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## Racial Discrimination in Urban Housing Markets

### INTRODUCTION

In Chapter 2, we extended traditional theories of residential location and urban spatial structure to incorporate durable housing stocks and nonmarket production of some housing attributes, as well as the impact of multiple employment centers. In this chapter, we consider what is perhaps the most serious form of interdependence in urban housing markets: racial prejudice and discrimination.

We shall begin with a brief survey of previous empirical research on the extent and causes of residential segregation in American cities. This summary offers no original findings, but it does provide a concise statement of the available evidence. We shall then proceed to examine how racial discrimination affects housing prices and housing consumption in urban housing markets. The final section of this chapter considers the broader questions of how housing-market discrimination affects the patterns of urban growth and development in U.S. metropolitan areas.

### SEGREGATION IN U.S. CITIES

An important aspect of urban housing markets is the token representation of blacks in suburban areas. There is more than a germ of truth to the characterization of an increasingly black central city being strangled by a noose of white suburbs. Black Americans have not participated in significant numbers in the rapid postwar suburbanization of the population. In 1970, the 216 metropolitan areas of the United States were 12 percent black. However, 21 percent of central-city populations were

black, as contrasted with only 5 percent of suburban populations.<sup>1</sup> If southern metropolitan areas, with their suburban (agricultural) black population, are omitted, the underrepresentation of blacks in the suburbs becomes even more apparent. In 1970, blacks constituted 17 percent of the population of central cities of metropolitan areas outside the South but only 3 percent of their suburban populations.<sup>2</sup>

Housing-market segregation does not end with the exclusion of blacks from suburban areas; blacks also are intensely segregated within central cities. Karl and Alma Taeuber have calculated segregation indexes for central cities in 1940, in 1950, and in 1960, using census block statistics.<sup>3</sup> These indexes, which assume values between zero and 100, measure the extent to which observed racial patterns of residence by block differ from a pattern of proportional representation. A value of zero indicates a completely even distribution of blacks, i.e., the proportion of blacks on every block is the same and equal to the proportion in the entire central city. A value of 100 indicates the opposite situation, a completely segregated distribution; i.e., each block contains only whites or blacks. The higher the value of the index, the higher the degree of residential segregation. Values for the 156 central cities analyzed in 1960 ranged from 60 to 98, with only a few cities having values in the lower range of observations; only 5 cities had values below 70.<sup>4</sup>

#### DETERMINANTS OF SEGREGATION

Numerous explanations have been offered for the virtually total segregation of blacks. Common contentions are that blacks are concen-

<sup>1</sup>U.S. Bureau of the Census, *1970 Census of Population and Housing: United States Summary*, "General Demographic Trends for Metropolitan Areas, 1960 to 1970." Final Report, PHC (2)-1 (GPO, 1970), Table B, p. 5.

<sup>2</sup>Much has been made recently of data from the current population surveys which suggest that suburban black populations may have grown more rapidly in the past few years. These data should be regarded with considerable caution, however, since small sample sizes do not permit any meaningful evaluation of these aggregate changes. For example, it is not possible from these statistics to determine whether the aggregate increases in black suburban populations are occurring in all SMSA's, are limited to a few SMSA's or particular sections of the country, or whether they take the form of a dispersed (integrated) pattern of settlement, an acceleration in the growth of small suburban ghettos, or simply the spilling over of central-city ghettos into the suburban ring. It should be clearly understood that the implications of these aggregate changes cannot be determined without more information about the nature of the changes.

<sup>3</sup>Karl E. Taeuber and Alma F. Taeuber. *Negroes in Cities: Residential Segregation and Neighborhood Change* (Chicago: Aldine Publishing Co., 1965).

<sup>4</sup>St. Louis is no exception to these generalizations: the city of St. Louis had segregation indexes of 92.6 in 1940, 92.9 in 1950, and 90.5 in 1960.

trated within particular neighborhoods because they are poor, because they spend too little on housing, or because they differ systematically from the majority white population in terms of other characteristics that influence residential choices. These socioeconomic hypotheses are easily evaluated empirically, and several studies have examined them.<sup>5</sup> Without exception, these studies have determined that only a fraction of the observed pattern of black residential segregation can be explained by low incomes or other measurable socioeconomic differences.

Although many tests of the socioeconomic hypotheses rely on elaborate statistical methods, even the most primitive analyses are sufficient to raise serious doubts. If low income explains the concentration of blacks in central cities, it should also be true that most low-income whites live in central cities, and that most of the small number of middle-class blacks live in the suburbs. Yet, as the data presented in Table 3-1 illustrate, in six of the eleven largest metropolitan areas, more low-income whites live in the suburban rings than live in the central cities. In most cases, the proportion of low-income whites living in the suburbs is not substantially different from the proportion of middle-income whites living in suburban areas. For example, 52 percent of Detroit's poor white families live in suburbs. In contrast, black households are heavily concentrated in the central cities in all 11 SMSA's. In the Detroit SMSA only 8 percent of poor black families reside in the suburbs.

Moreover, relatively few high-income blacks (over \$10,000 per year) live in the suburbs. Indeed, the percentage of high-income blacks living in suburban areas is less than that of *low-income* whites in all eleven SMSA's. Thus, in St. Louis, 37 percent of *high-income* blacks live in the suburbs, compared with 86 percent of high-income whites and 61 percent of low-income whites. Clearly, money is not the principal explanation for the underrepresentation of high-income blacks in the suburbs.

Another explanation holds that the segregation of blacks is the result of a desire "to live with one's own kind" and is a normal and healthy manifestation of a pluralistic society. The immigrant colonies that are evident even today in many cities are offered as evidence of the normality of this behavior. It is true that a number of identifiable ethnic

<sup>5</sup>Taueber and Taueber, *Negroes in Cities*; A. H. Pascal, "The Economics of Housing Segregation," Memorandum RM-5510-RC (Santa Monica: RAND Corporation, Nov. 1967); John R. Meyer, John F. Kain, and Martin Wohl, *The Urban Transportation Problem* (Cambridge: Harvard University Press, 1965), Chap. 7; and Davis McEntire, *Residence and Race* (Berkeley and Los Angeles: University of California Press, 1960).

TABLE 3-1  
Percent of White and Black Families Living in the Suburban Ring of Eleven Large SMSA's in 1970

	White			Black		
	% Total	% Income \$3,000	% Income \$10,000	% Total	% Income \$3,000	% Income \$10,000
1. New York	36.2	16.6	40.0	11.5	7.7	14.5
2. Los Angeles-Long Beach	58.3	45.9	58.1	31.5	24.6	37.5
3. Chicago	61.1	36.4	64.6	10.4	6.1	12.3
4. Philadelphia-Camden	67.6	47.8	71.1	22.6	16.9	23.4
5. Detroit	75.5	51.5	78.3	12.8	10.6	11.7
6. San Francisco-Oakland	71.9	47.4	72.8	33.1	26.5	35.3
7. Boston	79.8	65.9	84.5	17.6	13.3	27.1
8. Washington, D.C.	90.2	73.1	89.3	23.6	14.2	25.6
9. Pittsburgh	81.5	72.2	82.9	38.2	32.7	40.7
10. Cleveland	73.4	66.2	80.0	13.5	5.8	20.1
11. St. Louis	69.4	61.2	85.6	32.9	31.5	36.8

NOTE: For New York and Chicago the suburban ring is the difference between the Standard Consolidated Area and the central city. For St. Louis the ring is the difference between the SMSA and both East St. Louis and the central city of St. Louis. For all other cities, it is the difference between the SMSA and central city. San Francisco-Oakland, Los Angeles-Long Beach, and Philadelphia-Camden are counted as two central cities.

SOURCES: U.S. Bureau of the Census, *Census of Housing: 1970: Metropolitan Housing Characteristics*. Final Report, HC (2)—Parts 30, 44, 46, 60, 120, 149, 165, 168, 187, 195, 232 (GPO, 1972); U.S. Bureau of the Census, *1970 Census of Population and Housing: United States Summary*, "General Demographic Trends for Metropolitan Areas, 1960 to 1970." Final Report, PHC (2)—1 (GPO, 1970), Table 10, pp. 1-34.

and nationality groups have exhibited some degree of segregation in American cities. However, the differences between their experience and that of black Americans are so marked as to invalidate the historical analogy.<sup>6</sup>

The intensity of black residential segregation is greater than that documented for any other identifiable subgroup in American history. Moreover, segregation of these other groups has declined over time, while that of blacks has remained at a high level and, possibly, has increased. Finally, today metropolitan areas are very different places than they were thirty or fifty years ago. They are far less compact and employment is much more dispersed. Widely scattered employment centers impose heavy commuting costs on many ghetto residents. Comparable disincentives did not exist when the ethnic colonies flourished.

To conclude that "voluntary" self-segregation is responsible for much of the current pattern of black residential segregation, it is necessary to assume that blacks have much stronger ties to their community than do other groups. Although the apparent appeal of slogans such as "black power" and "black is beautiful" may be considered evidence of a growing cultural pride and sense of community among blacks, it is impossible to assign much weight to this increased awareness as an explanation of durable segregation patterns. While we recognize the difficulties of interpretation, recent surveys of black attitudes provide little support for the self-segregation hypothesis. In 1966, 68 percent of a random sample of American blacks interviewed by the Harris Poll indicated a preference for living in integrated neighborhoods. This fraction is somewhat larger than the 64 percent expressing this opinion in 1963, in spite of the growth of black militancy and cultural pride. Similarly, only 20 percent of blacks interviewed in 1963, and 17 percent in 1966, indicated a preference for living in all-black neighborhoods. The fraction of northern blacks preferring all-black neighborhoods was even smaller (8 percent in 1966), and the fraction of middle- and upper-income respondents in the North was smaller still (6 percent).<sup>7</sup>

In spite of the lack of any systematic evidence supporting the self-segregation hypothesis, it is difficult to dismiss. The problem lies in the fact that it is virtually impossible to determine conclusively the role of

<sup>6</sup>The most comprehensive comparative study of the segregation of blacks and other ethnic groups is by Stanley Lieberson, *Ethnic Patterns in American Cities* (Glencoe, Ill.: Free Press of Glencoe, 1963). Similar findings are reported in Otis Dudley Duncan and Stanley Lieberson, "Ethnic Segregation and Assimilation," *American Journal of Sociology* 64, no. 4 (Jan. 1959): 364-74; and Karl E. Taeuber and Alma F. Taeuber, "The Negro as Immigrant Group," *American Journal of Sociology* 69, no. 4 (Jan. 1964).

