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## The allure of new immigrant destinations and the Great Recession in the United States

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### Abstract

In the 1990s, the immigrant population in the United States dispersed to non-traditional settlement locations (what have become known as “new immigrant destinations”). This paper examines whether the allure of new destinations persisted in the 2000s with a particular focus on the internal migration of the foreign born during the recent deep recessionary period and its aftermath. Three specific questions motivate the analysis. First, are immigrants, much like the US-born population, becoming less migratory within the country over time? Second, is immigrant dispersal from traditional gateways via internal migration continuing despite considerable economic contraction in many new destination metropolitan areas? Third, is immigration from abroad a substitute for what appears to be declining immigrant internal migration to new destinations? The findings reveal a close correlation between the declining internal migration propensity of the US-born and immigrants in the last two decades. We also observe parallels between the geographies of migration of native- and foreign-born populations with both groups moving to similar metropolitan areas in the 1990s. This redistributive association, however, weakened in the subsequent decade as new destination metropolitan areas lost their appeal for both groups, especially immigrants. There is no evidence to suggest that immigration from abroad is substituting for the decline in immigrant redistribution through internal migration to new destinations. Across destination types the relationship between immigration from abroad and the internal migration of the foreign born remained the same before, during, and after the Great Recession.

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Most immigrants to the United States continue to settle in a handful of gateway metropolitan areas such as New York, Los Angeles, San Francisco, Chicago, and Miami. While these traditional destinations still retain a disproportionate share of the foreign-born population, the fastest growth in immigrant populations since the 1980s has been in the so-called “new destination” metropolitan areas in the south, west, and midwest (Singer 2004). A sizeable number of these new destinations have not experienced a significant foreign-born presence for at least a century, if ever.

New immigrant destinations emerged during a period of economic growth. Until recently, the last time national unemployment rates surpassed 10 percent was the recession of the early 1980s. From 1982 to 2007, the US economy experienced a 25-year period of expansion punctuated by two relatively mild recessions in the early 1990s and early 2000s. These slowdowns had distinct regional signatures, so many parts of the country were relatively unaffected by substantial rises in unemployment. For example, the early 1990s recession was bicoastal (Dzialo, Shank, and Smith 1993). It was especially severe in California, which had fewer jobs in 1994 than in 1990 compared to a 4 percent job increase nationally (California Legislative Analyst Office 1995). In a dramatic reversal of post-WWII trends, this crisis spurred many US- and foreign-born residents to leave the state and net domestic out-migration for California was negative for every year of the 1990s, with the net loss exceeding 300,000 per year between 1993–5 (Johnson 2000). The technology-led boom of the late 1990s and the housing-led growth frenzy of the mid-2000s created job opportunities across the country. Comparatively sluggish growth in key gateway regions, such as southern California, combined with more robust growth elsewhere made it attractive for immigrants (and the US born) to seek opportunity in new destinations.

The US Great Recession, which officially spanned the period from December 2007 to June 2009 and whose effects continue to reverberate, was distinguished not only by its depth and slow recovery but also by its geographic extent (Bardhan and Walker 2011; Elsby et al. 2010; Gabe et al. 2013). The recession's impact was spatially uneven, but, unlike its immediate predecessors, most regions of the country were hard-hit by increases in unemployment, including those that had experienced only relatively minor economic damage in previous national economic contractions since the 1970s. New immigrant destinations in the south and west experienced rapidly rising unemployment, with traditional immigrant employment sectors, such as construction, shedding many jobs quickly.

This paper examines trends in immigrant settlement geographies from the late 1990s -when the growth in new destinations was in full swing and the economy was expanding -through to 2010 when the national economy had begun to grow again, albeit anemically.<sup>1</sup> Our primary aim is to determine whether the Great Recession and its aftermath have tarnished the allure of new immigrant destinations and, more broadly, affected patterns of immigrant redistribution. We do this by examining recent tendencies in immigrant internal migration. Three specific questions motivate our analysis. First, are immigrants becoming less migratory over time - much like the US population in general - and has the recession dampened their internal mobility any further? Second, is immigrant dispersal from traditional gateways to new destinations via internal migration continuing despite economic contraction in many new destination metropolitan areas? Third, if redistribution to new destinations via internal migration has slowed as we expect, has immigration from abroad become a substitute, thereby maintaining the redistribution trends of the foreign born? Before proceeding to answer these questions we provide context for our analysis and interpretation by outlining the new destination geography literature and the current dynamics

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<sup>1</sup>For us, immigrants are those people in the United States (both documented and unauthorized) who were born elsewhere to non-US citizens, a definition consistent with the current research literature on new immigrant destinations.

in immigrant settlement, and by reviewing scholarship on how economic cycles affect migration and immigration.

## NEW DESTINATION GEOGRAPHIES IN THE 1990s AND 2000s

The 1990s saw the geographical diversification of immigrant settlement in the US away from the southwest and other traditional gateway locations, to the plains, the south, and east coast. Some states recorded doubling and tripling of populations; some counties grew at even higher rates. These spectacular changes in local economies and cultures have drawn much research attention (Li 2009; Singer et al 2008; Massey 2008; Jones 2008; Light 2006; Zúñiga and Hernandez-Leon 2006). A large fraction of this work examines the cultural, political, and economic transformations immigrants have wrought in US communities that previously had experienced little immigration (e.g., Winders 2005).

The question of why immigrants dispersed in the first place also interests scholars. Favorable labor market conditions and the development of nascent enclaves in non-traditional destinations attracted immigrants from traditional gateways and from overseas (Card and Lewis 2005). The growing vitality of these budding enclaves in turn drew even more immigrants in a cumulative causation process (Leach and Bean 2008). The 1990s saw not only weak labor demand but also higher relative housing costs in places like Southern California compared with many new destination metropolitan areas (e.g., Ley 2007). Furthermore, by the 1990s a substantial fraction of the immigrant population had sufficient socioeconomic and cultural experience in the US to take advantage of opportunities beyond traditional gateways (Ellis and Goodwin-White 2006).

These regional economic differentials were not the only forces at work. In the 1990s, California became openly hostile to immigrants with a series of local and state-wide policies designed to make life uncomfortable for the poor and those in the country without authorization (Light 2006). Simultaneously, a series of stepped-up border enforcement operations, put in place initially in the southwest in the 1990s, made it harder to cross there without inspection (Nevins 2010). Unauthorized migrants crossed in much greater numbers to the east and migrants consequently skipped California in favor of new destinations in the southeast and midwest (Massey and Capoferro 2008).

Whatever causal factors lie behind the regional dispersion of immigrant populations, this redistribution generally favors large metropolitan areas (Newbold 1999). Although immigration has dramatically changed the social and economic landscapes of many small towns and rural areas in recent years (Kandel, et al. 2011; Marrow 2011), between 2000 and 2010, metropolitan areas with over a million people that were not traditional gateways saw their share of the US foreign-born population increase by 12.85%.<sup>2</sup> In comparison, over the same time period, the share of immigrants in medium-sized metropolitan areas (population between 100,000 and 1,000,000) grew by 9.62% and in small metro/non-metropolitan areas

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<sup>2</sup>These traditional gateways are New York, Los Angeles, Chicago, San Francisco, Boston, Miami, Houston, and San Diego: i.e. Continuous and Post-WWII Gateways as identified by Singer (2004). We define these gateways to include both their principal core and surrounding metropolitan areas. The percentages in this paragraph are calculated from the 2000 Census and the 2010 American Community Survey.

by 6.31%. Furthermore, immigrants remain disproportionately concentrated in large metropolitan areas compared to the US born; in 2010, three-quarters of all immigrants lived in metropolitan areas of one million or more compared to just under half of the US-born population. Thus a systematic analysis of evolving new destination geographies should pay particular attention to large metropolitan areas -- the places where most immigrants live or move to.

Singer's (2004) gateway typology illuminates variation in settlement trends among this set of large metropolitan areas. In the remainder of this section we describe how we deploy this taxonomy and illustrate its use with some basic statistics on changes in immigrant population shares by gateway type in the 2000s. Later in the paper we use the same classifications in our migration analysis. Singer's scheme subdivides large metropolitan areas into categories of new and traditional destinations and identifies six classes of gateways: three older gateway types (*Former*, *Continuous*, *Post-WWII*) and three new destination gateway types (*Emerging*, *Re-emerging*, *Pre-emerging*). Table 1 lists criteria for membership in each type and arrays the metropolitan areas in these categories. The set of metropolitan areas we use is almost identical to that used by Singer but differs in one respect. We consolidated the constituent metropolitan areas of New York classified as Continuous gateways (e.g., Bergen-Passaic) into the aggregate New York CMSA. And because not all metropolitan areas of greater than one million are immigrant gateways, we add a seventh, residual category, designated as "*Other*".

