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INTER-NEIGHBORHOOD MIGRATION AND SPATIAL ASSIMILATION IN A MULTI-ETHNIC WORLD: COMPARING LATINOS, BLACKS, AND ANGLOS

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Abstract

Longitudinal data from the Panel Study of Income Dynamics are used to examine patterns and determinants of migration into neighborhoods of varying racial and ethnic composition. Consistent with spatial assimilation theory, higher income and education facilitate moving into neighborhoods containing proportionally more non-Hispanic whites and, among Latinos, the native-born move to "more Anglo" neighborhoods than immigrants. Consistent with place stratification theory, blacks move to neighborhoods with significantly fewer Anglos than do comparable Latinos, and the effect of income on migration into more Anglo neighborhoods is stronger for most minority groups than for Anglos. Latinos differ only slightly from Anglos in their migration into neighborhoods with large black populations, and blacks do not differ from Anglos in the migration into neighborhoods with large Latino populations.

Justified by the pernicious consequences of residing in predominantly minority or otherwise disadvantaged urban communities, the patterns and determinants of residential segregation among U.S. racial and ethnic groups has been a venerable topic of social science investigation. Countless studies have examined the degree to which minority groups are residentially segregated from the dominant white majority (e.g., Farley and Frey 1994; Frey and Farley 1996; Iceland 2004; Wilkes and Iceland 2004; Logan, Stults, and Farley 2004). Studies in this tradition paint a vivid portrait of American residential apartheid (Massey and Denton 1993). However, because the most common analytical approaches to examining determinants of racial and ethnic segregation are cross-sectional, strong inferences regarding the individual-level causes of segregation remain elusive. At their core, theories of residential segregation and spatial assimilation imply processes of inter-neighborhood migration, as individuals of a given race or ethnicity move—or fail to move—between neighborhoods of varying racial and ethnic composition. Yet, few studies explicitly examine the patterns of inter-neighborhood migration that sustain or attenuate levels of racial and ethnic segregation.

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This study goes beyond prior work on the patterns and determinants of racial and ethnic residential segregation in three main ways. First, rather than relying on cross-sectional data, we use nationally-representative, longitudinal survey data to examine the actual patterns of inter-neighborhood migration that preserve or diminish residential segregation. Given the possibility that neighborhood racial and ethnic composition influences some of the characteristics of individuals and households that predict segregation—the "neighborhood effects" issue (Sampson et al. 2002)—longitudinal studies enhance confidence in our ability to identify the causal forces underlying segregation.

Second, we systematically compare the inter-neighborhood migration patterns of the nation's largest racial and ethnic groups. Although some recent work has begun to explore these raciallyand ethnically-differentiated migration patterns (Quillian 2002), no study has yet contrasted simultaneously the segregation-relevant inter-neighborhood migration patterns among blacks, Latinos, and Anglos (i.e., non-Latino whites). South, Crowder, and Chavez (2005) explore the inter-neighborhood migration patterns of various Latino groups, but do not compare and contrast these with the inter-neighborhood migration patterns of blacks or Anglos.

Third, we take a multidimensional approach to measuring neighborhood ethno-racial composition. Virtually all prior studies in this area have focused on minorities' ability to attain spatial proximity with the white, non-Hispanic majority. For example, South, Crowder and Chavez (2005) examine the determinants of Latinos' migration into neighborhoods defined by the percentage of their population that is non-Hispanic white; Crowder, South, and Chavez (2006) perform a similar analysis for African Americans. However, given the rise of multiethnic cities and neighborhoods (Fong and Shibuya 2005), the conceptualization and measurement of neighborhood racial and ethnic composition using only the proportional representation of a single racial or ethnic group (almost always non-Hispanic whites) likely obscures important variation in inter-neighborhood migration patterns. High levels of migration into predominantly Anglo neighborhoods beget the question as to what types of neighborhoods—e.g., predominantly black or predominantly Latino—these migrants are avoiding. And, low levels of migration into predominantly Anglo neighborhoods beget the question as to what types of neighborhoods these migrants are moving into. Analyzing ethnoracial patterns of geographic mobility into neighborhoods defined by these latter characteristics allows us to determine not only how inter-neighborhood migration contributes to the residential separation of minorities and Anglos, but also to the residential separation of Latinos from African Americans.

THEORETICAL BACKGROUND AND HYPOTHESES

Two broad frameworks dominate current theorizing on the determinants of racial and ethnic residential segregation. The classical model of *spatial assimilation* essentially posits that members of minority groups seek to convert financial and human capital into geographic proximity with the dominant ethnic majority (Massey 1985). Because predominantly Anglo neighborhoods also exhibit higher property values, socioeconomic resources are required for minorities to purchase residence in these areas (Logan, Alba, and Leung 1996). Minorities' incentive to reside near the Anglo majority is also thought to increase with advanced socioeconomic attainment (Alba and Nee 2003).

Prior research has explored this issue primarily by examining levels of residential segregation of minorities from Anglos within income and education categories (e.g., Adelman 2004; Fischer 2003; Iceland, Sharpe, and Steinmetz 2005; Iceland and Wilkes 2006; Massey and Fischer 1999; St. John and Clymer 2000). In general, these studies find that high-SES racial and ethnic groups are less segregated than low-SES groups from non-Hispanic whites, but that this effect is weaker among African Americans than among other minority groups. Roughly

similar findings emerge from cross-sectional, individual-level models of minority locational attainment (Adelman 2005; Logan, Alba, and Yeung 1996). Of course, cross-sectional studies of the effect of income on locational attainment are likely hampered by the endogeneity of individual SES to neighborhood racial composition. Income is likely to be a consequence, as well as a cause, of residence in a neighborhood with a particular racial and ethnic composition. Cutler and Glaeser (1997) find significant effects of neighborhood racial composition on blacks' socioeconomic attainments, even after adjusting for the effect of socioeconomic status on location choice.

A second driver of ethnic residential integration that figures prominently in the spatial assimilation account is nativity (or immigrant status). In the classical narrative, immigrants settle primarily in ethnic residential enclaves, where the presence of co-ethnics can most easily assist them with housing and employment (Logan, Alba, and Zhang 2002). The children of these immigrants, in contrast, are presumably more acculturated to U.S. society, and strive to convert this cultural capital into residential proximity with the Anglo majority. Although immigrants are more and more settling directly into suburban areas, where segregation is usually lower than in central cities (Alba et al. 1999), the spatial assimilation model nonetheless anticipates continued residues of this pattern, with native-born members of minority groups residing in, or moving to, neighborhoods with proportionally more Anglo residents compared to their foreign-born co-ethnics.

