

**The Decline of Male Employment in Low-Income Black Neighborhoods, 1950–1990:
Space and Industrial Restructuring in an Urban Employment Crisis**

Lincoln Quillian
Department of Sociology
University of Wisconsin–Madison
E-mail: quillian@ssc.wisc.edu

March 2002

The research for this paper was supported by the Institute for Research on Poverty. Franklin Wilson provided helpful comments on an earlier draft of this manuscript.

IRP publications (discussion papers, special reports, and the newsletter *Focus*) are available on the Internet. The IRP Web site can be accessed at the following address: <http://www.ssc.wisc.edu/irp/>

Abstract

Many urban theorists, notably W. J. Wilson, hypothesize that rates of male joblessness in low-income urban neighborhoods have increased since the 1960s. No comprehensive study examines this claim, and case studies that consider it do not adjust for changes in rates of school enrollment and the size of the old-age population. This paper tabulates male employment trends in census tracts in 49 metropolitan areas from 1950 to 1990 and models causes of these trends. The results show a marked decline in the employment of working-age men in low-income black tracts, both in absolute terms and relative to the employment rates of male residents of other types of tracts. By 1990, more than 40 percent of working-age black men in low-income tracts were not employed, about two-thirds of whom were adults between the ages of 25 and 64. Models indicate that declining urban manufacturing employment contributed to the declining rates of work for black men in low-income neighborhoods, but they do not support explanations based on spatial mismatch, suburbanization, or black out-migration. The paper concludes that Wilson is right to focus on the employment problem of low-income black neighborhoods, and that black male joblessness in low-income neighborhoods in 1990 reached crisis levels.

The Decline of Male Employment in Low-Income Black Neighborhoods, 1950–1990: Space and Industrial Restructuring in an Urban Employment Crisis

The economies of urban areas have undergone a rapid transformation over the last 50 years. In 1950, one in three metropolitan residents worked in manufacturing, generally in central-city manufacturing plants. By 1990, not even one in five metropolitan residents was employed in manufacturing, and most remaining manufacturing employees worked in the suburbs (Sassen 1990; Farley, Danziger, and Holzer 2001). At the end of the century, American cities had been transformed from densely settled centers of goods production into sprawling centers of the new service economy.

It is widely believed that the transformation of American cities has had major effects on the form and geography of urban inequality. In the accounts of many urban theorists, most notably W. J. Wilson (1987, 1996), the economic and spatial transformation of metropolitan areas had devastating consequences for many working-class urban neighborhoods. For heavily blue-collar inner-city areas, the loss of manufacturing employment began a spiral of skyrocketing unemployment, rising crime, and population loss. The result was that most cities developed areas with few working male residents, which Wilson refers to as “jobless ghettos.”

Judging by the wide acceptance of this argument by other urban scholars, this narrative rings true to many observers. Still, there are good reasons for skepticism. Only one aspect of this account, the shift of manufacturing employment away from inner cities, is well established by broad-based empirical studies. If formerly blue-collar workers were able to make the transition into service jobs or move to areas of suburban job growth, inner-city joblessness need not have increased. In fact, no study has directly evaluated the available data to establish that there has been a sudden growth in the number of male “jobless ghettos,” let alone has provided systematic evidence linking these neighborhood changes to changes in residential patterns or industrial structure.

This paper uses data from five censuses on urban tracts in 49 U.S. cities to evaluate the claim that rates of joblessness in low-income urban neighborhoods have increased over time, and examines causes of neighborhood employment change. Before analyzing the data, I review past studies of neighborhood

employment levels and the reasons why many scholars believe that male joblessness in urban neighborhoods has increased since 1950.