As one would expect, the share of immigrants in these gateway types is changing (see Table 2 – upper panel). *Continuous* and *Post-WWII* gateways hosted 51.3% of US immigrants in 2000, which declined to 46% in 2010. Collectively, new destination gateways increased their share of the US immigrant population from 18.2% in 2000 to 20.8% in 2010. This suggests that dispersion to large, new destination metropolitan areas continued through the decade. A closer look, however, reveals a more complicated picture in the most recent three-year period that includes the Great Recession. Since 2008, the *Re-emerging* gateway share of immigrants has dropped, albeit slowly. The same is true of *Emerging* gateways since 2009. The *Pre-emerging* gateway share declined in 2010. The share in *Former* gateways hovered around 4% for every year between 2000 and 2010. *Other* gateways experienced a small increase in share – 0.6 percentage points - over the decade.

The slowdown, perhaps reversal, of dispersion to large new destination metropolitan areas in the late 2000s in conjunction with the continued loss of share from *Continuous* and *Post WWII* gateways suggests a reorientation of immigrant dispersion down the urban hierarchy. Medium-sized metropolitan areas (fewer than one million but more than one hundred thousand residents) and small metro/non-metro areas gained a two-percentage point share of the immigrant population over the 2000s (combined, these two categories accounted for 23.32% of immigrants in 2000 and 25.32% in 2010), with the bulk of this increase occurring in medium-sized metropolitan areas. Census regions highlight the regional specificity of these shifts. In medium-sized metropolitan areas, the northeast, south, and midwest saw their share of immigrants increase; but the biggest percentage point increase by far was in the south, whose share rose even after the recession started in 2007. The south is also a standout

among small metro/non-metro areas for its consistent increase in share. In other parts of the country, the small metro/non-metro share was stable or declining between 2000 and 2010.

To sum up, the most recent data suggest that immigrants are almost as heavily concentrated in large metropolitan areas in 2010 as they were in 2000; that dispersion from large traditional to large new destination metropolitan areas came to a standstill in the last three years of the 2000s; and that the redistribution taking place at the end of the decade mostly favors medium-sized metropolitan areas, especially in the south. The recessionary period coincides with a change from movement between large metropolitan areas to a modest relocation of immigrants from large to medium-sized metropolitan areas. These shifts in share to medium metropolitan and small/non-metropolitan areas matter, but the aggregate share distribution of immigrants remains decisively oriented to a select few large metropolitan areas. In 2010, the combined share of the US immigrant population in all medium metropolitan and small metro/non-metro areas was roughly equal to the share in just four continuous gateways -- New York, Boston, San Francisco, and Chicago.

## **IMMIGRATION, MIGRATION, AND LABOR MARKETS IN RECESSIONS**

### **Immigration/Migration and Recessions**

Recessions dampen both internal migration (Newbold and Liaw 1994) and immigration (Daniels 2005; Thomas 1973). The evidence for both of these effects in the Great Recession, however, is a little murky. Current Population Survey (CPS) data suggests that the internal migration rate declined precipitously as the recession began. It is not clear, though, if this drop is a marked acceleration of the long-term decline in migration because US Census Bureau imputation procedures for missing data inflated interstate migration rates in the immediate pre-recessionary period (Cooke 2011).

The growth of the foreign-born population has slowed since the recession started but this could stem from either reduced immigration or increased emigration. While regular immigration remained constant from 2006 through 2010 at a rate of just over one million a year (US Department of Homeland Security 2010) assessments of unauthorized flows of immigrants suggest a decline during the recession and after. Between 2000 and 2005, an estimated 850,000 unauthorized immigrants entered the US every year, with net gains being substantially lower. In 2005–7, the number fell to 550,000 a year, and from 2007–9 it dropped even further to 300,000 a year (Passel and Cohn 2011). This decline likely results from weak labor markets in the US and greater border enforcement; but it could also stem from relatively improved conditions in origin countries (Papademetriou and Terrazas 2009). In addition, immigrants already here have not voluntarily returned home in large numbers in the face of economic hardship (Rendall et al. 2011; Papademetriou 2009; Preston 2009; Passel and Cohn 2009). Massey (2009) points out that the low rate of return for Mexicans is probably because they are aware of the difficulty and costs of re-crossing the border when jobs again become more plentiful. Accounts of undocumented immigrants leaving selected states and localities in response to stepped-up enforcement campaigns exist (Lofstrom et al. 2011). The local geographies of these campaigns combined with the uneven geography of the economic slowdown could be stimulating immigrant relocation within the US and the so-called “voluntary departure” of the undocumented to their origin countries, or both. The

net effect of these new policies on new arrivals, internal relocations, and returns could reorient the trajectory of immigrant settlement geography to a different set of destinations than those that attracted immigrants in the 1990s.

### **Immigrants, Labor Markets, and Recessions**

Because they worked disproportionately in sectors that contracted the fastest (e.g., construction) the recession hit immigrants, especially Latinos, the hardest (Papademetriou and Terrazas 2009). It would be premature, however, to conclude that immigrants cannot hold their own – or even make employment gains – when aggregate labor market conditions appear to disfavor them. For example, immigrants came to New York in the 1970s in substantial numbers and garnered larger shares of jobs there despite the area's poor economic performance. The key to this situation was the aging and out-migration of the city's US-born population, creating openings for younger workers from abroad even as the city's economy stagnated (Wright and Ellis 1996, 1997). A similar phenomenon happened in Los Angeles in the 1990s. The bi-coastal recession of the early 1990s affected Southern California in particular and by 2000 Los Angeles only had the same number of jobs it had in 1990. Yet immigrants still came, albeit at a slower rate, which meant they replaced exiting or aging US-born workers in the Southern California labor market. This replacement effect could create job openings for immigrants in the current slowdown, possibly augmented by the retirement of the baby-boomers. And it may be geographically uneven; new destinations in the south may generate less replacement demand than traditional gateways, such as New York or Los Angeles, because of the younger age profile of their US-born labor forces.

The spatial distribution of replacement labor demand will not be the only factor influencing the geography of immigrant employment in current hard times. The geography of the recession also matters. The 1970s and 1980s saw the extremes of rustbelt deindustrialization and the recessions of this era added to the hollowing of those economies (Bluestone and Harrison 1982). Defense spending in the 1980s favored particular regions, spurring certain high-technology regions into prominence (Markusen et al. 1991). The 1991–2 recession was generally bicoastal, notably affecting high wage service sectors but also accelerating the pace of employment reductions in defense industry clusters that began soon after the end of the cold war (Gardner 1994, Schoeni et al 1996).

The 2007–9 recession was different. This downturn and the etiolated recovery period that followed (and continues as we write) were not like the recessions of the past 20 years. Moreover, the recession may have ignited a transformative shift in the US space-economy (Florida 2009). These changes could be as significant as the wrenching industrial restructuring/spatial fix of the 1970s and 1980s that shifted economic power and fueled migration to the Sunbelt. The Great Recession differs from the downturns of the rust-belt crises. This one was deeper, the subsequent recovery has been anemic, and the collapse did not have a clear geographical epicenter. Since 2007, cities in the northeast, midwest, west, and south have suffered severe job loss and high unemployment. Most importantly for our purposes, both traditional and new immigrant gateway metropolitan areas have experienced soaring unemployment rates, which means immigrants have faced significant economic shocks in locations in which they are long-term residents and relative newcomers. For



example, among traditional gateways, New York's unemployment climbed to 9.3% at the peak of the recession; in Los Angeles it climbed to 12.2%. Among new destinations, Atlanta's unemployment exceeded 10 percent in 2009, and continued to rise in 2010 and 2011. Charlotte's unemployment crested at 12.5% in 2009 and Las Vegas' rate topped 13 percent. In some other new destinations, unemployment peaks were lower: 8.3% in Dallas and 6.5% in the Washington DC metropolitan area.<sup>3</sup> Georgia, South Carolina, and North Carolina – southeastern states with extremely high rates of growth in foreign-born populations in the 1990s – suffered some of the largest increases in unemployment, shifting in just one year from rates of 4 or 5 percent to the 10–12 percent range (see: <http://www.bls.gov/lau/>). Other places fared better. Unemployment in Texas and the central plains, for example, did not rise to the levels seen in the southeastern states or in Arizona or Nevada. These locations offered potential alternatives for immigrants experiencing job loss and rising anti-immigrant sentiment in their current settings.