<sup>7</sup>William Brink and Louis Harris, *Black and White* (New York: Simon and Schuster, 1967), pp. 232-33.

self-segregation as long as traces of white community antagonism toward black efforts to leave the ghetto remain. The physical dangers of moving out of the ghetto may be less today than they were in the past, but many subtle and indirect forms of intimidation and discouragement still exist.

Today, evidence of the methods used to enforce housing-market segregation is more difficult to obtain than formerly. Open occupancy laws, which forbid discrimination in the sale and rental of housing on the basis of race, and a decline in clear-cut community approval for such practices have caused opponents of open housing to resort to more subtle and secretive methods.

Until very recently, however, the most effective techniques used to enforce segregation could hardly be called subtle. Deed restrictions (racial covenants), the appraisal practices of the FHA and of private lending institutions, the actions of local officials, and the practices of real-estate agents were among the most important of these devices.<sup>8</sup> Because residential patterns display a great deal of inertia, the effect of these now discredited methods will long be felt. Even if there were no future resistance to black efforts to leave the ghetto, the cumulative effects of decades of intense discrimination would have a long-lasting impact.

## PRICE DISCRIMINATION AND HOUSING CHOICES

Any attempt to evaluate the effects of racial discrimination in urban housing markets on housing prices and on the housing choices of white and black households must distinguish among several interrelated, but analytically distinct, questions. First, how does the price of housing inside the ghetto compare with the price of similar bundles outside the ghetto? A broad interpretation of this question would include consideration of the determinants of ghetto housing prices. Second, how much do black households have to pay for housing outside the ghetto? Specifically, do they systematically pay more than whites? Third, what are the full costs of obtaining housing outside the ghetto for white and black households? A narrow view of these costs would include the time and money spent in house hunting and any other incidental outlays. A broader conception would include the psychic costs of house hunting in

<sup>8</sup>McEntire, *Residence and Race*; Charles Abrams, *Forbidden Neighbors: A Study of Prejudice in Housing* (New York: Harper and Brothers, 1955); and Robert Thompson, Hylan Lewis, and Davis McEntire, "Atlanta and Birmingham: A Comparative Study in Negro Housing" in *Studies in Housing and Minority Groups*, Nathan Glazer and Davis McEntire, eds. (Berkeley and Los Angeles: University of California Press, 1960).

white neighborhoods and the fears of possible adverse consequences of moving into such a neighborhood. Fourth, what are the characteristics of the ghetto housing supply? Is a full range of housing types available there, and are scarcities adequately reflected in the relative prices of different bundles? To make matters still more difficult, the precise answer to these and similar questions will almost certainly vary by time and locality. Moreover, there are a variety of short-run dynamics that must be disentangled from the general condition in the market. These short-run dynamics may be quantitatively less important than the market's general state but may, nevertheless, strongly influence the perception of the market by observers and participants alike. Finally, the answers to these questions may differ by housing submarket. In particular, conditions may differ substantially between owner and renter housing.

#### DISCRIMINATION AND HOUSING PRICES

In spite of some recent improvement in the access of blacks to previously closed portions of the housing supply, limitations on the residential choices of black Americans remain great enough to justify the working assumption of separate black and white submarkets. As recently as 1964, housing ads in St. Louis newspapers carried separate listings for "Colored."<sup>9</sup> In general, blacks can purchase or rent property outside of neighborhoods which convention and practice have sanctioned for black occupancy only with great difficulty and inconvenience, and by incurring additional costs.

Whites, by contrast, may purchase or rent dwelling units anywhere, including the ghetto, although, owing to prejudice or other reasons, most live in predominantly white residential areas. This creates a situation in which location rents for equally accessible housing need not be the same within the two markets. Moreover, the characteristics of ghetto and nonghetto housing stocks differ significantly.

Our preceding discussion has emphasized the importance of stocks in determining the behavior of urban housing markets. New construction each year is but a fraction of the total housing supply. For all metropolitan areas, only 29 percent of occupied dwelling units in December 1959 had been constructed during the previous decade. Stocks are an even more important portion of the ghetto housing supply. Only 13 percent of

<sup>9</sup>Institute for Urban and Regional Studies, Washington University, St. Louis, Mo., *Urban Decay in St. Louis*, Working Paper INS 10, March 1972, p. 46.



the units occupied by blacks in 1959 had been built during the previous ten years. These averages are strongly weighted by southern metropolitan areas, where black neighborhoods are more dispersed and often contain vacant land on which some new construction for blacks takes place. In the northeast, only 8 percent of the black supply was less than ten years old; the fraction was even smaller (5 percent) in the north central region.

Most of the increased supply needed to house rapidly growing ghetto populations consists of units shifted from the white market, generally at the periphery of existing ghettos. For example, in the north central region, during the decade 1950-60 units formerly occupied by whites are nearly ten times as important as new construction in terms of additions to the black submarket (Table 3-2).<sup>10</sup> In contrast, few units shifted from black to white occupancy during the same period. For example, in the north central region, only about 7 percent as many units shifted from black to white occupancy as shifted from white to black.

#### DETERMINATION OF GHETTO HOUSING PRICES

Although the term location rent will be used in references to the ghetto housing stock, the determination of quasi rents on ghetto housing bundles is based on considerations different from those connected with nonghetto properties. Except for a few southern metropolitan areas, new construction is an unimportant source of additions to the black submarket. As a result, transport savings between a particular location and the periphery are virtually irrelevant in determining the *level* of location rents in ghetto areas. Instead, the level is determined almost entirely by the price at which units are shifted from the white market. This, in turn, will depend on the price level prevailing in the white market and on whether black buyers are able to buy or rent units at the white submarket price, must pay a premium, or can obtain them at a discount.

Whether blacks must pay a premium in order to add units to the ghetto is similar, but not identical, to the question of whether blacks pay more than whites for housing of otherwise identical characteristics. The distinction is that all types of housing may not be added to the ghetto in each period. Most researchers have concluded that blacks do pay more

<sup>10</sup>The ten-to-one ratio is obtained by allocating the "other" category in Table 3-2 (primarily units changed through conversions and mergers) in the same proportion as units whose previous occupant is known. Based on this assumption, in 1959 more than half of north central blacks lived in dwelling units that were occupied by whites a decade earlier.

TABLE 3-2  
The Sources of Ghetto Housing Supply by Region in 1960 Since 1950 (percent)

Region	New Construction	Previously Occupied by Whites	Previously Occupied by Blacks	Other <sup>1</sup>	Total
Northeast	7.5	39.1	40.5	12.9	100.0
North Central	5.4	48.9	31.4	14.3	100.0
South	19.7	16.6	51.2	12.5	100.0
West	21.8	34.5	32.6	11.1	100.0
United States	13.4	33.3	40.5	12.8	100.0
Inside Central Cities	10.6	37.0	40.0	12.3	100.0
Outside Central Cities	24.0	17.9	43.2	14.9	100.0
St. Louis	8.8	35.9	38.1	17.2	100.0

NOTE: Based on figures for nonwhite units inside SMSA's.

SOURCE: U.S. Bureau of the Census, *U.S. Census of Housing: 1960*, Vol. IV, *Components of Inventory Change*. Final Report HC (4), Part 1A, No. 1, 16 (GPO, 1962), Tables 2 and 4.

<sup>1</sup>Units changed through conversion and merger and added in ways other than new construction, and old units vacant in 1950.

than whites for housing of comparable size and quality, but this view is by no means unanimous.<sup>11</sup> This is, of course, a factual question, but while many such questions are easily resolved, determining the facts in this instance is not so simple. In order to ascertain whether there is a difference in prices paid by whites and blacks for comparable housing, it is necessary first to standardize the complex and heterogeneous bundle of residential services. In fact, one original motivation of our study was our assessment that, as yet, no one had been able to carry out this standardization sufficiently well to demonstrate conclusively that measured price differences are not simply the result of systematic differences in the housing consumed by whites and blacks.

A recent study by Thomas King and Peter Mieszkowski may come closest to coping with the difficult conceptual and empirical problems that have prevented a satisfactory empirical test of the price-discrimination hypothesis.<sup>12</sup> King and Mieszkowski estimated least-squares regressions for 220 rental units in New Haven, Connecticut, using rent per 100 square feet of living space as the dependent variable, and both supply and demand factors as explanatory variables. These included detailed descriptions of the size, quality, and other physical characteristics of the dwelling unit; a number of neighborhood variables, such as location and racial composition; and several household characteristics, including race, family size, and the education of the head of the household.

The principal difference between the equations estimated by these authors and those presented in Chapter 8 of this book is King and Mieszkowski's use of household characteristics as explanatory variables. Our analysis uses the estimated percent black in the census tract to

<sup>11</sup>McEntire, *Residence and Race*; Gary S. Becker, *The Economics of Discrimination* (Chicago: University of Chicago Press, 1957); Beverly Duncan and Philip M. Hauser, *Housing a Metropolis—Chicago* (Glencoe, Ill.: Free Press of Glencoe, 1960); Otis D. Duncan and Beverly Duncan, *The Negro Population of Chicago—A Study in Residential Succession* (Chicago: University of Chicago Press, 1957); Martin J. Bailey, "Effects of Race and Other Demographic Factors on the Values of Single-Family Homes," *Land Economics* 42, no. 12 (May 1966): 215–20; and Richard F. Muth, "The Variation of Population Density and Its Components in South Chicago," *Papers and Proceedings of the Regional Science Association* 11 (1964); Chester Rapkin, "Price Discrimination Against Negroes in Rental Housing Market" in *Essays in Urban Land Economics* (Berkeley and Los Angeles: University of California Press, 1966); Ronald G. Ridker and John A. Henning, "The Determinants of Residential Property Values with Special Reference to Air Pollution," *Review of Economics and Statistics* 44, no. 2 (May 1967); Chester Rapkin and William Grigsby, *The Demand for Housing in Racially Mixed Areas* (Los Angeles and Berkeley: University of California Press, 1960); Luigi Laurenti, *Property Values and Race: Studies in Seven Cities* (Berkeley and Los Angeles: University of California Press, 1960).

