Volume Title: Housing Markets and Racial Discrimination: A Microeconomic Analysis

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Volume Publisher: NBER

Volume ISBN: 0-870-14270-4

Volume URL: http://www.nber.org/books/kain75-1

Publication Date: 1975

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Chapter URL: http://www.nber.org/chapters/c3721

Chapter pages in book: (p. 283 - 300)

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Major Findings on the Structure of Urban Housing Markets and the Effects of Racial Discrimination

INTRODUCTION

The empirical and theoretical analyses presented in this book deal with a large number of specific issues, but two major analytical threads run through the study. The first concerns the articulation and testing of a theory of urban housing markets that is somewhat different from that which generally has been employed by economists for systematic empirical analyses of urban housing markets. The second concerns analysis of the effects of racial discrimination.

As we discuss in Chapter 2, economists, in their analyses of urban housing markets, have relied on a highly abstract theory that requires a large number of questionable simplifying assumptions. Some of these assumptions may be of little consequence, but others color the analyses in ways that may lead to seriously misleading conclusions. An important feature of most previous systematic empirical studies of urban housing markets is an insistence that housing can be analyzed as though it were a homogeneous good, whose quantities are accurately measured by households' total expenditures for housing. We do not doubt that this view is suitable for the analysis of many problems, but it is necessary to point out that there is a strong tendency to rely on this construct in circumstances where it is inappropriate.

In this study, we have developed and used a considerably different theoretical framework. It parts from traditional theories in two major respects: its unusual emphasis on the heterogeneous nature of housing services; and the important role assigned to specific workplace locations in determining households' choices of housing bundles and where they reside in large urban areas.

A large part of the analyses presented in this book is concerned with the intrinsic problems of defining and measuring meaningful categories

of housing output, with obtaining estimates of attribute prices, and with analyzing the determinants of demand for housing services. Although workplace location is a central element of the revised theory presented in Chapter 2, it does not figure prominently in the empirical analyses presented in subsequent chapters. In large part this is so because the sample of 1,500 households which is the basis for most of the empirical analyses presented in this book is not suitable for analysis of the effect of workplace location on housing demand.

In Chapter 3 we present an extensive review of previous empirical research on the effects of racial discrimination on urban housing markets and extend the theory of urban housing markets presented in Chapter 2 to include the effects of racial discrimination. While our survey of previous studies (many of which were done by sociologists rather than by economists), our theorizing, and our empirical findings all indicate that racial discrimination has major and pervasive effects in urban housing markets, most systematic studies of urban housing markets either ignore discrimination altogether or minimize its impact.

This chapter's recapitulation of the major findings of our research reflects the two major threads initially adumbrated. In the first half, we briefly review our principal findings about the nature of housing services and the demand for a heterogeneous housing stock. Then, in the second half, we summarize the findings of our empirical analyses as they relate to the large and extensive effects of racial discrimination.

THE NATURE OF HOUSING SERVICES

Most earlier studies of urban housing markets and the demand for housing services have treated housing as though it were a homogeneous good, which could be measured by the household's aggregate expenditures for housing. This view of the nature of housing services is based on a long-run equilibrium theory of urban housing markets that assumes a full adjustment of the stock of residential and nonresidential capital. This theory ignores those aspects of the heterogeneity of housing services that result from the extreme durability and immobility of housing capital and considers only housing attributes that are produced by competitive firms. Thus, in traditional empirical studies, the question of what determines the demand for housing services and the question of what determines housing expenditures are identical. In addition, empirical studies of the demand for housing services generally have resorted to the ad hoc practice of estimating separate demand functions for owner and renter households. This reflects both the absence of suitable data on the housing expenses of owner-occupants and the absence of an integrated

theory of demand that includes both households' decisions to own or rent, which are strongly influenced by investment considerations, and household decisions about how much to spend on housing annually.

The empirical analyses presented in this book are motivated by a view of urban housing markets that differs from this traditional one in a number of important respects. First, as we discuss in Chapter 2, we consider long-run equilibrium models to be of only limited usefulness in the analysis of urban housing markets and would argue that economists have placed too much reliance on them, both in analysis of urban housing markets and in prescribing public policy. We feel that in making policy proposals economists and noneconomists alike rely on these theories or conclusions derived from them far more than is commonly recognized.

