RECENT EVIDENCE ON THE CONTINUING CAUSES OF BLACK-WHITE RESIDENTIAL SEGREGATION

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ABSTRACT: *Black-white residential segregation, while on the decline, still persists at high levels in most US metropolitan areas. Despite decades of research into the underlying causes of black-white residential segregation, there is still much disagreement among scholars over the root causes of this phenomenon. This article examines recent evidence on the causes of black-white residential segregation. Evidence on the following hypotheses is examined: racial income differences, racial differences in tastes for housing services, racial differences in housing market information, racial prejudice, and housing market discrimination. Recent evidence suggests that household-level socioeconomic and demographic characteristics explain only a small proportion of the racial differences in location choices. Racial processes such as prejudice and housing market discrimination continue to drive black-white segregation patterns.*

Black-white residential segregation, while on the decline, still persists at high levels in most US metropolitan areas. Despite decades of research into the underlying causes of black-white residential segregation, there is still much disagreement among scholars over the root causes of this phenomenon. Some argue that segregation is caused by nonracial socioeconomic and demographic factors, while others argue that segregation is driven by racial processes including prejudice and housing market discrimination.

During the last decade, several new studies appeared that challenge many commonly held assumptions regarding the causes of black-white residential segregation. Many of these recent studies rely on datasets not previously available to segregation researchers, such as the Multi-City Study of Urban Inequality (MCSUI) and spatially referenced versions of public micro-datasets such as Census Public Use Microdata Sample (PUMS), the Panel Study of Income Dynamics (PSID), and the American Housing Survey (AHS). With these new sources of information emerged new methodological approaches.

This article offers a summary and critique of recent empirical evidence on five competing hypotheses concerning the causes of black-white residential segregation: (1) racial income differences, (2) racial differences in tastes for housing services, (3) racial differences

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in housing market information, (4) racial prejudice, and (5) housing market discrimination. Older studies conducted prior to 1990 were examined only if they provided seminal evidence on the causes of segregation. For a review of earlier empirical evidence, see Clark (1986, 1988, 1989) and Galster (1988a, 1988b, 1989).

THEORY AND EVIDENCE ON THE CAUSES OF BLACK-WHITE RESIDENTIAL SEGREGATION

Five major hypotheses have been offered as explanations for black-white residential segregation. First, racial differences in average household incomes imply racial differences in the ability to afford particular housing units in particular locations. Second, blacks and whites may choose to reside in different locations due to underlying racial differences in tastes for particular types of housing services. Such differences in tastes may in turn result from racial differences in the demographic characteristics, which affect housing demand at particular lifecycle stages.

Other explanations focus on race per se as the primary driver of black-white segregation. If blacks and whites rely on different sources of information when making housing market decisions and housing search is limited to areas near one's current residence, blacks and whites may have different estimates of the quality or affordability of housing in areas where their own race is in the minority. Racial prejudice may drive residential segregation if prejudiced individuals are willing to pay more to reside near neighbors with similar racial characteristics. Finally, housing market discrimination may affect segregation by altering the location choices available to black households.

Racial Income Differences

Many argue that black-white residential segregation is primarily a byproduct of segregation by income. In the standard neoclassical economic model of consumer choice, racial differences in income and wealth imply racial differences in the budget constraints faced by utility-maximizing households. If housing services are considered normal goods, white households will rationally choose housing units providing a larger quantity of housing services than black households, because the quantity of housing services demanded increases with income. If the quantity of housing services per housing unit is variable across neighborhoods and invariant within neighborhoods, the processes producing income segregation may generate patterns of segregation by race.

Scholars have relied on a number of empirical strategies to isolate the contribution of racial income inequality to the observed pattern of residential segregation by race. Many decompose residential segregation indices by social and demographic strata to assess the variability in racial segregation across different household types. If segregation is shown to be invariant across household types, scholars generally interpret this as evidence that segregation must be caused by factors other than the social and economic differences between black and white households. A related approach, known as the *indirect standardization* approach, requires computing the expected level of segregation that would occur if underlying characteristics such as income or housing costs were the primary drivers of segregation. Expected levels of segregation are estimated by applying the income or housing cost distribution for the entire metropolitan area to each census tract to obtain an expected number of white and black residents based solely on the census tract-level income or housing cost distribution (Farley, 1995; Taeuber & Taeuber, 1965).

Several studies from the 1970s and 1980s employ variations on the decomposition or indirect standardization approach. These studies generally find that black-white segregation remains high across all income intervals (see, for example, Farley, 1977; Massey & Denton, 1988). It is difficult to interpret evidence from more recent studies because most were conducted within individual metropolitan areas or regions with unique housing market characteristics. Farley (1995) examines segregation in St. Louis in 1990 and finds that the proportion of segregation due to differences in housing cost and tenure differences is lower than it had been in previous decades. Furthermore, black-white segregation indices remain high and exhibit little variability across all income intervals. Darden and Kamel (2000) report similar findings in their examination of segregation in Detroit. An outlier among recent studies is Clark and Ware (1997), who decompose dissimilarity indices by income interval for 10 urbanized areas and five counties in Southern California. The authors of this study report significant declines in segregation with increasing income levels.

Fischer (2003) decomposes residential segregation indices by income and race for a larger number of metropolitan areas (60). This study improves upon earlier studies in several ways and is one of the few studies to examine trends in segregation by race and income across several decades (1970 to 2000). Fischer employs an entropy-based measure that can be orthogonally decomposed into segregation within and between multiple groups. Several findings from this study are noteworthy. First, the author finds that segregation by race declined monotonically over the period examined, while income segregation increased until 1990 and declined thereafter. Second, she finds that segregation among poor blacks remained relatively stable over the entire 1970 to 2000 period, despite the overall decline in segregation among black households relative to nonblack households. Furthermore, the level of segregation among poor blacks was the highest among all racial and income groups in 2000. Fischer's (2003) study provides a perspective on the importance of income that is often overlooked: income inequality within the black population has become more important over time as poor blacks continue to live at persistently high levels of segregation compared to higher income whites and blacks.

While informative, the decomposition approach cannot be used to examine the simultaneous contribution of several factors toward any given pattern of segregation. An alternative is a multivariate regression approach, where dissimilarity indices or other MSA-level measures of segregation are regressed on MSA-level measures of black-white income inequality and various other social and economic variables hypothesized to cause segregation. Recent studies employing the MSA regression approach find that, controlling for various metropolitan characteristics including region, population growth, functional industrial specialization, housing market characteristics, and socioeconomic variables, segregation declines with increased black incomes relative to whites, but the magnitude of the decline is small compared to the impact of other factors (Farley & Frey, 1994; Krivo & Kaufman, 1999; Massey & Denton, 1987).

