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# **The Determinants of Within Metropolitan Immigrant Moves**

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## **Abstract**

While the role of immigration and neighborhood change has been studied since the days of the Chicago School of Sociology, recent restrictions to immigration in concert with state and local initiatives to both enforce immigration policy or welcome immigrants raises new questions about neighborhood sorting within metropolitan areas. Policy makers are interested in recruiting high skilled and wealthy immigrants to attract investment and create jobs for native-born citizens. Some have endorsed welcoming immigrants as a solution to regional economic development and to stabilize high poverty urban neighborhoods. Are these immigrant recruitment policies realistic given existing patterns of immigrant housing location choice within metropolitan areas? This study will investigate the determinants of immigrant concentration within metropolitan regions such as presence of immigrant serving organizations, tract level poverty, median rents, education, language ability, minority businesses and other variables. In order to answer this question, we analyze normalized Census data from the National Neighborhood Change Database using standard panel data techniques. Findings show that immigrants appear to be interested in choosing tracts with lower median gross rents, and increasing rental opportunities. They are also moving into new areas that immigrants had not been living in the previous decade. Immigrant entrepreneurship is also important for the attraction on immigrants. Local governments that wish to attract immigrants need to provide quality education and affordable rents.

**Keywords:** neighborhood change, urban, immigration, United States, housing

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## **Introduction**

While the role of immigration and neighborhood change has been studied since the days of the Chicago School of Sociology, recent restrictions to immigration in concert with state and local initiatives to both enforce immigration policy or welcome immigrants raises new questions about neighborhood sorting within metropolitan areas. Policy makers are interested in recruiting high skilled and wealthy immigrants to attract investment and create jobs for native-born citizens. Some have endorsed welcoming immigrants as a solution to regional economic development and to stabilize high poverty urban neighborhoods. Are these immigrant recruitment policies realistic given existing patterns of immigrant housing location choice within metropolitan areas?

The first section of the paper reviews the literature of neighborhood change and then moves on to the literature of immigration and immigrant integration policies at the local level. Data from the National Neighborhood Change Database are analyzed using standard econometric methods for panel data. Brief recommendations for future research and policy follow the results.

## **Literature Review**

There are several traditions of neighborhood change theory that include ecological theory, market theory and political economy (G. Galster, 2001; Schwirian, 1983; Temkin & Rohe, 1996). Early work on intra-urban migration defines these within metropolitan moves as those that occur within metropolitan regions to improve the bundle of housing services at a given location to optimize quality of life and commuting to work (Quigley & Weinberg, 1977). Research on intraurban moves is concerned about the consequences of residential segregation along lines of race and ethnicity in particular.

Immigrants come to the United States for the first time for the following reasons 1) they are refugees of war or political persecution; 2) they come for employment or education; 3) they have family members or other close social ties to someone in the receiving country (Massey, 1999). The standard model of immigrant incorporation assumes that membership is required for political power and in turn this political power is required to elect leaders that include immigrants as beneficiaries in social policy. For example, the early social theory of Marshall (1964) identifies three basic rights that come with citizenship: civil, political and social. Restrictive policies and the desire to be with similar people have led to the formation of ethnic enclave communities that provide social, economic and political resources necessary for well-being (Aldrich & Waldinger, 1990; Hung, 2007; Light, Kwun, & Zhong, 2004; Portes, 1987). An immigrant's first housing choice may be in older housing stock in a low income neighborhood.

As immigrants relocate within the United States, bid rent theory would predict that they simply trade up for a better neighborhood. This perspective is reflected in spatial assimilation theory, which posits that as immigrants assimilate to the mainstream, they choose to live with the mainstream because adapt the status attainment values of the mainstream (Massey & Denton, 1985). Without institutional intervention, the neighborhood they leave would decline. Research has documented that racial and ethnic preferences for neighbors lead to residential segregation or neighborhood decline (Card, Mas, & Rothstein, 2008; Denton, 1999; G. C. Galster, 1991; Kain, 1968; Waldinger, 1989). Other scholars have considered the role of immigration (Alba, Logan, & Stults, 2000; Saiz & Wachter, 2006) and school quality (Kling, Liebman, & Katz, 2007). This residential segregation literature is based on Schelling's (1969) tipping model that shows how even if most residents prefer integration, a region can become segregated (Bruch & Mare, 2006). Segregation in ethnic enclaves has some benefits. For example,

monetary and social resources from the immigrant community are used in the development of voluntary associations (Hung, 2007; Portes, 1987) or opening of businesses (Aldrich & Waldinger, 1990). Immigrant ethnic organizations in turn could potentially influence subsequent neighborhood location choice of residents. I argue that the presence of immigrant and ethnic organizations in the non-profit and voluntary sector should be associated with immigrant location choice within a metropolitan area. As immigrants integrate, residential preferences may converge to those of the native born. However, segmented assimilation theory (Portes & Zhou, 1993), would argue that this pattern depends on the context of reception, race and culture of the immigrant group. Recent research argues that segmented assimilation also applies to spatial assimilation in that having darker skin reduces log odds of moving into Anglo neighborhoods (South, Crowder, & Chavez, 2005).