Despite the potential for studies of nativity differences in minorities' neighborhood exposure to Anglos to enhance our understanding of locational attainments (Charles 2006), such differences have not been fully explored. Iceland and Scopilliti (2006) have recently computed segregation scores by nativity and by the timing of immigration, and find qualified support for the spatial assimilation model. For most racial/ethnic and country-of-origin groups, the nativeborn are less segregated than the foreign-born from whites. This difference is somewhat more muted among blacks than among Hispanics and Asians, perhaps due to the advantaged locational status of Afro-Caribbeans (Crowder 1999). Studies of nativity differences in interneighborhood migration are also rare. South, Crowder and Chavez (2005) find that Mexicans of the 1.5 generation and later move to neighborhoods with proportionally more Anglos than do earlier generations, but the reverse pattern is found for Puerto Ricans.

A third hypothesis derivable from the canonical account of minority spatial assimilation is that differences in locational attainment among racial and ethnic groups—not only between minority groups and the Anglo majority, but also among different minority groups themselves —are at least partially attributable to group differences in socioeconomic status and nativity. That is, equalizing racial and ethnic groups on the key determinants of their spatial proximity to the white majority should attenuate gross differences among these groups in their neighborhood attainments. There is only modest evidence for this claim regarding the segregation of blacks from whites; as noted above, even high-status blacks remain highly segregated from the Anglo majority. Less is known, however, about the degree to which differences between Latinos and Anglos, or between Latinos and blacks, in their spatial proximity to whites results from groups differences in socioeconomic status or country of birth.

These and other empirical challenges to the spatial assimilation theory have led to the development of an alternative perspective on minority spatial assimilation—the *place stratification model* (Charles 2003; Logan and Alba 1993). The place stratification model essentially describes how powerful groups manipulate space to maintain their physical and social separation from groups they view as undesirable. This model draws attention to the barriers to residential mobility faced by members of minority groups, and African Americans in particular. The discriminatory practices of real estate agents (Yinger 1995), local governments (Shlay and Rossi 1981), and mortgage lenders (Squires and Kim 1995) are posited

to create a racially-segmented housing market that obstructs the mobility aspirations of minorities. White stereotyping of, and hostility towards, minorities may also impede minorities' migration into mixed or predominantly white neighborhoods (Emerson, Yancey, and Chai 2001; Krysan and Farley 2002).

The place stratification model implies several hypotheses regarding racial and ethnic differences in the attainment of spatial proximity to the white majority. First, by highlighting the unwillingness of whites to share neighborhoods with minority residents, the place stratification model suggests that whites will be more likely than members of minority groups to move into neighborhoods with large Anglo populations, and that whites will especially avoid neighborhoods with large black populations (Crowder 2000; Krysan 2002).

Second, with its emphasis on the unique disadvantages suffered by African Americans (Massey and Denton 1993), the place stratification model posits that blacks are less able than Latinos to attain spatial proximity with the white majority, even after adjusting for group differences in the established socioeconomic, demographic, and geographic determinants of interneighborhood migration. Although housing discrimination against, and whites' stated desire to avoid living near, Latinos is nontrivial, these levels generally fall below those experienced by blacks (Ross and Turner 2005). Higher levels of residential segregation between blacks and Anglos than between Latinos and Anglos (Logan, Farley, and Stults 2004) support this idea, but they provide far from a conclusive test because they fail to take into account other differences between blacks and Latinos that could account for differences in their spatial proximity to whites.

Third, the place stratification model implies differences among racial and ethnic groups in the effects of socioeconomic characteristics on their spatial proximity to whites. Logan and Alba (1993) propose two versions of the place stratification model that speak to such differences. In the "strong" version, minorities receive lower locational returns than the white majority to their human capital and other endowments, largely because housing discrimination prevents minorities from successfully converting their resources into desirable neighborhood amenities. In what Logan and Alba (1993) call the "weak" version of the place stratification model, it costs minorities more than the majority to enter predominantly white neighborhoods, and hence the effects of socioeconomic characteristics are stronger among minorities. At the same time, however, minority group members never attain the level of neighborhood resources enjoyed by comparable majority group members.

The relative applicability of these models seems to depend partly on the type of neighborhood resource examined. Logan and Alba (1993) generally find greater support for the strong version in their study of racial and ethnic differences in access to suburban places characterized by their median incomes. However, in both cross-sectional and longitudinal studies of access to neighborhoods defined by their racial composition, greater support is found for the weak version. Both Alba and Logan (1993) and Bayer, McMillan, and Rueben (2004) find that, among blacks, income is strongly related to neighborhood racial composition, and Crowder, South, and Chavez (2006) observe stronger effects of socioeconomic status on mobility into more Anglo neighborhoods among blacks than among whites. However, studies of interneighborhood migration have yet to compare systematically the effects of socioeconomic resources among blacks, Latinos, and Anglos, so whether blacks are more or less able than Latinos, and whether Latinos are more or less able than whites, to convert SES into spatial proximity with Anglos is unknown. The weak version of the place stratification model, with its emphasis on the unique barriers to desirable neighborhood attainments faced by African Americans, implies a stronger effect of socioeconomic status among blacks than among Latinos.

The spatial assimilation and place stratification models of minority locational attainment focus almost exclusively on the ability of minority groups to achieve residential integration with the white majority. As such, these perspectives are virtually silent on the patterns and determinants of migration between neighborhoods characterized by varying representations of specific minorities. In a multi-ethnic world, however, the sustainability of ethnically diverse neighborhoods requires not only a willingness for the majority group to share neighborhoods with minorities (and vice versa), but also a willingness for various minority groups to share neighborhoods with one another.

The existing literature presents somewhat conflicting images regarding the willingness of various minority groups to have each other as neighbors and, indirectly, the inter-neighborhood migration patterns that create residential segregation among different minority groups. Given strong preferences for neighbors of the same race and ethnicity (Clark 2002), it is expected that members of each ethno-racial group will be most likely to move to neighborhoods with larger shares of their own race and ethnicity. It is also clear that non-black racial and ethnic groups are least willing to have blacks as neighbors (Charles 2006). Less clear is how blacks differ from Anglos in their propensities to move to neighborhoods with a given representation of Latinos, and how Latinos differ from Anglos in their propensities to move to neighborhoods with a given representation of blacks. Levels of segregation between Latinos and blacks are on the whole fairly similar to levels of segregation between blacks and whites, though they vary substantially by specific Latino ethnicity and across metropolitan areas (Logan 2002). At least in Los Angeles, native-born Latinos differ little from whites in their stated preferences for black neighbors, although foreign-born Latinos express significantly greater aversion to black neighbors (Charles 2006).