<sup>12</sup>Thomas King and Peter Mieszkowski, "Discrimination, Segregation, and the Price of Housing," *Journal of Political Economy* 81, no. 3 (May/June 1973): 590–606.

describe the ghetto and does not include descriptions of the race or any other characteristics of the occupants, except how long they have lived in the unit.

King and Mieszkowski experiment with a variety of specifications to describe racial differences in the occupants of the unit and the neighborhood. Their first equation, which includes only the race of the occupant, indicates that black renters in New Haven pay 11 percent more than white renters. When King and Mieszkowski add the percentage of nonwhites on the block (obtained from New Haven's 1967 census pretest), the combined effects of these two variables indicate that a black family living in the ghetto will pay 19 percent more than a white family living in an all-white neighborhood. A virtually identical estimate was obtained when the race dummy was replaced simply by the percentage of blacks on the block; rents are 18 percent higher in all-black neighborhoods than in all-white neighborhoods. From these results, King and Mieszkowski conclude that "in our sample the blacks and whites in the ghetto both pay the same rent, which is much higher than in the white interior."<sup>13</sup>

King and Mieszkowski test a variety of hypotheses about the prices paid by whites and blacks at the ghetto boundary but caution that their estimates of these boundary effects are based on few observations and are much less reliable than the estimates described above.<sup>14</sup> Still, their results indicate that blacks in the black boundary pay more than whites living in the same location, but both pay less than in the ghetto. Moreover, in the white boundary, blacks pay more than whites but not more than whites in the white interior.<sup>15</sup> Finally, their analyses indicate that blacks and whites pay the same rent in the white interior. King and Mieszkowski do not report how many blacks live in the white interior but note that only fourteen blacks live in either the white boundary or the white interior.

<sup>13</sup>Ibid., p. 29.

<sup>14</sup>King and Mieszkowski's analysis of boundary effects is motivated by the previously cited article on price discrimination by Bailey and by the brief, but widely cited, theoretical statement by Bailey which motivates his empirical analysis. Bailey, "Effects of Race," and Martin J. Bailey, "Note on the Economics of Residential Zoning and Urban Renewal," *Land Economics* 35 (Aug. 1959): 288-90.

<sup>15</sup>A unit is considered in the ghetto if it is located in a block 60-100 percent black, and if the surrounding blocks are 60-100 percent black. A unit is considered in the black boundary if the block is 60-100 percent black, and the surrounding blocks are 0-60 percent black, or if the block is 0-60 percent black, and the surrounding blocks are 60-100 percent black. A unit is considered in the white boundary if the block is 20-60 percent black and the surrounding blocks are 0-60 percent black, or if the block is 0-20 percent black and the surrounding blocks are 20-100 percent black. A unit is considered in the white interior if the block is 0-20 percent black and if the surrounding blocks are 0-20 percent black.

TABLE 3-3  
Discrimination Markups Paid by Nonwhite Occupants in  
10 Large Metropolitan Areas—1960

City	CHUS/Census Data	CHUS Data
Chicago	20.4 (2.5)	11.9 (2.0)
Los Angeles	9.5 (3.6)	-4.9 (-3.5)
Detroit	9.6 (1.6)	1.6 (1.6)
Boston	3.1 (4.2)	-5.9 (-4.3)
Pittsburgh	16.9 (4.3)	11.2 (4.3)
Cleveland	12.6 (2.4)	10.4 (2.1)
Washington	3.0 (2.2)	-4.9 (1.9)
Baltimore	17.4 (2.5)	9.0 (2.6)
St. Louis	13.4 (3.4)	-0.3 (2.1)
San Francisco	-0.1 (3.9)	-7.4 (8.1)

NOTE: Numbers in parentheses are standard errors.

An unpublished study by Robert F. Gillingham provides independent estimates of discrimination markups for a number of large metropolitan areas in 1960, including St. Louis.<sup>16</sup> Shown in Table 3-3 are two sets of estimates of the discrimination markups obtained for the 10 large metropolitan areas included in the Bureau of Labor Statistics Comprehensive Housing Unit Survey (CHUS). The first set of discrimination markups are those obtained when only dwelling unit characteristics, obtained from the CHUS, were included in the model. The second column of estimates are those obtained when neighborhood characteristics obtained from the 1960 Census of Population are included in the equation.

<sup>16</sup>Robert F. Gillingham, "Place to Place Rent Comparisons Using Hedonic Quality Adjustment Techniques," Research Discussion Paper No. 7, Research Division, Office of Prices and Living Conditions, U.S. Bureau of Labor Statistics, Washington, D.C., March 1973.

The statistics shown in Table 3-3 illustrate two important propositions. First, the estimates obtained from the complete model provide powerful support for the hypothesis that black renters in a large number of U.S. metropolitan areas paid higher rents for comparable housing in 1960 than white renters. Of the 10 large metropolitan areas included in Gillingham's analysis, there was evidence of positive discrimination markups for rental housing in 9 of them. The estimate for St. Louis, incidentally, was 13.4 percent in 1960. Gillingham's second finding, which is vividly demonstrated by a comparison of columns 1 and 2 in Table 3-3, relates to the importance of complete and proper specification of the hedonic price equations. Gillingham's results strongly indicate that those analyses that fail to include neighborhood descriptors have seriously underestimated the size of the discrimination markups imposed on black households by housing-market discrimination. When measures of neighborhood quality are not included in the regressions, positive discrimination markups are obtained in only 5 metropolitan areas and the magnitude of the markups in the remaining areas are in all cases considerably smaller.

In spite of the serious methodological and empirical problems involved, we conclude that most types of housing are more expensive inside the ghetto, and that a premium is required to shift bundles to the ghetto submarket.<sup>17</sup> This is based on our review of previous empirical studies, on our own findings presented in Chapters 5 through 10, and on a broader range of descriptive material and a priori reasoning.

Prices at active margins of the ghetto then may be depicted as equal to the price in the white submarket plus a premium, or discrimination markup. This markup may be some constant amount, as in Equation 3-1, or may be proportional to value, as in Equation 3-2.

$$(3-1) \quad p_k^n = p_k^w + \alpha$$

$$(3-2) \quad p_k^n = p_k^w (1 + \beta)$$

where

$p_k^n$  = monthly rent or market value in the ghetto submarket for housing type  $k$ ;

$p_k^w$  = monthly rent or market value in the nonghetto submarket for housing type  $k$ ;

$\alpha, \beta$  = ghetto housing price markups.

<sup>17</sup>Further complications are introduced by the fact that the magnitude of such discrimination would be expected to differ among metropolitan areas and over time in the same area. The size of the premium blacks must pay to shift housing from the white to the black market will depend on the extent of prejudice, the degree of organization of the market, and the instruments available to those wishing to contain the expansion of the black submarket.

The prices in Equations 3-1 and 3-2 apply, of course, to comparable housing bundles, i.e., identical collections of attributes. This requirement is easier to satisfy in principle than in practice. As we will illustrate in subsequent chapters, the ghetto housing market is far from a microcosm of the region's housing market. The supply of housing services in the ghetto differs systematically from that located outside, and many types of housing are completely unavailable. Blacks who seek to purchase housing outside the ghetto incur high transaction costs. They will often find realtors and other agents less than helpful, many hours of effort are typically required, and the householder and his family may meet with a hostile reception from their new neighbors.

The discrimination markup, shown in Equations 3-1 and 3-2, closely resembles the concept of a discrimination coefficient employed by Gary Becker in his classic work, *The Economics of Discrimination*. However, there is a crucial difference. Becker's discrimination coefficient is a measure of the individual seller's taste for discrimination and indicates the amount of money he would be willing to forgo to avoid selling to blacks.<sup>18</sup> The discrimination markup in our formulation depends only in part on an individual seller's unwillingness to sell to blacks. Becker's model depicts atomistic sellers with God-given tastes acting independently; the mechanism presented by us may easily describe much more collusive behavior and a relatively high level of market organization. Individual sellers may be motivated in part by individual prejudice, but real or imagined community pressures and the behavior of intermediaries are hypothesized to play a central role in affecting the white seller's willingness and opportunities to sell or rent to a black. In the not so distant past, these discriminatory actions were highly organized and such behavior was enforced by codes of "ethics" among market agents and even by FHA appraisers. Today the degree of organization appears to be less, or at least less visible.

This formulation can also provide an explanation of peripheral expansion of the ghetto, something which is entirely absent from

<sup>18</sup>In his brief discussion of residential discrimination, Becker concludes that "Negroes still (1957) appear to pay significantly more than whites for housing in cities like Chicago, where rent control and restrictive covenants have been abolished for several years" (p. 79). He adds that "this can be interpreted as an equilibrium difference that will be maintained until public policies or individual tastes change" (p. 79). But his subsequent discussion gives greater emphasis to explanations other than consumer "tastes for discrimination." For example, "since Negroes are prevented from living in white neighborhoods, their population can expand only within and on the periphery of existing Negro neighborhoods. If they expand within these neighborhoods, their rents will increase relative to rents for whites. . . . This rent differential, although caused by an adjustment lag, would appear to be a long run differential" (p. 80). In essence, a careful reading of Becker reveals that he places very little emphasis on tastes for discrimination as an explanation of residential price discrimination.

Becker's model. When excess demand within the ghetto becomes too great, i.e., when the price within the ghetto exceeds the white submarket price plus the markup [ $p^w + \alpha$ ] or  $p^w [1 + \beta]$ , units are shifted from white to black occupancy at the ghetto's periphery. The persistent expansion at the periphery and the infrequent purchases of housing by blacks outside the ghetto can, perhaps, be explained by much larger discrimination markups for properties distant from the ghetto—markups that exceed the potential transportation-cost advantages or general benefits of all other locations. Larger markups for housing bundles located far from the ghetto than for comparable bundles on the boundary of the ghetto can occur if there is a greater consensus about keeping blacks out of more remote neighborhoods. When rapid growth of the black population makes it apparent that expansion must take place somewhere, it is channeled into adjacent neighborhoods.