Regressions of this type are also subject to several criticisms. One disadvantage is that relative income levels may affect segregation in highly nonlinear ways. Although Cloutier (1982) addresses this issue by including variables that measure interracial income disparities within different income intervals, most recent studies simply include the ratio of black-to-white median household income to measure income effects. Another criticism is that most examine segregation within a single-equation framework that ignores the simultaneity between segregation and its determinants, including racial socioeconomic disparities, preferences, and housing market discrimination (Galster, 1988b). A final limitation of this strategy is its use of aggregate MSA-level measures to understand micro-level behavioral processes such as location choice and household mobility.

Other recent studies rely on individual or household-level microdata to examine the neighborhood choices of black and white households. More studies employ this approach due to the increased availability of restricted-access micro-datasets that contain individual-level and neighborhood-level variables. Due to confidentiality restrictions, restricted access versions of common household-level datasets such as the Census Public Use Microdata Sample (PUMS), the American Housing Survey (AHS), and the Panel Study of Income Dynamics (PSID) are usually only available to the researcher following an approval process that involves obtaining human subjects review clearance from the local institution's internal review board.

Many researchers currently rely on micro-data from these sources to examine the impact of income on racial differences in mobility patterns. South and Crowder (1997) rely on data from the Panel Study of Income Dynamics (PSID) to explain the probability of choosing a suburban location, separately for blacks and whites. The model includes detailed controls for family income, household family characteristics, tenure status, neighborhood racial composition and poverty rates, regional controls, and city-to-suburb ratios of violent crime, population density, unemployment rate, percentage black, and population. In the regressions for black households, family income is not a significant predictor of suburban moves. Crowder (2001) relies on the PSID to examine racial differences in the probability of moving between dwellings, controlling for household-level variables, neighborhood-level variables, and a variable capturing the household's mobility expectations. He finds that among blacks and whites with similar mobility expectations, blacks are less likely than whites to translate their expectations into an actual move. Furthermore, higher incomes enhance the ability of whites, but not blacks, to convert mobility expectations into moves. Another recent study utilizing the PSID is Gramlich, Laren, and Sealand (1992). This study finds that despite the substantial geographic mobility into and out of high-poverty US census tracts, poverty-stricken tracts are increasingly being inhabited by low-income black residents with large families, a finding that is consistent with Fischer (2003).

Other recent studies employ a discrete choice framework to estimate a household's choice of residence as a function of household and neighborhood-level characteristics. Most rely on the multinomial logit model to estimate choices among discrete location alternatives. The primary benefit of this approach is that estimates from racially stratified models can be used to predict the difference in location choices of white and black households, given that each racial group has similar household characteristics or chooses to live in similar types of locations. Gabriel and Rosenthal (1989) rely on this approach to explain a household's chosen county of residence. The data were derived from the metropolitan files of the American Housing Survey. They find that large simulated changes in black household characteristics, including income, have little effect on the probability of moving to a suburban jurisdiction in the Washington, DC metropolitan area. Their model does not include controls for neighborhood characteristics.

Waddell (1992) relies on a similar model to estimate the determinants of location choice within the Dallas-Fort Worth metropolitan area, using a special tabulation of the 1980 Census that provides information on households and the neighborhoods in which they reside. Waddell's model differs from Gabriel and Rosenthal (1989) in the inclusion of detailed neighborhood characteristics that are interacted with various household characteristics including race. Waddell finds that as income rises, black households are more than four times as likely to reside in neighborhoods with a lower percentage of blacks than are whites.

One limitation of the multinomial logit model is its restrictive assumptions. In particular, choices must be considered discrete alternatives that are not correlated with each other or with choices omitted from the household's choice set, a condition known as the independent from irrelevant alternatives (IIA) assumption. If choices are defined in terms of the wrong geographic unit of aggregation, this assumption will likely be violated. Furthermore, if blacks face housing market discrimination and some choices are unavailable to blacks, the estimated impact of income on black location choices will capture both the pure income effect plus the impact of discrimination constraints.

An alternative approach is the locational attainment model developed by Alba and Logan (1992). To estimate this model, the researcher must first construct a database of household-level observations that includes information on the neighborhood characteristics associated with the location where each household resides. The household's chosen neighborhood characteristics, such as the percentage of the surrounding census tract that is white or black, are then regressed on characteristics of the households and household heads in the sample. One feature of this model is that the coefficient on the household head's race can be interpreted as a measure of exposure to other racial groups in the neighborhood that is analogous to the exposure index utilized by segregation researchers (Bayer, McMillan, & Rueben, 2002). Like the multinomial logit model, the estimated coefficient on black household income in these models captures both a pure income effect and a discrimination component if blacks are constrained from choosing housing in particular locations.

Studies relying on the locational attainment approach report that while income plays a significant role in explaining a household's choice to reside in a segregated neighborhood, the magnitude of the income effect is small compared to the impact of other factors. Alba, Logan, and Stults (2000) rely on U.S. Census Public Use Microdata Sample (PUMS) data to estimate locational attainment models and find that while income does play a role in a black household's ability to enter more affluent white neighborhoods, blacks and whites with comparable household and personal characteristics still choose to reside in different types of neighborhoods. In particular, middle class blacks are more likely to reside in less affluent neighborhoods than whites with the same characteristics. Ihlanfeldt and Scafidi (2001a), utilizing recent data from the Multi-City Study of Urban Inequality (MCSUI), regress the percentage black of a black individual's neighborhood on individual level-characteristics and find that an increase in black incomes only slightly reduces the number of other black neighbors chosen by that resident. A similar study by Bayer, McMillan, and Rueben (2002) relies on a restricted-access version of the Census PUMS sample to estimate the impact of household characteristics on neighborhood racial composition. This study finds that underlying household characteristics can explain between 50 to 95% of the degree of segregation among Hispanics and Asians relative to other races. For whites and blacks, however, household characteristics explain less than 30% of the observed pattern of segregation. Among blacks, income is the most important non-racial characteristic, explaining about 10% of the observed pattern of segregation.

