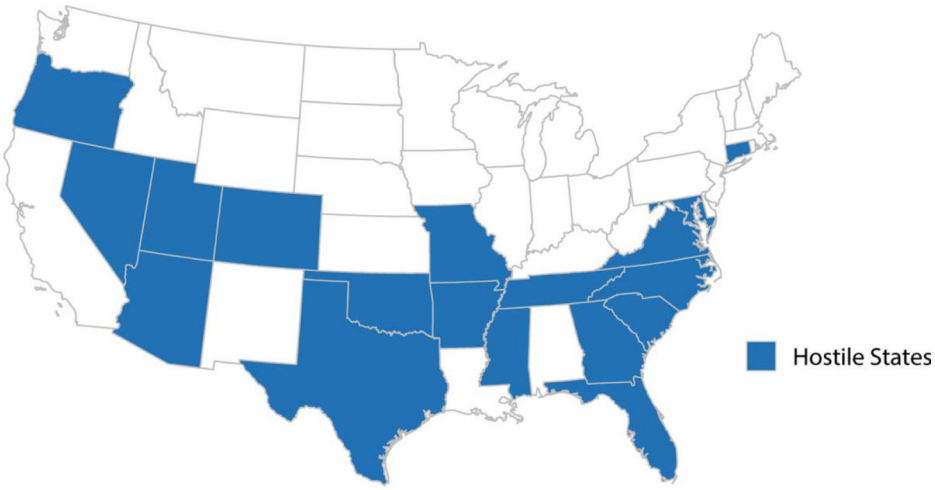

Figure 2.
Hostile states. *Source:* Leerkes, Leach, and Bachmeier (2012). (Color figure available online).

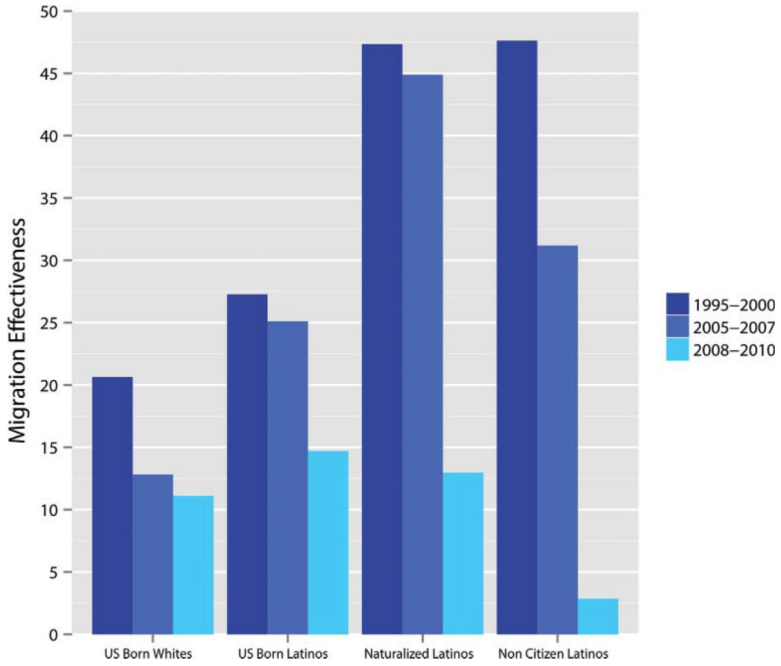

Figure 3.

Observed migration effectiveness: Hostile states. *Source:* Public Use Microsamples from 2000 U.S. decennial census and the 2005–2010 annual American Community Survey (Ruggles et al. 2015). Restricted to flows between the lower forty-eight states and persons between eighteen and sixty-five. Calculations by author. (Color figure available online).