The empirical analyses presented in this book clearly demonstrate the deficiency of most earlier studies and the analytical and predictive advantages of viewing housing as bundles of specific housing attributes. Housing consumers must choose between a finite number of housing bundles made up of specific quantities of various housing attributes. Individuals can modify these bundles somewhat, but the scope for such change is clearly limited. It is especially pertinent that many of these housing attributes (including housing age, structure type, and lot size) cannot be produced or modified at reasonable cost, and that many others (including quality of local schools and the socioeconomic character of neighborhoods) are not produced by competitive firms but, instead, require some kind of collective action or the aggregation in some manner of individual private decisions. Because housing capital and physical environments are so durable and difficult to change, and because attributes that are not provided by competitive firms may respond only sluggishly to price differentials, many housing attributes earn quasi rents. Moreover, the geographic pattern of these spatial quasi rents varies among housing attributes and bundles, thereby affecting both the type of housing selected by consumers and its location.

The empirical analyses of urban housing markets presented in previous chapters are infused with this broader view of the nature of housing services and prices and its implications for the analysis of housing demand. These empirical analyses deal with several major questions: (1) The definition of housing attributes and housing bundles and the estimation of the price of housing attributes (analyses of these questions are important in their own right, but in addition our constructs are used in subsequent analyses of the demand for housing); (2) determinants of total housing expenditures; (3) household decisions to move or change their residences and the closely related decision to rent or become homeowners; (4) the determinants of demand for individual

housing attributes and the demand for categories of relatively homogeneous attributes.

DETERMINANTS OF ATTRIBUTE PRICES

Accessibility to employment centers is the only determinant of spatial variations in housing prices included in traditional economic models of residential location and urban spatial structure. In contrast, the results presented in Chapter 8 suggest that the spatial distribution of the supply of housing bundles may have an even greater influence upon location rents than does accessibility to the core of the metropolitan area. If this apparent result is correct, it implies that the timing of residential development is a far more important determinant of the shape of metropolitan location rent surfaces than most previous studies acknowledge. The historical distribution of stocks of particular housing capital, which adjusts only slowly to changes in incomes, workplaces, and tastes, clearly exerts far more influence on metropolitan surfaces of housing prices than traditional economic theories of urban spatial structure would indicate.

The analysis presented in Chapter 8 (and in the related Appendix F) attempts to measure the attributes of housing services and to impute market prices to these attributes. For rental properties, the quality of dwelling units is measured by two indexes of the quality of the interior and exterior of the units: by the presence of hot water and central heating and by the age of the structure. The size of dwelling units is measured by the number of rooms and bathrooms and a prorated share of the parcel area associated with the structure. The quality of neighborhoods is measured by indexes of the quality of adjacent structures and of the block face as a whole, by a surrogate for neighborhood prestige (the median schooling of adults in the census tract), and measures of school quality and criminal activity (for the subset of city properties).

In regressions relating the contract rent of these units to these measures of housing services, six dummy variables are also included for structure type, four dummy variables reflect the terms of the rental contract (whether it includes landlord provision of heat, water, furniture, or major appliances), and two additional variables (duration of occupancy and a dummy variable for resident landlords) are incorporated. For owner-occupied single detached units, the description also includes the first-floor area of the structure.

The results of the analysis indicate that between 71 and 77 percent of the variance in housing prices and contract rents can be explained by these attributes of residential housing services. In particular, most of the

measures of quality included in the models in Chapter 8 and in Appendix F are strongly related to market prices. In comparison with the value of these heterogeneous components of housing services, the independent contribution to housing price determination provided by accessibility is modest.

Indeed, if the findings on the determinants of the value of housing attributes presented in Chapter 8 were accepted uncritically, they would seem to indicate that accessibility to employment has little or no effect on housing values and rents. Specifically, these empirical analyses reveal very little systematic spatial variation in housing prices that cannot be explained by characteristics of the housing stock and the spatial distribution of other housing attributes. This apparent contradiction between our findings and the relationship predicted by economic theories of urban spatial structure is resolved in part by theoretical and empirical analyses presented in Chapters 2 and 8, which suggest that there are in existence distinct location rent surfaces for individual housing attributes, subsets of housing attributes, and entire housing bundles, rather than a single surface. Sample limitations make a definitive test of this hypothesis impossible, but when the samples of housing units are stratified by ghetto/nonghetto or by number of rooms, accessibility to employment appears more important.

DETERMINANTS OF HOUSING EXPENDITURES

In Chapter 7 we present a large number of conventional housing-expenditure models estimated from a sample of approximately 1,500 St. Louis households. These models, which follow the usual convention of estimating separate equations for owner and renter households, explain a large fraction of the total variance in monthly rent and in the market value of owner-occupied single-family homes. As in most earlier studies, one one-hundredth of market value is used to proxy the monthly housing expense of homeowners.