If immigrants do relocate to areas with relatively favorable labor markets, however, they have to have information on where there are jobs. For the undocumented, and for documented immigrants with low levels of education, this information tends to flow through networks of family and friends (Boyd 1989; Massey et al. 1994; Palloni et al. 2001). Without connections in the right places, immigrants will not know where conditions are better. In these circumstances, immigrants face considerable risk in moving and therefore are likely to stay put. If they do migrate with poor information they are more likely to pick suboptimal locations for employment. If accurate information on job prospects comes through other channels, perhaps through recruiters, some immigrants will relocate to these locations for employment; but this is likely to be a selective and small stream of movers. In any event, initial migrants from an immigrant group will be those who are willing to take risks by chancing a move to a location without network support from co-nationals at the destination. Those movers who are successful will eventually establish enclaves for others to join them later in a more conventional network-fueled migration process, but this will take time to develop. The research on new destination growth in the 1990s suggests that pioneer risk-taking movers to new destinations in the 1980s laid the foundations for others to migrate to these places a decade later (Card and Lewis 2005).

In the high growth-rate 1990s, these networks attracted immigrants to new destinations through internal migration (i.e., redistribution from traditional gateways) and direct immigration from abroad. Census 2000 migration information from the public use microdata files (i.e., place of residence five years before census 2000) indicates that immigration directly from abroad supplied over 60% of the new arrivals to new destination metropolitan areas (calculated as the proportion of arrivals between 1995 and 2000 to *Emerging, Re-emerging*, and *Pre-emerging* gateways from abroad), with internal migration making up the remainder. The immigration from abroad proportion was higher in continuous (78% of new arrivals) and post-WWII (69% of new arrivals) gateways.

With the total number of new immigrant arrivals on the wane in the late 2000s, internal migration should be a more significant driver of current immigrant settlement dispersal and

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<sup>3</sup>Data from BLS and U.S. Metro Economies Report - U.S. Conference of Mayors.

may change the pattern of redistribution among US destination types. There are several possibilities. Fewer new arrivals from abroad and stability in internal migration trends could mean acceleration in the loss of immigrant population from traditional gateways. New destinations would see continued growth in their share of the immigrant population under these conditions. High levels of unemployment, however, may invert these possibilities. Under equivalent poor economic conditions, immigrants in new destinations may be more likely to move internally than those in traditional gateways (Kritz et al. 2011). This is because a larger fraction of recently arrived immigrants in new destinations have come from elsewhere in the country; such prior locational experience provides these migrants with a greater density of networks connected to other parts of the US, thus decreasing the uncertainties and risks associated with internal migration.

Much of the published academic work on new destinations (and on immigrant dispersion more generally) fails to speak to the fast-changing conditions facing immigrants. De Genova (2007), for example, observes that Zúñiga and Hernández-León's (2006) edited collection was published after most immigration politics and enforcement turned toxic in the current decade; the book's contents, however, describe dispersion and its consequences during the previous decade. The usual delays in publishing have a lot to do with this. Infrequent releases of census data in the recent past have also made it hard to keep up with trends. Accordingly, the current scholarship on immigrant geography largely describes trends in the 1990s. The annual release of the American Community Survey since 2005 offers some relief from these constraints. It allows us to observe yearly changes in immigrant settlement geography from the pre-recessionary period through the recession and beyond. What follows is our analysis of key redistribution trends for immigrants through 2010, focusing especially on their redistribution through internal migration.

## DATA AND ANALYTIC STRATEGY

Our research questions require migration data that distinguishes movers by nativity and that allows us to inspect migration with as much temporal detail as possible. In all the analysis that follows we restrict the definition of foreign born, or immigrant, to those born abroad to parents who are not US citizens. For the first research question, a comparison of foreign- and US-born migration rates, we use annual interstate migration data from the March supplement of the Current Population Survey (CPS). The CPS has collected annual data on migration (based on where people lived one year prior) for most years since 1947. Unfortunately, the series has only distinguished between the US and foreign born since 1994. The 1994–2011 period is sufficient to evaluate the migration response of these two groups before, during, and after the Great Recession; and allows us to situate these responses in the context of longer-running migration trends that include the peak period of foreign-born dispersal to new destinations in the 1990s. As people are generally less likely to move during recessions we want to know if both US- and foreign-born internal migrants react similarly in the face of a steep decline in job opportunities.

Our second and third questions – concerning the effects of the recession on immigrant redistribution among US gateway types and whether new arrivals from abroad substitute for internal migrants if the latter are no longer dispersing to new destinations – require data that



differentiate movers by nativity and have sufficient sample size to differentiate sub-national destination types. To answer these, we use public use-microdata from the 2000 decennial census to provide us with a base measurement of migration redistribution during the late 1990s boom period; and annual 2005–2010 American Community Survey (ACS) to measure migration redistribution in the period spanning the recession.

The 2000 decennial and ACS migration data differ in a number of important ways. The decennial data measure migration by asking where respondents lived five years before census day 2000. The ACS data ask where respondents lived one year prior to the survey, which is administered throughout the year instead of on a single day. These differences in collection method and time-span of residence make direct comparisons between decennial and ACS migration data problematic (e.g., Franklin and Plane 2006). Such difficulties are outweighed, however, by the advantages of having large sample migration data associated with other rich demographic information released on a more frequent basis than every 10 years. This innovation makes it possible to observe shifts in sub-national mobility responses for different socio-demographic groups across the phases of an economic cycle. Thus, for our purposes, the ACS data present an opportunity rather than a problem.

Our main interest is in the redistributive impacts of migration on immigrant settlement. As net-migration volumes are heavily influenced by population size, we base much of our analysis on a well-known measure, migration effectiveness, which standardizes migration gains or losses per 100 movers (e.g., Vias 2010). This makes it possible to compare the redistribution of differently sized population subgroups across locations of varying populations. In removing these size effects, effectiveness measures also make it easier to see temporal shifts in redistribution that result from alterations in space-economy conditions (Plane 1994; Stillwell et al. 2000). Finally, this standardization technique helps smooth comparisons between Census 2000 and the ACS by controlling for differences in net-migration magnitude due to migration measurement.

We measure migration effectiveness at two scales. To gauge the redistributive impact of migration at the national scale we calculate effectiveness thus:

$$E_{nk} = 100 \cdot \frac{\sum_{i=1}^N |In_i - Out_i|}{\sum_{i=1}^N (In_i + Out_i)} \quad (1)$$

$In_i$  refers to the number of immigrants to  $i$ ;  $Out_i$  refers to the number of outmigrants from  $i$ .  $E_{nk}$  tells us the change in the distribution of subgroup  $k$  among all  $N$  geographic units  $i$  per 100 movers.  $E_{nk}$  is zero when migration results in no net shift of the subgroup  $k$  across the country; it will equal 100 if migration is perfectly redistributive of this group (i.e. all migration streams are one way only).

The second measure calculates effectiveness for specific locations  $i$ :

$$E_{ik} = 100 \cdot \frac{In_i - Out_i}{In_i + Out_i} \quad (2)$$

This tells us the net loss or gain in population of group  $k$  in location  $i$  per 100 movers.  $E_{ik}$  ranges between  $-100$  and  $100$ . A value of  $-100$  means that the migration stream for group  $k$  is one-way only out of location  $i$ ; a value of  $100$  means the migration stream for group  $k$  is one-way only into location  $i$ ; zero means migration is ineffective (no net-change in population) for group  $k$  in location  $i$ . As immigrant settlement is a predominantly large metropolitan-area phenomenon in the US, we focus much of the redistribution analysis based on effectiveness measures at this scale (i.e., the subscript  $i$  in the above equations refers to metropolitan areas). In all years, metropolitan areas are defined by their boundaries in 2000.

We frame the comparative analysis of population redistribution at the national and metropolitan scales with observations of migration rates at the state scale. The use of metropolitan areas for the redistribution phase of the analysis and states to observe trends in migration propensity produces an inconsistency in the geographic scale of measurement. One option would be to shift the redistribution analysis to states, but this would not be useful for reasons just described. Alternatively, we could build metropolitan areas from the annual CPS data and calculate migration propensities for the US and foreign-born populations at this scale. Large variation in the area and population of metropolitan areas would make interpretation of migration rates at this scale difficult. Migration from some small metropolitan areas is simply movement to an adjacent county; for other large ones it requires movement across many counties. States have the same size variation problems of course, but we think these are less problematic overall than for metropolitan areas. Thus we opt for two scales of analysis, beginning with a report about trends in interstate migration propensities followed by discussion of changes in metropolitan scale redistribution patterns.