Of course, complicating the translation of these residential preferences into actual geographic moves are socioeconomic differences in neighborhoods of varying racial and ethnic compositions. On the one hand, greater socioeconomic similarity between predominantly Latino and predominantly black neighborhoods than between either of these and predominantly Anglo neighborhoods may generate higher levels of black (than Anglo) migration into "Latino" communities and higher levels of Latino (than Anglo) migration into "black" communities. The simple affordability of neighborhoods with a given racial-ethnic composition may partially govern ethno-racial differences in this dimension of inter-neighborhood migration. On the other hand, once group differences in socioeconomic resources are controlled, the effects of racial animus between minority groups are likely to emerge. Although such animus is admittedly not overwhelming in the neighborhood preferences of Los Angeles residents (Charles 2006; see also Bobo and Zubrinsky 1996), evidence from other metropolitan areas frequently indicates considerable tensions between Latinos and African Americans (Mindiola, Niemann, and Rodriguez 2002; Wilson and Taub 2006) that may rival those between Anglos and both Latinos and blacks. Both blacks and Latinos frequently hold negative stereotypes about, and perceive competition from, the other group (Bobo and Hutchings 1996). Accordingly, Latinos may be equally if not more averse than Anglos to moving to neighborhoods with comparatively large black populations, and blacks may be equally if not more averse than Anglos to moving to neighborhoods with comparatively large Latino populations.

We also anticipate differences among the main Latino ethnic groups in their migration into neighborhoods with large black or Latino populations. Because of a greater sharing of racial identity with African Americans, Puerto Ricans are perhaps less likely than Mexicans or Cubans to shun neighborhoods with large black populations. At the other extreme, high levels of antipathy between Cubans and blacks (Stepick and Grenier 1993) may find Cubans exceptionally averse to moving into neighborhoods with large black populations. Within these ethnic groups, we further expect differences by nativity. In particular, we expect foreign-born

Latinos, relative to their native-born counterparts, to shun neighborhoods with large black populations and, instead, to be especially likely to gravitate to neighborhoods with large Latino populations, where co-ethnics can provide social and economic support.

DATA AND METHODS

To address these issues, we use longitudinal data from the Panel Study of Income Dynamics (PSID) for the period 1990-1995, in conjunction with data on census tracts from the decennial census. Begun in 1968 with approximately 5,000 families, the PSID sample has been interviewed annually, and new families have been added to the sample as children leave home to form new households (Hill 1992). In 1990 the PSID added a new sample of 2,043 Latino families. This sample was originally drawn as part of the Latino National Political Survey. From 1990 to 1995, the PSID interviewed on an annual basis the members of those households and, as with the PSID core sample, followed those members who left the original household.

We use census tracts to represent neighborhoods. Attaching census data on the tract-level percentages of the population that is non-Hispanic white, non-Hispanic black, and Latino at each annual interview allows us to track prospectively which PSID respondents move between neighborhoods of varying racial and ethnic composition.

Sample Selection

To examine residential moves made by Latino, black, and Anglo families, our sample includes PSID respondents who were classified as heads of the household either at the beginning *or* at the end of an annual mobility interval. By including family members who were not the household head at the beginning of the interval but become the head at the end of the interval —e.g., when a child leaves the parental home or when an ex-spouse establishes a new residence —we incorporate "spinoff" households. To align our results more closely with studies of residential segregation, we restrict the sample to PSID household heads who began and ended a mobility interval in a metropolitan area. Applying these selection criteria results in a sample of 9,605 PSID respondents. They are distributed across a total of 313 metropolitan areas (though not all race/ethnic/nativity groups are represented in all areas).

Dependent Variables

Our dependent variables are the percentages of the population in the census tract of destination that are non-Hispanic white (*i.e.*, *Anglo*), *non-Hispanic black*, *and Latino*. These variables are constructed only for respondents who moved out of their census tract of origin between consecutive PSID interviews. We include both intra-metropolitan moves (about 80% of all moves) and inter-metropolitan moves (and 20% of all moves) because preliminary analyses found similar results for both types. Tract-level census data are drawn from the Neighborhood Change Database, which normalizes 1990 and 2000 census information to 2000 census boundaries. The restricted-use PSID Geocode data provide 2000 census tract identifiers for observations in all years of the study, thereby eliminating the possibility that changes in tract boundaries could be misconstrued as a change in residential location. We use linear interpolation to estimate the racial and ethnic composition of census tracts during intercensal years.

Independent Variables

We distinguish among eight racial/ethnic/nativity groups: non-Hispanic whites (hereafter "Anglos"), non-Hispanic blacks (hereafter simply "blacks") and, separately, respondents of Mexican origin, Puerto Rican origin, and Cuban origin. Because the spatial assimilation model posits fundamental differences between the locational attainments of immigrants and native-born minorities, we further distinguish between the foreign-born and native-born members of

the three Latino groups. (Latinos of other origins, members of racial groups other than black or white, and foreign-born whites and blacks are represented in too few numbers in the PSID to sustain analysis.) Given the restrictions described above, our effective total sample includes 4,325 Anglos, 3,134 blacks, 579 foreign-born Mexicans, 604 native-born Mexicans, 307 island-born Puerto Ricans, 112 mainland-born Puerto Ricans, 472 foreign-born Cubans, and 72 native-born Cubans. (Although island-born Puerto Ricans are technically internal migrants rather than immigrants, we consider them immigrants in this analysis in order to draw comparisons with foreign-born Mexicans and Cubans.)

We include four other variables in our substantive models. Family income refers to the total taxable income of husband and wife, measured in thousands of constant 1990 dollars. Education is measured by years of school completed. Home ownership is a dummy variable scored 0 for renters and 1 for owners. Because families with children might be especially likely to seek out neighborhoods with a particular ethno-racial composition, we include the total number of children in the household. These variables are measured annually at the beginning of each migration interval and are treated as time-varying covariates.

Analytical Strategy

We have information on the ethno-racial composition of respondents' census tract at each annual interview and thus it is possible to observe more than one residential move for each respondent between 1990 and 1995. To exploit this information, we structure the data file in "person-year" format, each observation pertaining to the year between annual consecutive interviews. Each PSID respondent in our sample could contribute a maximum of 5 person-years to the analysis. The 9,605 PSID respondents in our sample contributed 32,867 person-year observations to the analysis. Because the same PSID respondent can contribute more than one person-year to the analysis, and because inter-neighborhood mobility is a repeatable event, the usual assumption of the stochastic independence of error terms underlying tests of statistical significance is violated. We correct for this non-independence of observations by computing robust standard errors.