Two kinds of housing expenditure or housing demand equations are presented in Chapter 7. The first of these, which we term the full model of housing expenditures, includes 18 independent variables that describe the socioeconomic-demographic characteristics of the household and its members. These include variables that describe the race, education, and age of the head of household, and the annual income, labor-force participation, and size and composition of the household. In addition, the rental equation includes four variables to measure differences in contract terms, i.e., whether various utilities are provided by the landlord or are paid for separately by the tenant. Because we were uncertain

about what statistical specification was most appropriate for these expenditure models, we followed the common practice of obtaining alternative estimates using linear, semilog, and log-log specifications of each equation.

Although the several equations revealed individual differences, the estimates were generally consistent and, in all but a few instances, the coefficients of the individual explanatory variables had the correct signs and were reasonable in magnitude. To give one example, the measure of job stability used in these analyses indicates that housing outlays by owners increase as years on the current job increase, but as would be expected, the same variable has no discernible effect on housing expenditures by renters. The effect of job stability is enhanced by the finding that owners spend substantially more than renters with the same socio-economic-demographic characteristics and that years on the current job has a large effect on the probability of a household owning its home. The analysis also provides evidence of a lagged adjustment of retired homeowners to their smaller family responsibilities and lower incomes. For example, the semilog model indicates that retired owners spend 13 percent more on housing than would be expected, given their incomes and household characteristics. No comparable effect is obtained for retired renters.

The models of housing expenditure referred to above include a richer description of the characteristics of individual households than is typically included in econometric studies of the demand for housing. To make it easier to compare our findings with those of earlier studies, we estimated a number of models that focused more narrowly on the relation between household income and housing expenditures by owner and renter households. These simple models obtain some results that are consistent with earlier studies and some that contradict them. To illustrate, our analyses confirm the finding of all previous studies that the income elasticity of housing expenditure is larger for owners than for renters. At the same time, our estimated income elasticities for both owners and renters are much less than the value of one that several other researchers have proposed as the correct value of the income elasticity of demand for housing. In this respect, our estimates more closely resemble the estimates obtained from recent studies based on microdata than those earlier studies based on aggregate data.

Because of the substantial evidence that housing-market discrimination has a substantial effect on black housing expenditures, we estimated separate expenditure relations for black and white households. The important differences revealed by these analyses are discussed in the second half of this chapter. In addition, we estimated some simple expenditure equations, using an estimate of permanent income. These

estimates produced a modest increase in the income elasticity of housing demand, but it still remained much less than one for all specifications. The elasticity of housing expenditures with respect to permanent income obtained for the log-log equation was .43 for white renters and .46 for white owner-occupants of single-family homes.

TENURE CHOICE AND MOBILITY

There are two major ways of obtaining housing services. Roughly 63 percent of U.S. households in 1970 lived in rental units, while 37 percent lived in owner-occupied dwellings. Renters pay a specified weekly or monthly amount, have limited rights of tenure, and neither benefit nor lose from increases or decreases in the value of the property. Owner-occupants, by contrast, purchase their dwellings, either outright or with the assistance of a mortgage, may continue to occupy the unit for as long as they wish, and suffer capital gains or losses if their property increases or decreases in value. In addition to their initial payment at the time of purchase, owner-occupants must generally make periodic payments for maintenance, utilities, property taxes, and, if they purchased their home with a mortgage, for interest on, and amortization of, their mortgage.

It is difficult to compare housing expenditures by owners and renters for two major reasons. First, there is very little information available on actual housing expenditures by owner–occupants. As a result, most studies of housing demand by owner-occupants use either property values or some fraction of the value of the unit to proxy the quantity of housing consumed and housing expenditure. Worse still, even if detailed data on actual housing expenditures by owners were available, they would be difficult to interpret because of the question of how unrealized capital gains should be evaluated. The investment considerations of ownership decisions are probably the most important ones. In addition, however, control over tenure may be important to many households, especially those with children; and differences in the supply of rental and owner-occupied units may virtually force households with strong preferences for particular housing bundles to own or rent.

