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MIGRATION, SEGREGATION, AND THE GEOGRAPHIC CONCENTRATION OF POVERTY*

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We analyze patterns of African-American mobility and white mobility in U.S. cities to determine the causes of geographically concentrated poverty. Using a special tabulation of the Panel Study of Income Dynamics that appends U.S. Census tract data to individual records, we analyze the movement of poor and nonpoor people into and out of five types of neighborhoods: white nonpoor, black nonpoor, black poor, black very poor, and racially and socioeconomically mixed neighborhoods. We find little support for the view that the geographic concentration of black poverty is caused by the out-migration of nonpoor blacks or that it stems from the net movement of blacks into poverty. Rather, our results suggest that the geographic concentration of poor blacks is caused by the residential segregation of African-Americans in urban housing markets.

William Julius Wilson was among the first to realize that poverty had become geographically concentrated in large American cities during the 1970s. In his book, *The Truly Disadvantaged* (1987), he pointed out that the number of people living in poverty areas (defined as census tracts with poverty rates of at least 20 percent) rose by 40 percent in the five largest U.S. cities between 1970 and 1980. Over the same period, the number of people living in *high*-poverty areas (those with poverty rates of at least 40 percent) grew by 69 percent. These trends occurred not only because poverty increased in areas that were already poor, but also because poor areas grew in number. In Chicago, for example, Wilson counted 16 poor community areas in 1970, but 26 in 1980; over the same period the number of high-poverty areas increased from 1 to 9 (1987:46–56).

Subsequent studies have generally confirmed Wilson's observations. According to Jargowsky and Bane (1991), the number of poor people living in census tracts with poverty rates over 40 percent increased by 30 percent during the 1970s. Studies by Hughes (1989) and Weicher (1990) also revealed sharp increases in the number of poor census tracts over the decade. Although comparable analyses have not been done using the 1990 Census, work by Nathan and Adams (1989) has suggested that the trend toward more concentrated poverty has continued during the 1980s. Between 1980 and 1986 the percentage of poor people living in poor neighborhoods grew from 40 percent to 57 percent.

This growth in concentrated urban poverty has been more pronounced for certain groups and regions than others. According to Massey and Eggers (1990), urban poverty was most concentrated among African-Americans and Puerto Ricans, and the sharpest increases were observed in the Northeast and Midwest. Jargowsky and Bane (1991) found that just 10 metropolitan areas contained most of the nation's ghetto poor: New York, Chicago, Newark, Philadelphia, Detroit, Columbus, Atlanta, Baltimore, Buffalo, and Paterson (NJ). ("Ghetto poor" were defined as people living in neighborhoods where the poverty rate exceeded 40 percent.) Likewise, Hughes (1989, 1990) identified six urban areas with the largest number of "impacted ghetto" areas: Detroit, Philadelphia, Chicago, Baltimore, Cleveland, and Washington. ("Impacted ghetto ar-

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eas" are racially isolated neighborhoods with multiple social and economic problems.)

The geographic concentration of poverty is alarming: The intense clustering of poor people in neighborhoods leads to a concentration of other deleterious social and economic circumstances associated with poverty. The fact that black poverty became more concentrated during the 1970s and 1980s implies a simultaneous concentration of crime, violence, welfare dependency, family disruption, and educational failure. These trends have produced an increasingly harsh and extremely disadvantaged social environment for African-Americans that has undermined their broader well-being in society (for a review of neighborhood effects see Jencks and Mayer 1990). What distinguishes poor blacks from the poor of other groups is the degree to which high rates of neighborhood poverty *overlap* other personal and family disadvantages (Foster and Furstenberg 1993).

Crane (1991) showed that the odds of dropping out of high school and the odds of having a teenage birth rise markedly as the percentage of low status workers in a neighborhood increases. Massey, Gross, and Eggers (1991) demonstrated that male joblessness among men and motherhood among single women rise steadily as neighborhood poverty grows. Hogan and Kitagawa (1985) showed that living in a poor neighborhood increases the likelihood of pregnancy among black adolescent girls and lowers the age of first sexual intercourse. Brooks-Gunn, Duncan, Klebanov, and Sealand (1993) detected "reasonably powerful neighborhood effects . . . on childhood IQ, teenage births, and school-leaving, even after the differences in the socioeconomic characteristics of families are adjusted for" (p. 353). Consistent with these findings, Datcher (1982) and Corcoran, Gordon, Laren, and Solon (1989) found that moving a hypothetical poor African-American male from his own neighborhood into one that would be typical for a poor white male would raise his years of schooling and annual earnings significantly.

Concentrated poverty also appears to have political effects. Cohen and Dawson (1993) demonstrate that as neighborhood poverty grows, African-Americans become less connected to political institutions, less likely to participate in the political process, less likely to believe in their own political efficacy, and more distrustful of other politicians. Concentrated urban poverty, in other words, leads black citizens to become estranged from the American polity.

Despite mounting evidence of the deleterious consequences of concentrated poverty, there is substantial disagreement about its causes. Generally, three hypotheses have been advanced. The first causal mechanism proposed is the class-selective migration of blacks, a view closely associated with Wilson (1987). Wilson argued that "the significant increase in the poverty concentration in these overwhelmingly black communities is related to the large out-migration of nonpoor blacks" (p. 50). During the 1970s and 1980s, he reasoned, middle- and working-class blacks left poor black areas and moved "to higher income neighborhoods of the city and to the suburbs" (p. 7). As a result, "nonpoor black middle and working classes tend no longer to reside in these neighborhoods, thereby increasing the proportion of truly disadvantaged individuals and families" (p. 50). The effects of nonpoor black out-migration were exacerbated by the departure of whites from racially changing areas: "[I]n addition to the out-migration of nonpoor blacks from many of these neighborhoods, some have become poor because of the net minus migration of whites and other nonblacks" (p. 50).

Wilson did not exclude class-selective *in*-migration as a contributing cause of concentrated urban poverty; however, he generally placed more emphasis on *out*-migration as the driving force, particularly that of nonpoor blacks. Tienda (1991), in contrast, has given more weight to class-selective *in*-migration, pointing out that neighborhoods can become poor because they attract poor in-movers, not because they expel nonpoor out-movers. No matter what the balance of in- and out-migration, however, the Wilson hypothesis, broadly stated, is that poverty became more concentrated during the 1970s because of the net migration of middle class families out of poor black neighborhoods.

A second hypothesis, advanced by Hughes (1990) and Jargowsky and Bane (1991), is that trends in the concentration of poverty reflect general trends in urban poverty. They showed that changes in the geographic concentration of poverty between 1970 and 1980 were strongly correlated with shifts in the overall rate of urban poverty. The geographic concentration of poverty occurred because there was a net downward movement of people into poverty

within neighborhoods that were already poor. Although he did not emphasize it, Wilson (1987) recognized this mechanism as well, stating that "part of the increase [in the concentration of poverty] is due to the rise in the number of people in these poverty areas who became poor during the period" (p. 50).

A third hypothesis, advanced by Massey and colleagues (Massey and Eggers 1990; Massey 1990; Massey and Denton 1993), is that concentrated poverty among African-Americans follows ultimately from the racial segmentation of urban housing markets, which interacts with high and rising rates of black poverty to concentrate poverty geographically. Segregation focuses increases in the number of poor blacks geographically and confines blacks to a small set of geographically isolated, tightly clustered, and racially homogenous neighborhoods. The correlation between overall poverty rates and geographically concentrated poverty occurs because, *given high levels of black segregation*, when black poverty increases no other outcome is possible. As a result, during the 1970s and 1980s poverty was concentrated in metropolitan areas where a large and segregated group experienced a sharp increase in poverty—African-Americans and Puerto Ricans living in older U.S. cities in the Northeast and Midwest.

These three hypothesized causal mechanisms—net middle class out-migration, net downward social mobility, and racial residential segregation—are not mutually exclusive, of course. It is quite possible, even likely, that all three operate to some extent to influence the class composition of specific neighborhoods. The relevant issue for social scientists is *which hypothesis is empirically most important* in accounting for the geographical concentration of black poverty, not which one is ultimately "correct."