Because our dependent variables-measures of the racial/ethnic composition of destination neighborhoods—are unobserved for respondents who do not move from one neighborhood to another between successive PSID interviews, sample selection bias may adversely affect our results. Accordingly, we estimate our models using a maximum-likelihood Heckman procedure (Stolzenberg and Relles 1997). In our application of the Heckman procedure, the "selection" equation includes all of the regressors described above as well as several socioedemographic characteristics that predict selection into the category of "mover." Age is measured in years, and its squared value is included to capture nonlinear effects on the propensity to migrate. Sex and marital status are captured by dummy variables for females and married or long-term cohabitors. Residents of public housing are distinguished from residents of private sector housing by a separate dummy variable. Household crowding is measured by the number of persons per room. We also include measures of the tract of origin racial composition and the metropolitan area of origin racial composition, since both factors are likely to influence the probability of moving. Because the Heckman method is sensitive to underlying assumptions (Winship and Mare 1992), we also explored alternative estimation strategies, including estimating the models only on the subcategory of movers. Our findings were quite robust across these different strategies. Because the variables that appear only in the selection equation are of minor interest, we do not present descriptive statistics or coefficients for them.

RESULTS

Table 1 presents descriptive statistics for the key variables used in the analysis, separately for the eight race/ethnic/nativity groups. Members of these groups exhibit sharp differences in the

percentage of the destination tract population that is non-Hispanic white. Not surprisingly, the most marked differences are between non-Hispanic whites and the minority groups. Anglo inter-tract movers relocate on average to a census tract that is 81.42% non-Hispanic white. The corresponding mean "percent Anglo" in the tracts that members of the other groups move to ranges from 26.68% (for foreign-born Cubans) to 48.62% (for native-born Cubans). With an average of 31.22% of the population in their destination tracts being Anglo, blacks exhibit the second smallest percentage Anglo in their tracts of destination (after foreign-born Cubans). They are followed, in ascending order, by foreign-born Mexicans (32.66% Anglo), island-born and mainland-born Puerto Ricans (41.44% Anglo and 42.47% Anglo, respectively), nativeborn Mexicans (47.53% Anglo), and the native-born Cubans (48.62% Anglo). Thus, with the exception of foreign-born Cubans, blacks appear unduly disadvantaged in attaining residential proximity to whites relative to most Latino groups, a result that is largely consistent with a key postulate of the place stratification model of minority location attainment.

These groups also differ substantially in the percentages of the destination tract population that are black and Latino. Blacks move to tracts whose population is on average almost 58% black, compared to only 6.37% black among Anglo migrants. Among the Latino groups, Puerto Ricans move to tracts that are more heavily black (about 17%) than the tracts that Mexicans or Cubans move to (between 6% and 10% black). Within the Latino groups, differences by nativity are slight, although foreign-born Cubans move to tracts with moderately fewer blacks (6.0%) than do their native-born co-ethnics (10.12%).

Further reflecting the tendency for racial and ethnic groups to move to neighborhoods dominated numerically by their own group, Latinos move to neighborhoods with substantially larger shares of Latinos than do either blacks or Anglos. On average, blacks and Anglos relocate to neighborhoods in which 7% of the population is Latino. Latinos, in contrast, move to neighborhoods that are between 33% Latino (for mainland-born Puerto Ricans) and 65% Latino (for foreign-born Cubans). As anticipated by the spatial assimilation model, native- (island-) born members of the three Latino groups move to neighborhoods that have proportionally fewer Latinos than do their foreign- (mainland-) born counterparts, although the difference among Puerto Ricans is small.

The descriptive statistics presented in Table 1 also reveal sharp differences among these groups in the key indicators of socioeconomic status—family income and educational attainment. Anglos have the highest mean family incomes (\$40,550), followed by native-born Cubans (\$32,250). At the low end of the income distribution are island-born Puerto Ricans (\$11,420), followed in ascending order by foreign-born Mexicans (\$17,270), mainland-born Puerto Ricans (\$17,880) and non-Hispanic blacks (\$17,910). With regard to educational attainment, non-Hispanic whites have completed the most years of schooling (13.29) and foreign-born Mexicans the least (8.05). Anglos enjoy the highest rate of homeownership (66%), while island-born Puerto Ricans are least likely to own their homes (18%). Mexicans and Puerto Ricans have more children in the households than do the other groups.

Table 2 presents a series of linear regression models designed to examine the effects of the explanatory variables on the percentage of the population that is Anglo in the destination tract. Model 1 presents the gross differences in the percentage Anglo in the destination tract among the eight groups. All seven of the minority groups move to tracts that are substantially and significantly less Anglo than the tracts that non-Hispanic whites move to. At one extreme, foreign-born Cubans move on average to tracts that are 55 percentage points less Anglo than the tracts that are 50 percentage points less Anglo than the tracts that are 33 percentage points less Anglo than the tracts that non-Hispanic whites move to. At the other extreme, native-born Cubans move to, and they are followed closely by native-born

Mexicans, with a difference of 34 percentage points. For Mexicans and Cubans, differences between immigrants and the native-born correspond well with the tenets of the classical spatial assimilation model: Compared to their native-born counterparts, foreign-born Mexicans and Cubans move to neighborhoods that are 15 percentage points less Anglo (b for foreign-born Mexicans = -49, b for native-born Mexicans = -34) and 22 percentage points less Anglo (b for foreign-born Mexicans = -55, b for native-born Cubans = -33), respectively. In contrast, mainland-born and island-born Puerto Ricans are quite similar—both groups move to tracts that are 39-40 percentage points less Anglo than the tracts that non-Hispanic whites move to. Thus, on a purely descriptive basis, Puerto Ricans conform the least well of the three Latino groups to the spatial assimilation model's prediction regarding differences between the nativeborn and foreign-born in their ability to attain spatial proximity with the white majority, a finding consistent with South, Crowder, and Chavez (2005).

It is likely that gross differences among race/ethnic/nativity groups in their propensity to move to neighborhoods with a sizable proportion of Anglos are influenced by the distribution of these groups across different metropolitan areas. For example, groups that are clustered in metropolitan areas with comparatively few Anglos will have lesser opportunity to move to Anglo neighborhoods than groups concentrated in more heavily Anglo metropolitan areas. To account for these differences, Model 2 of Table 2 adds dummy variables for the metropolitan areas of destination to Model 1 (coefficients for dummy variables not shown). These metropolitan fixed-effect models thus partial out the effects of all metropolitan area characteristics.

Controlling for the metropolitan area characteristics modifies considerably the gross differences shown in Model 1. Although differences in the destination tract percent Anglo between Anglos, on the one hand, and all seven minority groups, on the other, remain statistically significant and substantial, some differences are diminished substantially by the introduction of a control for metropolitan area characteristics. For example, the difference between Anglos and foreign-born Cubans drops from 55 percentage points (Model 1) to 25 percentage points (Model 2), and among the six Latino groups, all of the differences are reduced by at least 20 percent. In contrast, the difference between Anglos and blacks in the percentage of the destination population that is non-Hispanic white drops less precipitously—from 50 percentage points to 43 percentage points. A key reason for these differences between blacks and Latinos is that Latinos tend to be much more concentrated than blacks in metropolitan areas with comparatively few non-Hispanic whites. These findings demonstrate that, relative to Latinos, even immigrant Latinos, African Americans are uniquely disadvantaged in their ability to become the neighbors of non-Hispanic whites—a result consistent with the place stratification model of minority locational attainment.

