New Destination Housing Markets: The Effects of Metropolitan Housing Markets on the Changing Geography of Immigrant Settlement

Introduction

The United States has one of the most unique and dynamic immigration histories of any nation. Currently the U.S. is experiencing immigration patterns unique from those seen throughout the twentieth century. The foreign-born population grew by 57% between 1990 and 2000 (Singer 2004). Recent estimates indicate there are over 40 million immigrants living in the U.S (Passel and Cohn 2011). In fact, almost one-fifth of persons in this country are first or second generation immigrants (U.S. Census 2010). According to the Pew Research Center, immigrants will account for 82% of the population growth between 2005 and 2050 (Passel and Cohn 2008). Martin and Midgley (2006) estimate that by 2030 immigrants will have accounted for the total labor force population growth in the U.S. As immigrant numbers have risen researchers have begun to notice and analyze the changing spatial structure of immigration. Immigration has gone from a regionally isolated phenomenon to one of national dispersion. Nearly 30 percent of the total population increase between 2000 and 2008 resulted from foreign-born population growth (Kandel 2011), and immigrants often replenish population declines caused by domestic outmigration (Donato et al. 2008; Frey 2003). With the rise of new destinations for settlement these growth rates are no longer confined to only a handful of states.

The formation of new immigrant destinations, including nonmetropolitan and emergent gateway cities, became noticeable in the 1980s. According to the Urban Institute, between 1980 and 2007 the number of metropolitan areas with immigrant populations over 100,000 increased from 25 to 55 within the top 100 metro areas (based on population) alone. Furthermore, thirty-three of the largest 100 metros had foreign-born shares of twenty percent or greater, compared to six areas in 1980 (Fortuny et al. 2010). Traditional destinations found in California, New York, Florida, Texas and Illinois still account for the majority of immigrant settlement, however, new destinations that in the past received little to no immigrants are now experiencing a relatively large influx of immigrants (Massey 2008). Audrey Singer (2004) reported that a total of thirty states had growth rates higher than the national average, and thirteen of these states more than doubled in foreign-born population size between 1990 and 2000.

Despite the noticeable growth and significance of new destinations, efforts to define these areas and the forces pushing and pulling immigrants have been limited (Hall et al. 2010; Leach and Bean 2008; Singer 2004). Studies of non-Hispanic foreign-born population increase have also been limited (Kuk and Lichter 2011). Within this burgeoning literature, there exists no single, comprehensive examination of new destination formation. On one track, there are studies that simply classify destinations on the basis of the prevalence and growth in overall foreign-born population. On another track, there are studies that examine the factors associated with, but not contributing to, foreign-born population growth. Namely, housing and labor markets are commonly discussed as factors influencing immigrant population growth in new destinations (Dunn et al. 2005; Skop and Buentello 2008). Yet no empirical analyses have tested this assumption.

The purpose of my research is to further our understanding of the factors associated with new destination formation. In this paper I particularly focus on the role of housing markets in explaining the changing geography of immigrant settlement. Specifically, I seek to answer elements of the following questions: What factors predict the growth or decline in foreign-born populations over the last three decades? Specifically, how do housing markets stimulate foreign-born population growth?

Housing Market Theories

The geographer David Ley has consistently demonstrated that housing markets are expensive in cities where foreign-born migrate (Ley et al. 2001; Ley et al. 2002; Ley 2007). While the majority of his research focuses on metros outside the U.S, such as Toronto and Sydney, Ley posits that U.S. cities reflect similar patterns. The positive correlation between foreign-born population growth and high-priced housing markets is said to exist for two reasons. First, expensive housing markets are associated with strong employment sectors and higher wages. These areas form a dual labor market where low-skilled workers are in demand to fill low-wage jobs. In addition, the foreign-born are more likely to tolerate low-quality housing and crowding (Ley 2007).

On the other hand, Cebula (2007) found that expensive housing costs deter in-migration. Light and Johnston (2009) concur upon finding that "deteriorating rent-to-wage ratios" cause foreign-born to leave cities for non-traditional destinations with better economic conditions. Light (2003) explains that the competition for housing in traditional destinations coupled with the possibility for cheaper cost of living and affordable housing in new destinations encourages many immigrants to settle in new destinations. South and Deane (1993) also contrast Ley, who purports that few vacancies are found in immigrant destinations, in finding a positive relationship between number of vacancies and rate of in-mobility to an area.

Additionally, some authors have argued that housing, in terms of home ownership, has a null effect on foreign-born migration because immigrants mostly cannot afford to own a home. This is contested by evidence provided by Atiles and Bohon (2003) which shows immigrants aim to achieve American norms of home ownership, and results from McConnell and Marcelli (2007) who argue that immigrants are targeted by subprime lenders and other real estate institutions. Another important point, raised by Light and Johnston (2009), is that immigration may inflate housing prices. Deileman et al. (2000) found evidence supporting this claim, namely city size and household income predominantly influence the housing market in their analysis. In order to answer the question of, "which came first: foreign-born or high rent?" it is necessary to examine temporal shifts. Consistent with a selection of the above theories and empirical support, I hypothesize that when controlling for confounds foreign-born population growth will be positively associated with housing market costs. Findings of the opposite direction would lend credence to the competing hypothesis discussed above.