Because relevant data are scarce, however, research on this issue has been limited, particularly with respect to class-selective migration, and most of the evidence marshalled to date has been indirect. Wilson's (1987) original analysis, for example, relied on an inference he made from two facts he observed in his study of poor ghetto areas in Chicago during the 1970s: He noted that the total population of poor ghetto areas decreased while the number of poor people within them remained roughly constant. From these two facts he concluded that there must have been a net out-migration of nonpoor black families, but these outcomes are actually consistent with any of the other hypotheses postulated above. Suppose, for example, that the net out-migration of blacks was not class-selective, but that those who remained behind experienced a net downward movement into poverty. In this case, we would observe a declining population and a rising rate of poverty. Or suppose there was class-selective net out-migration, but racial segregation caused the black out-movers to end up in equally poor or even poorer black areas. In this event we would observe a falling population and a rising poverty rate in the original neighborhood, as observed by Wilson; but by focusing on only one neighborhood we would miss the larger picture of the spreading poverty concentration caused by racial segregation.

The scarcity of data on the socioeconomic class of people moving into and out of urban neighborhoods has forced most researchers to make inferences from indirect evidence. Massey and Eggers (1990) reasoned that if poor and nonpoor African-Americans had moved selectively to different neighborhoods during the 1970s, then we should have observed an increase in black segregation by income over the decade; but they detected no such increase in the degree of class segregation among blacks. In Chicago, for instance, where black poverty grew considerably more concentrated during the 1970s, they found that the level of residential dissimilarity between affluent blacks and poor blacks remained virtually constant.

The validity of the class-selective migration hypothesis is also challenged by the persistence of high levels of racial residential segregation. If nonpoor blacks moved out of ghetto areas during the 1970s, they certainly did not go to white areas, at least in significant numbers. Levels of black-white segregation in large metropolitan areas have remained high and relatively constant (Massey and Denton 1987, 1989; Harrison and Weinberg 1992), and levels of black suburbanization continue to lag behind levels for other groups (Massey and Denton 1988). Black segregation, moreover, persists at high levels in suburbs as well as central cities, and does not fall with rising income (Massey and Denton 1988, 1993; Denton and Massey 1988).

Relatively few studies have directly examined the migration patterns of African-Ameri-

cans and whites. Several have computed net migration rates in specific neighborhoods and attempted to link them to poverty concentration. Massey, Eggers, and Denton (forthcoming) found that, across metropolitan areas, the rate of black net out-migration from poor census tracts had no significant effect on the degree of poverty concentration among blacks in those areas. Similarly, Massey and Kanaiaupuni (1993) showed that, across census tracts in the Chicago area, net 1970 to 1980 migration rates were not correlated with census tract poverty rates in 1980.

Only three studies have examined patterns of in- and out-migration directly in poor areas. Using the U.S. Current Population Survey, Emerson (1990) found a net inflow of poor blacks into central cities during the mid-1980s, but he didn't examine specific neighborhoods or link these movements to patterns of poverty concentration. Nelson (1991) used the American Housing Survey to examine rates of African-American out-migration from local "zones" in 40 metropolitan areas. She found that, compared to poor blacks, those in the middle and upper classes were more likely to move out of poor zones, supporting Wilson's out-migration hypothesis. But these "zones" contain more than 100,000 residents and are actually large geographic sectors. Thus, demographic change consistent with any of the postulated mechanisms might have occurred in the smaller neighborhood units composing the sectors. In addition, Nelson did not link black migration to levels of black poverty concentration in the cities she studied.

Gramlich, Laren, and Sealand (1992) circumvented the problem of excessively large geographic sectors by using a special tabulation of the Panel Study of Income Dynamics that appended census tract information to individual survey records. Patterns of in- and out-migration from specific tracts could thus be measured directly. Focusing on African-American and white families who were "persistently poor" during the years 1979 to 1984, Gramlich et al. measured migration flows among poor, middle-class, and high-status areas. (Persistently poor families were those with a multiyear average income-to-needs ratio of 1.25 or less.) They found that poor whites were relatively likely to move out of poor tracts (on average 27 percent did so in any single year), whereas poor blacks were unlikely to leave poor areas (only 10 percent did so). Although poor blacks living in nonpoor tracts were relatively unlikely to move into poor areas, their rate of entry into poor areas was considerably higher than that for poor whites living in nonpoor areas.

Gramlich et al.'s (1992) study suggests that a combination of white out-migration and black in-migration is responsible for creating neighborhoods that are "getting poorer and blacker, the home to an even larger share of the persistently poor, and the home of an ever larger share of black adults in families with children" (p. 285). Several inherent limitations, however, make it difficult to use this study to disentangle the various mechanisms of neighborhood change hypothesized above. First, since the analysis considered only persistently poor families, it did not examine the net movement of families into and out of poverty, a process that lies at the heart of the social mobility hypothesis. Second, in the absence of data on other classes, Gramlich et al. could not measure the movement of nonpoor families into and out of poor areas, data which are essential for a full analysis of class-selective migration. Finally, because Gramlich et al. did not disaggregate tracts by racial composition, they were unable to assess the effect of residential segregation on the geographic concentration of poverty.

In this paper, we use the same tract-linked dataset (from the Panel Study of Income Dynamics) used by Gramlich et al. (1992). We examine the movement of whites and African-Americans, poor and nonpoor, into and out of census tracts (neighborhoods) classified by poverty status and racial composition. Rather than considering the three causal mechanisms (class-selective migration, socioeconomic mobility, and racial residential segregation) as contradictory hypotheses in explaining the concentration of poverty, we view them as complementary and seek to determine the relative empirical importance of each one in the shaping of the class and racial composition of specific neighborhoods. Our goal is to gauge the level of support for each explanation, rather than to determine which one is "correct" in a statistical sense.

DATA AND METHODS

We employ a newly available version of the Panel Study of Income Dynamics (PSID) that

allows us to link individual survey records with specific census tracts (Survey Research Center 1992). The PSID is a longitudinal survey administered each year by the Survey Research Center at the University of Michigan. The initial sample was drawn in 1968 and consists of two components: (1) a representative sample of 3,000 households living in the coterminous United States and (2) a special subsample of 2,000 low income households whose household heads are less than 60 years old (Kalton 1986). Since both segments are probability samples, when appropriate weights are applied the total sample yields a representative profile of the U.S. population (Duncan and Hill 1989). All estimates reported here are calculated using weighted data (although unweighted computations are not substantially different).

Since 1968, members of sample households from the PSID have been systematically followed and re-interviewed annually. As the children in the households grow up and leave their original families of origin to form new households of their own, they are followed, interviewed, and retained in the survey. The initial panel had a response rate of about 75 percent, but since then response rates have been above 96 percent. Even though losses of subjects have cumulated to a total response rate of 60 percent since 1968, attrition has not affected the representativeness of the sample: Systematic examinations using sensitive variables found only trivial differences when PSID data are compared to other national datasets, such as the Current Population Survey (see Becketti, Gould, Lillard, and Welch 1988; Duncan and Hill 1989).

Given the growing interest in how neighborhood conditions affect individual lives, the Survey Research Center (SRC) at the University of Michigan undertook to match individual sample records with census tract identifiers. In this way, PSID respondents could be linked with the tract-level data files available from the U.S. Bureau of the Census. Because the SRC lost the original address files for 1975, 1977, and 1978, however, tract identifiers could not be generated for these three years, causing some specific analytic problems.

Since we are interested in the mechanisms that underlie *urban* poverty, we restrict our analysis to respondents living in metropolitan areas. (Our results do not differ significantly, however, when all cases are used.) Poverty rates are defined according to the federally established criteria prevailing in each survey year. For tract-level data, the application of this definition is straightforward, since poverty rates are taken directly from the U.S. Census. The PSID does not include poverty status as a normal part of respondent records. The SRC does, however, provide users with an algorithm that employs household and family information to determine poverty status according to federal standards. We used this algorithm to determine the poverty status of families and then attributed this status to individual family members—we wanted to use the same definition of poverty for individuals, families, and tracts.

The fact that the U.S. Census is conducted every 10 years means that we only know tract poverty rates and racial compositions with certainty in 1970 and 1980; but to match tract data to PSID records we needed this information on an annual basis. For each census tract, therefore, we used linear interpolation to estimate the percentage of residents who were African-American and the rate of poverty for intercensal years. After fitting a straight line between data points taken from the 1970 Census and the 1980 Census, we derived the straight-line formula predicting poverty and the percentage of black residents by year. We then inserted intercensal years into this formula to generate predicted values. In those few cases where predicted values were below 0 percent or over 100 percent, estimates were top- and bottom-coded to 0 percent and 100 percent, respectively.