The discrimination markup would be a monetary increment in either the rent or purchase price paid by blacks in order to add a unit to the ghetto. From our assessment of the available evidence, we would place greater emphasis on the transaction costs of finding a suitable dwelling and persuading the owner or landlord to make a transfer, on the problems of acquiring information, and on the psychic costs of moving into a potentially hostile environment. If a black chooses a dwelling within the ghetto, he can expect to be courted by both white and black real-estate agents and lenders. If he tries to locate outside the ghetto, the reception he receives from these agents is likely to be far less enthusiastic.<sup>19</sup> Returning to Equations 3-1 and 3-2, these factors can be thought of as an additional once-and-for-all transactions cost for both rental and owner-occupied structures. These transactions costs will vary by location within a metropolitan area; in general, they will be highest in all-white neighborhoods farthest from the ghetto, but other factors may influence them as well. For example, they may be lower in communities with active fair-housing groups. Equations 3-3 and 3-4 depict these ghetto markup equations with the transactions costs,  $\lambda_i$ , added. It should be emphasized that while there may be elements of continuing costs, in general they are one-time costs for each dwelling unit. We would predict, therefore, that black households will be more willing to incur them when they expect to remain in the community for a long time.

$$(3-3) \quad p_k^n = p_k^w + \alpha + \lambda_i$$

$$(3-4) \quad p_k^n = p_k^w (1 + \beta) + \lambda_i$$

<sup>19</sup>Testimony describing the conditions encountered by black households in St. Louis who attempt to acquire housing outside the ghetto is contained in U.S. Commission on Civil Rights, *Hearing*, held in St. Louis, Missouri, January 14–17, 1970.



There are two other explanations of ghetto expansion and price determination that are worthy of mention. One of these, like the hypothesis outlined above, produces a positive discrimination markup. The other also provides for peripheral expansion of the ghetto but produces a negative discrimination markup.

A positive discrimination markup and peripheral expansion of the ghetto might occur if blacks prefer to live in or near the ghetto and are therefore willing to pay more for adjacent properties. In the case of blacks employed at suburban workplaces, this preference for ghetto locations must be great enough to offset the transportation-cost savings accruing from residence in suburban areas. Under these circumstances, *ceteris paribus*, rents would be higher in the black submarket because blacks regard the ghetto as a more desirable location.

A third hypothesis produces a negative markup. It postulates that whites residing on the periphery of the ghetto are more willing to sell to blacks than whites living further from the ghetto because of their reluctance to live near blacks, their fear of racial invasion, and their belief that property values will plummet with black entry. Black entry into a white neighborhood located on the periphery of the ghetto is interpreted as the first step in an inevitable process through which the neighborhood will rapidly become all black. If white fears are great enough in these transitional neighborhoods, blacks may be able to purchase or rent housing bundles for substantially less than in the white market. Since black entry into a white neighborhood distant from the ghetto does not signal the same inevitable process, whites do not panic and prices remain firm.

In those cases where white panic depresses prices in the short run, the value of the discrimination markup would be negative, and the ghetto would expand as long as blacks were willing to pay a price equal to the white submarket price on the periphery of the ghetto plus the negative markup. Bargains obtainable at the periphery would discourage blacks from paying higher prices to reside in all-white neighborhoods far from the ghetto.

All three of the above hypotheses outline mechanisms for peripheral expansion of the ghetto. The first and second produce higher housing prices in the ghetto than outside for both black and white households, while the third produces lower prices in the ghetto for all households. The second hypothesis seems highly implausible, given the preceding discussion of self-segregation. A choice between the first and third can be made by determining empirically whether blacks must pay a premium or can obtain their units at a discount. The preponderance of evidence suggests that, typically, they pay a premium.

The fact that the *level* of location rents in the black market depends

primarily on the level in the white market and the discrimination markup does not imply that accessibility considerations are irrelevant in describing the surface of location rents within the ghetto. In a manner parallel to conventional models of residential location, the location rent surface within the ghetto depends on the distribution of black jobs and the savings in transport costs afforded by various residential locations. Given a rapid redistribution of black jobs, it is possible that some parts of the ghetto might become more accessible to the new employment centers.

Location rents would be bid up in these residential areas, causing the shape of the location rent surface within the ghetto to deviate from that outside. However, these factors should be temporary if the previous discussion of the processes that shift housing from the white to the black submarket is valid. As long as the markup for shifting units to the black submarket is the same everywhere at the periphery, the location rent surface within the ghetto should in general resemble that in the white market plus or minus a markup. Deviations would occur only if the markup,  $\alpha$ , were larger at some boundaries than others.

In fact, there is evidence that differences of this kind exist. Some ethnic neighborhoods resist black entry more strongly than neighborhoods with less clear identities, and suburbs with small black ghettos may be more successful in limiting their expansion through zoning and other political means. Forces such as these would increase the discrimination markup. Alternatively, if the ghetto is bounded by groups sympathetic to the plight of blacks, the markup might be lower.<sup>20</sup>

#### BOUNDARY EFFECTS AND SHORT-RUN DYNAMICS

The foregoing discussion of price discrimination has been concerned primarily with the overall level of housing prices in the ghetto and in all-white neighborhoods. The analysis fails to consider a number of aspects of housing-market structure and dynamics which may result in temporary price deviations in transitional areas. The persistent belief that prices are lower in the ghetto than outside may be fueled by the short-run dynamics accompanying the transition of neighborhoods from

<sup>20</sup>For example, the tendency for the ghetto to expand through Jewish neighborhoods has been noted by a number of observers. Ernest W. Burgess commented on this question in an early paper and remarked that "no instance has been noted . . . where a Negro invasion succeeded in displacing the Irish in possession of a community. Yet, frequently . . . Negroes have pushed forward in the wake of retreating Jews. . . ." Ernest W. Burgess, "Residential Segregation in American Cities," *Annals of the American Academy of Political and Social Science* 140 (Nov. 1928): 112.

all-white to black occupancy. These factors should have their greatest impact in the market for owner-occupied units.

Real-estate transactions are complex and time consuming. Because both the supply of available properties and potential purchasers are so heterogeneous, selling a house typically takes weeks or months. The effects of this heterogeneity on both the supply and demand side are reinforced by the great expense incurred in buying a house, including both search and transactions costs, which may exceed 10 percent of the value of a single-family unit.<sup>21</sup> Few persons are willing or able to pay cash for the real estate they purchase; therefore, they must locate a mortgage lender and file a mortgage application. More time is required for credit checks, appraisals of the property, and loan processing. These steps, always difficult and time consuming, are compounded in areas in the path of ghetto expansion, which are expected to become part of the ghetto. The transition from white to black occupancy may be accompanied by a changeover in the institutions, i.e., real-estate agents, banks, and other mortgage lenders, who perform these crucial functions.

Far too little information exists on the role of these institutions in the real-estate market and in the maintenance of racial segregation, but casual empiricism suggests that different institutions perform these functions in black and white neighborhoods.<sup>22</sup> In addition, although there is little hard proof, it is widely believed that banks and other lenders are less willing to finance properties in the ghetto or in areas expected to become part of the ghetto. Redlining by insurance companies may contribute to the problems of financing properties in ghetto neighborhoods, or in neighborhoods in the path of expansion. The Kerner Commission carried out a survey of approximately fifteen hundred homeowners in areas of Boston, Cleveland, Detroit, Newark, Oakland, and St. Louis. Over 6 percent of the homeowners did not have basic fire insurance, and in Detroit 12 percent were without it.<sup>23</sup>

Even if there were no unusual problems associated with selling property in areas that are expected to become part of the ghetto, temporary price declines could occur if many whites panicked and attempted to sell their properties quickly, fearing that the anticipated black invasion would lower property values. Such fears may be encouraged by block-busters, who in many areas have managed racial transition to provide speculative profits. We know of no careful study of block-busting, but journalistic accounts are plentiful and altogether consistent with our views of the structure of urban housing markets.

<sup>21</sup>John P. Shelton, "The Cost of Renting Versus Owning a Home," *Land Economics* 44, no. 1 (Feb. 1968): 59-72.

<sup>22</sup>McEntire, *Residence and Race*, chaps. 13 and 14.

<sup>23</sup>President's Commission on Civil Disorders, *Report of the National Advisory Commission on Civil Disorders* (GPO, Mar. 1968), Appendix II.

One of the most suggestive of these accounts has been provided by Jack Rothman.<sup>24</sup> In a brief article, Rothman emphasizes the contributions to racial segregation made by the separate sets of institutions serving the ghetto and nonghetto housing markets. He classifies brokers, for example, into two categories, "block-busters" and "lily-whiters."

The block-busters are the more deliberately destructive. Once a Negro somehow manages to move into a white neighborhood, these brokers make their entrance and work over the area. Through house-to-house canvassing, relentless telephone solicitation, use of the mails and by various other means, they create an atmosphere of panic in the neighborhoods and high-pressure the white residents into selling. They open up one block at a time, saturating block A with Negroes and then going on to block B. "Do you want your kids to play with colored kids?" goes their sales talk. "Do you want to be the last white family left on the block? Do you want to lose a fortune on your house?" Characteristically, they approach a home owner with a cash offer and the (often fallacious) news that Mrs. Jones down the street is selling to a Negro family. Emphasis is placed on the urgency of selling immediately, before the value of the house nose-dives.<sup>25</sup>

The "lily-whiters" in Rothman's paradigm are brokers operating in white neighborhoods who serve only whites. They support the actions of block-busters by discontinuing operations in transitional neighborhoods, and by not showing properties to their white customers in these areas.<sup>26</sup> A precipitous decline of white demand for properties in these neighborhoods is the inevitable result.

Rothman and others contend that banks and other lending institutions support this operation by making it difficult for nonwhites to obtain a mortgage when they attempt to buy in a white area and by discriminating against whites who want to buy in a changing neighborhood.

If the block-busters are able to persuade enough whites that property values will fall with black entry, they may cause it to happen, at least temporarily. Declines in white demand in anticipation of certain black invasion, occurring in conjunction with efforts by many white owners to sell their properties, could temporarily depress house values. Block-busters make their profit in these situations by buying properties at less than the white market price,  $p^w$ , and holding them for resale to black households at the ghetto price,  $p^w + \alpha$ . The difference between the panic price and the ghetto price is the block-buster's profit and his incentive to perform this function. In circumstances such as these, some

<sup>24</sup>Jack Rothman, "The Ghetto Makers," *Nation* 10, Oct. 7, 1961. Reprinted in part in *Race and Poverty: The Economics of Discrimination*, John F. Kain, ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1969).