#### Research Question

*RQ2: Are immigrants attracted to locations within metropolitan regions that have existing immigrants and immigrant services? Do these preferences change over time?* For immigrants who came recently, I would expect the percentage foreign born to be positively associated with proximity to co-ethnic population, immigrant services, local policy environment, retail, poverty and having an identity as a historic immigrant gateway. For the foreign born who did not immigrate recently, I would expect a higher level of assimilation to the native born housing preferences that would lead to an association with cost of living and educational attainment. This question is important for those who study urban neighborhoods in that most of the literature asks why native born whites leave neighborhoods in response to immigrants and not reasons why immigrant pick places to live. This has consequences for social services planning in making choices between investments in people or places. It is important to study immigration and social policy legislation to restrict or modify immigration may

have the unintended consequence of promoting neighborhood decline. The purpose of this question is to assess the current validity of neighborhood change theories as they related to immigration as a prelude to assessing whether policy makers should look to migration for stabilizing neighborhoods.

### **Method**

The design of the second question is a hierarchical cross-sectional time series using six decades of data from the Neighborhood Change Database (NCDB) from Geolytics, Inc. (Tatian & Kingsley, 2003). Because census tract boundaries change each decade, this database reconfigures the boundaries from 1970, 1980 and 1990 so that they match the 2000 boundaries to allow comparison over time. These tract level data have the geographic precision that approximates an urban neighborhood boundary and the presence of six decades of cross sectional time series data allows for a pre-post design. Lagged variables and time ordering will be used to address threats of reverse causation. Fixed effects will be used to address omitted variable bias. Data on minority businesses come from the 1997 Survey of Business owners (U. S. Census Bureau, 2012). These data are available at the Census place level (e.g. municipal government) and allocated to the tract level using MABLE/CORR (Blodgett, 2009). Non-profit data come from the August 1995 record of registered charitable organizations from the National Center for Charitable Statistics (Urban Institute, 2013).

*Dependent variables (b).* The second question will estimate the effect of tract level poverty on immigrant concentration in neighborhoods: 1) The first proposed dependent variable is the percentage point change in the concentration of foreign born in the 2010 census tract from 2000. Immigrant concentration will be measured as the ratio of percentage of foreign-born in the tract over the percentage in the metropolitan area; 2) The percentage point change in those who moved from outside

of the United States in the last 5 years from 2000 census tract from 1990. This at least gives us a proxy for new immigrants, but still conflates all countries of origin (this variable is not available for the 2010 release); 3) The NCDB has data on specific Latino ethnic groups that are new immigrants to the United States. In order to carefully identify the impact of organizations that serve specific country of origin groups, I will focus the analysis of Latino immigrants from four Central American countries that include Nicaragua, El Salvador, Guatemala and Panama.

*Independent variables (b).* The independent variables include: 1) Proximity to an immigrant serving non-profit organization existing in 1999; 2) Cost of living as measured by the natural log of median gross rents from the census; 3) Human capital measured by percentage of adults who completed high school; 4) Neighborhood assimilation measured by the percentage who speak English; 5) Co-ethnic population as measured by the percentage foreign-born in 1990; 6) The percentage point change foreign-born from 1970 – 1980; 7) The percentage of Hispanic and Asian minority businesses in 1997; 8) Percentage in poverty; 9) A matrix of control variables (e.g. political party of US Congressional representatives and metropolitan area level fixed effects). When the dependent variable is a subset of the Central American origin groups, the relevant independent variable will match the dependent variable.

The second question will use a pre-post design and estimate the marginal effects using ordinary least squares regression with fixed effects. The Chow F-test will be used to determine if the estimates for each metropolitan area are significantly different than the estimates for the whole sample. Alternate specifications will be assessed using standard panel data post-estimation tools. Robust and bootstrapped standard errors will be generated as an alternative specification as well as spatial lag or spatial filtering models to account for spatial dependence (Anselin, Syabri, & Kho, 2006; Bivand et al., 2008; Getis & Griffith, 2002).

*Human subjects.* This study does not involve original human subjects data collection and is only using publicly available data without individual identifiers. The Wayne State University human subjects committee made a determination on January 24<sup>th</sup>, 2012. that the research did not involve human subjects research and did not need review by the committee.