Two recent studies employing the locational attainment approach find that the importance of income varies by neighborhood and metropolitan context. Logan, Alba, and Leung (1996) estimate a multi-level locational attainment model that also includes information on the surrounding region's racial composition. The authors find evidence of substantial racial disparities in the locations chosen by whites and blacks with comparable incomes. These disparities are shown to be larger in regions with large black populations. Borjas (1998) utilizes data from the National Longitudinal Study of Youth (NLSY) to examine the individual-level determinants of ethnic segregation and finds that employment skill levels

affect segregation in indirect ways through human capital spillovers. While high income and highly skilled households choose to live in ethnically segregated neighborhoods, Borjas finds that greater skill inequality across groups actually reduces segregation, due to the incentive for lower skilled groups to move into high skilled neighborhoods to receive positive neighborhood spillover benefits.

Related to the income segregation hypothesis is segregation due to racial differences in employment sector representation. Evidence suggests that blacks tend to be over-represented in the manufacturing industry. If these industries are spatially clustered, then blacks and whites may sort into different locations to reduce the cost of commuting to work. While there is little direct empirical evidence to support this claim, empirical evidence on the spatial mismatch phenomenon (Ihlanfeldt & Sjoquist, 1998; Kain, 1968) suggests that even though whites and blacks may be employed in different industries, these differences are often not accompanied by differences in location choices, because blacks encounter mobility constraints, perhaps due to housing market discrimination and exclusionary zoning. If blacks are prohibited from locating in residential areas that are proximate to their employment locations, even with occupational differences between blacks and whites, we may not see significant sorting by proximity to employment among blacks. Recent evidence supporting this view comes from Squires, Friedman, and Saidat (2002), who find that black households in Washington, DC, are more likely than others to compromise on their ideal choice when choosing a residential location.

To conclude, recent evidence suggests that racial differences in income alone are insufficient to explain much of the observed pattern of black-white residential segregation. Evidence from recent household-level studies suggests that blacks are consistently less likely than whites to translate income gains into moves to more affluent white neighborhoods. Although this finding may result from a correlation between incomes and racial differences in tastes for neighborhood integration, the finding by Waddell (1992) that blacks are less likely than whites to choose majority-black neighborhoods with increased income suggests that housing market discrimination may limit blacks' ability to translate income gains into residential location choices. A fruitful area of inquiry for future studies would be to examine whether these same trends are observed with respect to racial differences in wealth accumulation. The PSID, with its detailed information on income sources and wealth, provides a perfect data source for such investigations.

Racial Differences in Tastes for Housing Services

Controlling for interracial income inequality, whites and blacks may still choose to reside in different locations if there are underlying racial differences in tastes for different structural unit characteristics, neighborhood characteristics, and local public services that comprise the housing service bundle. Studies of revealed location choices and local public service consumption provide evidence of substantial racial differences in the consumption of housing quality (Boehm & Ihlanfeldt, 1991), neighborhood amenities (Dipasquale & Kahn, 1999), and local public services (Bergstrom, Rubinfeld, & Shapiro, 1982; Rubinfeld, Shapiro, & Roberts, 1987). The challenge for researchers has been to quantify the proportion of these differences that is due to underlying racial differences in tastes for living in particular locations.

If racial differences in tastes are due to observable social and demographic characteristics such as family size, education level, marital status, age of household head, and other characteristics that affect lifecycle housing demand, then strategies similar to those discussed previously can be utilized to quantify the importance of these observable "taste-shifters"

towards the observed pattern of segregation. Aggregate studies that decompose indices of segregation by different demographic and socioeconomic groups have found that black-white segregation remains high regardless of how segregation indices are decomposed. St. John and Clymer (2000) decompose 1990 segregation indices for 102 metropolitan areas by education level and find little variability in black-white dissimilarity indices across different educational attainment categories. Miller and Quigley (1990) and Harsman and Quigley (1995) find that the degree of spatial stratification on the basis of familial status, presence of children, and gender of the household head accounts for only a small proportion of the observed pattern of racial segregation.

The location choice studies discussed in the previous section report similar findings regarding the impact of observable demographic taste-shifters on racial differences in location choices. Controls for household demographics consistently fail to explain a large percentage of the observed racial differences in location choices. In the study by Ihlanfeldt and Scafidi (2001a), for example, the combination of demographic lifecycle variables are jointly insignificant in equations explaining a black household's choice of residing in a black neighborhood within Detroit. In the study by Gabriel and Rosenthal (1989), achieving black-white parity in education level and household composition has little impact on the simulated differences in location choices between whites and blacks. Similar results for different combinations of household taste-shifters are reported in the recent studies by Alba, Logan, and Stults (2000) and Logan, Alba, and Leung (1996).

Deng, Ross, and Wachter (2003) interact location characteristics with household demographics in a nested multinomial logit model of location choice and tenure choice. In the location choice model, marital status has a statistically significant affect on the probability of choosing a black neighborhood only for white renters, while educational attainment consistently affects the choice of black neighborhoods for both black and white owner-occupants. Among black renters, the effect of education is statistically insignificant. Thus, blacks with lower levels of housing consumption are less likely to translate educational gains into residential location choices.

It is difficult to interpret the estimates from these studies as providing evidence on the importance of racial differences in tastes per se, because whites and blacks may face different choices in the housing market due to racial discrimination against blacks. Furthermore, not all determinants of housing market preferences are observable to the analyst. To the extent that unobserved taste-shifters are correlated with observable household characteristics, the estimates of the impact of observable household characteristics on segregation will be biased. Although available evidence suggests that racial differences in observable differences in household social and demographic characteristics have little impact on the pattern of black-white segregation, more work is needed to separate the role of tastes from the constraints imposed by housing market discrimination.

Racial Differences in Housing Market Information

If blacks and whites rely on different sources of information when making housing market decisions and housing search is limited to areas near one's current residence, blacks and whites may have different estimates of the quality or affordability of housing in areas in areas where their own race is in the minority (Galster, 1988a). Such information asymmetries may contribute to racial differences in the desirability of particular neighborhoods, which may further exacerbate black-white segregation.

Recent evidence on this hypothesis comes from the Detroit Area Survey (DAS) and Multi-City Study of Urban Inequality (MCSUI). Participants in the DAS were shown a

map of five suburban areas within Detroit and asked to estimate the average cost of homes in each area, evaluate whether each neighborhood was desirable as a place to live, and estimate the degree of tolerance for black in-migration into each neighborhood. Farley, Danziger, and Holzer (2000) examine the results of this survey and find that while both blacks and whites overestimated the cost of housing in suburban Detroit, there was little racial difference in the magnitude of these overestimates or in the neighborhoods perceived as being least and most costly. Both races also shared similar views about the affordability of each neighborhood to prospective black residents. When asked to evaluate the desirability of particular neighborhoods, however, there were significant racial differences in the perceived desirability of Southfield and Dearborn. It is significant to note that the first of these neighborhoods has a reputation for being the only prosperous suburb with a large black population while the latter has a strong reputation for hostility to blacks. These results suggest that perceptions regarding discrimination are likely more important than information asymmetries in shaping patterns of black-white location preferences within the Detroit neighborhoods examined.