To study the three mechanisms potentially responsible for creating concentrated areas of poverty, we characterized census tracts (neighborhoods) by race and class. Table 1 presents the distribution of black respondents and white respondents across census tracts classified by the percentage of blacks and the percentage of poor families they contain. It is immediately obvious that black respondents are overwhelmingly concentrated in neighborhoods that are at least 60 percent black, a finding that is not surprising given the high level of segregation that prevails in most metropolitan areas. About 63 percent of all blacks live in census tracts where blacks constitute 60 percent or more of the population: 15.5 percent live in areas that are black and nonpoor (with poverty rates under 20 percent), 33 percent live in areas that are

Table 1. Percentage of PSID Respondents, by Race, Living in Different Types of Neighborhoods Defined by Racial Composition and Poverty Status: U.S. Metropolitan Areas, 1970 to 1984

Neighborhood Type	Race	
	Black	White
FULL DISTRIBUTION		
0–29 Percent Black Residents		
Nonpoor (0–19 percent in poverty)	13.5	89.0
Poor (20–39 percent in poverty)[a]	2.9	6.0
Very poor (≥ 40 percent in poverty)[a]	0.8	0.9
30–59 Percent Black Residents		
Nonpoor (0–19 percent in poverty)[a]	9.1	1.2
Poor (20–39 percent in poverty)[a]	7.2	1.1
Very Poor (≥ 40 percent in poverty)[a]	3.4	0.3
≥ 60 Percent Black		
Nonpoor (0–19 percent in poverty)	15.5	0.3
Poor (20–39 percent in poverty)	33.3	0.9
Very poor (≥ 40 percent in poverty)	14.5	0.2
Total Percent	100.2[b]	99.9[b]
SUMMARY CLASSIFICATION		
Nonpoor white area	13.5	89.0
Nonpoor black area	15.5	0.3
Poor black area	33.3	0.9
Very poor black area	14.5	0.2
Racially/socioeconomically mixed area	23.4	9.5
Total Percent	100.2[b]	99.9[b]
Average yearly unweighted N	5,804	8,965

[a] These neighborhoods are included in the "racially/socioeconomically mixed" category in the summary classification of neighborhood types (bottom panel).

[b] Percentages do not sum to 100.0 because of rounding error.

black and poor (with poverty rates of 20 percent to 39 percent) and 14.5 percent live in areas that are black and very poor (with poverty rates of 40 percent or more). For convenience, we refer to these tracts as *nonpoor black* areas, *poor black* areas, and *very poor black* areas, respectively. A relatively small but significant share of black respondents, 13.5 percent, live in neighborhoods where whites are in the majority (i.e., where blacks constitute less than 30 percent of the residents) and where poverty is relatively uncommon (under 20 percent). We refer to these tracts as *nonpoor white* areas. The remaining 23 percent of black respondents are scattered among tracts that are mixed with respect to race and/or socioeconomic class. Most live in areas that are between 30 percent and 60 percent black: 9 percent are in nonpoor areas, 7 percent are in poor areas, and 3 percent are in very poor areas. We group the racially-mixed tracts and the small number of poor or very poor areas that are predominantly white (about 4 percent of the total) and label them as *racially/socioeconomically* mixed areas. The distribution of blacks across the five summary categories of neighborhood types is shown at the bottom of Table 1. This classification scheme was created to depict the range of neighborhood racial and class compositions experienced by blacks while providing a reasonable distribution of blacks across categories and, hence, usable cell sizes in the ensuing statistical analyses.

Compared to blacks, white respondents experience racially and economically homogeneous neighborhood conditions. The overwhelming majority of whites live in neighborhoods that are neither poor nor black: 89 percent live in areas that are under 30 percent black and less than 20 percent poor. Another 9 percent live in areas that fall into the residual category of racially/socioeconomically mixed areas. Virtually no whites live in areas that are predominantly black (in contrast to blacks, 17 percent of whom live in tracts that are at least 70 percent white).

To disentangle the various mechanisms affecting the concentration of black poverty, we calculate various probabilities of geographic and social mobility. We define geographic mobility to occur when a respondent changes his or her neighborhood of residence between two successive years, year t and year $t + 1$. Because of the missing address lists for 1975, 1977, and 1978, we were unable to compute probabilities for geographical mobility for the years 1974 to 1975, 1975 to 1976, 1976 to 1977, and 1977 to 1978. We therefore base our analysis on moves that began in years 1970 through 1973 and in 1979 through 1984; thus we compare mobility patterns in the early 1970s to those in the early 1980s.

To assess the overall level of geographic mobility we compute the likelihood that a person changed neighborhoods (census tracts) between years t and $t + 1$, broken down by period

of observation (1970–1973 or 1979–1984), race of respondent (black or white), poverty status at time t (nonpoor or poor), and type of neighborhood at time t (nonpoor white, nonpoor black, poor black, very poor black, or mixed). These probabilities reveal the extent to which blacks and whites of various classes are leaving different types of neighborhoods and the degree to which these patterns changed between the early 1970s and the early 1980s.

Conditioned on having moved, we also compute the likelihood that respondents moved to a different type of neighborhood. For all movers, we present cross-tabulations showing the probability of movement between each of the five neighborhood types, yielding a set of four 5×5 transition matrices. We developed separate transition matrices for poor and nonpoor whites, and poor and nonpoor blacks. These data reveal the extent to which whites and blacks who were poor and nonpoor selectively moved to different neighborhood types.

We also calculate probabilities of social mobility, defined as a move into or out of poverty between two adjacent years, years t and $t + 1$. As with geographical moves, these probabilities are computed separately by period, race, poverty status, and neighborhood type to reveal the rate of movement into and out of poverty among poor and nonpoor whites and blacks living in different types of neighborhoods and to assess the extent to which these mobility rates changed between the early 1970s and the early 1980s.

Since social and geographic mobility are not mutually exclusive, we also derive one last set of transition matrices that disaggregates probabilities of social mobility separately for the geographic movers and the geographic stayers. Similarly, these figures are broken down by race, poverty status, and neighborhood type to reveal the extent of any interaction between geographic and social mobility.

Finally, to assess the reliability of our probability estimates, we computed the standard error associated with each coefficient. The calculation of sampling errors was complicated by the complex weighting scheme of the PSID sample. Design effects associated with the PSID generally increase sampling error relative to that which would be achieved from simple random sampling (SRS). Depending on how the data are extracted, which year is chosen for study, and which subgroups are analyzed, the design effect will tend to vary. (Hill [1992] reported ratios of actual standard error to SRS standard error that ranged from .95 to 2.53, with most lying in the range from 1.1 and 2.2.) To simplify our calculations and derive a conservative estimate of standard error, we calculated the standard error assuming SRS for each coefficient. We then multiplied the result by 2.5 (the largest design effect reported by Hill). Thus, we are confident that the true standard errors are no greater than our estimates and that in general they can be expected to be less. Despite our conservative estimates, in most cases the probabilities we calculate are many times the computed standard errors.

PATTERNS OF CLASS-SELECTIVE MIGRATION

Table 2 shows the likelihood of out-migration from different kinds of neighborhoods for poor and nonpoor blacks and poor and nonpoor whites; the standard errors associated with these coefficients are shown in the three right-hand columns. If Wilson's (1987) hypothesis of class-selective migration is correct, then for blacks in poor neighborhoods we should observe higher probabilities of out-movement among nonpoor blacks compared to poor blacks, and we would expect this difference to increase over time. To ease interpretation, we have shaded the probabilities in Table 1 that are most relevant to this hypothesis.

In general, the highlighted coefficients do not support Wilson's view that black nonpoor out-migration is the driving force of poverty concentration: On average, the probability of leaving a poor or very poor black neighborhood was *lower* among nonpoor blacks than among poor blacks; the mean probability of moving out of a poor black neighborhood was .23 for the latter, but only .17 for the former. Likewise, the mean probability of leaving a very poor black area was .18 for poor blacks but .10 for nonpoor blacks.