Model 3 of Table 2 adds the four additional variables that are thought to influence minorities' spatial proximity to the white non-Hispanic majority. The coefficients for both family income and educational attainment are, as hypothesized, positive, and both are statistically significant. But neither effect is strong. A difference of \$1000 in family income translates into a difference of only .08 points in the percentage of the destination tract that is Anglo. And, a difference of one year in completed schooling translates into a difference of only 1 point in the percentage Anglo in the destination tract. Net of other factors, home ownership is not significantly associated with the percentage of the destination tract population that is Anglo. Perhaps surprisingly, number of children is significantly and inversely associated with percent Anglo in the destination tract. This effect may result from the tendency for families with children to move to larger dwellings in less expensive neighborhoods, which also tend to have fewer Anglos.

Controlling for these individual and family characteristics diminishes only slightly differences between Anglos and minority group members in the percentage of the destination tract population that is Anglo. Most differences drop only a few percentage points. And, among the minority groups, blacks continue to stand out as moving to neighborhoods with the fewest Anglo residents.

As noted above, a key hypothesis derivable from the place stratification model is that minorities will differ from the Anglo majority in their ability to convert socioeconomic resources into residence in "more Anglo" neighborhoods. Drawing on the weak version of the place stratification model, we anticipate that the positive effect of income on the percentage of the destination tract population that is Anglo will be stronger among the minority groups than among non-Hispanic whites. Model 4 of Table 3 tests this hypothesis by adding to Model 3 the appropriate product terms that allow the effect of income to vary among the racial/ethnic/ nativity groups.

The results are partially consistent with the hypothesis. The effect of family income on destination tract percent Anglo among non-Hispanic whites, as indicated by the main effect of family income, is positive (b = .035) and statistically significant, but fairly weak. As indicated by the coefficients for the product terms, the effect of income is significantly stronger among four of the seven minority groups. Among blacks, native- and foreign-born Mexicans, and mainland-born Puerto Ricans, the effect of income is significantly more positive than among Anglos. The effect is strongest among mainland-born Puerto Ricans: every \$1000 of family income translates into an increase of .317 (.035 + .282 = .317) in destination tract percent Anglo. They are followed closely by foreign-born Mexicans (b = .035 + .267 = .302). Blacks do not appear to stand out greatly from the other minority groups in their ability to convert income into residential proximity to Anglos. Among blacks, the effect of income (b = .035 + . 232 = .267) is weaker than the corresponding effect among mainland-born Puerto Ricans and foreign-born Mexicans, but stronger than the effect among the other Latino groups. On this score, then, blacks do not appear to be uniquely disadvantaged relative to at least some Latino groups, a finding that seems inconsistent with the place stratification model.

Within the Latino groups, nativity inconsistently moderates the relationship between family income and the percentage of the population that is Anglo in the tract of destination. Among Mexicans, the positive effect of income is stronger among immigrants than among the native-born. But among Puerto Ricans the effect is stronger among the mainland-born than among the island-born. And, the effect of income on destination tract percent Anglo differs only slightly between foreign-born and native-born Cubans.

Moving into Minority Neighborhoods

As noted above, high levels of migration into neighborhoods with relatively large Anglo populations raise the issue of what types of neighborhoods these migrants are avoiding, and low levels of migration into "more Anglo" neighborhoods raise the issue of what types of neighborhoods these migrants are moving to. The preceding analyses, of course, tell us that these neighborhoods have relatively large minority (i.e., other than non-Hispanic white) populations, but they fail to reveal the specific racial and ethnic composition of these neighborhoods. The analyses presented in Tables 3 and 4 explore the determinants of migration into neighborhoods defined by the percentages of their population that are non-Hispanic black and Latino.

The first model in Table 3 presents the gross differences among the eight race/ethnic/nativity groups in the percentage of the destination tract population that is black. The overwhelming effect of race on inter-neighborhood migration patterns is readily apparent in this model. Compared to non-Hispanic whites, blacks move to neighborhoods that are on average 52

percentage points more black. Perhaps surprisingly, neither Mexicans nor Cubans (regardless of nativity) differ significantly from Anglos in the percentage of the destination tract population that is black. In contrast, both groups of Puerto Ricans move to neighborhoods that are significantly more black than the neighborhoods that Anglos move to—a difference of about 10 percentage points. These migration patterns reinforce the slightly lower levels of segregation between blacks and Puerto Ricans relative to segregation between blacks and other Hispanic groups.

Model 2 of Table 3 adds the metropolitan-area dummy variables. Taking into account the differential distribution of these groups across metropolitan areas alters the results somewhat. The difference between blacks and Anglos declines slightly but remains pronounced (42 percentage points). Differences between native-born and foreign-born Mexican and native-born Cubans, on the one hand, and Anglos, on the other, grow larger such that all three differences are now significant. But while the gap between blacks and Latinos has shrunk, the differences remain large. Blacks move to neighborhoods that are at least 33 percentage points more black than any of the Latino subgroups, and these differences dwarf the much smaller differences between Latinos and Anglos in the percentage of the destination tract population that is black (.5 to 9 percentage points). Foreign-born Cubans move to tracts that are modestly less black than the tracts that the other Latino groups move to, but differences among these groups are quite small. Thus, we find little evidence that the different Latino ethnicities vary in their aversion to black neighbors (relative to blacks themselves). And, within the three Latino ethnicities, differences between the foreign-born and the native-born are also modest; the largest difference—6 percentage points—is between foreign-born and native-born Cubans.

Model 3 adds the four sociodemographic predictors. For the sample as a whole, both income and education are inversely and significantly associated with the percentage of the destination tract population that is black, while the number of children is significantly and positively related to this dimension of tract ethno-racial composition. Controlling for these factors reduces somewhat the gap between Latinos and Anglos in the percentage of the destination tract population that is black. In particular, the previously significant differences between Anglos, on the one hand, and foreign-born Mexicans and island-born Puerto Ricans, on the other, are now rendered nonsignificant. The pronounced difference between Anglos and black is reduced only slightly.

Model 4 examines whether the effect of income on migration into neighborhoods defined by relative black population size differs across the racial/ethnic/nativity groups. Among Anglos (the reference category) the effect of income is virtually nil (b = -.012). In contrast, the income coefficient for blacks (-.012 - .277 = -.289) differs significantly from the coefficient for Anglos (as well as from zero). But none of the coefficients for the product terms involving Latinos attains significance (nor do any of the income coefficients for these individual subgroups). Thus, blacks use higher incomes to avert moving into neighborhoods with relatively large black populations, as the classical assimilation model would seem to suggest. However, Anglos and Latinos avoid moving into "more black" neighborhoods regardless of their own incomes. Among these groups, rich and poor alike avoid moving to neighborhoods with large black populations.