## THE INTERNAL MIGRATION PROPENSITY OF IMMIGRANTS

Figure 1 charts annual interstate migration rates for the US- and foreign-born populations since 1993–4. There is a close correlation in migration propensity between the two groups, which suggests that the larger forces responsible for migration rates affect both groups roughly equally. Migration propensity rises for both groups in the 1990s as the economy strengthened; it then declined for both in the 2000s. In the late 2000s recessionary period, the migration rate for the foreign born is consistently below that of the US-born, which is a departure from the situation a decade earlier. Although the differences are small, the fact that they are consistent suggests a greater reduction in migration propensity for immigrants as the economy went into reverse. It is important to note that the chart's depiction of a rapid decline in migration after 2005–6 when the recession began is probably overstated. This dramatic fall is partially due to a technical change in the imputation of missing migration data around this time (Kaplan and Schulhofer-Wohl 2010). There is no reason, however, to believe that the imputation change has disproportionately lowered foreign-born interstate migration rates. Furthermore, the chart is consistent with trends found in other research using the longer CPS data series, which indicates a long-running secular decline in migration propensity (Cooke 2011). Figure 1 indicates this downward trend is occurring for both US- and foreign-born populations. All people were less likely to migrate during the Great Recession than they did during previous shocks.

## INTERNAL MIGRATION, THE REDISTRIBUTION OF IMMIGRANTS TO NEW DESTINATIONS, AND THE RECESSION

If immigrants in recent years, like the US-born, are less likely to migrate internally than in the recent past, does this reflect changes in the allure of new destinations? Perhaps the reduced volume of migration still results in a net shift of immigrants toward new destinations. Alternatively, the reduction in internal migration may be associated with alterations in the spatial dynamics of immigrant internal migration that no longer favor new destinations. To answer these and related questions, we report national, metropolitan-, and regional-scale effectiveness measures for immigrant internal migration in 1995–2000, and 2004–5 to 2009–10. We made these calculations by gateway category for metropolitan areas with more than one million residents, and by census division or region for smaller metropolitan areas and for non-metropolitan areas. In each case, we compare the effectiveness of internal migration for immigrants and the US-born to see if their redistributive trends correlate and whether the strength and direction of this association changes over the economic cycle. Such a change would indicate differing group migration responses to the recession.

Figure 2 displays national migration effectiveness levels for US- and foreign-born internal migrants for each year of data. These national effectiveness values were calculated using equation (1) with 283 units *i.*: *i.e.*, 274 metropolitan areas with more than 100,000 people in 2000, plus all smaller urban and rural areas subdivided by the nine census divisions. Figure 2 shows that aggregate migration effectiveness is greater for immigrants than the US-born in all years, which means that internal migration is producing a larger net shift in the redistribution of the foreign born than the US born. Also note that effectiveness for both groups drops in 2005–6. The decline is steeper for immigrants and by 2007–8 their internal migration results in a net shift of only 16 people per 100 movers compared to a peak of over 25 two years earlier. This dip begins a) one year before the recession formally starts but b) at the moment the economy begins to show signs of a slow-down. It reaches its lowest point as the recession takes hold. So not only are immigrants moving less frequently by the late 2000s compared to previously, but the pattern of their internal migration flows are also less redistributive. There are some signs of a return to more immigrant redistribution by 2009–10 but at levels still below those of the early part of the decade. The patterns for the US-born show no such revival, perhaps because of the relatively shallow post-2006 decline in migration efficiency.

Migration, then, is less common in the period immediately before, during, and after the Great Recession and it also became less effective in redistributing populations. We next unpack these trends by destination type to see if this aggregate decline in redistribution is evident in new destinations and whether other locations have now become the focus of net gains in immigrant populations through internal migration. Figure 3 charts foreign- and US-born internal migration effectiveness by destination type. The top two panels show trends for large metropolitan areas subdivided by Singer's gateway categories; the middle two panels chart these trends for smaller metropolitan areas subdivided by the four census

regions; and the lower pair illustrate these trends for small/non metropolitan areas, again by four census regions.

The large metropolitan gateway panels show the greatest variation among categories and change over time for both foreign- and US-born populations. Until 2006–7, all three emerging gateway types – *Emerging*, *Re-emerging*, and *Pre-emerging* – were gaining immigrant populations through internal migration in sizeable numbers (upper left panel), while traditional gateways – were losing migrants. After 2006–7, the trends converge. The collective emerging gateway types either drop to zero (*Emerging*, *Re-emerging*) or much smaller positive effectiveness values (*Pre-emerging*); the traditional gateways climb to zero (*Post WWII*) or less negative effectiveness values (*Continuous*). Thus the recession and succeeding slow-growth period dampened movement away from traditional gateways toward new destination types. Only *Pre-emerging* gateways show modest signs of net gains in foreign-born population through internal migration by 2009–10 and it is matched by *Other* metropolitan areas, which suggests some redistribution is occurring to an even newer type of large new destination not captured in Singer’s classification scheme.

The upper right panel provides perspective by graphing effectiveness in the same locational categories for US-born migrants. Although they are not quite as pronounced, many of the same trends are evident. US-born populations were redistributing at a relatively modest pace toward new destinations and away from traditional gateways in the late 1990s through the mid-2000s. As the economy slowed convergence occurred, mirroring that of the foreign born, although the effectiveness values did not converge to zero as they did for immigrants. The important point here is that foreign- and US-born redistributive trends in large metropolitan areas are similar, especially going into the recession.

The patterns in the remaining panels are not as uneven, partly because the aggregation of many places into census regions averages wide-ranging values. Nevertheless, they show that in metropolitan areas between 100,000 and 1,000,000 people the south gains immigrants and the US-born through internal migration in every time period. The attraction of these metropolitan areas in this region for immigrants spikes immediately before the recession (2005–6) and then collapses as the recession bites. It never erodes completely, however. For immigrants, effectiveness in medium sized metropolitan areas in the northeast surpasses the south by 2009–10 and is on the same scale as that for *Pre-emerging* gateways (in the panel above). In small metro/non-metro areas, effectiveness is zero or higher for both groups in all census regions until 2004–5, which means there was a net redistribution of the US and foreign born to these places during these times. These trends become much less consistent in the late 2000s and suggest that the Great Recession interrupted the uniform redistribution of these populations down the urban hierarchy and to rural places.

The similarities between foreign- and US-born redistribution patterns in the top two panels of Figure 3 prompt a more detailed analysis of these relationships and their temporal stability. We estimated a set of simple regression models predicting foreign-born effectiveness,  $E_{iFBt}$ , in metropolitan area  $i$  at time  $t$  as a function of US-born effectiveness,  $E_{iUS,t}$ , in the same place and time period:

$$E_{iFBt} = \beta_0 + \beta_1 E_{iUS_t} + \varepsilon_{it} \quad (3)$$

A positive intercept suggests that places gain foreign-born migrants when they are not gaining US-born migrants. We estimate this model separately by year and our expectation is that the slope coefficient will be positive in every year, which would mean that immigrants are redistributing to the same set of locations as the US-born. A key question, however, is whether the strength of this relationship is constant through the recession. If it is, then the pattern of foreign-born redistribution through migration resembles that for the US-born during this economic cycle.

We also extend this model to explore whether the relationship between foreign- and US-born effectiveness differs significantly for large metropolitan areas:

$$E_{iFBt} = \beta_0 + \beta_1 E_{iUS_t} + \beta_2 M_i + \beta_3 M_i E_{iUS_t} + \varepsilon_{it} \quad (4)$$

In this model,  $M_i$  is a dummy variable set to 1 if the metropolitan area population exceeded one million in 2000. If  $\beta_2$  is positive and significant, then large metropolitan areas are gaining more foreign-born migrants per 100 foreign-born movers than smaller metropolitan and non-metropolitan places. The slope interaction coefficient,  $\beta_3$ , tells us whether the elasticity of foreign-born migration redistribution in response to US-born migration differs between large and small metropolitan areas. If it is positive, then net migration gains by the US-born in large metropolitan areas generates more gain in the immigrant population through internal migration than in small metropolitan areas; if it is negative then this elasticity is smaller in large metropolitan areas than in small ones.

Analysis of the residuals in OLS-estimated versions of these models strongly suggests that the variance of the error term is inversely related to the population of metropolitan areas  $i$ . This heteroscedasticity is not surprising when one considers that the sample sizes used to calculate effectiveness in small metropolitan areas are far less than those in large metropolitan areas. Thus we re-estimated the models in equations (3) and (4) using weighted least squares (WLS), setting the variance of each observation to be inversely proportional to the relevant metropolitan area population (defined in 2000). Table 3 reports estimates of these WLS models by year.

The slope coefficient predicting foreign-born effectiveness in metropolitan area  $i$  at time  $t$  as a function of US-born effectiveness is positive and statistically significant in every equation, meaning that immigrants are redistributing to the same set of locations as the US-born. In the simple, bivariate, models, the strength of this relationship declines over time, with the slope coefficient flattening during the recession and its aftermath. This is also captured by the adjusted  $R^2$ , which declines steadily (with 2008–9 the exception) between 1995–2000 and 2009–10. In other words, the strength of this relationship is not constant through the recession cycle. The pattern of foreign-born redistribution through migration resembled that for the US-born in 1995–2000, but by the time the economic cycle began its slow recovery

in 2009–10, the correlation between immigrant migration effectiveness and that of the US-born had weakened considerably.