However, during the early period, 1970 through 1973, the results were consistent with Wilson's hypothesis; during these years nonpoor blacks *were* more likely to move out of poor black neighborhoods than were poor blacks. By 1979 through 1984, this differential had reversed; the probability of out-movement by poor blacks *rose* from .20 to .24 between early 1970s and the early 1980s, and the prob-

Table 2. Probabilities Predicting Moves Out of Different Neighborhood Types Between Years t and $t + 1$, by Race: Respondents to PSID, U.S. Metropolitan Areas, 1970 to 1984

Poverty Status and Neighborhood Type in Year t	Probability of Leaving Neighborhood by Year $t + 1$			Estimated Standard Errors		
	1970–1973	1979–1984	Average	1970–1973	1979–1984	Average
BLACK RESPONDENTS						
Nonpoor Person						
Nonpoor white area	.13	.21	.18	.02	.01	.01
Nonpoor black area	.11	.19	.16	.01	.01	.01
Poor black area	.23	.14	.17	.01	.01	.01
Very poor black area	.17	.09	.10	.02	.01	.01
Mixed area	.15	.14	.14	.02	.01	.01
Average	.17	.15	.16	.01	.01	.01
Poor Person						
Nonpoor white area	.19	.31	.25	.03	.03	.02
Nonpoor black area	.18	.25	.22	.03	.02	.02
Poor black area	.20	.24	.23	.01	.01	.01
Very poor black area	.09	.22	.18	.02	.01	.01
Mixed area	.07	.14	.11	.02	.02	.02
Average	.14	.22	.19	.01	.01	.01
WHITE RESPONDENTS						
Nonpoor Person						
Nonpoor white area	.10	.09	.10	.01	.01	.01
Nonpoor black area	.30	.28	.29	.11	.07	.06
Poor black area	.22	.21	.22	.05	.03	.03
Very poor black area	.22	.18	.20	.11	.06	.05
Mixed area	.10	.14	.13	.02	.01	.01
Average	.11	.10	.10	.01	.01	.01
Poor Person						
Nonpoor white area	.28	.21	.24	.04	.03	.02
Nonpoor black area	.20	.01	.01	.26	.06	.09
Poor black area	.33	.17	.20	.09	.09	.06
Very poor black area	.50	.35	.37	.30	.11	.11
Mixed area	.18	.18	.18	.06	.03	.03
Average	.25	.20	.21	.03	.02	.02

Note: indicates comparisons relevant to the class-selective migration hypothesis (Wilson 1987); indicates comparisons relevant to the racial residential segregation hypothesis (Massey, 1990).

ability of out-migration by nonpoor blacks *fell* from .23 to .14. Both changes are statistically significant. (Here and in all subsequent statistical comparisons we employ two-tailed tests). Similar shifts occur among poor and nonpoor blacks living in very poor neighborhoods.

How these changing probabilities affect the class composition of specific neighborhoods depends on the numbers of poor and nonpoor blacks living there. To gauge the effect of these mobility patterns, consider a hypothetical neighborhood that is 100 percent black and that has 5,000 residents in year t, 30 percent of whom are poor (the average poverty rate in poor black tracts during the 1970s). Applying the transition probabilities for the 1970 to 1973 period to such a neighborhood yields a predicted increase in the rate of poverty from 30 percent to 31 percent between years t and $t + 1$. During the early 1970s, in other words, class-

selective out-migration would have produced a growing concentration of poverty in poor black neighborhoods if it were the only force operating to influence the class composition of neighborhoods.

By 1979 to 1984, however, the transition probabilities had shifted, yielding higher levels of out-migration for poor blacks and lower levels for nonpoor blacks. Under these circumstances, a projection between years t and $t + 1$ yields a *lower* rate of poverty, 27 percent in poor black areas. Assuming that the average transition probabilities prevailed across the entire decade yields a predicted poverty rate of 28 percent. Thus, poverty would be growing *less* concentrated in poor areas if the out-migration patterns observed among blacks during the early 1980s were the only force influencing neighborhood composition. The same results are achieved when projections are carried out assuming the mobility patterns observed in very poor black areas.

That out-migration probabilities from poor black areas were greater for poor blacks compared to nonpoor blacks makes sense if one assumes that poor blacks are mainly renters while the nonpoor blacks are often homeowners. Unlike renters, homeowners are bound to deteriorating neighborhoods by sunk investments and by home equity that cannot be recouped in a declining market. Although renters have few incentives to stay in a poor neighborhood when conditions worsen and landlords have few incentives to maintain their buildings, homeowners cannot walk away so easily—hence, the common sight in poor ghetto areas of isolated single family homes with barred windows and doors surrounded by abandoned apartment buildings and run-down tenements.

Poor blacks living in nonpoor black tracts were also more likely to leave than their nonpoor counterparts (with an average probability .22 compared to .16, again a significant difference), a difference that persists across both periods studied. For the early period, poor blacks displayed an 18 percent chance of leaving a nonpoor black area, while nonpoor blacks displayed an 11 percent chance; for the later period the comparable figures were 25 percent and 19 percent. When any of these probabilities are applied to a hypothetical all-black neighborhood with a poverty rate of 17 percent (the average for nonpoor black areas), a lower poverty rate is generated as time moves from year t to year $t + 1$. Thus, nonpoor areas should also be growing less poor if out-migration were the only force operating to influence neighborhood composition. Comparable mobility patterns are observed in nonpoor white areas: Poor blacks tend to be more mobile than nonpoor blacks, a pattern that would yield less poverty concentration over time.

Thus, our data provide relatively little support for Wilson's view that concentrated poverty stems from the selective out-migration of nonpoor blacks from poor black neighborhoods. Although during the early 1970s nonpoor blacks did indeed move out of such areas at a higher rate than did poor blacks, by the early 1980s this pattern had reversed and the poor had become more outwardly mobile than the nonpoor. In nonpoor black areas as well, poor blacks were more outwardly mobile than those who were not poor. Therefore, if out-migration were the only force operating, mobility patterns prevailing during the early 1980s would have produced steadily falling levels of poverty concentration in black neighborhoods, and this, in fact, has not been the case.

A very different picture emerges from an examination of white mobility rates. Although the likelihood of out-migration by nonpoor whites is relatively stable over the decade, pronounced differences occur by neighborhood type. In general, neighborhoods containing black residents display an elevated probability of out-migration among nonpoor whites, consistent with the hypothesis that the concentration of poverty follows from the racial segregation of urban housing markets. Refer to the shaded coefficients in the bottom panel of Table 2. From Table 1, it was clear that the vast majority of nonpoor whites live in nonpoor white neighborhoods, and the probability that they will leave their neighborhoods is about .10 over the entire period of study. In contrast, nonpoor whites living in black neighborhoods display probabilities of out-migration that are two to three times higher; averages range from .20 in very poor black areas to .22 in poor black areas to .29 in nonpoor black areas. Although the small number of whites in black areas inflates the standard errors, the differences between nonpoor whites living in nonpoor white areas and those living in nonpoor, poor, or very poor black areas are statistically significant at the $p < .05$ level. The likelihood of out-migration is also rather high among poor whites living in

poor and very poor black neighborhoods, but small cell sizes make the probability estimates somewhat unstable and more difficult to interpret with confidence.

To assess the quantitative effect of white mobility patterns, consider a hypothetical neighborhood that is 60 percent black with a white poverty rate of 20 percent and a black poverty rate of 30 percent, parameters that yield what we would call a poor black neighborhood. Assuming no black mobility and applying the average white out-migration probabilities from Table 2, the neighborhood poverty rate would shift from 26 percent to 27 percent between years t and $t + 1$. In other words, the propensity of whites to flee black neighborhoods would cause a slight increase in the concentration of black poverty, other things being equal. White mobility patterns also suggest a means by which the number of poor ghetto areas might expand. Consider a neighborhood that is 60 percent black with a white poverty rate of 10 percent and a black poverty rate of 20 percent, yielding a neighborhood we would call a nonpoor black neighborhood. Assuming no black mobility and applying the white transition probabilities from Table 2 yields a predicted shift in the neighborhood poverty rate from 16 percent to 18 percent between years t and $t + 1$, moving the tract toward the threshold that would define it to be a poor black neighborhood.