Recent evidence from Atlanta, Georgia, provides stronger evidence in favor of the information asymmetries argument. Using data from the MCSUI, Thompson (2000) examines the full distribution of black and white estimates of suburban housing costs and finds statistically significant differences for five of the six neighborhoods examined. This is in contrast to Farley et al. (2000) who only examine average differences in housing costs. Surprisingly, however, blacks overvalued housing in the majority-black Tri-Cities area, while whites undervalued housing in the majority-white Norcross area. Both blacks and whites shared similar views concerning the affordability of different neighborhoods to black families. Again, in Atlanta as in Detroit, there were racial differences in the stated desirability of particular neighborhoods, with whites evaluating the rapidly growing suburban areas as desirable locations and blacks evaluating majority-black neighborhoods to the south as being more desirable.

Evidence from Los Angeles and Boston, the other two metropolitan areas included in the MCSUI study, is comparable to that from Detroit with regard to racial differences in perceived housing affordability. Blacks and whites are about equally as accurate in their assessment of the housing costs of different neighborhoods within the surrounding metropolitan area. Furthermore, a significant number of blacks believe that black households could afford housing in a wide variety of neighborhoods within each neighborhood in both metropolitan areas. Racial differences emerge primarily in the desirability of areas perceived as acceptant of minority residents. Areas perceived as open to minorities with a higher minority percentage and where perceived hostility to minorities is lower are consistently viewed as more desirable to minorities than to whites (Charles, 2001).

Data from the MCSUI suggests that while racial differences in the ability to correctly estimate housing costs do not appear to be a significant driver of residential segregation patterns, whites and blacks view neighborhoods that are hospitable to blacks differently. In particular, neighborhoods that are acceptant of minorities are generally more desirable to minority residents and less desirable to whites. This suggests that perceptions regarding discrimination and the perceived attitudes of majority residents likely play an important role in shaping residential outcomes. These conclusions are based on limited aggregate descriptive evidence from four metropolitan areas. To date, no study has linked individual-level perceptions regarding housing market costs to racial differences in observed location choices. One possible strategy is to rely on data from MCSUI to estimate locational attainment models that include measures of housing market information as explanatory variables along with other household-level controls.

Racial Prejudice

Another explanation for racial segregation is that households prefer neighbors with specific racial characteristics. Urban economists have developed several models to explain the impact of prejudice on urban structure (see Yinger, 1979, for a review). All of these models assume that when a household is prejudiced against members of another race, the racial composition of the neighborhood becomes a type of neighborhood externality that affects the price that prejudiced residents are willing to pay for housing. The pattern of segregation predicted by these models is highly sensitive both to the assumed geographic extent of the racial externality and the manner in which prejudice is incorporated into the model. In the "border" models of racial segregation (e.g., Bailey, 1959, 1966; Becker, 1957; Muth, 1969; Rose-Ackerman, 1975), prejudiced residents experience negative externalities that vary with distance from the border between an exogenously determined border between black and white neighborhoods. "Amenity" models, developed by Schnare (1976) and Yinger (1976) assume that prejudiced residents care only about the racial composition of their own neighborhood.

Prejudice is incorporated into these models by assuming one of the following: (1) both whites and blacks equally prefer white neighbors, (2) whites are prejudiced against blacks but blacks have no preferences for neighborhood racial composition or prefer integrated neighborhoods, or (3) both white and black households prefer neighbors with similar racial characteristics to their own. Yinger (1979) argues that the first approach is unrealistic, because blacks who prefer to live with whites would simply move into white neighborhoods, thus disrupting a segregated residential pattern. This is the approach taken in Bailey's (1959, 1966) border model of neighborhood succession. Even if we modify the border model to allow for a relatively stronger preference for white neighbors among white households, the border pattern of segregation may be disrupted by high-income blacks who outbid low-income whites for housing in white neighborhoods.

In Yinger's (1976) amenity model, racial composition is included as a good in a prejudiced household's utility function. The insight from Yinger's model is that if all whites are prejudiced against blacks, complete racial integration is the only equilibrium, because racial composition is invariant across the metropolitan area and no location is preferred to another based on differences in racial characteristics. This equilibrium is highly unstable, however, because a slight change in the racial composition of any neighborhood increases the desirability of that neighborhood. This process initiates a series of moves, the outcome of which cannot be determined inside the Yinger model without further assumptions.

As it turns out, Yinger's (1976) amenity model, much like earlier border models, is also highly sensitive to assumptions regarding the nature of prejudice. If both whites and blacks prefer same-race neighbors and desire to self-segregate into racially homogenous neighborhoods, then complete segregation is an equilibrium outcome. If some blacks prefer to live in integrated neighborhoods, then complete segregation is not an equilibrium outcome. In a modification to the Yinger (1976) model suggested by Kern (1981), segregation is a stable outcome if whites and blacks both prefer white neighbors as long as the preference for white neighbors is stronger among whites than among blacks.

Evidence of racial asymmetries in preferences for neighborhood racial integration is provided by Clark (1991), who analyzed survey data on questions about preferred racial mix and found that blacks were not willing to live in neighborhoods that were more than 50% white, whereas whites were hesitant to live in neighborhoods that were only 20% black. The data for this study comes from a telephone survey conducted in Omaha, Kansas City, Milwaukee, Cincinnati, and Los Angeles as part of litigation related to desegregation cases.

More recent evidence on the differences between white and black preferences for integrated neighborhoods comes from the MCSUI. White and black respondents to this study were asked to describe their ideal racial pattern in a hypothetical neighborhood with 15 housing units. Similar surveys such as the Detroit Area Survey (DAS) posed different questions to black and white households, limiting the researcher's ability to simultaneously examine black and white preferences (Vigdor, 2003). White respondents in the MCSUI were more than four times as likely to prefer a neighborhood inhabited by members of their own race than were blacks. Furthermore, 11.1% of white respondents in this survey indicated that their ideal neighborhood was 100% white, while only 2.5% of black respondents desired to live in a neighborhood that was 100% black (Charles, 2001).