We find the same trends in the elaborated models. The main effect slope coefficient for US-born migration efficiency is positive throughout and above 1 in 1995–2000. The adjusted  $R^2$  for the equations declines over time in much the same way, signaling the increasingly differentiated distributive patterns of the migration of the native and foreign born. This second set of equations, of course, contains other interesting information. In 1995–2000, the parameter for the metropolitan dummy variable is positive and significant, indicating that in that 5-year window large metropolitan areas gained more foreign-born migrants per 100 foreign-born movers than smaller metropolitan and non-metropolitan places. In the second half of the following decade that effect is nonexistent. The slope interaction coefficient is positive and significant for each time period except 2008–9 and 2009–10. In other words, outside of this two-year window, net migration gains by the US-born in large metropolitan areas generated more gain in the immigrant population through internal migration than in small metropolitan areas. In 2008–9 and 2009–10, we detect no such effect.

## CONNECTING IMMIGRATION FROM ABROAD AND INTERNAL MIGRATION

If internal migration is relatively less effective in shifting the foreign born to new destinations in the late 2000s than it was a decade earlier, is immigration from abroad providing a substitute source of growth in foreign-born populations in these places? Aggregate evidence suggests that the number of new immigrant arrivals is down. This is the case for authorized immigrants as well as the undocumented. For the latter, who either enter without inspection or overstay their visas, Warren and Warren (2013) document a steep decline in the numbers of such new “arrivals” during the 2000s. Warren and Warren’s state-level data also indicate no significant spatial variation in this decline—it is both large and widespread. But what of the geography of all newly arrived immigrants (documented and those in the United States without official permission)?

Table 4, again organized by destination type, shows the percent of foreign-born arrivals from internal migration, calculated as a fraction of all foreign-born arrivals: i.e., including new arrivals from abroad. We see the effects of the different five- and one-year migration questions in this instance wherein the fraction of internal movers steps up with the one-year (ACS) data. This translation across contexts, however, has little to do with the point these data make: that is, we do not detect any kind of systematic recessionary effect on the proportion of foreign-born arrivals from origins inside the US going to particular destinations. In other words, immigrants from abroad are not substituting for decreased internal migration of the foreign born in any destination type after 2004–5. Arrivals from abroad or within the US are moving to the same types of destinations – weathering the Great Recession and its aftermath, as it were, in unison.

## CONCLUSIONS

This paper answered three fundamental questions about immigrant settlement patterns, migration, and the Great Recession. Much like the US-born population, immigrants are



becoming less migratory within the country. The declining internal migration propensity of the US-born and immigrants in the last two decades is correlated and both groups are less migratory during and after the Great Recession than they were a decade earlier. The second, and more complicated question, concerned whether or not immigrant dispersal from traditional gateways via internal migration persisted during the recession. The results showed that the allure of new destinations weakened in the late 2000s. They also show divergence in the patterns of US- and foreign-born internal migration. In the late 1990s both groups gravitated to the same types of destinations but this relationship weakened considerably in the late 2000s. Both these results signal that the Great Recession has disrupted well-established population redistribution trends. Last, we found that the relationship between patterns of immigration from abroad and the internal migration of the foreign-born remained stable through the recession and its aftermath. The destination locations of i) newcomers, and ii) immigrants who had been in the country longer, remained much the same.

The analysis also demonstrates the utility of our extended version of Audrey Singer's immigrant gateway typology. It is easy to see how future research might leverage this comprehensive typology of place to study other aspects of immigrant social and economic life in the 1990s and 2000s such as second-generation labor-market achievement, contexts of reception, or a comparative analysis of neighborhood segregation (cf. Park and Iceland 2011).

Other interesting questions would build on the platform established by this analysis and concern more of the details of the internal migration of the foreign-born. While this paper has centered on the Great Recession, other changes in US society have come into play at the same time. Some states and localities have become hostile environments for immigrants, and while the teeth of locally based anti-immigration initiatives are primarily directed at those people in the country without authorization, many immigrants, no matter their status or national origin, feel the effects of these statutes. These laws have been passed in particular places, so it would be very interesting to assess their effects on the migration propensity and patterns of the foreign-born compared to the native-born in states such as Arizona and Alabama where especially draconian anti-immigrant laws have been implemented (cf. Parrado 2012). Any modeling effort along these lines would have to compare migration rates from, say Arizona, before and after the policy was introduced there against changes in migration rates in other places.

Where foreign-born migrants from these places go is also of considerable interest. The logical expectation is that they will favor destinations where economic conditions are better and where local and state policies are more inclusive and welcoming. If immigrants migrating from elsewhere in the US or abroad use the same calculus when choosing US destinations then new settlement geographies will emerge in response to these economic and political geographies. This may initiate new patterns of migration by the US-born if the flows of natives and immigrants remain linked through labor market substitutions and complementarities as previous research suggests (e.g. Card and DiNardo 2000; Borjas 2006; Wright et al. 1997)

This analysis also sets the stage for other types of research. We have treated the foreign-born monolithically. Future studies should compare the internal migration of the foreign-born by nativity or along some other dimension, such as human capital or arrival cohort. Of particular interest is the migration of more recent arrival cohorts, particularly of Mexicans and Central Americans. Recently arrived immigrants from these countries have felt the brunt of the recession and have also been the primary target of local and state exclusionary policies. These economic and political challenges have been greatest in many new destination locales and the reaction of these groups in these places may be disproportionately responsible for change in the immigrant settlement systems during the recession and the following slow-growth period. An alternative path of research might tap into the creative class literature and examine the relationship between the internal migration of the foreign-born by skill set and urban development and metropolitan creativity.

We end with a comment about the opportunity that the recession and its aftermath present for studying how immigrant settlement systems respond to economic crises. As we noted in the beginning, the current geography of settlement, which includes the development of new destinations, emerged during a period of relative economic calm. The evidence we have presented suggests that the forces responsible for the production of this settlement geography may have been disrupted during the recession and the subsequent slow growth recovery. One way to investigate this issue further is to examine the relative importance of network or enclave effects and local labor market conditions in directing the migration paths of immigrants over the economic cycle. The relative importance of these forces for immigrant settlement and redistribution may have changed during the recent economic hard-times, perhaps more so for some groups than for others. We suspect this shift may favor enclave effects for those groups whose economic insecurity and political marginality is greatest. Those who possess the skills demanded by the post-recession economy may be more responsive to local labor market demand.

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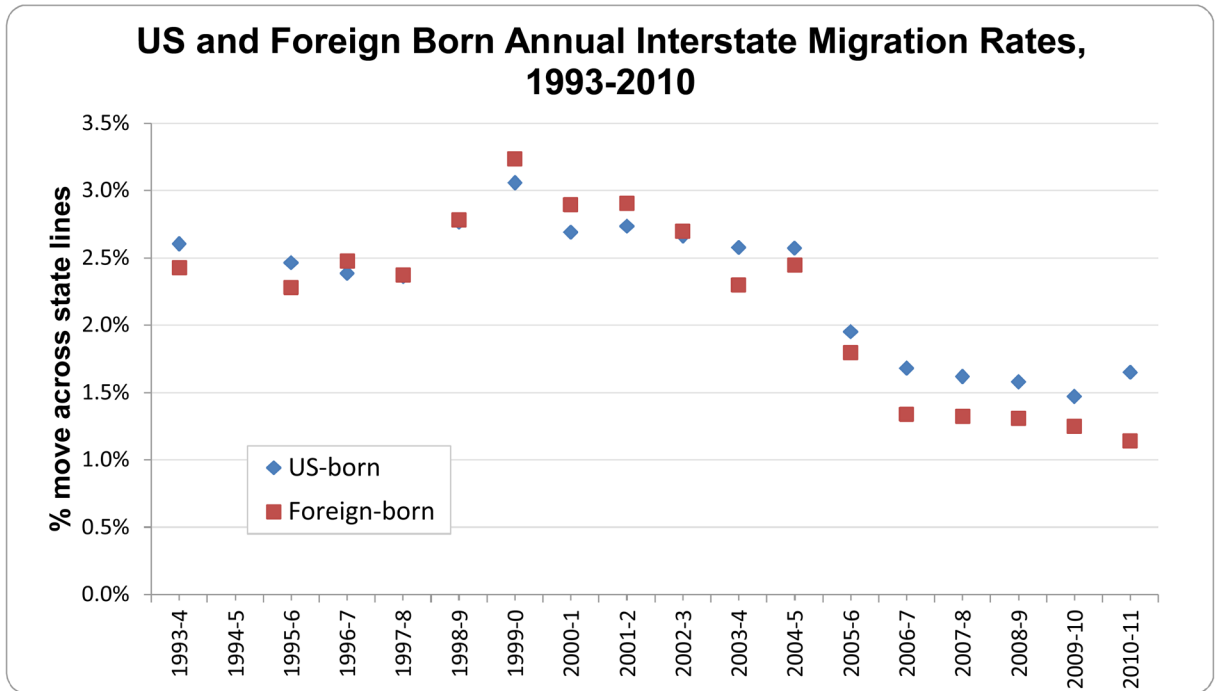
## References