Table 4 presents the analogous analyses of migration into neighborhoods characterized by the percentage of their population that is Latino. As shown in Model 1, non-Hispanic blacks do not differ significantly from Anglos in the percentage of the destination tract population that is Latino. But all of the Latino groups move to neighborhoods that are significantly more Latino than the neighborhoods that Anglos (or blacks) move to. Among Latinos, foreign-born Cubans move to tracts having the largest proportional representation of Latinos (67% = 8.848 + 58.007), while mainland-born Puerto Ricans move to tracts having the fewest Latinos (35% = 8.848 + 58.007)

25.747). And, consistent with spatial assimilation theory's emphasis on the importance of immigration for subsequent locational attainments, for each Latino subgroup the percent Latino in the destination tract is lower among the native- (mainland-) born than among the foreign-(island-) born, although the difference for Puerto Ricans is quite small.

Model 2 adjusts for group differences in the structure of metropolitan areas by adding dummy variables for these areas. This adjustment modestly affects the difference between black and whites; blacks now move to neighborhoods that are significantly, albeit only slightly, more Latino than the neighborhoods that Anglos move to. Controlling for metropolitan area characteristics attenuates, but does not eliminate, differences between Latinos and Anglos in the percentage of the destination tract population that is Latino. All of the gross differences are reduced by at least one-quarter, and in some cases by much more than this. Supplementary analyses revealed that much of gross differences results from differences between Latinos and Anglos in the racial/ethnic composition of their metropolitan areas. Compared to Anglos, Latinos tend to reside in metro areas with much larger Latino populations, and residing in such areas sharply increases the percentage of the destination neighborhood that is Latino. Within the Latino ethnicities, differences by nativity continue to conform to expectations, although again the difference among Puerto Ricans is miniscule.

Adding the four sociodemographic predictors (Model 3, Table 4) has little influence on these differences. Income and education are significantly and inversely related to, and the number of children is significantly and positively related to, the percentage of the destination tract population that is Latino. But controlling for these factors does little to alter group differences; the sole exception is that the difference between blacks and Anglos becomes negative but non-significant. This model, in conjunction with prior results, yields two important results. First, even after adjusting for group differences in metropolitan location and sociodemographic characteristics, blacks do not differ from Anglos in the propensity to migrate into neighborhoods containing large numbers of Latinos. Second, although Anglos avoid both largely black and largely Latino neighborhoods, they move to neighborhoods with fewer blacks than Latinos (compare Model 3, Table 3 with Model 3, Table 4), a finding consistent with the place stratification model.

Model 4 of Table 4 adds the product terms representing the interaction between racial/ethnic/ nativity group and income. Among Anglos, higher income is associated with migration into neighborhoods with significantly fewer Latinos (b = -.021). But this effect differs significantly from the corresponding effect among four of the racial/ethnic/nativity groups. Among blacks, the effect of income on destination tract percent Latino is significantly less negative—indeed slightly positive (.007 = -.021 + .028). And among Mexicans and mainland-born Puerto Ricans, the effect of income on destination tract percent Latino is significantly more negative than among Anglos. These Latino groups, then, tend to use higher income to avoid moving to Latino neighborhoods in order to purchase residence in more Anglo neighborhoods (as indicated by Model 4 of Table 2), consistent with a central tenet of spatial assimilation theory. Perhaps surprisingly, the negative effect of income is strongest among foreign-born Mexicans, who have been portrayed as resistant to assimilation (Huntington 2004).

DISCUSSION AND CONCLUSION

Theories of racial/ethnic segregation and spatial assimilation invoke processes of interneighborhood migration, as members of different groups move, with varying propensities, to neighborhoods of particular racial and ethnic compositions. Yet, most tests of these theories neglect these migration patterns, focusing instead on the static aggregate population distributions that define segregation (e.g., Farley and Frey 1994) or on the cross-sectional, individual-level correlates of neighborhood racial and ethnic composition (e.g., Alba and Logan 1993). The few studies that have examined these inter-neighborhood migration patterns (e.g., Quillian 2002; South, Crowder, and Chavez 2005) have failed to compare simultaneously the experiences of multiple racial and ethnic groups, and have thus failed to consider how, via migration, members of different minority groups attain, or fail to attain, spatial proximity with the white non-Hispanic majority and with other minority groups.

Consistent with the key tenets of the spatial assimilation theory, among blacks and some Latino subgroups, we find that higher income and education facilitate migration into neighborhoods with relatively large Anglo populations. Consequently, the oft-observed cross-sectional associations between these indicators of socioeconomic status and the percentage of the neighborhood population that is Anglo do not appear to reflect entirely reverse causation— i.e., higher minority attainments as a result of residing in largely Anglo neighborhoods. Also as anticipated by the classical model of spatial assimilation, patterns of inter-neighborhood migration among Mexicans are differentiated by nativity, with immigrants, relative to the native-born, moving to neighborhoods that have fewer Anglos, even after controlling for other determinants.

But our analysis also reveals several findings that are seemingly incompatible with, or at least unanticipated by, spatial assimilation theory, and that appear more consistent with hypotheses derived from the place stratification model of minority locational attainment. Consistent with the place stratification model's emphasis on the unique disadvantages of African American racial status, after adjusting for socioeconomic and geographic determinants of interneighborhood migration, whites avoid black more than Latino neighborhoods, and blacks move to neighborhoods containing proportionally fewer Anglos than the neighborhoods that Latinos move to. And, while higher income generally facilitates the migration of blacks and Latinos into "more Anglo" neighborhoods, high income is not a requirement for Anglos to make such moves. Rather, non-Hispanic whites of all income levels move to neighborhoods that are predominantly Anglo.

Theories of minority spatial attainment and attendant empirical analyses focus almost exclusively on minorities' ability to achieve spatial proximity to the white, non-Hispanic majority. Consequently, we know little about how inter-neighborhood migration leads to the residential segregation of minorities from one another. But the sharing of neighborhoods among different minority groups is likely to foster primary group ties (Brown 2006), pan-ethnic organizations (Okamoto 2003), and other forms of social integration (Blau 1977). We explore this issue here by examining the racially- and ethnically-differentiated patterns of migration into neighborhoods characterized by the proportions of their population that are black and Latino. A key finding from this part of our analysis is that Latinos tend to move to neighborhoods that are only slightly, if at all, more black than the neighborhoods that Anglos move to. While white avoidance of neighborhoods with large black populations is undoubtedly a key proximate cause of racial residential segregation (Quillian 2002), whites' aversion to moving near blacks is only slightly more pronounced than Latinos' aversion to black neighbors. Moreover, blacks tend to move to neighborhoods whose proportional representation of Latinos does not differ from the neighborhoods that Anglos move to. Patterns of inter-neighborhood migration, then, tend not only to separate minorities from Anglos; they also work to separate the two largest minority groups in the U.S. from each other. In addition to confronting the discriminatory behaviors that ostensibly impede the migration of minorities into predominantly Anglo neighborhoods, the quest for stable, multi-ethnic neighborhoods will also need to address the inter-neighborhood migration patterns that reflect minority groups' apparent aversion to having each other as neighbors.

