HOW MUCH DOES INCOME MATTER IN NEIGHBORHOOD CHOICE?

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ABSTRACT

Residential mobility is a highly structured process and it is that process whereby households improve their housing and their neighborhoods. There is a substantial literature on the mobility process itself but less on the influences that dictate the actual neighborhood choices that households make. This discussion has been particularly contentious with respect to race and class in neighborhood choices. Do minorities choose own race neighborhoods because they are constrained by income, or is income less relevant, and it is own race preferences which dictate the neighborhood choices. This paper takes up the issue of the relative importance of income in dictating neighborhood outcomes. We use the detailed data from the Los Angeles Family and Neighborhood Study (LAFANS) to investigate the residential mobility and residential choices of white and Hispanic households in the Los Angeles metropolitan area. We show that both white and Hispanic households respond to higher incomes by choosing more white neighborhoods in the case of whites, and less Hispanic neighborhoods in the case of Hispanics.

INTRODUCTION

The substantial population changes that are occurring in US metropolitan areas have been well documented in a wide variety of research presentations. Research with the 2000 Census has shown that the proportion of the US population that is foreign born has increased by nearly forty percent in the last decade and American metropolitan areas continue to diversify. Nor are these changes confined to the central cities - more Hispanics now reside in the suburbs than the central city (Suro, 2002), and other case studies have provided evidence of the growth of large suburban concentrations of Asian ethnic groups, immigrants from Russia, the Middle East and Africa. While this has been more true in some cities than others, it is clear that the patterns of foreign-born settlement including very recent arrivals are increasingly diverse. Gone too, are the times when immigrants mainly arrived in the urban center and only slowly moved to suburban locations. Now immigrants arrive and settle widely across the city.

How do the new ethnic groups make residential choices? When they move, what kind of neighborhoods do they choose and to what extent do they choose neighborhoods that reflect their own ethnicity? Additionally, when they have greater earnings how is this translated into neighborhood choices? These questions become especially important in the dynamics of our changing metropolitan areas. Once concentrated areas of African Americans are now diverse neighborhoods of Hispanics and Asians. In Los Angeles in particular the residential mosaic has changed fundamentally and makes the study of neighborhood choices more complex and more interesting.

The overarching question that guides this research is the relative role of income and racial preference in making neighborhood choices. Within that question there are three sub-questions:

How do patterns of neighborhood choice vary for white and Hispanic households?
Does income matter in the neighborhood choice?
To what extent do households chose integrated neighborhoods when they move?

Answering these questions will provide us with a greater understanding of how the diverse mosaic will evolve under the continuing wave of population change.

PREVIOUS STUDIES AND INTERPRETATIONS

Residential mobility is a highly structured process. It is the process whereby households improve their housing and neighborhoods (see Clark and Dieleman, 1996 for an overview of the mobility process). Over time the sum of the myriad individual decisions by individual households leads to basic changes in the urban structure. Neighborhoods and communities change as people move in and out of them. These individual moves and the changes that they bring eventually establish the population composition of neighborhoods and the patterns of land use and the associated patterns of commuting and traffic flows.

At the individual level mobility is highly correlated with age and family status (younger people move more often, families less often, especially if they are home owners). Much of the movement is related to housing disequilibrium (that household's move to gain more space and larger, better quality dwellings) and with housing comes an associated neighborhood. At the same time income constrains the choices of housing and because housing quality and neighborhood quality are so intimately linked, income constrains the range of neighborhoods that the household can select.

Despite the large literature on housing and a smaller but growing literature on neighborhood choice, there is much less research that considers the neighborhood choices that occur and how those choices may be linked to income and preferences. The work on neighborhood transitions in the US has for the most part been focused on "mobility programs" which are designed to improve the living environments of minority households in particular. In this case the central policy aim is to move these households from perceived "bad" neighborhoods to perceived "good" neighborhoods. Such studies have attempted to separate out the true effects of neighborhoods from the effects of families or social networks on the outcomes (Briggs, 1997). These studies have often focused solely on poor households who have moved from inner city poor neighborhoods to suburban neighborhoods. Clearly, there are income constraints on who can transition from inner cities to suburbs but what of internal moves within central cities and within suburbs.