These issues are considered in Chapter 5, which presents analyses of household decisions to own, to purchase, and to change residence. The models of mobility, home ownership, and home purchase use the same explanatory variables that are included in the complex housing expenditure models presented in Chapter 7. This presentation does not mean that we have developed a fully articulated theory of housing

demand, but it does provide a consistent way of analyzing the effects of these several socioeconomic-demographic variables on household decisions to own or to rent and on the separate decisions of how much owners and renters of various characteristics will spend on housing.

The results of the home ownership analysis are generally consistent with the findings of earlier studies; the probability of being a homeowner is strongly affected by family composition and is much less dependent on household income. Small households, and especially those that do not include children, are much less likely to be homeowners than larger ones. Retired households are far more likely to be homeowners than would be predicted on the basis of their current incomes and household composition.

Not surprisingly, the findings for the decision to purchase resemble those for the ownership analysis in most respects. The effect of household income on the probability of purchase is virtually the same as its effect on the probability of home ownership. Prior tenure also has a large effect on the probability of purchase: the probability of house purchase is .23 higher for prior owners than for prior renters and .42 greater than for new households. The average probability of purchase over the three-year period considered in the analysis was .22.

Tenure similarly has an important effect on the rate of mobility of urban households. The simple mobility rates, which combine the independent effects of tenure per se and differences in the socioeconomic-demographic characteristics of owners and renters, indicate that 12 percent of owner-occupants included in the sample move within a three-year period as contrasted with 38 percent of renters. The mobility equations similarly indicate that after the effects of all other socioeconomic variables are accounted for, prior renters were .20 less likely to move and prior owners were .40 less likely to move than both new households and households who did not report their prior tenure. This analysis also reveals that households with retired heads are much less likely to move than otherwise comparable households whose heads are employed; the presence of multiple wage earners in the household likewise reduces the rate of mobility.

DEMAND FOR A HETEROGENEOUS HOUSING STOCK

The conventional housing-expenditure demand models presented in Chapter 7 are a useful base line against which to compare the analyses of demand for heterogeneous parts of housing output which constitute a large part of the empirical analyses presented by us. The analyses of the

demand for separable dimensions of housing output employ two distinct methods of analysis. First, in Chapter 9, we present single-equation attribute demand equations estimated by ordinary least-squares for twenty-one individual housing attributes. These include five measures of dwelling-unit quality and amenity, four measures of dwelling-unit and parcel size, seven variables that describe the quality of the neighborhood and the government services provided, and five structure types.

Because these attribute demand equations are defined in physical terms, it is possible to combine the owner and renter subsamples and estimate pooled equations. Inasmuch as the demand of both renters and owner-occupants is treated in a single unified demand relation, this convention avoids the difficulty commonly encountered in the estimation of expenditure housing-demand models. At the same time, to facilitate evaluation of the interrelationship between tenure choice and the demand for specific housing attributes, estimates are obtained for separate attribute demand equations. These separate estimates for the occupants of single-family owner-occupied units and renters are presented in Appendix G. The pooled attribute demand equations also include an important group of housing consumers which is omitted from most studies of housing demand—the owner-occupants of multifamily structures.

It is impossible to provide a complete summary of the specific findings obtained for the large number of attribute demand equations. Still, it is possible to indicate the broad outline of a few of the more important results. Higher incomes, more years of education, and retirement are all associated with the choice of larger dwellings and parcels and with the increased household demand for the several attributes used to represent dwelling-unit quality and neighborhood amenities. Similarly, a positive, though weak, relationship is obtained between these household characteristics and the consumption of public service attributes, i.e., measures of school quality and neighborhood safety (low crime rates). We attribute the weak relationship obtained more to the measurement error of these attributes (and to the omission of suburban observations) than to any clear-cut empirical regularities.

The effects of family size and composition on the consumption of dwelling-unit quality, dwelling-unit size, and neighborhood quality are both quite consistent and plausible a priori. The family-size variables used in the attribute demand equations point to a clear pattern of substitution of dwelling-unit size for dwelling-unit quality. Parcel area behaves more like a quality variable than a dwelling-unit size variable; its attribute demand equation indicates that a six-person family consumes 1,428 fewer square feet of parcel area than a three-person family, after the effects of income and the remaining household characteristics

are accounted for. At the same time, the results indicate that single individuals and couples also consume much less exterior space than otherwise comparable households. For example, young single males consume 7,000 square feet less parcel area than the typical family. At the same time, household consumption of exterior space increases rapidly with income.