Vigdor (2003) performs an interesting thought experiment. Using data from the MCSUI, he examines the question, "Is it possible to reallocate households within a metropolitan area so that each racial group's preferences for their 'ideal' racial composition are simultaneously satisfied?" Vigdor's answer is, "No." He addresses this question by matching the distribution of black preferences to the preference distribution of whites that would be required to achieve an ideal neighborhood composition for both groups. More than 35% of black MCSUI respondents desire a neighborhood with four other black residents. To achieve a residential outcome where both black and white preferences are perfectly aligned, at least 8% of the white population would have to optimally prefer a neighborhood with the same number of black residents. In Los Angeles, the actual percentage of whites who would prefer this racial composition is only 3%.

Other than the MCSUI studies and the study by Clark (1991), few have examined the simultaneous impact of white and black racial prejudices on the pattern of segregation. Most focus on the role of either white prejudice against black neighbors or black preferences for self-segregation. Of these two perspectives, white prejudice has received the most attention.

Most individual-level evidence on the importance of white prejudice comes from stated preference surveys that pose questions to white households about their desired neighborhood racial preferences and how these preferences are translated into location decisions. A seminal study by Farley, Schuman, Bianchi, Colasanto, and Hatchett (1978) relies on survey data collected in the 1976 Detroit Area Study (DAS) to determine the importance of three hypotheses regarding the causes of segregation: misperceptions among blacks about housing costs, black preferences for segregated neighborhoods, or white preferences for segregated neighborhoods. The authors find that both blacks and whites are quite knowledgeable about housing costs. As for black preferences, the authors found that most blacks actually preferred mixed neighborhoods. Whites, on the other hand, were reluctant to remain in neighborhoods where blacks were likely to enter. From this, the authors conclude that white prejudice has been the primary driver of residential segregation in Detroit.

Researchers utilizing more recent data from the 1992 Detroit Area Study report that whites' tolerance for integration had increased; however, prejudice-based stereotypes still affect whites' propensity to choose an integrated neighborhood. Farley et al. (1994) rely on the 1992 DAS data to estimate a model to explain white willingness to move into integrated neighborhoods as a function of individual-level characteristics and a measure of white attitudes toward negative racial stereotypes. The authors found that whites who endorse negative neighborhood stereotypes were more likely to flee integrated neighborhoods and less likely to move into integrated neighborhoods.

Other recent stated preference evidence on the white prejudice argument comes from the MCSUI. Charles (2001) relies on MCSUI data to construct residential preference indices, similar to those employed in the Farley et al. (1978) study. These indices then become

dependent variables in a regression on various individual characteristics and location indicators to explain individual preferences for black, Hispanic, and Asian neighbors among white, black, Hispanic, and Asian respondents. Charles finds that preferences for racial neighborhood composition are driven primarily by racial stereotypes and not by class-driven prejudices that are correlated with race. Charles also reports that white preferences for integration with blacks tend to increase as interracial contact with blacks increases. This is the contact hypothesis, which states that interracial prejudices decline as groups gain familiarity with each other and come into contact with each other more often in social situations (Allport, 1954). A study by Ihlanfeldt and Scafidi (2002) utilizing MCSUI controls for the endogeneity of interracial neighborhood contact and finds that interracial neighborhood contact affects white preferences only if that contact is with blacks of the same or higher socioeconomic status, a finding that is consistent with the contact hypothesis.

Emerson, Yancey, and Chai (2001) take a slightly different approach to examining the importance of white prejudice. In this study, the authors randomly surveyed 1,663 white Americans and presented each with a home-buying scenario. Respondents were given detailed characteristics about neighborhoods in question and then asked to indicate the likelihood that they would purchase a home in that neighborhood. Using a logit model to explain the likelihood of home purchase, the authors find that neighborhood black composition reduces the likelihood that the respondent would be willing to purchase a home in a given neighborhood. Because the marginal effects for these regression coefficients were not reported, it is difficult to assess the magnitude of this reduction. However, the effect was nearly 10 times larger than the (insignificant) effect of Asian and Hispanic neighborhood composition on the probability of likely homeownership among whites.

It is important to point out that the reliability of the evidence from stated preference surveys is limited by respondent's ability or willingness to state preferences as they would be revealed in the market. Due to the sensitivity of race-based questions, respondents may not be willing to reveal their true preferences. Furthermore, actual residential location decisions may differ from stated preferences, because stated preference survey settings may poorly replicate the actual constraints faced by households in an actual decision-making setting. Finally, although MCSUI questions about neighborhood racial composition assume that neighborhood characteristics are held constant, households may still impute such characteristics to neighborhood racial composition preferences if they rely on race as a proxy for the quality of the neighborhood (Vigdor, 2003). Thus, the evidence from stated preference surveys must be interpreted with some caution.

An alternative empirical strategy for examining the white prejudice hypothesis is to estimate hedonic regression equations to determine if, after employing appropriate controls, whites pay a premium to live in neighborhoods where their own race is in the majority. The general form of these hedonic regressions can be represented as follows (Kiel & Zabel, 1996):

$$P = f(H, F, N, R_H, R_N)$$

Where P = price of the housing unit, H = vector of housing unit characteristics, F = vector of non-racial family-level controls, N = vector of non-racial neighborhood characteristics, R_H = race of the household head (equal to *1* for blacks and *0* otherwise), and R_N = per-percentage of the household's surrounding neighborhood occupied by black residents. Yinger (1979) also suggests stratifying the regression by submarket, where submarkets are defined in terms of different neighborhood racial compositions.

The estimated coefficients for R_H and R_N are taken as evidence of different hypotheses regarding the causes of residential segregation. A significant positive coefficient on the R_H variable is usually interpreted as evidence of racial price discrimination, while a negative coefficient on the R_N variable is interpreted as a measure of the prejudice-based price discount associated with an increase in the neighborhood black composition. One problem with this interpretation is that a negative coefficient on the R_N variable may also result from housing market discrimination against blacks (Kiel & Zabel, 1996; Yinger, 1978).

As with the location choice models discussed in the previous section, the hedonic approach requires a rich data set of appropriate neighborhood and individual-level controls, including the race of the household head, the racial composition of the neighborhood, the appropriate sub-market that the home is located within, in addition to traditional controls used in hedonic regressions including dwelling unit and neighborhood characteristics (Ihlanfeldt & Scafidi, 2001b; Galster, 1982; Yinger, 1979). Although restricted access household-level datasets providing location-specific information are becoming more available to researchers, few recent studies have relied on these sources to estimate hedonic models.