Thus, if out-migration were the only force operating to influence the socioeconomic and racial composition of neighborhoods, patterns of white mobility would act both to increase the number of poor black neighborhoods and to increase in those neighborhoods the concentration of poverty and the proportion of blacks, albeit only slightly. In contrast, patterns of black mobility would generally act in the opposite direction.

The problem with this conclusion, of course, is that class composition depends not only on patterns of out-migration, but on levels of in-migration as well. Table 3 presents the probability of moving into different types of neighborhoods and their associated standard errors. The four 5×5 matrices in Table 3 show transition probabilities for nonpoor blacks, poor blacks, nonpoor whites, and poor whites. To maximize cell sizes, facilitate interpretation, and enhance the stability of results, we computed probabilities across all years of observation. Since the moves of nonpoor blacks out of poor black neighborhoods and into nonpoor areas are particularly germane to the mechanism of poverty concentration hypothesized by Wilson, we have shaded these probabilities in Table 3.

Again our results provide little empirical support for the view that nonpoor blacks were leaving poor ghetto neighborhoods for greener pastures elsewhere. Nonpoor blacks leaving poor black neighborhoods had only an 11 percent chance of going to a nonpoor white area and a 20 percent chance of going to a nonpoor black area (a total likelihood of .31). In contrast, the probability that a nonpoor black would move from one poor black neighborhood to another was .36 and the probability of moving to a very poor black area was .13 (for a total likelihood of .49). Thus, for nonpoor blacks leaving poor neighborhoods, the odds of ending up in another poor neighborhood or an even poorer neighborhood were 1.5 times greater than for ending up in a nonpoor area (statistically significant at $p < .05$). For nonpoor blacks leaving very poor areas, the disparity was even more extreme: The likelihood of entering a poor black neighborhood was .35, and the likelihood of entering a very poor black neighborhood was .27 (for a total likelihood of .62); but the probability of entering a nonpoor white area was only .13, and the likelihood of entering a nonpoor black area was only .09 (for a total of .22). Thus, nonpoor movers from very poor black areas were three times more likely to end up in a poor or very poor black neighborhood than in a nonpoor neighborhood (again, significant at $p < .05$).

Only nonpoor blacks who were already living outside of poverty areas were relatively likely to move into a nonpoor neighborhood. For nonpoor blacks moving out of nonpoor black areas, the probability of entering another such area was .20 while that of moving into a nonpoor white area was .29 (for a total likelihood of .49). In contrast, the probability of moving into a poor or very poor black neighborhood was .41 (.37 plus .04, respectively). Likewise, nonpoor blacks leaving nonpoor white areas had a .27 probability of moving to a similar neighborhood, and the probability of moving into a nonpoor black area was .18 (for a total of .45), compared to a probability of .22 for entering a poor or very poor black neighborhood (.19 plus .03, respectively).

Table 3. Probabilities Predicting Moves Into Different Neighborhood Types Between Years t and $t + 1$, by Race: Geographic Movers from PSID, U.S. Metropolitan Areas, 1970 to 1984

Poverty Status and Origin Neighborhood Type in Year t	Probabilities for Different Destination Neighborhood Types in Year $t + 1$					Estimated Standard Errors				
	White Nonpoor Tract	Black Nonpoor Tract	Black Poor Tract	Black Very Poor Tract	Mixed Tract	White Nonpoor Tract	Black Nonpoor Tract	Black Poor Tract	Black Very Poor Tract	Mixed Tract
BLACK MOVERS										
Nonpoor										
Nonpoor white area	.27	.18	.19	.03	.33	.03	.02	.03	.01	.03
Nonpoor black area	.29	.20	.37	.04	.09	.02	.03	.03	.02	.02
Poor black area	.11	.20	.36	.13	.20	.01	.02	.02	.01	.01
Very poor black area	.13	.09	.35	.27	.17	.02	.02	.03	.03	.03
Mixed area	.21	.13	.34	.04	.29	.03	.02	.03	.02	.03
Poor										
Nonpoor white area	.09	.38	.32	.07	.14	.04	.03	.06	.04	.05
Nonpoor black area	.14	.15	.47	.14	.11	.03	.04	.06	.03	.04
Poor black area	.07	.15	.42	.17	.20	.02	.02	.03	.02	.02
Very poor black area	.02	.06	.41	.29	.22	.02	.02	.03	.03	.02
Mixed area	.14	.07	.41	.17	.20	.03	.02	.04	.04	.03
WHITE MOVERS										
Nonpoor										
Nonpoor white area	.89	.01	.01	.00	.10	.01	.01	.01	.01	.01
Nonpoor black area	.73	.06	.06	.02	.13	.11	.05	.06	.07	.07
Poor black area	.92	.00	.01	.00	.07	.08	.00	.04	.00	.07
Very poor black area	.91	.00	.02	.02	.06	.16	.00	.11	.09	.12
Mixed area	.70	.01	.02	.00	.27	.03	.01	.01	.01	.03
Poor										
Nonpoor white area	.69	.01	.02	.00	.28	.05	.01	.02	.00	.05
Nonpoor black area	.86	.00	.14	.00	.00	.40	.00	.40	.00	.00
Poor black area	.73	.00	.00	.00	.27	.23	.00	.00	.00	.23
Very poor black area	.42	.32	.00	.00	.27	.29	.20	.00	.00	.30
Mixed area	.42	.00	.08	.01	.48	.07	.01	.04	.03	.07

Note: indicates comparisons relevant to the class-selective migration hypothesis (Wilson 1987); indicates comparisons relevant to the racial residential segregation hypothesis (Massey 1990).

Thus the concentration of black poverty does not appear to be strongly linked to the selective movement of nonpoor blacks out of poor areas and into nonpoor areas; the only systematic movement of nonpoor blacks into such areas occurred among those who were already living in nonpoor areas. A more feasible explanation, then, seems to be that poor blacks selectively migrated *into* poor areas, as postulated by Tienda (1991) but also considered by Wilson (1987) in a broader statement of his migration hypothesis. The probabilities relevant to this hypothesis are shaded in the second panel of Table 3. In general, poor black neighborhoods were very likely to attract poor black in-movers. For poor blacks who left poor black neighborhoods, the likelihood of moving to another poor black area was .42 and the likelihood of going to a very poor black area was .17 (for a total likelihood of .59). Likewise, poor blacks leaving a very poor black area had a .29 chance of going to another such area and

a .41 probability of entering a poor black area (for a total of .70). Even poor blacks who moved out of nonpoor black areas tended to gravitate toward areas that were black and poor: They had a .47 likelihood of moving to a poor black neighborhood and a .14 likelihood of moving to a very poor black tract (for a total of .61). Among poor blacks who moved out of mixed areas, the probabilities of entering poor and very poor black neighborhoods were .41 and .17, respectively, for a total of .58.

Thus, not only were poor blacks relatively more likely than nonpoor blacks to move during the period under study, they were highly likely to move toward neighborhoods that were already poor and black. After leaving a poor, very poor, or racially/socioeconomically mixed area, poor blacks had between a 58 percent and 70 percent chance of ending up in a black neighborhood that was either poor or very poor. Only the relatively small number of poor blacks who left nonpoor white areas showed a relatively low likelihood of entering poor areas. For them, the probability of moving to a poor or very poor black neighborhood was only .39 (.32 plus .07).

PATTERNS OF RACIAL RESIDENTIAL SEGREGATION

A striking pattern evident in the neighborhood transition probabilities shown in Table 3 is the strong tendency for blacks to move toward black neighborhoods, regardless of the original neighborhood type or the poverty status of the mover. This suggests a racial segregation of U.S. housing markets consistent with Massey's (1990) segregation hypothesis. In our study, among blacks the proportion of moves directed to white neighborhoods never exceeded .29 and was usually much lower.

Racial segregation is also evident in the transition probabilities for whites. These figures are directly relevant to the segregation hypothesis, since they reveal a strong tendency for whites of all classes to avoid neighborhoods containing blacks. The relevant probabilities are shaded in the bottom panels of Table 3. No matter where they begin, nonpoor whites are overwhelmingly likely to end up in neighborhoods that are white and nonpoor. Of those nonpoor whites leaving either white nonpoor areas, black poor areas, or black very poor areas, around 90 percent moved into white nonpoor neighborhoods. Among nonpoor whites leaving black nonpoor areas or mixed areas, about 70 percent ended up in neighborhoods that were white and nonpoor, with most of the remaining moves being directed to mixed areas. The likelihood that a white nonpoor mover would enter any type of black neighborhood was close to zero, as a glance down the middle three columns reveals.