In addition to the attribute demand equations, we also estimated demand equations for four categories of relatively homogeneous attributes. These categories were defined both on the basis of a priori theorizing and from analysis of the attribute demand equations. The quantities of housing services which we included in the four categories of attributes were computed by multiplying attribute price weights obtained from hedonic price equations for nonghetto rental units by the quantity of each attribute associated with each housing bundle and by summing these for each of the four categories. Since rental prices were used for both owner-occupied and renter-occupied units, these bundle-component demand equations were also estimated for pooled samples of owner and renter households.

We had two reasons for estimating the component demand equations, one conceptual, one pragmatic. First, on conceptual grounds we were concerned about certain kinds of interdependence in the demand for, and consumption of, and production of, housing attributes. Second, we thought that estimation of a smaller number of demand relationships for only four categories of relatively homogeneous attributes might facilitate the analysis and reveal the predominant relationships more clearly.

We attempted to deal with the problem of interdependence through use of a method of joint estimation first proposed by Arnold Zellner. As it turned out, the empirical results revealed very little of the kind of conjectured interdependence that originally led us to employ the technique. The benefits from aggregation in terms of simplifying the analysis were somewhat greater. Our findings pertaining to the effects of household income, family composition, and retirement illustrate the results obtained.

Evaluation of the equations presented in Chapter 10 reveals that a $5,000 increase in income would lead to a 15 percent increase in dwelling-unit quality, a 9.3 percent increase in interior space, a 3.2 percent increase in neighborhood quality, and a 73.8 percent increase in exterior space. The analyses also indicated that the addition of an infant to a standard family would increase a household's demand for interior space by 1.4 percent and the addition of a child over 5 years of age would increase its demand for interior space by 4.3 percent, while the addition of another adult would increase its demand for interior space by only .3

percent. Moreover, we find that single females consume 6.5 percent less interior space, single males 7.8 percent less interior space, and couples 6.8 percent less interior space than otherwise comparable standard families. These analyses further revealed that retired households consumed 37 percent more dwelling quality, 5 percent more neighborhood quality, and 19 percent more exterior space than would have been predicted on the basis of their incomes, labor-force attachments, and family composition. At the same time, the analysis revealed no significant effect of retirement on the consumption of interior space.

IMPLICATIONS OF RACIAL DISCRIMINATION

Traditional economic theories of urban housing markets ignore or minimize the importance of housing-market discrimination. In Chapter 3 we extend the revised theory of urban housing markets developed in Chapter 2 to incorporate the effects of racial discrimination. This analysis explains the persistence of black ghettos in American cities in terms of a modified theory of consumer behavior which acknowledges a variety of constraints on black households. Chapter 3 also provides a systematic review of previous empirical studies on the extent and causes of residential segregation and of the economic costs it imposes on black households.

The empirical analyses presented in Chapters 5 through 10 provide highly consistent evidence of the effects of housing-market discrimination on house values and rents in the ghetto and in the remainder of the metropolitan area, and its effects on housing consumption of black and white households in St. Louis and a number of other metropolitan areas. These findings, the theoretical framework developed in Chapters 2 and 3, and the systematic review of earlier studies presented in Chapter 3 provide a basis for a fairly comprehensive evaluation of the effects of housing-market discrimination on the welfare of white and black Americans and on the efficiency of metropolitan growth. Since we regard these findings and their implications as the major substantative contribution of this book, we devote the remainder of this final chapter to summarizing them.

Insofar as economists have considered housing-market discrimination at all, they have generally asked only whether housing-market discrimination causes black households to pay more than white households for identical bundles of housing services. Even to this apparently simple question, a definitive answer is elusive because of the inherent methodological questions it involves. However, there is now general agreement, supported by the analyses presented in Chapter 7 and by the

survey of previous studies presented in Chapter 3, that blacks typically pay more than whites for the same housing bundles. These discrimination markups appear to be higher in areas with larger and more rapidly growing black populations and in areas where black populations are restricted to the central city. There is some indication, however, that these differentials may have declined in recent years.

Our results for St. Louis suggest that black renters may pay prices which are 12 to 18 percent higher than whites for comparable housing; at any rate, housing units located in the ghetto cost this much more than comparable units in the white submarket. For owners, the corresponding analysis suggests a markup of 5 to 6 percent.

Discrimination markups of the magnitude identified for St. Louis blacks in this book represent serious welfare losses for black Americans, but they are only the tip of the iceberg. Nearly all available estimates of discrimination markups implicitly assume that housing is a homogeneous good and that housing in the ghetto is the same as housing outside the ghetto, except for price. In fact, as we clearly demonstrate in earlier chapters, housing is a bundle of heterogeneous attributes, the characteristics of housing bundles available in the ghetto differ from those available in the rest of the metropolitan housing market, and the discrimination markups of these numerous housing bundles or attributes are not uniform.