Neighborhood choices matter because the evidence suggests, that at least at the margin, neighborhood conditions play a role in shaping outcomes for individuals who live in those neighborhoods (Ellen and Turner, 1997). Still, most of the research has been on

the role of poverty and low income in neighborhoods and how those factors create negative outcomes for children. There is a parallel British literature that has also been concerned with how neighborhoods affect residents but that literature has also examined the intersection of mobility and neighborhood choices. Neighborhoods can foster belonging and attachment, but also create pressures to find more conducive surroundings (Kearns and Parkinson, 2001).

Clearly, neighborhood selection and neighborhood formation is not a random mechanism. There is a substantial literature which documents the way in which households sort by income and preferences (Tiebout, 1956; Dowding, SPELL OUT, 1994, Clark, 1992). Economic and social processes determine how households get assigned to areas within the city. The overall conclusion of the literature on neighborhood selection is that the outcomes are determined by the complex interplay of incomes and preferences. At the same time there is an ongoing debate about the relative role of preferences and income and some emphasize the role of prejudice as an extension of preference in the sorting process. However, the expression of greater tolerance, by whites, for Asians and Hispanics versus blacks cannot be construed as the primacy of racial prejudice. Ellen et al (2000) point out that the heightened sensitivity of white families with children in comparison to families without children to racial composition is evidence that these households may in fact be expressing concerns about property values and school quality than simple racial prejudice.

Higher household income is associated with greater proximity to whites (Alba and Logan, 1993) and in a similar vein Quillian (1999) finds that affluent African American households are more likely to move into white neighborhoods than lower income African American households, a finding that is consistent with wealth and income effects. Furthermore, increases in income are associated with substantially higher staying probabilities of blacks in white neighborhoods. In contrast to the Alba findings, Quillian argues that the "staying power" is associated with homeownership rather than income alone, as homeowners are much less likely to move. For low income households, financial constraints, coupled with a lack of homeownership leads to low income African American families being more likely to move back into black neighborhoods than high-income African American families

The urban mosaic continues to change under the impact of new arrivals from outside the United States. Moreover, immigrants are arriving directly to both inner city communities and to suburban communities. No longer is there a simple division into more and less advantaged in the locational choices that they make. These choices reflect an increasingly diverse metropolitan environment. What are the choices in this changing environment and do they reiterate the power of economics and affordability in the residential choice process. That is, do Hispanics with more money still choose own race neighborhoods or do they attempt to choose higher cost neighborhoods which may be more white than Hispanic? We will examine the same questions for Asians and African Americans but the sample sizes preclude in-depth analysis.

DATA AND QUESTIONS

Two data sources are used in the analysis, survey data from the Los Angeles Family and Neighborhood Survey (LAFANS) and block data from SF3 Census 2000. LAFANS is a household survey of families in 65 randomly sampled census tracts in Los Angeles County. A first wave of interviews with approximately 6000 residents in 3000 households has been completed. In addition to the publicly accessible data there are several special data sets that incorporate detail on the neighborhoods in which the respondent live and the neighborhoods from which they came if they moved. Data collection for wave 1 was initiated in April 2000 and completed in mid-January 2002.

The sample includes a very diverse set of neighborhoods from the 88 cities within Los Angeles County. The LAFANS uses a stratified sampling design to select the families in the 65 Census tracts. The sampling strata in the LAFANS design correspond to tracts that are very poor (those in the top 10 percent of the poverty distribution), poor (tracts in the 60-89th percentiles), and non-poor (tracts in the bottom 60 percent of the distribution). The probability of a being included in the LAFANS is the product of two factors. The first factor reflects the overall rate at which the tracts were sampled, which is given by the ratio of the number of households in LAFANS tracts to the total number of households in Los Angeles County. The second factor represents the rate at which there was over-or under-sampling of tracts from each of the three strata; it is given by the proportion of the households in the 65 sampled tracts that were contained in the stratum divided by the proportion of households in Los Angeles County that were located in the stratum (Sastry, et al 2003).

The household survey had seven modules but in this paper the data is drawn primarily from two modules: the household questionnaire and the adult questionnaire. The household questionnaire collected information on income of family members, and the adult questionnaire collects detailed information on the family background, educational history social ties, residential history, employment welfare and health status, as well as neighborhood information. It also includes an Event History Calendar that recorded detailed information on the preceding two- year period of spells of residence, employment and unemployment, program participation and health insurance. The data were geo-coded and matched to census block groups from the 2000 Census.