Finally, our results may have implications for the future of residential segregation between Latinos and Anglos. We find that a substantial proportion of the difference in inter-

neighborhood migration patterns between Latinos and Anglos is attributable to the differential distribution of these groups across metropolitan areas, in particular the clustering of Latinos in heavily Hispanic areas. As Latinos move to metropolitan areas in which they have historically been underrepresented and where levels of Latino-Anglo segregation are relatively low (Fischer and Tienda 2006), overall levels of segregation between Latinos and Anglos are likely to decline. Although these declines may be tempered by increases in segregation within metropolitan areas, the geographic dispersal of Latinos to new destinations is likely to enhance the sharing of neighborhoods between Latinos and Anglos.

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Table 1

Descriptive Statistics for Key Variables Used in the Analysis of Inter-Neighborhood Migration by Race, Ethnicity, and Nativity: Panel Study of Income

	Nati Bor Mexic	ve- n ans	Foreign Mexic	-Born ans	Mainl Born P Rica	and- uerto ms	Island- Pue: Rica	Born to ns	Native Cub	-Born ans	Foreign Cub	1-Born ans	Non-Hi bla	ispanic tck	Non-Hi whi	spanic ite
Variables	Mean	S.D	Mean	S.D.	Mean	S.D	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Dependent Variables																
Percent Anglo in destination tract ^a	47.53	27.99	32.66	26.91	42.47	29.81	41.44	29.78	48.62	31.02	26.68	22.97	31.22	29.87	81.42	18.58
Percent black in destination tract ^a	7.02	10.44	8.11	14.11	16.55	22.07	16.78	20.48	10.12	14.12	6.01	14.11	57.93	34.08	6.37	10.98
Percent Latino in destination tract ^a	39.20	29.19	51.20	29.26	32.89	24.39	35.73	26.97	37.28	32.76	65.09	28.08	7.03	12.56	7.34	12.02
Independent Variables																
Family income (in \$1,000s)	22.27	25.57	17.27	17.05	17.88	22.08	11.42	16.26	32.25	34.15	18.76	21.22	17.91	21.39	40.55	60.83
Education (years)	10.90	3.67	8.05	3.98	11.58	3.03	9.01	4.03	11.84	3.13	10.79	3.88	11.66	2.66	13.29	2.61
Homeowner	.56	.50	.42	.49	.21	.41	.18	.38	.58	.49	.50	.50	.34	.47	99.	.47
Number of children	1.19	1.39	1.80	1.51	1.23	1.42	1.15	1.33	.65	76.	.60	.92	1.09	1.32	.78	1.09
N of Person-Years	213	5	205	7	38	6	107	6	26	7	175	53	104	182	147	05
N of Persons	709	+	575	•	11:	2	30	7	77	6	47	2	31.	34	432	25

aPercentages of tract racial/ethnic composition based on movers only.

Table 2

Coefficients for Linear Regression Models of the Percentage of the Destination Tract Population That is Non-Hispanic White: Panel Study of Income Dynamics, 1990-1995 a

	Model	1	Model	2b	Model.	3 b	Model	^{4}b
Independent Variables	p	(s.e.)	p	(s.e.)	p	(s.e.)	p	(s.e.)
Race/Ethnicity/Nativity:								
Anglo (ref.)	:		I		ł		:	
Non-Hispanic Black	-50.092^{***}	(.867)	-43.115^{***}	(.961)	-39.518^{***}	(1.003)	-44.200^{***}	(1.171)
Native-Born Mexicans	-33.849^{***}	(1.798)	-22.410^{***}	(1.740)	-18.799^{***}	(1.714)	-22.479	(2.291)
Foreign-Born Mexicans	-48.950^{***}	(1.852)	-34.305***	(1.776)	-26.008^{***}	(1.834)	-31.746^{***}	(2.382)
Mainland-Born Puerto Ricans	-39.194^{***}	(4.568)	-29.670^{***}	(4.046)	-25.679***	(3.755)	-31.599^{***}	(4.839)
Island-Born Puerto Ricans	-40.402	(3.297)	-28.122^{***}	(2.969)	-20.702^{***}	(3.080)	-20.660^{***}	(3.971)
Native-Born Cubans	-32.712***	(5.930)	-22.117^{***}	(2.966)	-21.236^{***}	(2.763)	-20.771^{***}	(3.655)
Foreign-Born Cubans	-55.074^{***}	(1.944)	-24.857	(2.932)	-20.416^{***}	(2.993)	-20.983^{***}	(3.607)
Other Independent Variables:								
Family income (\$1990)					.080	(.012)	.035***	(600.)
Education					1.147^{***}	(.145)	1.055^{***}	(.145)
Homeowner					.478	(1.035)	.270	(1.032)
Number of children					-1.338^{***}	(.282)	-1.289^{***}	(.280)
Interactions of Family Income with:								
Non-Hispanic Black							.232***	(.037)
Native-Born Mexicans							.132*	(.067)
Foreign-Born Mexicans							.267**	(.086)
Mainland-Born Puerto Ricans							.282**	(.085)
Island-Born Puerto Ricans							-060	(.150)
Native-Born Cubans							001	(.055)
Foreign-Born Cubans							022	(.068)
Lambda (λ)	1.519	(1.498)	1.891	(1.001)	1.423	(1.264)	1.549	(1.252)
Constant	79.494 ^{***}	(2.003)	103.869^{***}	(7.570)	84.543 ^{***}	(7.588)	86.188 ^{***}	(7.320)

	Model	1	Model 2	2 b	Model 3	q	Model 4	q^{\dagger}
Independent Variables	p	(s.e.)	q	(s.e.)	p	(s.e.)	q	(s.e.)
BIC	76174.02		77198.02		77026.95		77025.37	
N of Uncensored Observations	5484		5484		5484		5484	
N of Censored Observations	27383		27383		27383		27383	
N of Person-years	32867		32867		32867		32867	
N of Persons	9605		9605		9605		9605	
Notes:								
* p<.05;								
** p<.01;								
*** p<.001								

^a Models were estimated with maximum-likelihood Heckman selection using the following variables in the selection equation: race/ethnicity/nativity, family income, education, homeowner, number of children, age, age squared, sex, marital status, persons per room, tract of origin racial composition, and metropolitan area racial composition.