<sup>25</sup>Rothman, "Ghetto Makers," p. 123.

<sup>26</sup>For accounts of this "steering" of white and black buyers in St. Louis, see U.S. Commission on Civil Rights, *Hearing*.

white residents may receive less than the price of housing in white neighborhoods; at the same time, blacks purchasing the property may have to pay a discrimination markup.

Several researchers have studied the effects of racial integration on the prices of single-family homes.<sup>27</sup> In general, the issue is whether the entry of blacks into a previously all-white neighborhood causes property values to decline. The problem is formulated in these terms because many real-estate brokers, lenders, and other crucial agents in the real-estate market allege it to be the case, and because John Q. Public is encouraged to share their belief.

In our opinion, the most interesting and careful study of this kind has been carried out by David Karlen for the South Shore Community in Chicago.<sup>28</sup> Karlen's investigation assumes additional importance, moreover, because it considers the same housing market as that studied by Martin Bailey a decade earlier. Bailey's interesting, but to us confusing, analysis of sales of single-family units on Chicago's South Side has been widely cited as evidence that price discrimination does not exist in urban housing markets. From his analysis, Bailey concludes:

On the major question . . . whether slum-dwellers and non-Caucasians pay more than others for equivalent housing, these data not only fail to support this idea but on the contrary point to the opposite situation. If values within the slum were to be as high or higher than those outside, there would be a jump in values just as one crossed the boundary into the slum to offset the decline in values as one approaches it.<sup>29</sup>

<sup>27</sup>The best-known study of this type is Laurenti, *Property Values and Race*. Other studies of housing prices in racially changing neighborhoods include: W. M. Ladd, "Effect of Integration on Property Values," *American Economic Review* 52, no. 4 (Sept. 1962); Erdman Palmore, "Integration and Property Values in Washington, D.C.," *Phylon* 27 (Spring 1966); Erdman Palmore and John Howe, "Residential Integration and Property Values," *Social Problems* 10, no. 1 (Summer 1962); Rapkin and Grigsby, *The Demand for Housing in Racially Mixed Areas*; Frederick E. Schietinger, "Race and Residential Property Values in Chicago," *Land Economics* 30 (Nov. 1954); Joseph P. McKenna and Herbert D. Werner, "The Housing Market in Integrating Areas," *Annals of Regional Science* 4, no. 2 (Dec. 1970); Donald Phares, "Racial Change and Housing Values: Transition in an Inner Suburb," *Social Science Quarterly* (Dec. 1971); Allen Dobson, "Price Changes of Single Family Dwelling Units in Racially Changing Neighborhoods" (Ph.D. diss., Washington University, 1970); T. E. Billette, "Sante Fe: A Study of the Effects of Negro Invasion on Property Values," *American Journal of Economics and Sociology* 16, no. 2 (Jan. 1957): 151-62.

<sup>28</sup>David H. Karlen, "Racial Integration and Property Values in Chicago," Urban Economics Report #7, University of Chicago, April 1968. The boundaries of South Shore Community studied by Karlen are 67th Street on the north, Stony Island on the west, 73rd Street on the south, and Lake Michigan (from 67th to 71st) and Yates Ave. (from 71st to 73rd) on the east.

<sup>29</sup>Bailey, "Effects of Race," p. 220.

Bailey's work stands out as one of the very few empirical analyses to find no evidence of a price markup. As with most other empirical studies, it is not without conceptual and empirical failings.<sup>30</sup>

In 1960, the South Shore Community area of Chicago had a population of 133 blacks and 56 other nonwhites out of a total population of 26,662. However, it was directly in the path of ghetto expansion, and by 1966 was perhaps three-fourths black. In an effort to distinguish between the effects of racial integration and other factors affecting property values, Karlen compared the experience of the South Shore Community with that of a control area in the northern part of the city. The control area resembled the South Side community in most respects, but it was not in the path of ghetto expansion.

In spite of Karlen's efforts to match the test and control areas to the greatest possible extent, properties in the control area were more expensive at the beginning of the period than those in the South Shore Community. Therefore, he constructed the relative-price indexes which appear in Figure 3-1 to show the movements in relative prices in the two areas. The analysis indicates that property values in the South Shore Community were declining relative to those in the North Shore test area prior to the time of black entry.<sup>31</sup> Between 1956 and 1961, house prices in the South Shore Community studied declined by 18 percent in relative value—the values in the test area declined from .84 of the values in the control area in 1956 to .69 in 1961. For most of this period, the area was all white.

Once the area was clearly identified for black occupancy, however, property values in the South Shore Community increased relative to those in the North Shore test area. Karlen estimates that between 1962 and 1966 values in the South Shore Community increased both absolutely and relatively; the increase relative to the control area being from .65 to .78.

Karlen offers the following explanation of this price behavior. (1) Before blacks began moving in, white demand decreased drastically because of a widespread expectation among whites that the South Shore Community was next in line for expansion of the ghetto. (2) During the

<sup>30</sup>A detailed critique of Bailey's analysis is contained in Mitchell Stengal, "Racial Price Discrimination in the Urban Rental Housing Market" (Ph.D. diss., Harvard University, 1970).

<sup>31</sup>Karlen reports that the values in the South Shore Community had been declining before the 1960 census and that significant black entry to the area began about 1962. This entry was accompanied by a doubling of the rate of sales activity in the neighborhoods, a pace that was maintained until the area had become predominantly black; a "normal" level of activity was reached again in 1966 (Karlen, "Racial Integration and Property Values" [p. 11]).

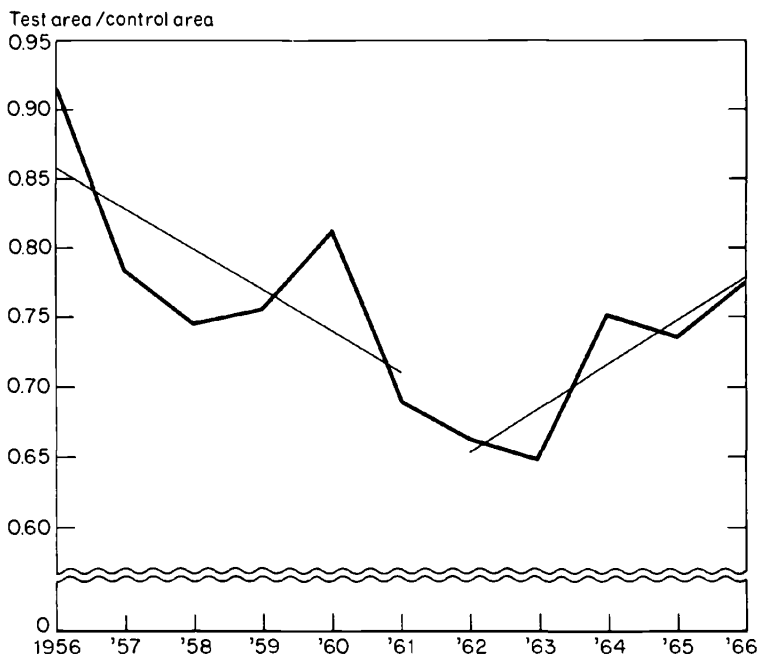


FIGURE 3-1

Relative-Price Index (Test Area/Control Area) with Two Regression Lines [Source: David H. Karlen, "Racial Integration and Property Values in Chicago," Urban Economics Report No. 7, University of Chicago, April 1968, p. 26.]

transition period, around 1960–61, only a few blacks sought housing in the area, and the black demand for homes was insufficient to offset the decrease in white demand. (3) Once the area was clearly identified for black occupancy (about 1961), large numbers of blacks sought housing there, and "their increased demand eventually more than compensated for both the decrease in white demand and the increase in the supply of white homes for sale."<sup>32</sup>

Karlen makes no attempt to determine whether the prices of properties in the South Shore Community at the end of the transition period were higher or lower than the prices of comparable units in comparable all-white areas safe from ghetto expansion. He does, however, conclude that "because Negro demand could not be diffused over the metropolitan area, it had to be concentrated on the few areas like South Shore where a breakthrough had been made, thus driving values up. And South

<sup>32</sup>Ibid., p. 16.

Shore's proximity to the Negro ghetto, in the absence of open housing, made it a logical area for such a 'breakthrough.'<sup>33</sup>

Similar findings were reported by Donald Phares in a study of property values in University City, Missouri. Phares' study—the second of two recent studies of property values in University City—is especially pertinent to this book, because University City is located in St. Louis County, contiguous to St. Louis city.<sup>34</sup>

The housing in University City is generally of high quality. In 1970, 61 percent of the 17,000 dwelling units were owner-occupied, a decline from 66 percent in 1960. As we detail in later chapters, good-quality single-family units for black households are in short supply in St. Louis. The opening up of University City to black occupancy provided St. Louis blacks with an opportunity to obtain types of housing that had been expensive or completely unavailable to them previously.

The first black purchases in University City occurred in 1964 in the northeast section of the city. Only 88 residents, or one-tenth of 1 percent of University City's 51,249 population, were black in 1960. A decade later University City's 9,281 black residents comprised 20 percent of a somewhat smaller total population, and 42 percent of University City's elementary school students were black. Phares analyzes changes in property values in University City between 1958 and 1967. Since the first sales to blacks occurred in 1964, he is able to analyze property values before black entry and during the period of racial transition (1964–67).

The data used by Phares are sales and assessed valuation for 1,030 single-family units. An important aspect of his analysis is a comparison of the price experience in elementary-school districts undergoing differing amounts of integration during the period. These comparisons among neighborhoods are based on indexes of sales prices to 1970 assessed valuation. Fortunately, the assessment data were of unusually high quality, since a comprehensive reassessment of the area had been done recently by an independent assessment organization. Use of a ratio of selling price to assessed valuation in order to examine price changes incorporates some adjustment for quality differentials into the analysis, a major problem in most studies of property values.

Phares classified neighborhoods into two groups according to the amount of integration that occurred during the period: (1) no or very little integration (less than 10 percent nonwhite enrollment in the elementary schools in 1967), and (2) significant integration (more than 20 percent nonwhite enrollment in the elementary schools in 1967).<sup>35</sup> His

<sup>33</sup>Ibid.