Using a methodology based on microdata, and taking into consideration the external and neighborhood aspects of housing services, we obtain a variety of estimates of discrimination markups, all of which suggest the presence of a substantial premium for owner and renter units in the ghetto, at least in St. Louis, Missouri, in 1967. These estimates are not inconsistent with the literature surveyed in Chapter 3. However, when we take the heterogeneity of housing markets into account, the estimated welfare loss is much larger.

This is the case because many desirable housing bundles are either very scarce or completely unavailable in the ghetto. To consume these desirable kinds of housing, black households have to seek housing in neighborhoods not sanctioned for black occupancy. There, without guarantee of success, they must devote inordinate amounts of time and money to house hunting. As a result, most blacks limit their search for housing to the ghetto. Housing-market discrimination thus operates to restrict black access to the newest, highest-quality housing in the best neighborhoods. It is hardly surprising, therefore, that black households consume less neighborhood quality, dwelling-unit quality, and exterior space, and also spend less on housing than would be predicted from a knowledge of their incomes and other characteristics (Chapters 9 and 10).

These same supply restrictions insure that blacks are much less likely to be homeowners than are white households of similar income and family structure. For example, our analysis of home ownership and purchase in Chapter 5 revealed that while only 32 percent of black households in St. Louis were homeowners, 41 percent would have been homeowners if their housing-market behavior was the same as comparable white households. The effect of these differences in black behavior on the decision of recent movers to buy or rent was even larger. The analyses of this decision presented in Chapter 5 revealed that while only 8 percent of St. Louis black households who had moved in the past three years purchased homes, 20 percent would have been home buyers had they been white.

Even larger differences between the actual and "expected" rates of black home ownership were obtained for a number of other large metropolitan areas. Analyses of the effects of racial discrimination in 18 large metropolitan areas presented in Chapter 6 reveal substantial differences in black and white home ownership rates after adjusting for socioeconomic differences. For example, while only 18 percent of Chicago black households were homeowners, 47 percent would have been homeowners in the absence of housing-market discrimination. The differences between actual and "expected" black ownership rates among these 18 areas appear to be related systematically to the extent to which the central-city ghetto contained units suitable for owner occupancy and the extent of black access to suburban housing. This finding is especially important in distinguishing between the several hypotheses that could be advanced to "explain" the differences in the housing consumption of otherwise comparable white and black households revealed by the various analyses presented in earlier chapters.

Restrictions on black home ownership opportunities have far greater ramifications than may be evident at first glance. As we demonstrate in Chapter 6, effective limitation on home ownership can increase housing costs by over 30 percent, assuming no price appreciation. Moreover, given reasonable assumptions about increases in housing prices, a black household prevented from buying a home in 1950 would have out-of-pocket housing costs in 1970 more than twice as high as such costs would have been if the family had purchased a home twenty years earlier. These increases in housing costs are in addition to any discrimination price markups.

Of course, much of the savings from home ownership results from the favorable treatment accorded homeowners under federal income tax laws. Since black households at all income levels purchase and own fewer single-family homes than comparable whites, they are prevented from taking full advantage of these tax benefits. The loss of tax benefits

is greatest for middle- and upper-income black households, since tax savings from home ownership increase with income.

Both the simple and more complex models of housing expenditure presented in Chapter 7 indicate that black owners and renters spend considerably less than white households with similar incomes, family structure, and labor-force attachment. This difference, which is especially large for owners, provides important evidence relating to the effects of discriminatory pricing upon households. Accepting the view of previous studies that housing consumption is price elastic, the lower levels of housing consumption by black owners and renters in St. Louis are consistent with the findings presented in Chapter 8 that housing in the ghetto is more expensive than comparable housing outside the ghetto. We conclude that lower levels of housing consumption by black households than by white households of comparable characteristics reflect limitations on the supply of housing available to black households, which discourage them from buying as much housing as their incomes and family circumstances dictate.

As we discuss in Chapters 6 and 7, the lower level of housing consumption and lower levels of home ownership by black households than by white households may be attributable in part to differences in the "permanent income" of black and white households having otherwise identical socioeconomic characteristics and annual incomes. However, tests of this "permanent income" hypothesis as an explanation of black-white differences in home ownership, home purchase, and the level of housing expenditures presented in Chapters 6 and 7 indicate that substantial racial differences remain after adjusting for permanent income.