 $\boldsymbol{b}^{}$ Models 2-4 include dummy variables for metropolitan areas of destination.

Table 3

Coefficients for Linear Regression Models of the Percentage of the Destination Tract Population That is Non-Hispanic Black: Panel Study of Income Dynamics, 1990-1995 a

	Mode	11	Mode	12b	Model	3 b	Mode	14b
Independent Variables	<i>p</i>	(s.e.)	p	(s.e.)	p	(s.e.)	В	(s.e.)
Race/Ethnicity/Nativity:								
Anglo (ref.)	I		1		1		1	
Non-Hispanic black	51.598***	(968.)	42.430 ^{***}	(1.000)	40.015***	(1.045)	45.359 ^{***}	(1.237)
Native-Born Mexicans	.664	(.694)	5.399***	(.953)	3.234**	(866.)	4.317**	(1.390)
Foreign-Born Mexicans	1.679	(.955)	6.836^{***}	(1.176)	1.630	(1.323)	1.840	(1.661)
Mainland-Born Puerto Ricans	10.095^{**}	(3.286)	9.357**	(2.977)	6.542	(2.897)	9.160^{*}	(4.002)
Island-Born Puerto Ricans	10.261^{***}	(2.435)	6.017^{*}	(2.514)	.877	(2.740)	2.526	(3.127)
Native-Born Cubans	3.789	(1.964)	6.523^{**}	(2.149)	6.106^{**}	(2.132)	6.335^{*}	(3.112)
Foreign-Born Cubans	476	(1.079)	.530	(2.077)	-2.580	(2.225)	-3.014	(2.388)
Other Independent Variables:								
Family income					053***	(.012)	012	(.007)
Education					698	(.136)	612^{***}	(.135)
Homeowner					-1.585	(166.)	-1.301	(976)
Number of children					.705*	(.283)	.641 [*]	(.279)
Interactions of Family Income with:								
Non-Hispanic black							277***	(.041)
Native-Born Mexicans							019	(.033)
Foreign-Born Mexicans							.049	(.054)
Mainland-Born Puerto Ricans							095	(.105)
Island-Born Puerto Ricans							023	(.134)
Native-Born Cubans							015	(.043)
Foreign-Born Cubans							.074	(.044)
Lambda (λ)	.534	(1.190)	.184	(806.)	1.339	(1.240)	1.126	(1.207)
Constant	5.692^{***}	(1.543)	-13.878^{*}	(5.515)	-2.674	(5.798)	-3.134	(5.742)
BIC	75331.94		76908.52		76856.44		76836.60	

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	Mode	11	Model	2^{b}	Model	3 b	Model	4^{b}
Independent Variables	p	(s.e.)	q	(s.e.)	p	(s.e.)	В	(s.e.)
N of Uncensored Observations	5484		5484		5484		5484	
N of Censored Observations	27383		27383		27383		27383	
N of Person-years	32867		32867		32867		32867	
N of Persons	9605		9605		9605		9605	
Notes:								
* p<.05;								
** p<.01;								
*** p<.001								
aModels were estimated with maximum-lik	kelihood Heckmaı	n selection usi	ig the followir	ig variables in	the selection e	quation: race/e	ethnicity/nativ	ity, family i

age, age squared, sex, marital status, persons per room, tract of origin racial composition, and metropolitan area racial composition.

 \boldsymbol{b}_{M} dodels 2-4 include dummy variables for metropolitan areas of destination.

Table 4

Coefficients for Linear Regression Models of the Percentage of the Destination Tract Population That is Latino: Panel Study of Income Dynamics, 1990-1995

South et al.

	Mode	11	Model	12 b	Model	3 b	Model	4 b
Independent Variables	p	(s.e.)	p	(s.e.)	p	(s.e.)	В	(s.e.)
Race/Ethnicity/Nativity:								
Anglo (ref.)	I		1		;		ł	
Non-Hispanic black	389	(.460)	1.111^*	(.440)	428	(.469)	743	(.564)
Native-Born Mexicans	31.833***	(1.830)	16.126^{***}	(1.523)	14.500^{***}	(1.497)	17.736^{***}	(1.953)
Foreign-Born Mexicans	44.011^{***}	(2.002)	27.046 ^{***}	(1.830)	23.300^{***}	(1.855)	29.130^{***}	(2.534)
Mainland-Born Puerto Ricans	25.747***	(3.407)	17.824^{***}	(3.385)	16.149^{***}	(3.299)	20.618^{***}	(4.134)
Island-Born Puerto Ricans	28.729 ^{***}	(3.385)	21.084 ^{***}	(2.974)	17.919^{***}	(2.998)	16.520^{***}	(3.664)
Native-Born Cubans	29.877***	(6.041)	15.590^{***}	(3.062)	15.106^{***}	(2.981)	14.421 ^{***}	(4.016)
Foreign-Born Cubans	58.007***	(2.373)	25.634 ^{***}	(2.935)	23.812 ^{***}	(2.932)	24.533 ^{***}	(3.496)
Other Independent Variables:								
Family income					028***	(900.)	021***	(900)
Education					530***	(.104)	519***	(.106)
Homeowner					087	(.604)	130	(.596)
Number of children					.698	(.164)	.712***	(.163)
Interactions of Family Income with:								
Non-Hispanic black							.028*	(.013)
Native-Born Mexicans							139*	(.055)
Foreign-Born Mexicans							327***	(.082)
Mainland-Born Puerto Ricans							248**	(.087)
Island-Born Puerto Ricans							.110	(.169)
Native-Born Cubans							.014	(.072)
Foreign-Born Cubans							036	(.082)
Lambda (λ.)	-1.190	(1.224)	-1.410	(.507)	-1.442	(099.)	-1.411	(.642)
Constant	8.848^{***}	(1.630)	5.911	(4.172)	14.813^{***}	(4.240)	13.561^{***}	(3.756)

	Model	11	Model	2 b	Model	3 b	Model	4b
Independent Variables	\boldsymbol{b}	(s.e.)	q	(s.e.)	p	(s.e.)	В	(s.e.)
BIC	71670.66		70996.69		70914.30		70907.85	
N of Uncensored Observations	5484		5484		5484		5484	
N of Censored Observations	27383		27383		27383		27383	
N of Person-years	32867		32867		32867		32867	
N of Persons	9605		9605		9605		9605	
Notes:								
k p<.05;								
** p<.01;								
*** p<.001								

^a Models were estimated with maximum-likelihood Heckman selection using the following variables in the selection equation: race/ethnicity/nativity, family income, education, homeowner, number of children, age, age squared, sex, marital status, persons per room, tract of origin racial composition, and metropolitan area racial composition.

 $^{b}\!\mathrm{Models}$ 2-4 include dummy variables for metropolitan areas of destination.