## **Results**

The change in concentration of foreign born persons from 1990 – 2000 is positively associated with the change in percent of rental units, change in the percent of persons with high school or higher, the percent of minority firms that are Hispanic owned, and the percent of minority firms that are Asian owned. The change in concentration of foreign born persons from 1990 – 2000 is negatively associated with the change in logged median gross rents, the change in percent vacant units, and the change in percent foreign born from 1970 – 1980.

The change in concentration of persons 5 years or older residing abroad 5 years ago from 1990 – 2000 is positively associated with the change in percent vacant units, change in percent of rental units, change in percent of persons who speak English only, and the percent in poverty from the previous decade. The change in concentration of persons 5 years or older residing abroad 5 years ago from 1990 – 2000 is negatively associated with the change in logged median gross rents and the change in percent foreign born from 1970 – 1980.

The percent change in persons of Central American ancestry from 1990 – 2000 is positively associated with the proportion of Hispanic firms. The percent change in persons of Central American ancestry from 1990 – 2000 is negatively associated with the change in percent of persons 18 or older

who speak Spanish and the change in percent foreign born from 1970 – 1980.

### **Discussion and Conclusion**

All three groups are interested in value all things equal are choosing tracts with lower median gross rents, and increasing rental opportunities. They appear to be living in areas that the foreign born had not been living in the previous decade. These data do not show a statistically significant relationship between neighborhood choice and immigrant serving organizations, but the elasticities on the proportion of funding to immigrant serving organizations are relatively high at 9 – 10%. It is likely that more precise data would show that immigrants are choosing to live near social and community centers. Indeed, all things equal, the percent change in foreign born is associated with having Hispanic or Asian owned business nearby and as expected. Persons recently moved from abroad are seeking tracts with slightly higher poverty and are neutral to the education level of a tract. All things equal, the foreign born and Central Americans are seeking more educated tracts. Like the other two groups, Central Americans are seeking tracts with a higher number of persons who speak only English but more so those with Spanish speakers. This complicates the spatial assimilation pattern. Future research would need to distinguish between subgroups in the sample place with heterogeneous preferences as opposed to persons having a preference for linguistic diversity.

#### Limitations

The data are not to be interpreted as a causal model per se because the model does not account for unobserved tract level variables that would correlate simultaneously with the dependent variables. The low R-squared values suggest that much of the variability remains unexplained. While the normalized Neighborhood Change Database allows comparison of the same places over a four decade period, the selection of variables does not allow an ideal understanding of within metropolitan intraurban moves. The percentage of foreign-born does not tell us how long the immigrants have been

at that residence. Persons who moved from abroad within the last five years also includes native born expatriates who may have been abroad on businesses, as students, or on military duty. The Central American variable is limited only to the 1990 and 2000 census. This however, is as a strength, because we do know from a review of history that Central American migration had an increase in the 1980s onward and that it is reasonable to assume that the growth in Central American persons is due to recent migration. Limitations notwithstanding, this study does have time ordering on variable to show a decade of trends and incrementally add to the literature on neighborhood change and immigration.

### Conclusion

Local governments that wish to attract immigrants as a whole need only provide value: quality education and affordable rents. Immigrant entrepreneurship is also important for the attraction on immigrants. These data cannot speak precisely to immigrant human services, but should be considered for future research.

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Table 1: Change in Concentration of Foreign Born, 1990-2000 with Metropolitan Area level fixed effects included (n = 31414 census tracts in 33 Metropolitan Areas).

	Estimate	Std. Error	t value	Pr(>  t )
(Intercept)	0.0167	0.0232	0.72	0.4713
Rate of immigrant-serving non-profit	-0.0059	0.0279	-0.21	0.8335
Proportion of county non-profit revenues to Immigrant and Ethnic Services	0.0922	0.0749	1.23	0.2179
Change in ln of median gross rents, 1980 to 1990	-0.0362	0.0050	-7.26	0.0000
Change in percent vacant units, 1980-1990	-0.0013	0.0005	-2.81	0.0050
Change in percent of rental units in tract, 1980-1990	0.0026	0.0003	8.70	0.0000
Change in percent of persons 25+ with high school or higher, 1980-1990	0.0014	0.0004	3.92	0.0001
Change in percentage of persons 18+ who speak English only, 1980-1990	0.0003	0.0002	1.55	0.1202
Change in percentage of persons 18+ who speak Spanish only, 1980-1990	-0.0000	0.0005	-0.00	0.9984
Change in percent foreign born, 1970-1980	-0.0176	0.0006	-30.09	0.0000
Hispanic owned firms allocated to tract	0.0056	0.0016	3.56	0.0004
Asian owned firms allocated to tract	0.0051	0.0014	3.72	0.0002
Change in percent in poverty, 1990-2000	0.0001	0.0005	0.27	0.7901
Hispanic firms missing value, 0=F, 1=T	-0.0545	0.0134	-4.05	0.0001
Asian firms missing value, 0=F, 1=T	0.0130	0.0137	0.95	0.3420
Immigrant serving missing value, 0=F, 1=T	-0.2297	0.0503	-4.57	0.0000