<sup>34</sup>Phares, "Racial Change and Housing Values."

<sup>35</sup>Phares also reported the analysis using three categories: (1) no or little integration; (2) moderate integration; and (3) substantial integration (ibid.).



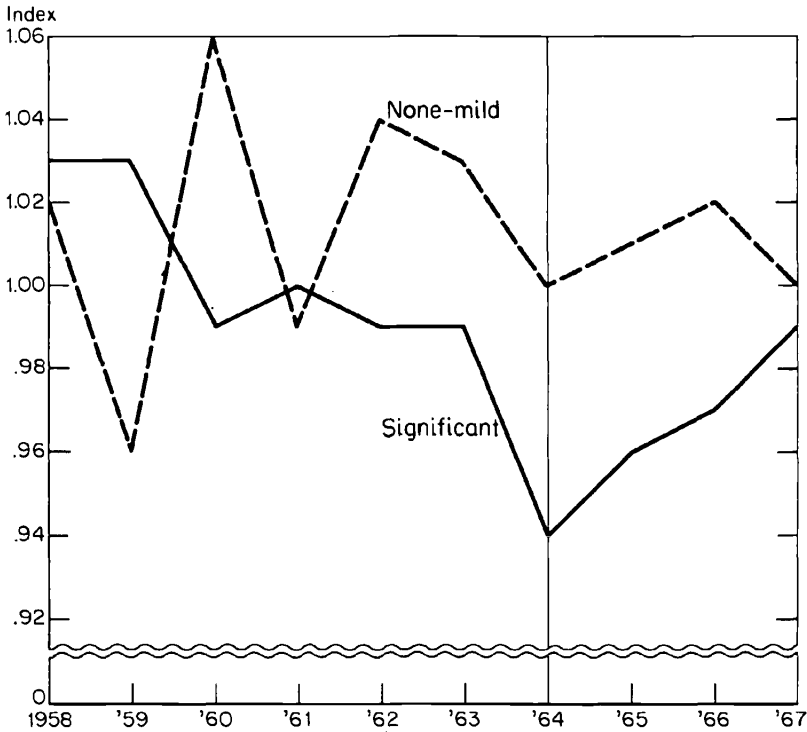


FIGURE 3-2a

Relative-Price Index by Degree of Transition, University City, Missouri, 1953-67

findings, summarized in Figures 3-2a and 3-2b, are similar to those obtained by Karlen. Relative prices (Figure 3-2a) in areas with significant entry exhibits fairly regular declines between 1958 and 1964, i.e., prior to black entry, and a rapid rise after 1964. By contrast, relative prices in the control area, i.e., areas with no or mild nonwhite entry, fluctuate considerably but exhibit no trend either before or after entry. The number of transactions in the area with significant integration increased sharply after 1964, whereas the number of transactions in the control area exhibits a slight upward trend over the entire period 1958-67 (Figure 3-2b).

Black entry to the suburbs in St. Louis during the decade 1960-70 was not limited to University City. Joseph P. McKenna and Herbert D. Werner carried out a study similar to Phares' for the Normandy School District in St. Louis County.<sup>36</sup> Until 1965, when blacks began to buy and

<sup>36</sup>McKenna and Werner, "Housing Market in Integrating Areas."

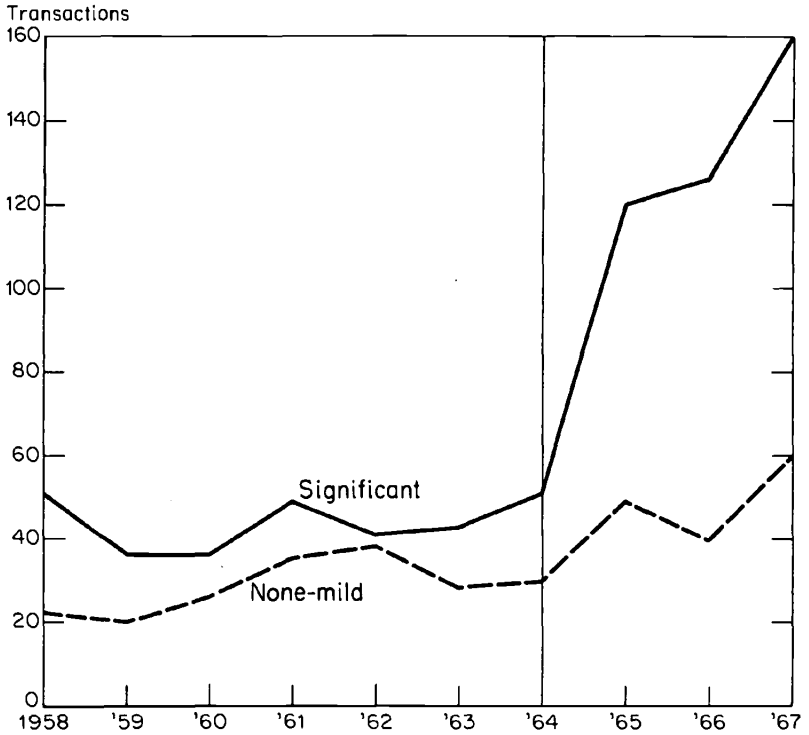


FIGURE 3-2b

Number of Transactions by Degree of Transition, University City, Missouri, 1953-67

rent homes in the eastern and southern sections of the district, the entire district, which includes twenty-nine separate municipalities, was occupied almost exclusively by whites. By December 1970, four of the eight elementary schools were integrated, while the remaining four had no black students.

The methodology used by McKenna and Werner is virtually identical to that used by Phares: ratios of sales prices to assessed values were computed for twenty-five-hundred transactions, and those ratios were then grouped by elementary-school districts. The entire area had been reassessed in 1958 by the same firm that reassessed University City. From the data shown in Figure 3-3(A). McKenna and Werner conclude that the difference in prices in integrating and nonintegrating areas is small, and that if integration has an effect "it is probably the least important of all of the factors influencing price."<sup>37</sup> At the same time,

<sup>37</sup>Ibid., p. 131.

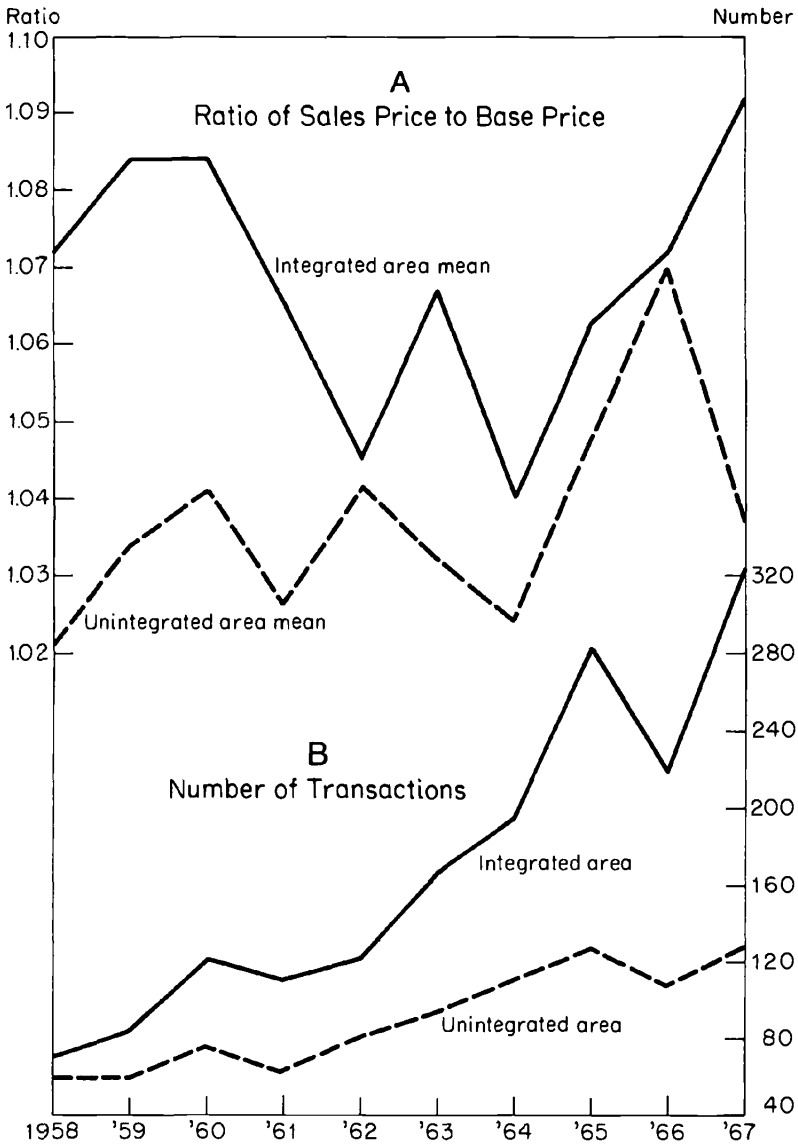


FIGURE 3-3

Ratio of Sales Price to Base Price and Number of Transactions by Integrated and Unintegrated Areas of the Normandy District, by Year [Source: Joseph P. McKenna and Herbert D. Werner, "The Housing Market in Integrating Areas," *Annals of Regional Science* 4, no. 2 (Dec. 1970): 131-33.]

they conclude from the transactions data that integration greatly increases the turnover of houses (Figure 3-3 (B)). Their observations about these market dynamics are virtually identical to those offered by Phares and Karlen.

#### EFFECTS ON LOCATION RENTS

The impact of housing-market discrimination on the metropolitan surface of location rents is not limited to its effect within the black market. By reducing the white submarket supply of residential sites in particular parts of the metropolitan region, it affects the level and spatial distribution of location rents in the white market as well. The central location of the ghetto causes location rents in central areas to be higher than they would be if this pattern of housing-market discrimination did not exist. It is true that some centrally employed blacks would choose to live in these centrally located residential areas even if there were no discrimination. However, many blacks employed at central workplaces and nearly all blacks employed in suburban areas would not bid for these central locations were it not for restrictions on their choice of residence. Of course, this also means that the current demand by blacks for suburban sites is less than it would be if no housing-market discrimination existed. The net effect of the present restrictions is to increase the demand for sites in central areas where the ghetto is located and to decrease relatively the demand for suburban locations. The rapid growth of the black market represents a source of demand for central-city properties that might not exist in the absence of segregation. An offsetting influence which might increase the demand for central-city properties in the absence of residential segregation would come from centrally employed white workers who willingly pay higher transport costs to avoid living in integrated housing. Thus, while the suburbanization of black households may reduce total demand for central-city properties, the white demand for central locations should increase if the spatial distribution of employment remains unchanged.