Two recent hedonic studies include Chambers (1992) and Kiel and Zabel (1996). Chambers relies on a special version of the Chicago version of the American Housing Survey to estimate a hedonic regression that includes a measure of racial transition as an explanatory variable along with other traditional controls. Consistent with the white prejudice argument, Chambers finds that while whites pay more to live in white submarkets, this premium has decreased over time. Furthermore, areas that underwent substantial racial transition were shown to have lower housing prices. One problem with Chambers' study is that neighborhood characteristics are measured at an aggregate scale defined by the American Housing Survey's zones of 100,000 persons or more. Kiel and Zabel (1996) rely on a special restricted-access version of the metropolitan waves of the American Housing Survey to measure neighborhood characteristics at a more disaggregate scale. The authors find that when measured at the census tract level, results vary significantly within and across metropolitan areas. In Chicago, there is evidence that the premium attached to white neighborhoods has declined over time, whereas in Philadelphia and Denver, this premium has increased over time within suburban areas.

Cutler, Glaeser, and Vigdor (1999) put a novel twist on the hedonic approach by employing MSA-level variables in a multiple-MSA hedonic estimation of housing prices. They find that whites living in more segregated metropolitan areas pay higher housing prices than blacks. The authors interpret this as evidence that current levels of segregation are driven primarily by the desire among whites to live in racially homogenous neighborhoods. The hedonic model includes no controls for neighborhood characteristics, however.

Other evidence on the white prejudice argument comes from the neighborhood change literature. In the *invasion-succession* model (Duncan & Duncan, 1957; Wood & Lee, 1991), neighborhood racial change occurs when one group moves into a neighborhood that is occupied by residents of another racial group. Incompatibilities between the two racial groups, due to underlying differences in social characteristics or housing and neighborhood preferences, eventually initiate a process of succession that leads to complete racial turnover within the neighborhood. Schelling's (1972) tipping model offers a similar explanation for neighborhood racial change. Here, differences between black and white preferences for integrated neighborhoods cause neighborhoods to "tip" towards complete black segregation once the neighborhood reaches a threshold black concentration level, above which, whites are unwilling to tolerate.

The most recent aggregate studies of household mobility provide support for the hypothesis that white mobility is driven primarily by neighborhood-level racial concerns. A common way to test this assertion is to examine the coefficient on *percentage black* in a regression explaining decadal change in neighborhood racial composition. In the simplest case, white prejudice suggests that initial neighborhood black concentrations should contribute to out-migration of the white population over time, controlling for nonracial neighborhood characteristics. Several studies adopting this approach have found that initially high black population concentrations significantly contribute to a decline in the white population over time, controlling for other neighborhood-level demographic characteristics (Denton & Massey, 1991; Galster, 1990; Hwang & Murdock, 1998; Logan & Stearns, 1981; Struyk & Turner, 1986).

Other aggregate studies find that the processes producing neighborhood racial change have become somewhat less pronounced in recent years (Ottensmann, 1995). Ottensmann and Gleeson (1992) examine household movement into racially integrated Chicago census tracts and find that in the most recent decade (the 1980s) there had been a reduction in black in-migration and relatively greater levels of white in-movement into racially mixed tracts. Furthermore, the propensity for whites to move into integrated tracts is related to overall changes in the relative size of the metropolitan area black population. Wood and Lee (1991) examine changes in racially mixed census tracts within five large US cities over a 40 year period and find that stable racial integration became more likely, while the succession from integrated to all-black neighborhoods decreased during the 1980s. When the authors examined trends within a larger sample of 58 cities, the authors find that trends varied substantially across regions and cities. Lee and Wood (1990) offer an alternative perspective on the stability of these trends, however. Although a quarter of the tracts examined in the 58 cities exhibited stable levels of integration, these integrated tracts also experienced substantial overall population losses.

Because these studies rely on aggregate data to explain the motivations underlying individual and household-level location choice and mobility decisions, it is difficult to draw conclusions regarding the importance of personal prejudice in stimulating the mobility of whites. More reliable evidence on the impact of neighborhood racial composition on the probability of moving comes from individual-level studies of mobility behavior. Crowder (2000) examines the factors contributing to moves out of one's neighborhood and finds that the probability of out-migration among whites increases with the size of the black population, controlling for other household-level determinants of mobility.

Ellen (2000) argues that whites' reluctance to reside in black neighborhoods is primarily the result of whites' relying on neighborhood racial composition as a proxy for expected changes in neighborhood quality. Ellen (2000) finds that while racial composition at the beginning of the mobility interval does not have a significant effect on the probability of white mobility, increases in neighborhood black percentages during the interval increase the probability that white homeowners move but have no effect on the probability of white renter mobility. She interprets this as evidence that white households rely on racial composition as a proxy for expected future declines in property values. As homeowners presumably care more about neighborhood property values than renters, we would expect homeowners to be more sensitive to changes in neighborhood quality proxies than renters.

Harris (2001) examines other evidence on this point from the 1990 to 1993 Chicago Area Survey project. From his examination of individual-level data on stated neighborhood satisfaction levels, Harris finds that both blacks and whites prefer white neighborhoods. Furthermore, when Harris controls for neighborhood quality measures unrelated to racial composition, both the magnitude and significance of the effect of racial composition on

neighborhood satisfaction levels decline. Of course, another explanation for this finding is that neighborhood racial composition and neighborhood characteristics may be highly correlated. If this is the case, then we would expect to find insignificant effects on the racial composition variable due to multicollinearity.

In addition to its effect on the probability of white out-migration, prejudice may lower the probability that whites will choose majority-black neighborhoods upon relocating. Ellen (2000) refers to this as the *white avoidance* argument. In her examination of a spatially referenced version of the American Housing Survey, Ellen (2000) finds that whites systematically avoid entering housing units initially occupied by black households. Quillian (2002) relies on micro-data from the Panel Study of Income Dynamics and finds that the best explanation for observed patterns of migration by race is white avoidance of majority-black and integrated neighborhoods. Individual-level characteristics were shown to be relatively unimportant in explaining the neighborhood choices of movers.

Ihlanfeldt and Scafidi (2001b) utilize MCSUI data to examine the racial composition of neighborhoods chosen by whites, controlling for other determinants of neighborhood choice. They find that whites' preferences for living among other whites play a significant role in white residents' choices of neighborhood racial composition. The size and significance of white racial preferences as a determinant of neighborhood racial composition far outweighs the importance of life-cycle variables. Furthermore, interracial contact between whites and blacks is shown to reduce the aversion of whites to black neighborhoods.