In addition, it might be argued that some of our empirical results reflect unmeasured differences in the "tastes" of comparable black and white households. As we discuss at several points in earlier chapters, we do not find this argument very plausible as an explanation of our findings of differences in housing consumption by black and white households. The statistical models used to analyze black and white housing choices include most of the variables that are believed to determine "tastes" for housing, such as household income, the education and labor-force attachment of its members, the job stability and age of the head, family composition, and life cycle. The effect of these variables on black housing choices is generally quite similar to their effects on white housing choices, and the well-documented differences in the characteristics of the housing supply within the ghetto and outside, and the difficulty and expense of providing certain housing attributes in the ghetto, provide a far more consistent explanation of black-white differences than vague appeals to black-white differences in tastes for housing consumption.

It is also important to emphasize that a difference in "tastes" hypothesis cannot explain the measured differences in housing prices inside and outside the ghetto. It would, moreover, take a decidedly peculiar black-white difference in "tastes" among cities for this hypothesis to explain the results of the intercity analysis presented in Chapter 6. Our interpretation of these empirical findings is further supported by a large number of qualitative studies and accounts of the problems encountered by black households in attempting to acquire housing outside the ghetto and by attitudinal surveys, which indicate that only a small fraction of black persons prefer segregated neighborhoods and that an overwhelming majority would like to move out of the ghetto. These studies are reviewed in Chapter 3.

Taken as a whole, the empirical findings presented in previous chapters on the differences in housing expenditures and type of housing consumption between comparable black and white households appear to be most consistent with the hypothesis that housing-market discrimination seriously limits the residential location choices of black households and effectively restricts the supply of housing—particularly certain housing attributes or bundles—available to them. Our analysis indicates that these supply restrictions are reflected in the unavailability of units suitable for owner occupancy, in the dearth of high-quality dwelling units, and in the discriminatory markups for both owner- and renter-occupied units in the ghetto.

As we remarked earlier, several studies have provided evidence that the demand for housing is price elastic. Thus, our finding in Chapter 7 that black households in St. Louis devote fewer resources to housing than comparable white households appears to reflect rational decisions of black housing consumers in a constrained housing market rather than elusive differences in "tastes" between black and white consumers. Still other results relating to the different choices of comparable black and white households in the level of housing consumption, among housing attributes and housing bundles, and between rental and owner-occupied units (Chapters 5, 6, 9, 10) seem most consistent with the hypothesis that black households are restricted in their access to the entire metropolitan housing market and thus concentrate their search to a limited segment.

INDIRECT EFFECTS ON BLACK HOUSEHOLDS

Restrictions on black access to home ownership may explain in part why black households at every income level have less wealth than white households. A simple example, which is discussed in greater detail in Chapter 6, demonstrates the substantial effect of home ownership on

capital accumulation by low- and middle-income households. The average house purchased with an FHA 203 mortgage in 1949 had a value of $8,286 and a mortgage of $7,101. If this home had been purchased with a twenty-year mortgage by a thirty-year-old household head, and if the home neither appreciated or depreciated, the purchaser would have saved more than seven-thousand dollars and would have owned his home free and clear by his fiftieth birthday. Further, if we assume that the price of this single-family home increased by a conservative two and one-half percent per year, the purchaser would have accumulated assets by age fifty worth at least $16,000, a considerable sum that he could use to reduce his housing costs, to borrow against for the college education of his children, or simply hold for his retirement.

The full effects of housing-market discrimination extend far beyond housing and include additional, more subtle costs and welfare losses for the black population. There is considerable evidence that segregated housing patterns create unequal educational opportunity, increase insurance and other living costs, and contribute to employment discrimination for blacks (as discussed in Chapter 3).

De facto segregation, rooted in racial discrimination in urban housing markets, has displaced de jure segregation as the principal cause of segregated education and the inferior quality it typically signifies. Again it is middle-class and upwardly mobile blacks, who wish their children to have the best education possible, who suffer most from existing patterns of segregated education.

Blacks who buy homes in the ghetto either are forced to pay more for theft and fire insurance than would be the cost in suburban communities or are unable to obtain coverage at all. Mortgage financing is more difficult to obtain and often can be had only on less favorable terms than in the suburbs. These premiums are in addition to the discrimination markups and home ownership considerations discussed previously. Ghetto residents, moreover, usually pay more for auto insurance than suburban whites. Even if these increased costs are appropriate to higher risks, there is less opportunity for blacks to avoid them.