In most cases, the odds were also quite low that even a *poor* white mover would move into a black neighborhood. Poor whites moving out of either white nonpoor areas or black poor areas had roughly a 70 percent chance of going to a white nonpoor area, with the balance of moves being directed to mixed areas. Likewise, 86 percent of poor whites moving out of nonpoor black neighborhoods ended up in nonpoor white areas. Only those few poor whites living in very poor black neighborhoods or mixed neighborhoods in year t were relatively unlikely to end up in nonpoor white areas by year $t + 1$; the probability was .42 in both cases. Poor whites originating in these poor black neighborhoods were more likely to go to a mixed or black nonpoor tract, but the probability of going to a poor or very poor black neighborhood was still close to zero. Thus, the racial segmentation of mobility patterns appears to play a strong role in determining the class and racial composition of particular neighborhoods.

PATTERNS OF SOCIOECONOMIC MOBILITY

Table 4 directly tests the social mobility hypothesis by examining the probability of movement into and out of poverty by poor and nonpoor blacks and whites living in different types of neighborhoods (with the associated standard errors again being shown on the right-hand side of the table). The social mobility hypothesis argues that black poverty concentration increased because blacks living in black neighborhoods experienced net downward movement into poverty, apart from any effects of class-selective migration. Coefficients pertinent to this hypothesis are once again shaded in the table.

Poverty rates in poor black neighborhoods would rise if the number of people falling into poverty exceeds the number rising out of poverty, and this balance depends on probabilities

Table 4. Probabilities Predicting Upward and Downward Socioeconomic Mobility Between Years t and $t + 1$, by Race: Respondents to PSID, U.S. Metropolitan Areas, 1970 to 1984

Poverty Status and Neighborhood Type in Year t	Probability of Socioeconomic Mobility in Year $t + 1$			Estimated Standard Errors		
	1970–1973	1979–1984	Average	1970–1973	1979–1984	Average
BLACK RESPONDENTS						
Nonpoor Person		*(Moving Into Poverty)*				
Nonpoor white area	.06	.04	.05	.02	.01	.01
Nonpoor black area	.06	.06	.06	.01	.01	.01
Poor black area	.14	.10	.11	.01	.01	.01
Very poor black area	.15	.17	.16	.02	.01	.01
Mixed area	.08	.08	.08	.01	.01	.01
Average	.10	.09	.09	.01	.01	.01
Poor Person		*(Moving Out of Poverty)*				
Nonpoor white area	.52	.29	.41	.04	.03	.03
Nonpoor black area	.27	.38	.33	.03	.03	.02
Poor black area	.41	.21	.27	.02	.01	.01
Very poor black area	.33	.23	.26	.02	.01	.01
Mixed area	.18	.24	.21	.02	.02	.02
Average	.32	.24	.27	.01	.01	.01
WHITE RESPONDENTS						
Nonpoor Person		*(Moving Into Poverty)*				
Nonpoor white area	.02	.02	.02	.01	.01	.01
Nonpoor black area	.00	.04	.03	.00	.02	.01
Poor black area	.08	.07	.07	.05	.02	.02
Very poor black area	.00	.01	.01	.00	.04	.03
Mixed area	.05	.05	.05	.01	.01	.01
Average	.02	.02	.02	.01	.01	.01
Poor Person		*(Moving Out of Poverty*				
Nonpoor white area	.60	.53	.55	.04	.03	.02
Nonpoor black area	.00	.26	.25	.00	.13	.10
Poor black area	.33	.18	.20	.09	.09	.07
Very poor black area	.00	.09	.08	.00	.10	.08
Mixed area	.58	.40	.44	.06	.04	.03
Average	.59	.47	.50	.03	.02	.02

Note: indicates comparisons relevant to the social mobility hypothesis (Jargowsky and Bane 1991; Hughes 1990).

of upward and downward social mobility. Among blacks living in poor neighborhoods, the likelihood of falling into poverty (likelihood coefficients generally range from .10 to .16) was generally less than the likelihood of rising out of poverty (likelihood coefficients range from .21 to .41), but the size of this difference shifted markedly during the period studied. Whereas the chance of falling into poverty remained fairly stable over the period in both poor and nonpoor areas, the likelihood of escaping poverty fell dramatically between 1970 to 1973 and 1979 to 1984. During the earlier period, the probability of leaving poverty was .41 for poor blacks in poor areas, but by the later period this figure had declined to .21 (a very significant drop). Similar patterns of change were observed in very poor black neighborhoods.

Over time, therefore, it has become increasingly true that blacks living in poor areas have been unable to escape poverty. The coincidence of a relatively stable likelihood of falling into poverty within poor black neighborhoods, combined with a sharp decrease in the likelihood of exiting poverty, implies a steady accumulation of people who are poor and black in these neighborhoods. The extent of the accumulation depends on the relative number of poor and nonpoor black people to which the probabilities are applied.

To gauge the effect of these shifts in social mobility rates, consider a hypothetical neighborhood that is 100 percent black and has 5,000 residents in year t, 30 percent of whom are poor. Applying the class transition probabilities for the 1970 to 1973 period to such a neighborhood yields a predicted decline in the poverty rate from 30 percent to 28 percent between years t and $t + 1$; in other words, the number of exits from poverty exceeds the number of entries. Applying the class transition probabilities for the period 1979 to 1984, however, this situation is *reversed*, and the poverty rate *increases* from 30 percent to 31 percent because of a higher number of entries into poverty compared to exits.

Among blacks living in black nonpoor neighborhoods, trends in interclass mobility worked in precisely the opposite direction. Whereas the likelihood for nonpoor blacks of falling into poverty remained constant at exactly .06 in both periods, the likelihood that poor blacks would rise out of poverty increased from .27 in 1970 to 1973 to .38 in 1979 to 1984 (another statistically significant shift). Given an all-black nonpoor neighborhood of 5,000 residents and a poverty rate of 17 percent (the average value observed among black nonpoor neighborhoods during 1970 to 1973), the transition probabilities yield a slightly higher rate of poverty (17.4 percent) between years t and $t + 1$; but using the transition probabilities from the early 1980s, the poverty rate would *fall* to 16 percent over the same time interval.

The effects of these trends in black social mobility are reinforced by trends observed among whites. For nonpoor whites living in poor black areas, the likelihood of moving into poverty hardly changed during the years studied (it was .08 in 1970 to 1973 and .07 in 1979 to 1984), but the likelihood that poor whites would rise out of poverty fell significantly, from .33 to .18, again tipping the balance toward the accumulation of poverty in poor black neighborhoods. Within nonpoor black neighborhoods, however, the probability that poor whites would rise out of poverty increased markedly, while the likelihood of entering poverty remained fairly stable. In essence, given the trends in social mobility observed among blacks and whites living in predominantly black neighborhoods during the early 1970s, poverty rates would have risen in poor neighborhoods and fallen in nonpoor neighborhoods even if no in- or out-movement had occurred—social mobility was, therefore, concentrating poverty geographically.

Social and geographic mobility are not mutually exclusive, of course. Table 5 examines the probabilities of moving into and out of poverty among geographic movers and stayers during the period under study (with the corresponding standard errors presented in the right-hand columns). In general, there is no strong correlation between the two types of mobility: Patterns of social mobility are similar among geographic movers and stayers. Among nonpoor whites, for example, those living in nonpoor white or mixed areas (the vast majority of all whites) experienced a downward mobility probability of .05 or less, regardless of whether they moved from or stayed within their neighborhood. Poor whites in mixed neighborhoods likewise yielded about the same chance of upward mobility whether or not they moved (with likelihoods of .41 and .44, not a significant difference). Only poor white movers from nonpoor white areas displayed a significantly higher probability of upward mobility when compared to their nonmobile counterparts (.73 versus .51, a statistically significant gap).