Fewer studies have directly examined the role of black preferences for majority-black neighborhood racial composition. Thernstrom and Thernstrom (1997) and Patterson (1997) argue that white prejudice and housing discrimination have declined so precipitously that current trends in segregation can only be explained by the preference among blacks to live among black neighbors. While compelling, this argument flies in the face of evidence discussed earlier on the differences between white and black neighborhood racial composition preferences.

Early hedonic evidence on the importance of black self-segregation is provided by regressions that include *percentage black* as an explanatory variable in a housing price or rent regression, along with other appropriate controls. King and Mieszkowski (1973) find that black renters in New Haven, Connecticut pay a premium to live in majority-black neighborhoods. Although the authors interpret this as evidence supporting the black self-segregation argument, their finding is also consistent with a discrimination-based argument. If blacks are excluded from white areas, the shortage of black housing relative to black housing demand may place upward pressure on rental prices within majority-black areas. Counter evidence on the black self-segregation argument is provided by Yinger (1978) and Galster (1982) who find no evidence that blacks are willing to pay more to live in neighborhoods with a large percentage of black residents.

More recent evidence on the importance of black preferences is provided from the MCSUI dataset. Freeman (2000) employs this dataset to explain the determinants of neighborhood racial composition for minorities, where neighborhood racial composition is defined as the percentage of neighborhood residents that are white. He finds that a measure of neighborhood preferences to live among whites is a significant predictor of a minority household's choice of neighborhood racial composition. He also finds that these preferences vary across metropolitan areas. Freeman (2000) does not consider the endogeneity of black preferences for self-segregation, however. In accordance with the contact hypothesis, neighborhood-level contact with other races may affect levels of racial prejudice, which suggests that a measure of racial preferences is endogenous to an equation explaining one's choice to reside in a black neighborhood. Ihlanfeldt and Scafidi (2001a)

address the endogeneity of racial preferences using a two-stage least squares approach and find that black preferences for black neighbors affect the likelihood of their choosing more black neighbors. However, the impact of black self-segregation is small and cannot be interpreted to be a major cause of observed levels of segregation.

To summarize, evidence suggests that while both whites and blacks may have preferences for living in neighborhoods where their own race is in the majority, such preferences are still much stronger among whites, on average, than among blacks. Furthermore, some evidence suggests that many blacks actually prefer neighborhoods with a lower percentage of black residents. These racial asymmetries in preferences for living among other racial groups have been shown to affect racial differences in housing prices, contribute to racial differences in neighborhood choices, and perhaps most important, affect the neighborhoods not chosen by whites.

Housing Market Discrimination

A final hypothesis is that racial segregation may be caused by discrimination against blacks in housing and mortgage markets. Here, blacks face barriers to entry in white neighborhoods from landlord price discrimination, mortgage market discrimination, racial steering, or overt hostility against blacks from incumbent white residents (Yinger, 1995). Because discrimination fosters segregation through the outright exclusion of blacks from some areas, the discrimination hypothesis is sometimes also referred to as the *involuntary segregation* argument.

Although discrimination in housing and credit markets has been ruled illegal by the 1968 Fair Housing Act and the Equal Credit Opportunity Act of 1974, there is a large body of empirical evidence supporting the continued existence of racial discrimination in the markets for rental and owner-occupied housing (Yinger 1995). Evidence on the existence of housing market discrimination comes primarily from experimental data from equally matched homeseeker candidates who differ only in terms of race to determine how race affects the offerings of real estate brokers, landlords, and mortgage lenders. Yinger (1995, 1998) reviews this housing audit evidence and concludes that there is convincing evidence that blacks are shown fewer housing units, are shown different neighborhoods, and are given different advice on financing options.

The most comprehensive housing audit studies are the Housing Discrimination Studies (HDS) conducted by the U.S. Department of Housing and Urban Development in 1979, 1989, and 2000. Each of these studies relies on a paired testing audit approach, where pairs of white and black applicants, who are identical in observable characteristics affecting rental or sales approval, seek information about the availability of advertised housing units from relevant housing market agents. Preliminary results from the 2000 survey, conducted in 23 metropolitan areas, suggest that while the incidence of discrimination against blacks in rental and sales markets has declined since the 1989 study, whites are still treated more favorably in 22% of rental market tests and 17% of sales market tests (Turner, Ross, Galster, & Yinger, 2002).

Evidence from the most recent HDS suggests that geographic steering has become more pervasive in recent years. The most common type of steering occurs when minority applicants are shown homes in predominantly minority neighborhoods. The gross incidence of steering based on neighborhood racial composition rose by 10 percentage points between 1989 and 2000 for homes recommended to prospective homeseekers. Evidence from the 2000 HDS also suggests that steering may take forms previously unrecognized, such as when minority residents are shown homes in a smaller number of neighborhoods

or when minority residents are shown homes in neighborhoods with different average socioeconomic characteristics (Turner et al., 2002).

Other studies have investigated the causes of racial discrimination in housing markets. Yinger (1986) find that the primary reason that agents discriminate is to satisfy the perceived preferences of their white customers. More recent evidence by Ondrich, Ross, and Yinger (2001) confirms this hypothesis. This study finds that discrimination declines with distance between the agent's office and the house being sold. The authors attribute this finding to the fact that agents protect the business of their white clients and become more likely to show houses to black clients when these transactions can be isolated from the agent's white clientele.

Despite the evidence on the continued existence of housing market discrimination, there have been few attempts to directly examine the link between housing market discrimination and residential segregation by race. Clark (1986) reviews several studies that explore the causes of segregation and concludes that the effect of private discrimination on current levels of racial segregation "cannot be very noticeable" (p. 122). This observation initiated a series of articles in a lively debate between Galster and Clark over the relative importance of housing market discrimination (Clark, 1986, 1988, 1989; Galster, 1988a, 1989). Galster (1988a) charged that Clark's review was selective and incorrect. In response, Galster (1986) pointed to his own work as evidence to support the importance of housing market discrimination in producing segregated metropolitan areas. Although this debate never led to common ground, both authors came to acknowledge that the interaction between prejudice, discrimination, and economic inequality and segregation is a complex phenomenon that involves multiple feedback effects among a variety of factors.