Residual standard error: 0.5443 on 31366 degrees of freedom

Multiple R-squared: 0.04031, Adjusted R-squared: 0.03887

F-statistic: 28.03 on 47 and 31366 DF, p-value: < 2.2e-16

*Table 2: Change in concentration of persons 5+ residing abroad 5 years ago (% in tract/% in MSA), 1990-2000 with Metropolitan Area fixed effects included (n = 31414 census tracts in 33 Metropolitan Areas)*

	<b>Estimate</b>	<b>Std. Error</b>	<b>t value</b>	<b>Pr(&gt;  t )</b>
(Intercept)	0.0650	0.0533	1.22	0.2226
Rate of immigrant-serving non-profit	0.0434	0.0640	0.68	0.4970
Proportion of county non-profit revenues to Immigrant and Ethnic Services	0.0996	0.1718	0.58	0.5620
Change in ln of median gross rents, 1980 to 1990	-0.0827	0.0114	-7.23	0.0000
Change in percent vacant units, 1980-1990	0.0063	0.0011	5.79	0.0000
Change in percent of rental units in tract, 1980-1990	0.0019	0.0007	2.71	0.0067
Change in percent of persons 25+ with high school or higher, 1980-1990	0.0012	0.0008	1.40	0.1620
Change in percentage of persons 18+ who speak English only, 1980-1990	0.0014	0.0004	3.51	0.0005
Change in percentage of persons 18+ who speak Spanish, 1980-1990	-0.0050	0.0012	-4.20	0.0000
Change in percent foreign born, 1970-1980	-0.0203	0.0013	-15.09	0.0000
Hispanic owned firms allocated to tract	0.0056	0.0036	1.54	0.1228
Asian owned firms allocated to tract	0.0045	0.0031	1.42	0.1551
Change in percent in poverty, 1990-2000	0.0072	0.0011	6.61	0.0000
Hispanic firms missing value, 0=F, 1=T	-0.0604	0.0309	-1.96	0.0504
Asian firms missing value, 0=F, 1=T	0.0164	0.0314	0.52	0.6013
Immigrant NPO missing value, 0=F, 1=T	-0.9695	0.1153	-8.41	0.0000

Residual standard error: 1.249 on 31366 degrees of freedom

Multiple R-squared: 0.01704, Adjusted R-squared: 0.01557

F-statistic: 11.57 on 47 and 31366 DF, p-value: < 2.2e-16

*Table 3: Percentage change in concentration of persons of Central American origin, 1990-2000  
Metropolitan Area level fixed effect included(n = 31414 census tracts in 33 Metropolitan Areas)*

	<b>Estimate</b>	<b>Std. Error</b>	<b>t value</b>	<b>Pr(&gt;  t )</b>
(Intercept)	-0.0586	0.1209	-0.48	0.6279
Rate of immigrant-serving non-profit	-0.1035	0.1451	-0.71	0.4756
Proportion of county non-profit revenues to Immigrant and Ethnic Services	0.3026	0.3898	0.78	0.4375
Change in ln of median gross rents, 1980 to 1990	-0.0264	0.0260	-1.02	0.3090
Change in percent vacant units, 1980-1990	0.0001	0.0025	0.03	0.9764
Change in percent of rental units in tract, 1980-1990	0.0021	0.0016	1.33	0.1827
Change in percent of persons 25+ with high school or higher, 1980-1990	0.0030	0.0019	1.57	0.1160
Change in percentage of persons 18+ who speak English only, 1980-1990	0.0004	0.0009	0.46	0.6458
Change in percentage of persons 18+ who speak Spanish, 1980-1990	-0.0134	0.0027	-4.94	0.0000
Change in percent foreign born, 1970-1980	-0.0266	0.0030	-8.73	0.0000
Hispanic owned firms allocated to tract	0.0173	0.0082	2.11	0.0350
Asian owned firms allocated to tract	0.0083	0.0071	1.17	0.2421
Change in percent in poverty, 1990-2000	0.0031	0.0025	1.25	0.2127
Hispanic Firms Missing, 0=F, 1=T	0.0782	0.0700	1.12	0.2642
Asian Firms Missing Value, 0=F, 1=T	-0.1025	0.0712	-1.44	0.1501
Immigrant NPO Missing Value, 0=F, 1=T	-1.0146	0.2617	-3.88	0.0001

Residual standard error: 2.834 on 31366 degrees of freedom

Multiple R-squared: 0.005887, Adjusted R-squared: 0.004397

F-statistic: 3.952 on 47 and 31366 DF, p-value: < 2.2e-16