- Bardhan A, Walker R. California shrugged: fountainhead of the Great Recession. *Cambridge Journal of Regions, Economy and Society*. 2011; 4(3):303–322.
- Bluestone, B.; Harrison, B. *The deindustrialization of America*. Basic Books; New York: 1982.
- Borjas GJ. Native Internal Migration and the Labor Market Impact of Immigration. *Journal of Human Resources*. 2006; 41(2):221–258.
- Boyd M. Family and Personal Networks in International Migration: Recent Developments and New Agendas. *International Migration Review*. 1989; 23(3):638–670. [PubMed: 12282798]
- Card D, DiNardo J. Do immigrant inflows lead to native outflows? *American Economic Review*. 2000; 90(2):360–367.
- Card, D.; Lewis, EG. [last accessed 12 January 2009] *The Diffusion of Mexican Immigrants During the 1990s: Explanations and Impacts*. National Bureau of Economic Research Working Paper Series No 11552. 2005. <http://www.nber.org/papers/w11552>

- Cooke TJ. It is not Just the Economy: Declining Migration and the Rise of Secular Rootedness. *Population, Space and Place*. 2011; 17(3):193–203.
- Daniels, R. *Guarding the golden door: American immigration policy and immigrants since 1882*. Hill & Wang; 2005.
- Elsby M, Hobijn B, Sahin A. The labor market in the great recession. *Brookings Papers on Economic Activity*. 2010; 1:1–48.
- Ellis M, Goodwin-White J. 1.5 Generation Internal Migration in the US: Dispersion from States of Immigration? *International Migration Review*. 2006; 40(4):899–926.
- Florida, R. *The Atlantic*. 2009. How the Crash Will Reshape America; p. 6
- Franklin RS, Plane David A. Pandora’s Box: The Potential and Peril of Migration Data from the American Community Survey. *International Regional Science Review*. 2006; 29(3):231–246.
- Gabe T, Florida R, Mellander C. The Creative Class and the crisis. *Cambridge Journal of Regions, Economy and Society*. 2013; 6(1):37–53.
- De Genova N. *New Destinations: Mexican Immigration in the United States*, edited by Victor Zuniga and Ruben Hernandez-Leon. *American Journal of Sociology*. 2007; 112(4):1271.
- Johnson, HP. *Movin’ Out: Domestic Migration to and from California in the 1990s*. San Francisco: Public Policy Institute of California; 2000.
- Jones, RC. *Immigrants Outside Megalopolis: Ethnic Transformation in the Heartland*. Lexington Books; 2008.
- Kandel W, Henderson J, Koball H, Capps R. Moving Up in Rural America: Economic Attainment of Nonmetro Latino Immigrants. *Rural Sociology*. 2011; 76(1):101–128.
- Kaplan, G.; Schulhofer-Wohl, S. [last accessed 27 March 2011] Interstate Migration Has Fallen Less Than You Think: Consequences of Hot Deck Imputation in the Current Population Survey. National Bureau of Economic Research Working Paper Series No 16536. 2010. <http://www.nber.org/papers/w16536>
- Kritz M, Gurak D, Lee MA. Will They Stay? Foreign-Born Out-Migration from New U.S. Destinations. *Population Research and Policy Review*. 2011; 30(4):537–567. [PubMed: 22923857]
- Leach, MA.; Bean, FD. *New faces in new places: The changing geography of American immigration*. New York: Russell Sage Foundation Publications; 2008. *The Structure and Dynamics of Mexican Migration to New Destinations in the United States*; p. 25-50.
- Ley D. Countervailing immigration and domestic migration in gateway cities: Australian and Canadian variations on an American theme. *Economic Geography*. 2007; 83(3):231–254.
- Li, W. *Ethnoburb: the new ethnic community in urban America*. Univ of Hawaii Pr; 2009.
- Light, I. *Deflecting Immigration: Networks, Markets, and Regulation in Los Angeles*. Russell Sage Foundation Publications; 2006.
- Lofstrom, M.; Bohn, S.; Raphael, S. *Lessons from the 2007 Legal Arizona Workers Act*. Public Policy Institute of California; San Francisco: 2011.
- Markusen, AR.; Hall, P.; Campbell, S.; Deitrick, S. *The rise of the gunbelt: The military remapping of industrial America*. Oxford University Press; USA: 1991.
- Marrow, H. *New Destination Dreaming: Immigration, Race, and Legal Status in the Rural American South*. 1. Stanford, CA: Stanford University Press; 2011.
- Massey, DS. *New faces in new places: the changing geography of American immigration*. Russell Sage Foundation Publications; 2008.
- Massey, DS. [last accessed 10 April 2012] Testimony. Testimony Before the Senate Judiciary Committee. 2009. [http://www.judiciary.senate.gov/hearings/testimony.cfm?id=e655f9e2809e5476862f735da149ad69&wit\\_id=e655f9e2809e5476862f735da149ad69-2-4](http://www.judiciary.senate.gov/hearings/testimony.cfm?id=e655f9e2809e5476862f735da149ad69&wit_id=e655f9e2809e5476862f735da149ad69-2-4)
- Massey, DS.; Capoferro, C. The geographic diversification of American immigration. In: Massey, DS., editor. *New faces in new places: The changing geography of American immigration*. New York: Russell Sage Foundation Publications; 2008. p. 25-50.
- Massey, Douglas S.; Goldring, L.; Durand, J. Continuities in Transnational Migration: An Analysis of Nineteen Mexican Communities. *American Journal of Sociology*. 1994; 99(6):1492–1533.
- Nevins, J. *Operation Gatekeeper and beyond: the war on “illegals” and the remaking of the US-Mexico boundary*. Taylor & Francis; 2010.

- Newbold KB, Liaw KL. Return and onward interprovincial migration through economic boom and bust in Canada, from 1976–81 to 1981–86. *Geographical Analysis*. 1994; 26(3):228–245.
- Newbold, K Bruce. Internal Migration of the Foreign-Born: Population Concentration or Dispersion? *Population & Environment*. 1999; 20(3):259–276.
- Palloni A, Massey Douglas S, Ceballos M, Espinosa K, Spittel M. Social Capital and International Migration: A Test Using Information on Family Networks. *American Journal of Sociology*. 2001; 106(5):1262–1298.
- Papademetriou, DG.; Terrazas, A. Immigrants and the Current Economic Crisis. Migration Policy Institute; 2009.
- Park J, Iceland J. Residential segregation in metropolitan established immigrant gateways and new destinations, 1990–2000. *Social Science Research*. 2011; 40(3):811–821.
- Parrado EA. Immigration Enforcement Policies, the Economic Recession, and the Size of Local Mexican Immigrant Populations. *The ANNALS of the American Academy of Political and Social Science*. 2012; 641(1):16–37.
- Passel, J.; Cohn, D. Mexican Immigrants: How Many Come? How Many Leave?. Pew Hispanic Center; 2009. <http://pewhispanic.org/reports/report.php?ReportID=112> [last accessed 1 August 2009]
- Passel, J.; Cohn, D. US Unauthorized Immigration Flows Are Down Sharply Since Mid-Decade | Pew Hispanic Center. Pew Hispanic Center; 2011. <http://www.pewhispanic.org/2010/09/01/us-unauthorized-immigration-flows-are-down-sharply-since-mid-decade/> [last accessed 3 April 2012]
- Plane DA. The wax and wane of interstate migration patterns in the USA in the 1980s: a demographic effectiveness field perspective. *Environment and Planning A*. 1994; 26:1545–1545.
- Preston, J. [last accessed 1 August 2009] Mexican Data Show Migration to U.S. in Decline. *The New York Times*. 2009 May 15. <http://www.nytimes.com/2009/05/15/us/15immig.html?scp=1&sq=Mexican%20Data%20Show%20Migration%20to%20U.S.%20in%20Decline&st=cse>
- Rendall MS, Brownell P, Kups S. Declining Return Migration From the United States to Mexico in the Late-2000s Recession: A Research Note. *Demography*. 2011; 48(3):1049–1058. [PubMed: 21744184]
- Singer, A. The rise of new immigrant gateways. Washington: Brookings Institution; 2004.
- Singer, A.; Hardwick, SW.; Brettell, C., editors. Twenty-first century gateways: Immigrant incorporation in suburban America. Washington DC: Brookings Institution Press; 2008.
- Stillwell J, Bell M, Blake M, Duke-Williams O, Rees P. Net Migration and Migration Effectiveness: A Comparison Between Australia and the United Kingdom, 1976–96 - Part 1: Total Migration Patterns. *Journal of Population Research*. 2000; 17(1):17–38.
- Thomas, B. Migration and economic growth: a study of Great Britain and the Atlantic economy. Cambridge University Press; 1973.
- US Department of Homeland Security. [last accessed 3 April 2012] Yearbook of Immigration Statistics. 2010. <http://www.dhs.gov/files/statistics/publications/yearbook.shtm>
- Vias AC. The Influence of Booms and Busts in the US Economy on the Interstate Migration System. *Growth and Change*. 2010; 41(1):115–135.
- Warren R, Warren JR. Unauthorized Immigration to the United States: Annual Estimates and Components of Change, by State, 1990 to 2010. *International Migration Review*. 2013; 1111/ imre.12022
- Winders J. Changing politics of race and region: Latino migration to the US South. *Progress in Human Geography*. 2005; 29(6):683–699.
- Wright RA, Ellis M, Reibel M. The linkage between immigration and internal migration in large metropolitan areas in the United States. *Economic Geography*. 1997; 73(2):234–254. [PubMed: 12292531]
- Wright R, Ellis M. Immigrants and the Changing Ethnic-Racial Division of Labor in New York City, 1970–1990. *Urban Geography*. 1996; 17:317–353.
- Wright R, Ellis M. Nativity, ethnicity, and the evolution of the intra-urban division of labor in metropolitan Los Angeles, 1970–90. *Urban Geography*. 1997; 18:243–263.