PRELIMINARY INTERPRETATIONS FROM THE LOS ANGELES DATA

The analysis of moves is structured into a three by three matrix representing moves within minority group status (less than 40 percent of own race composition), moves within integrated block groups (40-60 percent of own race) and majority own group status (60 percent plus of own race). The relatively small sample size of movers precludes more detailed divisions by race and ethnicity. Analyses of African American and Asian moves and neighborhood choices involve small sample sizes and the research will investigate weighting tools to provide similar analyses of their choice behavior.

1. Origin Destination matrices by income

Households above and below the median family income have very different neighborhood relocation patterns. In both matrices the diagonal, as expected, dominates. Households move within neighborhoods of similar racial/ethnic status – an outcome of the short distance of most residential moves. White households with lower incomes are in minority white areas and few of them move to majority white areas. White households with incomes above the median are in majority white neighborhoods and move within those neighborhoods. Clearly, income is critical in the choice process. The proportion of white households in integrated neighborhoods is small, and those below and above the median have very different outcomes. Households below the median cannot sustain the integrated neighborhood while those above transition to majority white neighborhoods. To this point there are few surprises in the results. We now turn to the patterns of relocation for Hispanic households.

Table 1. Relocation of White households by ethnic composition of Block Group.

a) Below Median Income (n = 39)

% White Origin	% White Destination 0-40	40-60	60-100
0-40	**46.1%** ***18***	0% *0*	5.1% *2*
40-60	10.3% *4*	**7.7%** ***3***	5.1% *2*
60-100	10.3% *4*	0% *0*	**15.4%** ***6***

b) Above Median Income (n = 45)

% White Origin	% White Destination 0-40	40-60	60-100
0-40	**8.9%** ***4***	13.3% *6*	2.2% *1*
40-60	0% *0*	**6.7%** ***3***	6.7% *3*
60-100	4.4% *2*	6.7% *3*	**51.1%** ***23***

Hispanic families with incomes below the median are in predominantly Hispanic neighborhoods and stay within them when they move. In contrast, although the numbers are small, Hispanic households above the median income are proportionately less likely to choose predominantly Hispanic neighborhoods – 35 percent versus 63 percent.

Approximately 40 percent of families in integrated or majority Hispanic origins, choose integrated or majority other race.

Table 2. Relocation of Hispanic households by ethnic composition of Block Group.

a) Below Median Income (n = 264)

% Hisp. Origin	% Hispanic Destination 0-40	40-60	60-100
0-40	**4.1%** *11*	1.9% *5*	5.3% *14*
40-60	0.4% *1*	**7.2%** ***19***	9.5% *25*
60-100	2.7% *7*	5.7% *15*	**63.3%** ***167***

b) Above Median Income (n = 23)

% Hisp. Origin	% Hispanic Destination 0-40	40-60	60-100
0-40	**17.4%** ***4***	4.4% *1*	21.8% *5*
40-60	4.4% *1*	**4.4%** ***1***	0% *0*
60-100	4.4% *1*	8.7% *2*	**34.8%** ***8***

2. Composition of Destination Block Groups

The overall racial/ethnic composition of neighborhood choice outcomes is equally important in examining residential relocation behavior, especially in such a multi-ethnic context as Los Angeles.

White movers earning below the median income and originating in white minority neighborhoods end up in Hispanic dominated neighborhoods. For those moving from mixed neighborhoods, the trend is still characterized by movements which end up in Hispanic majority neighborhoods, though these neighborhoods are clearly integrated with significant proportions of all the major race and ethnic groups. For low-income movers from majority white areas, the preference is for majority white neighborhoods, although the actual neighborhoods are mixed Hispanic and white.

For movers earning above the median income, there is a clear preference for destinations with a white majority, regardless of the ethnic composition of the origin. Even those households who are in minority white neighborhoods (less than 40 percent white before the move) are in neighborhoods which are slightly more than 40 percent white after the move. Households in majority white neighborhoods preserve their majority status.