The Clark-Galster debate led Galster (1987, 1988b, 1991) and Galster and Keeney (1988) to advocate a simultaneous equations approach to explaining segregation. These papers provide the most direct evidence on the link between housing market discrimination and residential segregation by race to date. Galster (1987) estimates an SMSA-level model that treats the extent of segregation, the centralization of black-white segregation, black-white income disparities, and occupational segregation as endogenous variables in a four-equation simultaneous equations model. Measures of segregation for the 40 SMSAs included in the sample come from HUD's 1979 Housing Market Practices Survey (HMPS). In this system of equations, measures of housing market discrimination are positively correlated with the centralization of the segregation pattern but not the extent of the segregation pattern. A separate model estimated by Galster and Keeney (1988) that treats housing market discrimination as endogenous finds that discrimination also contributes to the extent of segregation in a system of equations estimated for the same sample of 40 metropolitan areas. Finally, Galster (1991) estimates a six-equation simultaneous equations model (estimated for 59 metropolitan areas) that relies on an index of discrimination created from exogenous determinants of discrimination. As in the study by Galster (1987), segregation is measured in terms of the degree of centralization of the black population around the central business district and the degree of interracial residential exposure. Galster (1991) also includes a measure of intra-racial class segregation as an endogenous variable in the system of equations. He finds that discrimination in the home sales market decreases integration, while an increase in rental market discrimination increases intra-racial class segregation. The primary limitation of these studies is the small sample size, which was limited by the number of sites included in the 1979 HMPS study.

Hedonic studies have also been a popular method for examining the discrimination hypothesis. If racial price discrimination exists, then we would expect to find that blacks pay higher prices to purchase or rent housing in white neighborhoods. On the other hand,

if blacks are being excluded from white neighborhoods, increases in the demand for black housing are not being accommodated by the market, which suggests that (1) the price of housing in the interior of a black neighborhood should be higher than the price of housing in the interior of the white neighborhood, and (2) blacks should have lower homeownership rates than whites. Of course, this interpretation assumes the existence of a seller's market within the black neighborhood. If whites are reluctant to purchase housing in black neighborhoods or are steered away from black neighborhoods in large numbers and blacks are unable to purchase housing in black neighborhoods due to wealth constraints or mortgage market discrimination, the price of owner-occupied housing in the interior of the black neighborhood may actually be lower due to a shortage of potential buyers.

The most recent hedonic study to differentiate between the price discrimination hypothesis and the exclusion hypothesis is by Kiel and Zabel (1996). Across the four metropolitan areas examined, the authors find that price discrimination, as evidenced by the positive sign of the R_H coefficient in the hedonic regression discussed previously, has declined over time in the majority-black neighborhoods of Chicago and Philadelphia, remained stable over time in Denver, and increased within the suburbs of Chicago. In Philadelphia, the increased difference in the price of housing in the interior of majority-black neighborhoods relative to white neighborhoods suggests that the exclusion of blacks from majority-white neighborhoods has become more important over time.

In addition to actual discrimination, perceptions of discrimination among blacks may deter blacks from searching for housing in neighborhoods where the probability of discrimination is high (Courant, 1978). Evidence in support of this hypothesis is provided from the MCSUI studies. Thompson (2000) examined evidence from the Atlanta survey and found that black perceptions about perceived institutional barriers against home purchase and rental in white neighborhoods were the most likely explanation for persistent segregation in Atlanta. When asked about the possibility that whites would not sell or rent to blacks, 93% of blacks in this survey responded that this is likely to happen *very often* or *sometimes*. Discriminatory lending was seen as a problem by 91.1% of blacks, while only 49.2% of whites felt that this was a problem. Evidence from the other three metropolitan areas examined in the MCSUI suggests that blacks consistently view neighborhoods with lower perceived levels of housing market discrimination as being more desirable residential location alternatives (Charles, 2001).

To summarize, new evidence on the connection between housing market discrimination and residential segregation has appeared since the Clark-Galster debate. Simultanous equations models by Galster (1987, 1991) and Galster and Keeney (1988) find consistent evidence supporting the connection between residential segregation and housing market discrimination at the metropolitan scale. Furthermore, recent evidence from several sources suggests that blacks face a more limited range of choices in the housing market. Evidence for this claim comes from recent housing audit studies, the recent hedonic pointing to a link between exclusion and black-white housing price differences, and evidence from the MCSUI, which points to a link between perceived discrimination and racial differences in the desirability of particular neighborhoods.

CONCLUSION

The primary conclusion suggested by recent research is that race matters when it comes to residential location choices. Racial differences in the ability to afford housing and in tastes for housing services contribute to a small portion of the observed pattern of segregation. Although the role of household-level racial differences is small, evidence

from individual and household-level studies also suggests that while many blacks desire homes in majority-white neighborhoods, these blacks are less likely than whites to translate incomes and tastes into residential location choices. Recent evidence from Waddell (1992) suggests that achieving income parity between the races would have the most significant impact on the location choices of black households, who would be more likely to choose non-black neighborhoods than would whites.

Racial differences in tolerance for integration continue to shape patterns of residential segregation by race. Hedonic studies point to the importance of decentralized racism, where whites outbid blacks to live in all-white neighborhoods (Cutler, Glaeser, & Vigdor, 1999). There is new evidence to support the existence of self-segregation among blacks; however, this effect appears smaller than the effect of self-segregation among whites. Studies of mobility and location choice suggest that whites are still reluctant to move into majority-black neighborhoods.

Recent studies provide more convincing evidence of the link between housing market discrimination and residential segregation by race. These studies suggest that housing market discrimination may affect segregation through several mechanisms: price discrimination, exclusion, steering, and by altering the perceived desirability of particular neighborhoods. Of these, steering and outright exclusion from suburban areas appear to have become more important in recent years. Further research is needed to understand the causes of these troubling trends.

The continued importance of racial prejudice, the existence of housing market discrimination some 30 or more years since the enactment of fair housing legislation, and the persistence of residential segregation among black and white households with similar observable household characteristics suggest that federal fair housing policy alone may be insufficient to eliminate current levels of black-white residential segregation. If there are social costs associated with living in segregated neighborhoods, as suggested by a growing number of researchers (see, for example, Cutler & Glaeser, 1997; Galster, 1991; Massey & Denton, 1993), and these social costs exceed the perceived benefits from having same-race neighbors, federal initiatives to reduce segregation may be socially desirable. Furthermore, if discrimination is more likely in areas where housing submarkets are more racially differentiated, then a policy of reducing segregation may possibly achieve the dual objective of eliminating both segregation and discrimination. Absent new federal initiatives, the responsibility for fostering racial integration remains with local and state policy makers.

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