Zúñiga, V.; Hernandez-Leon, R. *New destinations: Mexican immigration in the United States*. Russell Sage Foundation Publications; 2006.

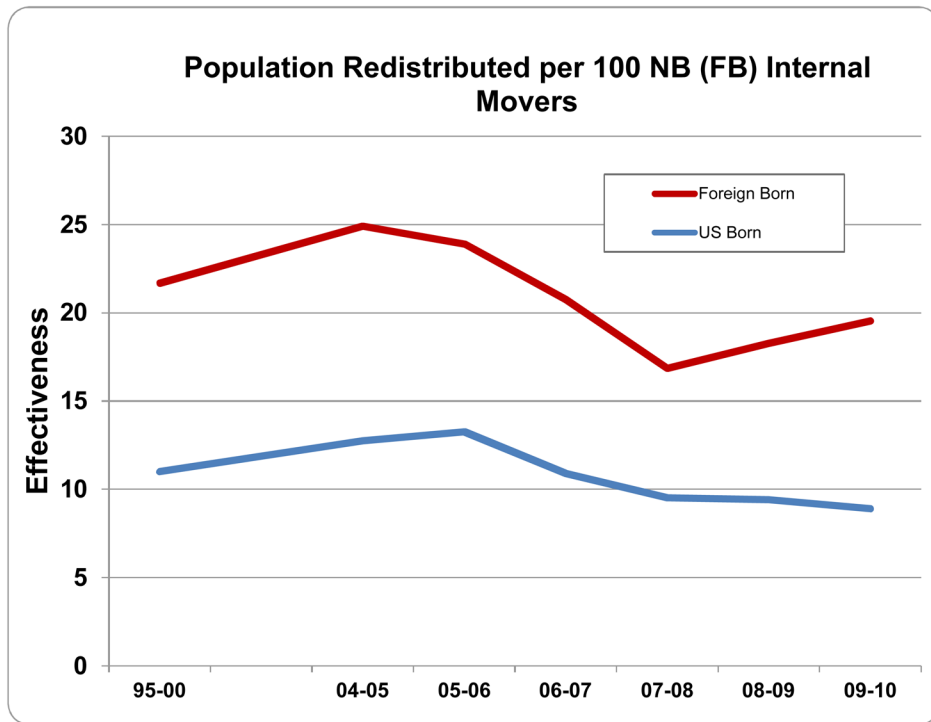


**Figure 1.**

Trends in US and Foreign Born Interstate Migration Rates, 1993–2010

Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement

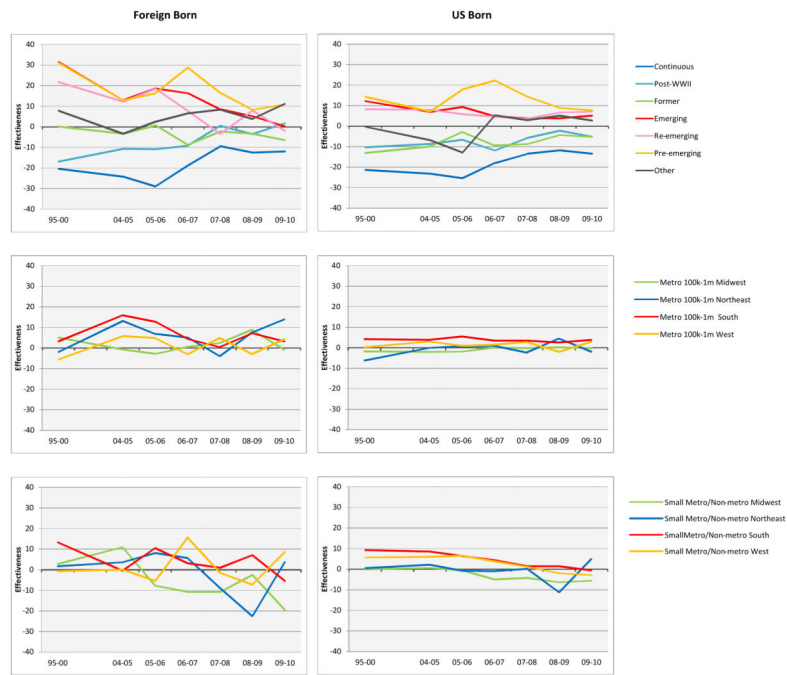




**Figure 2.**

US Migration Effectiveness for the US and Foreign Born

Source: U.S. Census Bureau, 2000 Decennial Census and 2005–10 American Community Survey



**Figure 3.**  
 US and Foreign Born Effectiveness by Gateway Category and Census Region  
 Source: U.S. Census Bureau, 2000 Decennial Census and 2005–10 American Community Survey

**Table 1**

Gateway Classification after Singer (2004)

Gateway Type	Metro Area	Total Pop 2000	% Foreign-born
Continuous	Boston, MA-NH	3,951,557	14.64%
	Chicago, IL	8,804,453	16.53%
	New York-Northeastern NJ	18,372,239	26.33%
	San Francisco-Oakland-Vallejo, CA	4,645,830	26.33%
Post WWII	Fort Lauderdale-Hollywood-Pompano Beach, F	1,624,272	25.22%
	Houston-Brazoria, TX	4,413,414	19.66%
	Los Angeles-Long Beach, CA	12,368,516	34.86%
	Miami-Hialeah, FL	2,327,072	49.67%
	Riverside-San Bernardino, CA	3,253,263	18.73%
	San Diego, CA	2,807,873	21.53%
Emerging	Atlanta, GA	3,987,990	10.45%
	Dallas-Fort Worth, TX	5,043,876	15.45%
	Las Vegas, NV	1,375,174	18.01%
	Orlando, FL	1,652,742	11.85%
	Washington, DC/MD/VA	4,733,359	17.41%
	West Palm Beach-Boca Raton-Delray Beach, F	1,133,519	17.35%
Pre-emerging	Austin, TX	1,167,216	12.76%
	Charlotte-Gastonia-Rock Hill, NC-SC	1,499,677	6.75%
	Greensboro-Winston Salem-High Point, NC	1,252,554	5.52%
	Raleigh-Durham, NC	1,182,869	9.21%
	Salt Lake City-Ogden, UT	1,331,833	8.53%
Re-emerging	Denver-Boulder, CO	2,412,400	10.84%
	Minneapolis-St. Paul, MN	2,856,295	7.22%
	Phoenix, AZ	3,070,331	14.47%
	Portland, OR-WA	1,789,019	11.25%
	Sacramento, CA	1,632,863	13.94%