#### HOUSING QUALITY, EXTERNAL EFFECTS, AND COLLECTIVE GOODS

The preceding discussion of the effects of residential discrimination on metropolitan housing markets, while eliminating some serious deficiencies of existing "economic" theories of residential location, fails to consider a number of factors that influence the behavior of urban housing markets and that reinforce the effects of residential segregation.

As has been discussed more fully in Chapter 2, existing "economic" theories of residential location entirely ignore housing stocks, despite the fact that stocks are more important in housing than in almost any other market.

Given a heterogeneous and durable stock of structures and neighborhood attributes, different price relationships may exist between the black and white submarkets for various kinds of housing. It is not hard to imagine circumstances where blacks have to pay a premium for adding certain types of housing bundles (of particular size, quality, or other characteristics) to the ghetto, while other types of bundles may be cheaper there. Such a result could arise if housing bundles become less desirable to whites once they become part of the ghetto. It seems likely that few whites will wish to live in all-black neighborhoods, particularly deep within the ghetto. Thus, housing bundles located in the ghetto might be cheaper than otherwise identical ones outside without causing large numbers of whites to buy or rent them. This difference, which might be termed the ghetto discount, could exist for some kinds of properties at the same time blacks were finding it necessary to pay a premium to add other kinds of units to the ghetto.

Assume that there are only two kinds of dwelling units, high quality and low quality. The conditions outlined above could produce an excess supply (defined in terms of the white market price) of low-quality dwelling units within the ghetto coexisting with an excess demand for high-quality units. For this excess-supply condition for low-quality dwelling units to be consistent with the continued expansion of the ghetto and the payment of a premium for high-quality units, it is only necessary that the supply price of providing high-quality units by means of ghetto expansion (the price of high-quality units in the white market plus the discrimination markup) be less than the cost of providing such units through the conversion of low-quality units (the price of low-quality units in the black submarket plus the cost of upgrading).<sup>38</sup>

Though the growth of the ghetto has not been systematically studied in these terms, most descriptive accounts seem consistent with a mechanism of this kind. These accounts indicate that the peripheral expansion of the ghetto tends to occur in the best adjacent neighborhoods rather than in the worst, and that disproportionate numbers of blacks moving into previously white neighborhoods are members of higher-income groups.<sup>39</sup> This peripheral expansion of the ghetto serves high-income blacks in very much the way that the flight to the suburbs serves upper-

<sup>38</sup>In order for this condition to persist, it may be necessary for the depreciation rate or the filtering of high-quality units to be more rapid inside the ghetto than outside.

<sup>39</sup>The most detailed analyses of ghetto expansion are found in Duncan and Duncan, *The Negro Population of Chicago*; and in Taeuber and Taeuber, *Negroes in Cities*.

income whites and establish high-quality, high-income residential neighborhoods far from the adverse influences of low-income households, they of lower-income groups.

“Ghetto suburbs” usually do not have as extensive a buffer of middle-income housing as that which separates high-income white suburbs from low-income neighborhoods. With the continued growth of the ghetto, the neighborhoods of well-to-do blacks are continually invaded by lower-income groups. This causes a decline in neighborhood quality and upper-income blacks are forced to migrate to a new “ghetto suburb.” Because they are seldom able to leapfrog in the manner of high-income whites and establish high-quality, high-income residential neighborhoods far from the adverse influences of low-income households, they pass houses down to lower-income groups more rapidly.

It is well to remember that the ghetto is not simply black. It is also poor. The concentration of poverty in central-city ghettos produces a host of adverse environmental conditions that make the central city and its core (both ghetto and nonghetto) less attractive to both middle-income whites and middle-income blacks. The only difference is that the former are under less compulsion to live there. They can move to independent political subdivisions a safe distance from the ghetto, where they may vote service-taxation packages appropriate to their tastes and incomes. Middle-income blacks seldom have this option.

In the postwar period, white central-city residents, unable to obtain the desired services-tax packages by political means in the central city, voted with their feet and millions moved to the suburbs. Today, the concentrated poverty of the ghetto makes it difficult, if not impossible, for central cities to provide the quantity and quality of services demanded by middle- and upper-income whites and blacks—especially while these areas continue to rely largely on the property tax for revenues.

The experience of St. Louis is typical of large northern metropolitan areas. During the decade 1950–60, the central city lost 168,000 whites and gained 61,000 blacks. The suburbs gained 429,000 whites but only 18,000 blacks. Similar data for other metropolitan areas are presented in Table 3-4. These trends, noticeable earlier in the century, became pronounced with the rapid migration of blacks northward beginning with the Second World War. Between 1940 and 1960, the white populations of the twenty-four metropolitan areas with over a million inhabitants in 1960 increased by 12 million; and their black populations, by 4.2 million. Even though these twenty-four included rapidly growing cities such as Los Angeles, San Diego, and Houston, only .2 percent of the white population increase (net) occurred in the central cities, as compared with 83 percent of the black increase (net). These changes became even more

TABLE 3-4  
Change in White and Nonwhite Central-City and Suburban-Ring  
Populations 1950-60

Rank in Population	City	Change in Population			
		Central City		Suburban Ring	
		White (Thousands)	Black (Thousands)	White (Thousands)	Black (Thousands)
24	Atlanta	91	65	140	-6
12	Baltimore	-113	100	324	7
7	Boston	-130	23	278	3
15	Buffalo	-83	34	259	4
3	Chicago	-399	320	1,076	34
21	Cincinnati	-32	31	166	3
11	Cleveland	-142	103	367	2
20	Dallas	171	72	111	-17
5	Detroit	-363	182	904	19
16	Houston	250	90	87	7
22	Kansas City	-9	27	204	2
2	Los Angeles-Long Beach	388	169	1,668	77
17	Milwaukee	61	41	133	-
14	Minneapolis-St. Paul	-47	8	366	-
1	New York	-476	340	1,177	67
13	Newark	-97	63	226	27
18	Paterson-Clifton-Passaic	3	15	286	6
4	Philadelphia	-225	153	700	38
8	Pittsburgh	-91	18	257	7
9	St. Louis	-168	61	429	18
23	San Diego	212	20	231	3
6	San Francisco-Oakland	-148	67	554	25
19	Seattle	70	11	171	-
10	Washington, D.C.	-173	131	553	18

SOURCE: U.S. Bureau of the Census, *U.S. Census of Population: 1960, Selected Area Reports, Standard Metropolitan Statistical Areas*. Final Report PC (3)-1D (GPO, 1963), Table 1.

pronounced during the decade 1950-60, when the black population of these twenty-four central cities increased by 2.1 million. Large numbers of whites were displaced by this growth of central-city ghettos; these same cities lost more than 1.4 million white inhabitants during the decade. Finally, between 1960 and 1968, these same central cities lost an additional 2 million whites, while gaining an additional 1.9 million

blacks.<sup>40</sup> During the same eight-year period, the white population of the suburban rings of these metropolitan areas increased by 6.8 million, while the black population increased by .6 million.

In summary, housing-market segregation modifies the logic of "economic" models of residential location in several important respects. It creates a demand for certain locations (typically the inner part of large central cities) that is unrelated, or only weakly related, to their access advantages. Black households, physically limited in their choice of residential locations, must bid sites in the segregated market away from whites who wish to be near their place of employment. The result is a radically different pattern of price levels than is derived in most theories of residential location. In most large U.S. metropolitan areas, there is a rapidly growing "captive" demand for residences within the ghetto. This demand is principally for low-quality housing. These locations are accessible to the workplace of many blacks, but as jobs—particularly blue-collar jobs—suburbanize, ghetto sites provide no geographical advantage to increasing numbers of blacks. Indeed, for those blacks employed in suburban areas, the ghetto is perhaps the poorest possible location.

In evaluating the effect of the growing central ghetto on metropolitan development, it is crucial to bear in mind that because so many blacks have low incomes, the growth of the central ghetto also implies an increased concentration of poverty, a growing aggregation of low-quality housing, and an impaired ability to provide urban services on the part of cities. These factors make the city still less attractive to higher-income groups and increase the relative desirability of the suburbs.

These elements, important in a static analysis, assume even greater significance in a dynamic framework. The rapid dispersal of employment from the central parts of metropolitan areas is amply documented elsewhere.<sup>41</sup> The effect of employment dispersal should be to reduce the demand for centrally located residences and to cause a downward shift in the location rent surface in central areas. If centrally located units become less expensive, the location rent savings from commuting to suburban locations will decrease. Under these changed circumstances, many more centrally employed middle- and upper-income groups would find it advantageous to choose centrally located neighborhoods. The fact that the quality of many units would be lower than desired presents no serious obstacle, provided that the units can be obtained cheaply

<sup>40</sup>U.S. Bureau of the Census, Current Population Reports, Series P-23, Special Studies (formerly Technical Studies), no. 27, *Trends in Social and Economic Conditions in Metropolitan Areas* (GPO, 1969), p. 2.

<sup>41</sup>John F. Kain, "The Distribution and Movement of Jobs and Industry," in *The Metropolitan Enigma*, James O. Wilson, ed. (Cambridge: Harvard University Press, 1968).



enough. The most structurally sound of these units could be renovated and modernized, while the least valuable could be demolished and replaced by new structures. However, these possibilities have not been realized, inasmuch as the rapid increases in the black population have largely offset the effects of employment dispersal.

#### RACIAL DISCRIMINATION AND THE WORKPLACE DOMINANCE ASSUMPTION

The evidence presented in this chapter that black households are severely limited in their residential location choices raises serious questions about the appropriateness, in the case of black households, of the workplace dominance assumption employed in the revised theory developed in Chapter 2. Given the rather extreme geographic restrictions on black residential choice identified in this chapter, it is only prudent to inquire whether this limitation has any effects on the location of jobs held by black households.