Blacks also displayed relatively small differences in social mobility across categories of geographic mobility, as shown by the average probabilities for stayers and movers for both poor and nonpoor blacks. Although these averages vary somewhat, the variation is not systematic: Sometimes movers display a higher likelihood of social mobility than stayers, and sometimes the opposite pattern prevails. Among nonpoor blacks, movers originating in black poor areas and mixed areas tend to have higher probabilities of downward social mobility than stayers, but those from very poor areas tend to have higher likelihoods of downward

Table 5. Probabilities Predicting Socioeconomic Mobility Among Geographic Stayers and Movers Between Years t and $t + 1$, by Race: Respondents to PSID, U.S. Metropolitan Areas, 1970 to 1984

Poverty Status and Neighborhood Type in Year t	Probability of Socioeconomic Mobility in Year $t + 1$		Estimated Standard Errors	
	Geographic Stayers	Geographic Movers	Geographic Stayers	Geographic Movers
BLACK RESPONDENTS				
Nonpoor	*(Moving Into Poverty)*			
Nonpoor white area	.05	.04	.01	.02
Nonpoor black area	.05	.08	.01	.02
Poor black area	.10	.20	.01	.01
Very poor black area	.17	.12	.01	.02
Mixed area	.07	.14	.01	.02
Average	.09	.13	.01	.01
Poor	*(Moving Out of Poverty)*			
Nonpoor white area	.40	.43	.03	.05
Nonpoor black area	.36	.24	.02	.05
Poor black area	.10	.27	.01	.02
Very poor black area	.28	.15	.01	.03
Mixed area	.20	.26	.02	.03
Average	.26	.25	.01	.01
WHITE RESPONDENTS				
Nonpoor	*(Moving Into Poverty)*			
Nonpoor white area	.02	.02	.00	.00
Nonpoor black area	.04	.00	.02	.00
Poor black area	.09	.05	.03	.04
Very poor black area	.01	.01	.03	.10
Mixed area	.05	.04	.01	.02
Average	.01	.01	.00	.00
Poor	*(Moving Out of Poverty)*			
Nonpoor white area	.51	.73	.03	.05
Nonpoor black area	.19	.86	.11	.40
Poor black area	.18	.29	.06	.23
Very poor black area	.13	.00	.11	.00
Mixed area	.41	.44	.04	.07
Average	.46	.63	.02	.04

mobility. Among poor blacks, movers from black nonpoor and black very poor areas display lower likelihoods of upward social mobility than stayers, but those from poor and mixed areas show higher probabilities of upward mobility. Overall, these patterns cancel out, leaving a low average association between geographic mobility and socioeconomic mobility among blacks.

EXPLAINING THE CONCENTRATION OF POVERTY: A SIMULATION

The foregoing analyses suggest that concentrated black poverty is likely to stem, to some extent, from three complementary mechanisms: the net out-migration of nonpoor people from poor black neighborhoods (the Wilson [1987] class-selective migration hypothesis),

the net movement into poverty of people living in poor black neighborhoods (the Jargowsky-Bane [1991] and Hughes [1990] social mobility hypothesis), and the racial segmentation of black and white residential mobility patterns (the Massey [1990] racial segregation hypothesis). The foregoing analyses do not reveal, however, the relative importance of each mechanism to the observed trends in the concentration of black poverty.

To examine the relative empirical importance of each of these explanations, we undertake a simulation that applies the transition probabilities we have estimated to a set of hypothetical neighborhoods in a model city and project neighborhood characteristics ahead in time from year t to year $t + 5$. We test the relative importance of each hypothesis by eliminating it from the analysis and examining the resultant change over the baseline projection: To assess the Wilson hypothesis, we assume zero black out-migration and project neighborhood composition ahead in time using the other transition probabilities observed in our data; to test the Jargowsky-Bane and Hughes hypothesis we eliminate black social mobility as a factor and project neighborhood composition ahead using geographic transition rates as observed; and to test the Massey hypothesis, we eliminate black-white differentials in geographic destination probabilities and project ahead using the other observed probabilities.

For our simulation, we used the hypothetical city composed of 16 neighborhoods developed by Massey (1990:335) and gave the city the same characteristics as observed in the Chicago metropolitan area during 1980 in terms of the distribution of neighborhoods by type (nonpoor white, nonpoor black, poor black, very poor black, and mixed) and the distribution of poor and nonpoor blacks and whites across these areas. We then projected neighborhood populations ahead five years using the annual transition probabilities our data specified for the various scenarios; we allowed neighborhood sizes to change in response to the in- and out-migration of blacks and whites. The results of this simulation are reported in Table 6.

The first column shows the baseline model, which states the populations, black percentages, and poverty rates that would be achieved in different kinds of neighborhoods after five years, assuming the average empirical probabilities observed for the entire period (i.e., those shown in Tables 2, 3, 4, and 5). The bottom two rows present two summary indices of poverty concentration among blacks. The first is the neighborhood poverty rate experienced by the average black person, and the second is the average neighborhood poverty rate experienced by the average *poor* black person.

After five years of social and geographic mobility governed by the average transition probabilities that prevailed from 1970 to 1984, the typical black person would end up living in a neighborhood that was 22 percent poor, and the average poor black person would reside in an area that was 30 percent poor. The latter figure replicates quite closely the figure computed by Massey and Eggers (1990) for blacks in the 60 largest metropolitan areas. Using 1980 Census data, they estimated that the average poor black person resided in a neighborhood that was 29.7 percent poor. This close correspondence suggests that the PSID does, in fact, accurately mirror patterns recorded in the U.S. Census.

The second column tests the Wilson (1987) class-selective migration hypothesis by eliminating black out-migration as a factor in neighborhood change. Eliminating this mechanism leads to a slight reduction in black poverty concentration compared to the baseline model, shifting the average neighborhood poverty experienced by blacks from 22.4 percent to 21.9 percent. The neighborhood of the average poor black person would likewise go from 30.1 percent poor to 29.2 percent poor. Thus, although Wilson's mechanism operates in the expected direction, it does not appear to be a powerful source of neighborhood change.

The third column examines the Jargowsky-Bane (1991) and Hughes (1990) social mobility hypothesis by eliminating black socioeconomic mobility but allowing geographic mobility. This produces a slightly greater change in black poverty concentration compared with the Wilson scenario, but not much. If net downward social movement among blacks were eliminated, their average neighborhood poverty rate would drop from 22.4 percent to 20.6 percent (compared to 21.9 percent in the Wilson scenario), and the level of neighborhood poverty experienced by poor blacks would go from 30.1 percent to 29.3 percent (about the same level as observed under the Wilson scenario). Most of this lower neighborhood poverty concentration among blacks is explained

Table 6. A Simulation Predicting Neighborhood Racial Composition After Five Years Under Four Scenarios of Change

Neighborhood Type and Racial Composition in Year t	Population Size, Percent Black, and Percent Poor After $t + 5$ Years			
	Observed Transition Probabilities	Black Out-Migration Eliminated	Black Nonpoor Socioeconomic Mobility Eliminated	Racial Segregation Eliminated
Nonpoor White Areas				
Population size	45,810	45,389	45,761	50,265
Percent black	4.6	3.7	4.5	16.2
Percent poor	4.0	3.9	3.9	5.8
Nonpoor Black Areas				
Population size	3,870	5,084	3,751	2,432
Percent black	94.2	95.6	94.0	90.7
Percent poor	16.2	13.1	14.1	13.5
Poor Black Areas				
Population size	5,122	5,222	5,463	2,202
Percent black	96.1	96.1	95.3	92.8
Percent poor	38.6	36.9	28.8	40.5
Very Poor Black Areas				
Population size	2,505	2,529	2,546	1,261
Percent black	99.3	98.7	99.5	98.4
Percent poor	40.0	38.5	48.0	40.5
Mixed Areas				
Population size	6,651	5,830	6,558	6,292
Percent black	41.2	33.0	40.4	37.9
Percent poor	18.5	18.1	18.8	18.8
Average Neighborhood Poverty Concentration				
For blacks	22.4	21.9	20.6	13.1
For poor blacks	30.1	29.2	29.3	21.1

by the drop in the poverty rate in poor black neighborhoods.

Although the introduction of restrictions consistent with both the Wilson and Jargowsky-Bane/Hughes hypotheses lead to changes in the predicted direction, and eliminating net social mobility has a slightly stronger effect in reducing the average poverty rates experienced by blacks, neither scenario has a particularly strong effect on black neighborhood composition. The elimination of racial segregation in the housing market, however, has a very pronounced influence on the concentration of black poverty in neighborhoods.