Data and Methods

In order to examine the above hypothesis I am utilizing data from a variety of sources: These include the 1980, 1990, and 2000 decennial censuses, 2005-2009 American Community Survey 5-year estimates, and Bureau of Labor Statistics. It is difficult to discern the causal order underlying foreign-born population growth and its correlates. For example, given that immigration influx can create inflation it is important to test which came first in time. By using

multiple periods of change I strive to establish causal order. 1980 data is used as a basis for change when conducting analyses specific to the decades following, and including, 1990. Analyses are restricted to metropolitan statistical areas (MSA). MSA boundaries fluctuate across decennial censuses. In order to remain consistent, metropolitan boundaries are defined as an aggregate of counties consistent with 2009 Office of Management and Budget (OMB) MSA definitions. Current MSA boundaries are applied to prior years using Geographical Information Systems (GIS) software. Definitions and technical GIS procedures follow the precedent of recent research conducted by Hall et al. (2010).

Variables

The outcome variables, foreign-born population growth rates, are defined as the percent change in foreign-born population relative to the previous time point. 1990 population growth will be expressed as the numerical change in foreign-born from 1980 to 1990 divided by the number of foreign-born residents in 1980. The dependent variables for 2000 and 2009 change are similarly calculated. This expression of population change as the outcome variable follows suit with previous migration research (see, for example, Cebula 2009).

The explanatory variables are static indicators for each period. Key independent variables include median gross rent, median home value, percent vacant units, and percent owner-occupied dwellings (homeownership rate). In order to remain consistent with previous migration theory and analyses (see, for example, Kritz and Gurak 2001; Massey and Espinosa 1997; Massey et al. 1998; Parrado and Kandel 2011), a series of additional variables are held constant. These include: percent foreign-born, percent in poverty, workforce distribution, unemployment rate, percent Latino, percent Asian, percent black, and percent white. Controls for region are also included, in large part to help account for the documented implications of climate (Conway and Houtenville 2003). This series of variables strengthens the modeling approach by accounting for a range of social, demographic, and economic factors. Such modeling directly examines the effects of housing markets. The following table incorporates the key independent variables into my hypothesis:

| Independent Variable | Percent Foreign-Born |
|----------------------|----------------------|
| Housing Market | |
| Homeownership | - |
| Vacant Units | + |
| Median Home Value | + |
| Median Gross Rent | + |

Table 1. Expected direction of relationship amongst key independent variables and foreign-born growth

Descriptive Statistics

Metropolitan areas, as will be seen, experienced dramatic increases in foreign-born population over the thirty year period examined. In addition to immigrant population growth, these areas underwent a number of social, economic, and demographic changes. Beyond tabular descriptives, thematic maps created using ArcGIS contribute to this presentation by allowing the reader to visualize change. For each time point I present a series of bivariate thematic maps illustrating foreign-born growth, decline, and stagnation in metropolitan areas across the U.S.

Multilevel Models

In order to determine the factors contributing to new destination growth I will model metropolitan- and county-level change in foreign-born population (relative to native-born growth) as an outcome of the components outlined above. For each of the time points I will present a model regressing values from, and change since, the prior time point on foreign-born population change during this period. For example, the first model predicts 1980 to 1990 change using 1980 values and 1990-1980 change. Similar models for 2000 and 2009 follow. A final model examining change between 1980 and 2009 will also be presented.

The models will account for the nesting of counties within metropolitan areas by incorporating random intercepts. Given that counties vary within metros it is necessary to use a hierarchical structure that allows for this variance. In addition, the variance amongst metros will be captured by incorporating random slopes into the models. Random slopes allow for between-metro variance conditional on key explanatory variables. The differential effects of these variables across metropolitan areas would otherwise be ignored. Modeling these random effects is the only way to accurately capture the dynamic nature of foreign-born growth across the nation. These analyses are to be conducted using MLwiN software. The typical model will appear as follows:

$$y_{ij} = \beta_0 x_{0ij} + \beta_1 x_{1ij} + \dots + \beta_k x_{kij} + (u_{0j} x_{0ij} + u_{1j} x_{1ij} + \dots + u_{kj} x_{kij} + e_{0ij} x_{0ij})$$

Where, i=county, j=metro, k=number of observations

Conclusion

Aligned with my hypothesis, I expect to find that foreign-born population growth follows rising housing market costs. Unfortunately my analyses have their limitations. I am only accounting for one component of migration: the macro-level. Scholars consistently posit that at least three levels influence migration. My research excludes the individual- and household-levels, and literature has demonstrated the importance of agency and family units (Massey et al. 1998). Future research should attempt to integrate all levels into the analysis, although I imagine this quite difficult given the available data. There are also a number of theoretically relevant variables that are omitted from the modeling. This flaw coincides with the former weakness as a number of important variables are not available at the macro level. Despite these limitations, my dissertation reacts to a number of inconsistencies created by gaps in literature and should ultimately inform demographers and immigration scholars interested in housing markets in new destinations and foreign-born population change across the metropolitan U.S.

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