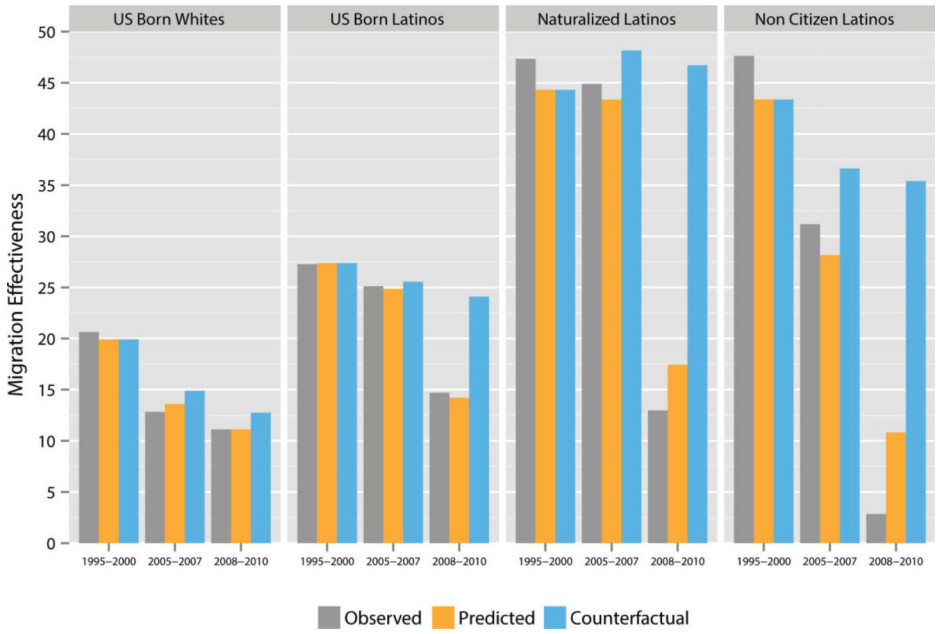

Figure 4.

Observed, predicted, and counterfactual migration effectiveness: Hostile states. *Source:* Public Use Microsamples from 2000 U.S. decennial census and the 2005–2010 annual American Community Survey (Ruggles et al. 2015). Calculations by author. (Color figure available online).

Table 1.

Poisson destination choice model estimates

	U.S.-born whites			U.S.-born Latinos			Naturalized Latinos			Noncitizen Latinos		
	a	b	c	a	b	c	a	b	c	a	b	c
Constant	677.9441***	722.6842***	723.6159***	13.8121***	18.2417***	18.2549***	3.3458	5.8990*	9.7592**	3.4782+	4.1095*	10.1855***
2005	0.3157***	0.3180***	0.3178***	0.5675***	0.5852***	0.5666***	0.7999*	0.8284	0.8139*	0.6712***	0.6747***	0.7061***
2006	0.3075***	0.3098***	0.3096***	0.5609***	0.5781***	0.5600***	0.7806**	0.8083+	0.7850**	0.7211***	0.7245***	0.7572***
2007	0.2979***	0.3001***	0.2999***	0.5019***	0.5175***	0.5022***	0.7695**	0.7957*	0.7808**	0.6759***	0.6791***	0.7109***
2008	0.2867***	0.2920***	0.2893***	0.5116***	0.5524***	0.5471***	0.5626***	0.7055**	0.7057***	0.5333***	0.5762***	0.6299***
2009	0.2707***	0.2758***	0.2732***	0.4899***	0.5300***	0.5250***	0.5484***	0.6876**	0.6737***	0.4984***	0.5385***	0.5914***
2010	0.2658***	0.2708***	0.2682***	0.5318***	0.5743***	0.5680***	0.5669***	0.7149**	0.7027***	0.5214***	0.5621***	0.6112***
Distance	0.9993***	0.9993***	0.9993***	0.9993***	0.9993***	0.9993***	0.9995***	0.9995***	0.9995***	0.9994***	0.9994***	0.9994***
Adjacent state	3.1256***	3.1254***	3.1378***	1.8863***	1.8822***	1.8779***	1.7135***	1.7082***	1.7204***	1.7671***	1.7672***	1.7684***
Employment growth ratio	1.0152***	1.0145***	1.0143***	1.0149**	1.0119*	1.0109*	1.0298***	1.0236**	1.0176*	1.0401***	1.0383***	1.0286***
Unemployment rate ratio	0.9992*	0.9992*	0.9992*	0.9981*	0.9981*	0.9981*	0.9980	0.9982	0.9985	0.9938***	0.9938***	0.9937***
Housing affordability ratio	0.9983***	0.9983***	0.9983***	1.0001	1.0000	0.9999	1.0020*	1.0017+	1.0013	1.0003	1.0002	0.9999
Foreign-born Latino population ratio	1.0000	1.0000	1.0000	0.9998***	0.9998***	0.9998***	0.9995***	0.9994***	0.9995***	0.9996***	0.9996***	0.9996***
Hostile		1.0000			1.0000			1.0000			1.0000	
2005–2007 hostile		0.9839			0.9349			0.9163			0.9851	
2008–2010 hostile		0.9625			0.8618+			0.6655**			0.8712	
Rest to hostile			1.0673			1.3916***			1.4794**			1.2869+
2005–2007 rest to hostile			0.9737			0.9850			0.8857			0.8276
2008–2010 rest to hostile			0.9672			0.8140*			0.5167***			0.5929***
BIC	8,064,213.7586	8,062,708.0147	8,059,880.1967	1,026,338.2547	1,024,748.3129	1,015,005.5772	322,688.6556	319,846.8143	315,206.3458	971,344.5923	970,108.0560	959,624.7164