The theory of residential location presented in Chapter 2 postulates a fixed workplace and obtains the households' optimal residence location in terms of a housing cost-travel cost tradeoff. Because the residence choices of black households are so severely constrained, it can be argued plausibly that a theory which employs the opposite assumption, i.e., that blacks have a fixed residence location and select a workplace with reference to the effects of transport and other distance-related costs, would better explain the behavior of black households.

In a paper published in May 1968, one of the authors presented empirical tests of this alternative model of the interrelationships between the workplace and residence choices of black workers.<sup>42</sup> In that paper, which used data for the Detroit and Chicago metropolitan areas, Kain attempted to test the hypotheses that racial segregation in housing markets: (1) affects the geographic location of black employment and (2) reduces black job opportunities; and that (3) suburbanization of employment following the Second World War has seriously aggravated the problem. These hypotheses were tested using an exceedingly simple, single-equation, reduced-form model, which employed the convenient and realistic assumption that black households could live in a few compact neighborhoods.

In his paper, Kain identified three ways in which housing-market segregation might affect the distribution and level of black employment.

<sup>42</sup>John F. Kain, "Housing Segregation, Negro Employment, and Metropolitan Decentralization," *Quarterly Journal of Economics* 82, no. 2 (May 1968): 175-97.

First, the time and money costs required to commute to jobs distant from black residence areas may impose costs on blacks high enough to discourage them from seeking employment there. Second, blacks may have less information about and less opportunity to learn of jobs distant from their place of residence or those of their friends and neighbors. Third, employers located outside the ghetto may discriminate against blacks out of real or imaginary fears of retaliation from white customers for "bringing blacks into all-white residential areas," or they may feel little pressure not to discriminate. Similarly, employers in or near the ghetto may discriminate in favor of blacks.

To test these hypotheses, Kain estimated a series of multiple regression models for Detroit and Chicago using the black percentage of total employment in each of 98 workplace areas as the dependent variable and a series of proxy variables to represent the factors causing blacks to be underrepresented in distance workplaces as explanatory variables.

The black percentage of population residing in each of the 98 workplace zones was included as a proxy for the propensity of employers to discriminate in favor of or against black workers because of real or imagined attitudes of the surrounding resident population toward the employment of blacks. Airline distance from the ghetto boundaries was included as a proxy for the transportation cost and information impediments to black employment at workplaces distant from the ghetto.<sup>43</sup>

To provide a crude test of the hypothesis that housing-market discrimination reduces black employment, Kain solved these and similar equations using the convenient counterfactual assumption that blacks resided in every residence zone at the same proportion as their proportion in the total population. This procedure suggested that job losses from housing-market segregation could be as large as 24,622 for Chicago and 9,113 for Detroit. More realistic assumptions, that took into account the socioeconomic characteristics of the black population, would have produced larger estimates of job loss. Obviously, as Kain makes clear in both his original paper and subsequent references to it, the particular numerical results are quite speculative.

<sup>43</sup>There is some limited evidence that the use of travel time or a weighted average of travel time and cost would reveal an even stronger relationship between black employment and workplace accessibility to the ghetto. In an unpublished analysis of EEOC (Equal Employment Opportunity Commission) data for Chicago, Robert B. McKersie of the University of Chicago computed simple regressions between the ratio of black to total employment in each of 25 workplace zones and the separation of these zones from the ghetto in terms of distance, automobile travel time, and cost (including both the money and time costs of automobile commutation). The equation using distance had a coefficient of determination of .199, while the one for auto travel time was .504 and the one for cost was .403. Robert B. McKersie, "Affirmative Action and Analytical Probing of EEOC Data" (processed).

The final part of the analysis considered the effects of employment dispersal on black employment. For Chicago, sufficient data were available to test directly some of the model's predictions about the effects of postwar employment and population shifts on black employment.

The Chicago SMSA had approximately 3,000 fewer manufacturing jobs in 1950 than in 1960, and these fewer jobs were on average located further from the ghetto. Even so, a disproportionate number of jobs remained in the central city at the end of the period, and with the expansion of the ghetto large numbers of white workers moved away from these centrally located jobs. (During the decade, the black population within 15 miles of the centroid of the ghetto increased by 319,000, while the white population declined by 261,000.) These outward shifts of the white resident population would be expected to improve the labor market position of blacks relative to whites at central workplace.

To provide a crude indication of the net impact of these offsetting trends, Kain estimated regression equations for total manufacturing employment and solved them using 1950 and 1960 values of population and employment by geographic location. The estimated changes in black manufacturing employment during the period obtained from this procedure corresponded to a remarkable degree to the actual changes. Black manufacturing employment in the Chicago SMSA declined by about 2,000 between 1950 and 1960; the estimated declines in black manufacturing employment ranged from 4,000 to 7,000, depending on the model specification employed. Both the actual and projected experience then implies unfavorable (for blacks) declines in the ratio of black to all manufacturing employment during the ten-year period.

Publication of Kain's 1968 paper stimulated a considerable amount of research on the effects of housing-market discrimination on urban labor markets and a number of critiques that claimed to refute one or more of the hypotheses advanced in that paper. Some of the more prominent of these analyses or critiques are those by the late Joseph Mooney, by Paul Offner and Daniel Saks, by Roger Noll, by Bennett Harrison, and most recently by Stanley Masters.<sup>44</sup> There is, however,

<sup>44</sup>Roger Noll, "Metropolitan Employment and Population Distribution and the Conditions of the Urban Poor," in *Financing the Metropolis*, The Urban Affairs Annual Review, Vol. 4, John P. Creceine, ed. (Beverly Hills: Sage Publications, Inc. 1970) pp. 481-509; Joseph D. Mooney, "Housing Segregation, Negro Employment, and Metropolitan Decentralization," *Quarterly Journal of Economics* 83, no. 2 (May 1969): 299-311; and Bennett Harrison, "The Intrametropolitan Distribution of Minority Economic Welfare," *Journal of Regional Science* 12, no. 1 (1972): 23-43; Paul Offner and Daniel H. Saks, "A Note on John Kain's 'Housing Segregation, Negro Employment, and Metropolitan Decentralization,'" *Quarterly Journal of Economics* 85, no. 1 (Feb. 1971): 147-60; Stanley H. Masters, "A Note on John Kain's 'Housing Segregation, Negro Employment, and Metropolitan Decentralization,'" from *Quarterly Journal of Economics* 88, no. 3 (August 1974): 505-12.

no controversy about the paper's central finding: that limitations on black residence choices reduce the level of employment at workplaces distant from the ghetto. Indeed, this result has been confirmed by several subsequent investigations of varying degrees of quantitative sophistication. On the other hand, the findings that racial discrimination in urban housing markets is a contributory cause of high levels of black unemployment and low black earnings, and that employment dispersal has aggravated the situation, have created considerable controversy and must be regarded as being on less firm ground than the simple proposition that it affects the location of black employment.<sup>45</sup>

## SUMMARY

This chapter investigates the ways in which racial prejudice, discrimination, and segregation affect the behavior of urban housing markets. We begin with an investigation of the possible explanations of the widely documented persistence of segregation by race in American cities. After reviewing the available evidence, we conclude that only a small portion of residential segregation can be attributed to socioeconomic differences between black and white households. In addition, the historical analogies between the experiences of immigrant colonies in American cities and the experiences of urban black households seem invalid. Finally, there is no evidence that the observed levels of residential segregation arise from the desire for self-segregation by blacks. We thus conclude that racial discrimination and prejudice are the principal explanations of the observed patterns of racial segregation.

The analysis then investigates the pricing of housing services in the black ghetto and in the unrestricted housing market available to white households. If residential segregation arises because of the prejudice of white households, conventional economic analysis would suggest that housing prices are higher in the unrestricted (white) submarket than in the ghetto. In fact, as noted in this chapter the preponderance of empirical evidence suggests that the prices of comparable dwelling units are higher in the ghetto than in the white submarket.

<sup>45</sup>A survey and evaluation of the studies bearing on these questions is published elsewhere. John F. Kain, "Housing Segregation, Negro Employment, and Metropolitan Decentralization: A Retrospective View," in *Patterns of Racial Discrimination*, Vol. 1: *Housing*, George M. von Furstenberg et al, eds. (Lexington: Lexington Books of D.C. Heath, Co., 1974). A briefer survey and evaluation of these questions is presented in John F. Kain, "Reply to Stanley Master's Comment on 'Housing Segregation, Negro Employment, and Metropolitan Decentralization,'" *Quarterly Journal of Economics* 88, no. 3 (August 1974): 513-20.

This conflict indicates the limited applicability of the comparative static (or long-run equilibrium) analysis of housing markets and economic discrimination. Since previously occupied housing is about four times as important as new construction as a source of additions to the ghetto housing supply, a principal determinant of the level of prices in the black submarket is the price at which units can be shifted from white to black occupancy.

The analysis then investigates these prices in terms of the markup which must be paid to shift dwelling units from the white to the black submarket. Several formulations of the discrimination markup provide explanations of the level of housing prices in the ghetto and of the peripheral expansion of the ghetto housing market in urban areas. This formulation also permits an analysis of the boundary effects and short-run dynamics of the housing market in transition areas where dwelling units are being transferred from white to black occupancy. A survey of the empirical literature on the behavior of housing prices in transition areas also appears consistent with this view of the determination of price levels.

Because the expansion of the black housing supply typically occurs at the periphery of the existing ghetto in the central city, several other effects of racial discrimination can be identified. First, since the relative supply of high-quality dwelling units in better neighborhoods is in very short supply at the periphery of the ghetto, we may expect that higher-quality units may be far more expensive in the black submarket than in the white market. That is, although the "average" housing unit may be more expensive in the black submarket than in the white submarket, high-quality units may be substantially more expensive, or indeed completely unavailable to black households. The analysis also indicates that a further effect of discrimination in housing markets is a demand for central-city properties that is only weakly related to accessibility considerations. Finally, the chapter concludes with a discussion of the indirect effects of residential segregation upon the level and distribution of black employment. The analysis suggests that the secular trend of workplace decentralization, the segregated central location of black residences, and the characteristics of transportation systems in urban areas combine to reduce black employment levels and exacerbate the underrepresentation of blacks in the rapidly growing suburban employment centers.