Table 3. Composition of Destination Block Group by Origin Block Group for Whites

a) Below Median Income

	Destination			
Origin	% White	% Black	% Asian	% Hispanic
0 - 40%	24.48	8.55	15.26	48.53
40 - 60%	29.61	11.71	17.34	38.16
60 - 100%	38.74	10.36	12.91	33.95

b) Above Median Income

	Destination			
Origin	% White	% Black	% Asian	% Hispanic
0 - 40%	42.61	8.59	23.52	20.06
40 - 60%	52.50	4.88	17.96	20.17
60 - 100%	75.93	2.81	7.04	9.56

Hispanic households below the median income end up in Hispanic neighborhoods after their move (Table 4). In contrast Hispanic households above the median income are likely to be in less Hispanic Neighborhoods. For Hispanic households in integrated or majority Hispanic neighborhoods however, the probability is almost twice that of those below the median, to be in neighborhoods which are "more white". The most striking result in Table 4 is the concentration of Hispanic movers from own-race majority neighborhoods to predominantly Hispanic neighborhoods. This is true for both below median income and above median income households. It may also reflect the presence of ethnic enclaves in Los Angeles (Allen and Turner, 2002; Logan et al, 2002) given the fact that it is a primary destination for immigrants from Mexico. The other notable finding is that high income Hispanics in integrated neighborhoods – 40-60 percent Hispanic have destinations that are significantly lower in percent Hispanic. For these households own race preferences are less apparent.

Table 4. Composition of Destination Block Group by Origin Block Group for Hispanics

a) Below Median Income

	Destination			
Origin	% White	% Black	% Asian	% Hispanic
0 - 40%	18.19	7.88	13.28	57.88
40 - 60%	8.22	15.04	8.98	66.66
60 - 100%	7.44	7.45	4.92	78.57

b) Above Median Income

	Destination			
Origin	% White	% Black	% Asian	% Hispanic
0 - 40%	28.69	2.92	10.76	53.98
40 - 60%	20.29	11.77	29.66	34.24
60 - 100%	15.97	3.68	5.18	73.88

3. Model Estimates

To provide a contextualized analysis of the neighborhood choices and neighborhood outcomes we examine the choices in a multinomial logit model where the choices are integrated (40-60 percent own race) or majority Hispanic or majority white (more than 60 percent own race).

The results clarify and enrich the descriptive interpretation of the move matrices and the outcome matrices. As income and education increase white families choose more white neighborhoods. The expected hypothesis of the choice of integrated neighborhoods with increasing education that has been shown in some other studies did not emerge. White households choose neighborhoods that are more own race as socio economic status increases. In contrast as income and education increase, Hispanic households choose less Hispanic neighborhoods. Education and income are negative with respect to choosing an integrated or "more Hispanic" neighborhood.

Are white households exercising own race preference and Hispanics exercising other race preference? This is at least a plausible interpretation but a more compelling suggestion is that both households are choosing higher status neighborhoods, which happen to be white because the current structure of the urban mosaic reflects historical patterns in which white households had disproportionate access to higher status neighborhoods. We cannot that Hispanics are choosing neighborhoods not on the basis of the numbers of Hispanics, rather they are choosing, when enabled by income, higher status and hence more

white neighborhoods. Households in fact are being driven not by race per se but by the status of the neighborhood.

Table 5. Results of Multinomial Logistic Regression, Mobility Choices among movers in L.A.FANS survey (N= 654)

	Majority White			Majority Hispanic		
	B	E^b	p	*B*	E^b	p
Education[1]	1.766	5.845	0.000	-0.366	0.693	0.004
Income (000's)	0.005	1.005	0.021	-0.019	0.981	0.000
Family Status	0.013	1.013	0.971	0.076	1.079	0.751
Foreign Born	-0.475	0.954	0.895	0.929	2.532	0.000
Intercept	-4.255		0.000	1.192		0.000
Pseudo R^2 = 0.21						

Notes:
Integrated (40 – 60 percent Black, White, Asian, Hispanic) is the reference category for the equation.
[1] Education is divided into three categories – Some high school (0), High school graduate (1), college (2).

CONCLUSION

This study provides solid evidence that income, a basic measure of socio-economic status, seems to be more important than ethnicity in the choice process. This is not to suggest that the racial/ethnic composition of neighborhoods is irrelevant. Because of deeply embedded structural inequalities in contemporary urban settings, there is a correlation between higher status neighborhood destinations and the proportion of white residents living there. However, as cities become increasingly diversified ethnically it is inevitable that this correlation will diminish, highlighting the fact that the primary sorting mechanism in the mobility process is increasingly economic status.

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