Ann Am Assoc Geogr. Author manuscript; available in PMC 2020 September 30.

Note: BIC = Bayesian information criterion. Not shown: forty-eight origin and forty-eight destination fixed effects in the destination choice model (above) and all estimates of the accompanying inflation (logit) model. Sample: 2000 decennial U.S. Census Public Use Microsamples, 2005–2010 annual American Community Survey (ACS) Public Use Microsamples; restricted to U.S.-born whites, U.S.-born Latinos, naturalized Latinos, and noncitizen Latinos between the ages of 18 and 65. 2000 (i.e., 1995–2000 migration) is the excluded category in the main effects and the interactions with the hostile state effects. Distance = miles between state population centroids in 2010 (great circle) (https://www.census.gov/geo/reference/centersofpop.html). Adjacent state: 1 if state is adjacent, 0 otherwise. Employment growth ratio (U.S. Bureau of Labor Statistics, http://www.bls.gov/sae/): 100 * (Destination state employment growth t - 1 to t/Origin state employment growth t - 1 to t). For 2000 (i.e., 1995–2000 migration), t - 1 = 1993, t = 1998. Unemployment rate ratio (U.S. Bureau of Labor Statistics (http://www.bls.gov/lau/data.htm): 100* (Destination state unemployment rate at t/Origin State unemployment rate at t). For 2000 (i.e., 1995–2000 migration), t = 1998. Housing affordability ratio (state median house price from 2000 decennial census and 2005–2010 ACS; and state per capita income from the U.S. Bureau of Economic Affairs (http://www.bea.gov/iTable/index_regional.cfm): 100 * [destination state median house price(t)/state per capita income(t)] / [origin state median housing price (t)/state per capita income (t)]. For 2000 (i.e., 1995–2000 migration), t = 1998 (linear interpolation for median housing price, actual data for state per capita income). Foreign-born Latino pop ratio (decennial census 1990, 2000, ACS 2005–2010: 100* [Destination state % FB Latino(t) / Origin state % FB Latino(t)]. For 2000 (i.e., 1995–2000 migration), t = linear interpolation to 1998.

$^{+}p < 0.1$.

$^{*}p < 0.05$.

$^{**}p < 0.01$.

$^{***}p < 0.001$ using robust standard errors.