Theoretically, racial segregation might be eliminated in one of several ways: Blacks might be given white destination probabilities, whites might be given black destination probabilities, some average of the two might be given to both groups, or racial differentials in out-migration probabilities as well as destination probabilities might be equalized. We chose to give blacks the same destination probabilities of whites and to leave racial differentials in the likelihood of out-migration unchanged, believing that this scenario most realistically captures what would happen if discrimination were eliminated from urban housing markets. In such a circumstance, whites would still be unlikely to enter black areas, but blacks might become quite likely to enter white and racially mixed areas, even though their overall rates of out-migration would not necessarily change.

The elimination of racial discrimination in this fashion renders the classic "tipping point" model of racial re-segregation inoperative. According to this model, racial turnover in neighborhoods stems from a dynamic interplay in the racial attitudes of whites and blacks (Schelling 1971, 1978; Taub, Taylor, and Dunham 1984; Clark 1991). As the model goes, because whites have little tolerance for racial mixing, they tend to leave neighborhoods once blacks move in; and because blacks strongly prefer integration, the departing whites are replaced by blacks moving in, yielding a self-perpetuating cycle of racial turnover and re-segregation.

Although this model seems to provide a compelling explanation for racial segregation, it implicitly assumes the existence of all-white enclaves to which whites can retreat after blacks move into their neighborhoods. Given black preferences for racially mixed neighborhoods, however, such enclaves can only be maintained through discriminatory actions. The tipping point model thus accepts racial discrimination as a given and through logic works out the inescapable conclusion of racial re-segregation under this circumstance.

In our alternative scenario, where discriminatory barriers are eliminated, whites are not able to retreat to all-white neighborhoods when blacks move in. Rather than being channeled to a small number of areas subject to strong pressures for racial change, black homeseekers have access to all neighborhoods in the city, subject only to socioeconomic constraints. In this hypothetical city where racial discrimination is eliminated, whites cannot escape blacks no matter what they prefer, because blacks will be entering all neighborhoods in significant numbers.

Evidence of the persistence of discrimination against African-Americans in the real estate and banking industries is unequivocal and abundant (Wienk, Reid, Simonson, and Eggers 1979; Taggart and Smith 1981; Orren 1982; Yinger 1986, 1991a, 1991b; Squires, Velez, and Taeuber 1991; Turner, Edwards, and Mikelsons 1991; Fix and Struyk 1993). What separates blacks from other groups in the United States is not their neighborhood racial preferences. (Despite their lower segregation levels, for example, Hispanics display a greater preference for ethnic homogeneity than blacks [Clark 1991].) What makes blacks unique is the high degree of discrimination they face—discrimination that systematically channels their housing demand away from white neighborhoods and into a few unstable areas on the periphery of existing ghettos, and within these areas racial transition becomes inevitable.

Our simulation demonstrates the powerful effect that racial discrimination and residential segregation have on the neighborhood conditions experienced by blacks. When we eliminate the barriers to black residential mobility throughout the city, the relative number of blacks living in white nonpoor areas rises while the relative number of blacks in poor and very poor black areas falls, compared to the baseline model. Despite out-movement from poor and very poor areas, the average poverty rates within them do not increase markedly over the baseline projection, meaning that both poor and nonpoor blacks are going to nonpoor white neighborhoods. As a result, the poverty rate in nonpoor white areas increases slightly and the percentage of blacks within them increases markedly.

These population shifts lead to a rather dramatic decline in black poverty concentration. Compared to a baseline figure of 22.4 percent, the average black person in this hypothetical city would live in a neighborhood with a poverty rate of only 13.1 percent, a 42 percent drop in only five years. Likewise, the percentage of poor people in the neighborhood of the average poor black person would drop from 30.1 percent to 21.1 percent, a 30 percent drop. Thus, compared to the Wilson (class-selective migration) and Jargowsky-Bane/Hughes (social mobility) explanations, the levels of poverty concentration experienced by blacks appears to be more powerfully affected by residential segregation in U.S. urban areas.

CONCLUSIONS

The most important finding of this research is that geographically concentrated poverty ultimately stems from racially segregated U.S. housing markets. Class-selective patterns of out-migration from poor ghetto areas seem to have relatively little to do with the accumulation of poverty in black neighborhoods per se. Among blacks living in poor or very poor neighborhoods, those who were poor were more likely to leave than those who were not, and those nonpoor blacks who did leave were more likely to go to a poor neighborhood than

to a nonpoor one. Only nonpoor blacks already living outside poor black areas were relatively likely to migrate into nonpoor areas. To the extent that concentrated poverty is linked to the geographic moves of nonpoor African-Americans, therefore, it reflects a reluctance of those living outside of poor ghetto areas to move back in.

Focusing on the residential mobility of middle-class blacks, however, deflects attention from the real cause of concentrated black poverty: racial segregation. Middle-class members of every racial and ethnic group endeavor to get away from the poor. Indeed, levels of class segregation are *higher* among Hispanics and Asians than among blacks (Massey and Eggers 1990). Efforts to escape the poor do not distinguish middle-class blacks from middle-class members of other racial and ethnic groups; what differentiates them from everyone else is that these normal processes of residential mobility occur within a context of high segregation.

Because of racial segregation, nonpoor blacks are less able to escape living in poor neighborhoods than are nonpoor members of other groups; and poor blacks have few housing options outside of the poorest and most disadvantaged ghetto neighborhoods. As a result, middle-class blacks experience a range of neighborhood problems that middle-class members of other groups never face, and poor blacks live in neighborhoods with unrivaled concentrations of poverty.

Thus, the concentration of black poverty arises from three mechanisms that grow out of the persistent segregation of American cities. First, concentrated poverty stems from the net in-migration of poor blacks into poor black neighborhoods: Given their limited options for housing, poor black movers are very likely to enter poor or very poor black areas, no matter where they come from. Second, concentrated poverty stems to some extent from net downward socioeconomic mobility among blacks living in racially segregated neighborhoods: If the rate of poverty rises in a segregated group, as happened among blacks in many urban areas during the 1970s and 1980s, the geographic concentration of black poverty follows axiomatically. Finally, and most important, poverty concentration stems from the exclusion of blacks from white neighborhoods and from the strict avoidance of black neighborhoods by white movers: These segregational forces isolate blacks economically and socially and contribute directly and forcefully to the accumulation of poverty in black neighborhoods.

These conclusions lead to policy prescriptions that differ from those normally offered by theorists of the urban underclass, who typically fail to consider housing segregation as a problem to be remedied. Rather than focusing purely on class-based programs such as training, education, welfare reform, or job creation, our analysis suggests that race-specific policies to end discrimination in housing markets must be undertaken as an essential part of any broad antipoverty effort.

According to a 1988 audit survey conducted by the U.S. Department of Housing and Urban Development, on any given encounter between a black home seeker and a realtor, the odds are at least 60 percent that something will happen to limit the black renter or buyer's access to housing units that are available to whites (Yinger 1991b); and the odds are one in three that blacks will be systematically steered toward a neighborhood having greater numbers of minorities, lower home values, or lower median incomes (Turner et al. 1991). As a result of these and other discriminatory actions, black housing demand is decisively channeled away from white neighborhoods toward a few minority areas within which racial transition becomes inevitable, as described by the tipping point model. Because of discrimination in the lending industry, the supply of mortgage and home-improvement loans to these neighborhoods is reduced (Taggart and Smith 1981; Orren 1982; Pol, Guy, and Bush 1982; Squires et al. 1991); and as housing values deflate because of the decreasing demand, black home equity withers, and physical structures in the neighborhood decline. Rents fall, and the poor concentrate, along with their social problems; dilapidation and housing abandonment spread; and the neighborhood embarks on a downward spiral of social, economic, and physical deterioration.

Unless racial discrimination in housing is eliminated, therefore, whatever improvements in black welfare are achieved through class-based interventions will tend to be overwhelmed by the disastrous neighborhood conditions that follow directly from residential segregation. Rather than berating middle class African-Americans for acting like middle-class

people from other racial and ethnic groups, or blaming them for "abandoning" the black poor, strenuous efforts should be made to facilitate black residential mobility and to enhance the access of blacks to the full range of benefits and resources available in U.S. metropolitan housing markets.

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