Gateway Type	Metro Area	Total Pop 2000	% Foreign-born
	San Jose, CA	1,688,089	34.09%
	Seattle-Everett, WA	2,332,682	13.99%
	Tampa-St. Petersburg-Clearwater, FL	2,386,781	9.83%
	Baltimore, MD	2,513,661	5.82%
	Buffalo-Niagara Falls, NY	1,175,089	4.36%
	Cleveland, OH	2,255,480	5.04%
Former	Detroit, MI	4,430,477	7.49%
	Milwaukee, WI	1,499,015	5.21%
	Philadelphia, PA/NJ	5,082,137	6.99%
	Pittsburgh, PA	2,500,497	2.50%
	St. Louis, MO-IL	2,602,448	3.14%
	Cincinnati-Hamilton, OH/KY/IN	1,473,012	2.75%
	Columbus, OH	1,443,293	4.99%
	Indianapolis, IN	1,603,021	3.22%
	Jacksonville, FL	1,101,766	5.42%
	Kansas City, MO-KS	1,682,053	4.88%
	Nashville, TN	1,234,004	4.70%
Other > 1m	New Orleans, LA	1,381,841	4.72%
	Norfolk-VA Beach--Newport News, VA	1,553,838	4.45%
	Oklahoma City, OK	1,157,773	5.38%
	Providence-Fall River-Pawtucket, MA/RI	1,025,944	12.89%
	Rochester, NY	1,030,303	5.89%
	San Antonio, TX	1,551,396	10.61%

Continuous, Post-World War II, Emerging, and Re-Emerging gateways have foreign-born populations greater than 200,000 and either foreign-born shares higher than the 2000 national average (11.1 percent) or foreign-born growth rates higher than the national average (57.4 percent), or both. Former gateways are determined through historical trends (see below). Pre-Emerging gateways have smaller foreign-born populations but very high growth rates in the 1990s. The gateway definitions and selection are also based on the historical presence (in percentage terms) of the foreign-born in their central cities:

**Former:** Above national average in percentage foreign-born 1900–1930, followed by percentages below the national average in every decade through 2000

**Continuous:** Above-average percentage foreign-born for every decade, 1900–2000

**Post-World War II:** Low percentage foreign-born until after 1950, followed by percentages higher than the national average for remainder of century

**Emerging:** Very low percentage foreign-born until 1970, followed by a high proportions in the post-1980 period

**Re-Emerging:** Similar pattern to continuous gateways: Foreign-born percentage exceeds national average 1900–1930, lags it after 1930, then increases rapidly after 1980

**Pre-Emerging:** Very low percentages of foreign-born for the entire 20th century

**Table 2**  
 Percentage Share Of US Immigrant Population by Gateway Category and Census Region, 2000–2010

	2000	2005	2006	2007	2008	2009	2010
<b>Metro &gt; 1m</b>							
<i>Continuous</i>	25.69%	23.89%	23.69%	23.41%	23.58%	22.95%	22.85%
<i>Post-WWII</i>	25.56%	24.40%	23.73%	23.64%	23.33%	23.50%	23.13%
<i>Former</i>	3.92%	4.09%	3.97%	4.01%	3.97%	4.08%	4.04%
<i>Emerging</i>	8.55%	9.81%	10.05%	9.97%	10.27%	10.24%	10.23%
<i>Re-emerging</i>	7.96%	8.56%	8.76%	8.77%	8.67%	8.55%	8.35%
<i>Pre-emerging</i>	1.74%	1.99%	2.07%	2.12%	2.21%	2.27%	2.21%
<i>Other</i>	3.26%	3.53%	3.52%	3.59%	3.60%	3.77%	3.86%
<b>Subtotal</b>	<b>76.68%</b>	<b>76.26%</b>	<b>75.78%</b>	<b>75.51%</b>	<b>75.63%</b>	<b>75.35%</b>	<b>74.68%</b>
<b>Metro 100k–1m</b>							
<i>Metro 100k–1m Midwest</i>	1.98%	2.06%	2.06%	2.09%	2.07%	2.11%	2.21%
<i>Metro 100k–1m Northeast</i>	2.68%	2.71%	2.84%	2.77%	2.80%	2.83%	2.89%
<i>Metro 100k–1m South</i>	5.09%	5.58%	5.71%	5.80%	5.77%	5.85%	6.21%
<i>Metro 100k–1m West</i>	6.15%	6.16%	6.15%	6.20%	6.13%	6.12%	6.12%
<b>Subtotal</b>	<b>15.90%</b>	<b>16.51%</b>	<b>16.76%</b>	<b>16.86%</b>	<b>16.77%</b>	<b>16.91%</b>	<b>17.43%</b>
<b>Small Metro/Non-Metro</b>							
<i>Small/Non-Metro Midwest</i>	1.28%	1.18%	1.24%	1.24%	1.25%	1.27%	1.27%
<i>Small/Non-Metro Northeast</i>	1.00%	0.94%	0.97%	0.98%	0.99%	0.99%	0.98%
<i>Small/Non-Metro South</i>	2.78%	2.84%	2.95%	3.08%	3.07%	3.16%	3.24%
<i>Small/Non-Metro West</i>	2.36%	2.27%	2.30%	2.33%	2.29%	2.33%	2.40%
<b>Subtotal</b>	<b>7.42%</b>	<b>7.23%</b>	<b>7.46%</b>	<b>7.63%</b>	<b>7.60%</b>	<b>7.75%</b>	<b>7.89%</b>
<b>GRAND TOTAL</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Source: U.S. Census Bureau, 2000 Decennial Census and 2005–10 American Community Survey



**Table 3**

WLS regression coefficients for models predicting foreign born migration effectiveness ( $E_{iFt}$ ) in metro area  $i$ , during time  $t$ .

$E_{iFt}$	1995-2000	1995-2000	2004-5	2004-5	2005-6	2005-6	2006-7	2006-7	2007-8	2007-8	2008-9	2008-9	2009-10	2009-10
Cons	6.155***	2.342*	3.053*	6.670**	2.677	3.116	0.589	-0.834	0.805	-1.295	1.306	2.117	0.183	0.078
$E_{iUSt}$	1.281***	1.125***	1.081***	0.405*	1.008***	0.653***	0.894***	0.432*	0.705***	0.622***	0.981***	0.809***	0.790***	0.477*
$M_i$		9.237***		-2.632	1.211		5.226		4.863		-1.396		1.211	
$M_iE_{iUSt}$		0.343**		0.938***	0.504**		0.732***		0.22		0.279		0.574*	
N	283	283	283	283	283	283	283	283	283	283	283	283	283	283
Adj $r^2$	0.705	0.747	0.343	0.390	0.366	0.378	0.220	0.250	0.124	0.128	0.221	0.221	0.110	0.119

\*  $p < 0.05$ ,  
 \*\*  $p < 0.01$ ,  
 \*\*\*  $p < 0.001$

$E_{iUSt}$  = US born migration effectiveness in metro area  $i$ , during time  $t$

$M_i$  = dummy variable=1 if metro  $i > 1m$  in 2000

$M_iE_{iUSt}$  = interaction of previous two variables

Table 4

Foreign born internal migrants as a share of all foreign-born migrants

	1995-2000	2004-5	2005-6	2006-7	2007-8	2008-9	2009-10
Continuous	21.89%	35.28%	33.49%	34.30%	36.70%	38.76%	33.69%
Post-WWII	31.17%	47.99%	50.81%	50.27%	47.93%	47.52%	47.35%
Former	35.07%	46.11%	50.70%	48.22%	45.86%	43.81%	45.15%
Emerging	36.52%	51.19%	52.41%	53.22%	49.18%	50.86%	44.96%
Re-emerging	37.99%	52.45%	49.24%	48.37%	45.30%	52.63%	47.81%
Pre-emerging	38.16%	52.64%	58.60%	59.37%	53.03%	47.45%	54.56%
Other	40.64%	48.75%	60.46%	52.16%	55.25%	52.85%	51.97%
Metro < 1 M Midwest	40.38%	54.89%	53.74%	55.19%	49.87%	59.58%	51.38%
Metro < 1 M Northeast	41.67%	62.92%	63.27%	64.81%	61.37%	58.34%	54.98%
Metro < 1 M South	45.89%	59.56%	62.11%	56.31%	56.60%	58.95%	59.25%
Metro < 1 M West	45.05%	57.30%	60.72%	54.76%	51.70%	56.22%	62.68%
Non-metro Midwest	46.68%	53.10%	53.77%	55.71%	55.14%	65.46%	50.08%
Non-metro Northeast	52.88%	60.30%	63.41%	60.38%	56.54%	53.44%	73.28%
Non-metro South	44.78%	54.61%	59.08%	58.72%	52.85%	59.01%	64.48%
Non-metro West	45.86%	45.96%	51.05%	56.83%	56.84%	58.03%	59.30%

Percentages = foreign born internal migrants in time  $t$  / (foreign born internal migrants in time  $t$  + foreign born migrants from abroad in time  $t$ )