Housing segregation and discrimination reinforce more direct forms of employment discrimination. Geographic limitations on the residential choice of nonwhites insure that blacks can reach many jobs only by time-consuming and expensive commuting. If blacks seek, obtain, and accept these distant jobs, their real wages (money wages minus the money and time outlays for commuting) will be less than those of comparable white workers. Often blacks will not even learn of available jobs far from the ghetto or will not bother to apply because of the cost and difficulty of reaching them. Faced with these obstacles, they may accept low-paying jobs near the ghetto or no job at all, choosing leisure

and welfare payments as rational alternatives to low net pay and circuitous transport.

Racial discrimination and the steady growth of central-city ghettos have altered the patterns of urban growth and development in recent decades. For example, if the suburbs had been open to middle- and low-income blacks, many would almost certainly have moved to suburban areas along with their jobs, much in the fashion of whites of similar socioeconomic status. This suburbanization of blacks, though possibly in clusters, would have occurred even if one maintains that blacks prefer to live near other blacks.

Black access to the suburbs would have affected the central-city housing market in two ways. First, a slower rate of growth of the poverty population would have made central-city residential areas more attractive to middle- and upper-income families. If more middle- and high-income families had remained in the central cities, the quality of public schools and of other public services would have been maintained at higher levels, and the quality of neighborhood environments would have declined less often. Second, a larger number of black suburban residents would have increased the competition for, and the prices of, suburban housing and would have reduced the competition for, and prices of, central-city properties. Given relatively lower central-city housing prices, many more centrally employed whites would have decided to live in the central city. Similarly, few blacks employed at suburban workplaces would commute long distances back to the central-city core to pay more for housing. Increased black residence in the suburbs also would have reduced the underrepresentation of blacks in suburban workplaces.

Unfortunately, the poverty of entrapped minority and other disadvantaged populations insured that central-city housing would worsen. The result has been a steady expansion of slum housing, deterioration of urban services, and an expectation that the process will continue until many central cities become black slums. This pattern of urban development presents us with the current policy dilemma: Can these historical trends be reversed or is the economic, physical, and social decline of our great cities inevitable?

SOME CONCLUDING OBSERVATIONS

Although black Americans remain intensely segregated, there are some indications that increasing numbers of black households are moving to the suburbs. The extent and nature of this suburbanization has not yet been well documented. Much of the growth of black suburban

populations no doubt merely reflects the continued peripheral growth of central-city ghettos across city borders. However, in many cases it may significantly ease the supply restraints identified in earlier chapters, and in some instances may actually represent genuine dispersal. A full evaluation of these changes and their implications must await more detailed analyses, but the limited evidence available suggests that the forces of housing discrimination in a number of metropolitan areas may be waning. At the same time, other metropolitan areas, particularly those in the South, may be becoming more segregated. Historically, southern metropolitan areas, particularly older ones, did not exhibit the massive concentration of black households which characterized northern metropolitan areas. Unfortunately, these southern cities appear to be developing patterns of racial segregation similar to those found in the North.

Qualitative changes in recent decades in the nature of the forces that maintain housing-market segregation provide some basis for optimism. A few years ago, government actively supported and maintained segregated living patterns. The most effective weapons for the maintenance of segregation—for example, racial covenants and FHA mortgage loan policies—are no longer available. Racial discrimination in urban housing markets is now unlawful and the federal government and numerous state and local governments have promulgated a number of important regulations that would limit the ability of lenders, brokers, sellers, property owners, and developers to discriminate against minorities.

These changes in law and in government policy and practice reflect long-term trends in the attitudes of the American population toward racial discrimination. Whereas a short time ago an individual who openly discriminated in housing could expect strong vocal approval from his friends and neighbors, today he often will feel obliged to hide his actions and motives. Brokers, who once openly refused to serve blacks, must now disguise their discriminatory actions. Because of changes in law and community attitudes, brokers are increasingly willing to show property in white neighborhoods to black households.

Because racial prejudice persists and because discriminatory acts in urban housing markets are so difficult to detect and prove, policies that insure that minority households have access to the entire metropolitan housing market on an equal basis with the white majority will be very difficult to formulate. It would be irresponsible to design and implement housing programs and policies that depend on minority access to the entire housing market without a sober evaluation of the likelihood of breaching the barriers which currently limit the housing choices of minority households. The task is clearly a difficult and demanding one. However, the fruits of success would be immense.