PAST STUDIES OF NEIGHBORHOOD EMPLOYMENT TRENDS

The spatial distribution of joblessness has increasingly come to be a central concern in discussions of the problems of low-income urban neighborhoods. Joblessness is a cause of low income and poverty, and thus jobless neighborhoods are usually poor neighborhoods. An important contention of Wilson's (1996) work on urban poverty, however, is that concentrated joblessness has significance beyond its connection to concentrated poverty. Spatially concentrated joblessness creates an environment that isolates residents from employed role models and job networks, contributing to further joblessness (Anderson 1990; Massey and Shibuya 1995). Lack of legitimate male employment encourages alternative employment in the underground economy, adding to the crime problem of low-income neighborhoods (Freeman 1996). Correspondingly, Wilson sees modern "jobless ghettos" as distinguished from the "institutional ghettos" of the past by the problems associated with concentrated and persistent joblessness. In part because of Wilson's influence, this theme figures prominently in the work of many writers on urban problems, including Elijah Anderson (1990), Nicholas Lemann (1991), Thomas Sugrue (1996), and Loic Wacquant (1996).

Despite the recent emphasis on neighborhood joblessness, no prior studies consider trends in rates of male joblessness for neighborhoods or other small-area units. Studies of individuals find that rates of male employment have declined over time (Jaynes et al. 1989; Wilson, Tienda, and Wu 1991). Nonetheless, the relationship between these individual trends and trends in *spatial* joblessness are not clear, because there are no analogues to studies of individual joblessness at the neighborhood level.

Because individual trends include persons in both rural and urban areas, employment trends among the residents of urban neighborhoods need not even be in the same direction as national employment trends.¹

The few studies that directly examine small-area employment trends are case studies of particular cities. Perhaps the best-known study of neighborhood joblessness is the empirical section of Wilson's *The Truly Disadvantaged* (1987). Wilson finds a substantial increase in neighborhood-level unemployment in inner-city Chicago community areas—no communities areas had greater than 20 percent unemployment rates in 1970, but more than 10 communities areas had unemployment rates greater than 20 percent in 1980. Likewise, Sugrue (1996, p. 151) finds that the share of Detroit men who were not employed increased from 23 percent in 1950 to about 45 percent in 1980, and from 28 percent to 56 percent for blacks. Farley, Danziger, and Holzer (2001) also find evidence of surging rates of male joblessness in inner-city Detroit. The focus of these studies on only these two notorious examples of urban decline, however, limits our ability to generalize from these results.

In addition to the limits inherent in case studies, a significant problem with these past studies is their lack of adjustments for school enrollment or size of the old-age population. These studies consider employment-to-population ratios for the entire male population over the age of 14 or 16. This measurement confounds change in “joblessness,” in the sense associated with idleness and economic hardship, with two other social trends during this period: longer school enrollments and an increasingly large retired population (Mare and Winship 1984). Persons in school or retired are counted as jobless in the tabulations used by these studies. Yet full-time students or retirees clearly are not part of an idled jobless reserve army. Much of the increase in joblessness identified in these studies could reflect these trends.

Krivo et al. (1998) conducted a more broad-based study of trends in male joblessness, examining the spatial concentration of male joblessness in more than 100 inner cities. They found no change in the

¹For an illustration of the influence of rural patterns on national trends for teenagers from 1950 to 1970, see Cogan (1982).

geographic concentration of male joblessness between 1970 and 1980. An important qualification to this result, as they acknowledged, is that they examined the average isolation of jobless men from employed men across *all* census tracts in the city. They did not separately examine trends in the most disadvantaged neighborhoods, which may have experienced trends different from the average for all neighborhoods.

Finally, a separate line of studies has examined trends in income segregation in U.S. cities, demonstrating that spatial segregation on the basis of income increased from 1970 to 1990 (Massey and Eggers 1993; Jargowsky 1996). Although suggestive about change in employment, trends in income segregation and trends in employment segregation are sufficiently different that we cannot assume a direct correspondence. Income is not just a function of employment, but of wages and income from sources such as transfers and interest. As discussed above, recent theoretical efforts consider income and joblessness to be separable trends with distinct implications.

URBAN TRENDS AND NEIGHBORHOOD EMPLOYMENT

In addition to evidence from studies of Detroit and Chicago, many scholars believe that male neighborhood joblessness has increased because this outcome seems consistent with other changes in U.S. cities. In particular, increasing rates of neighborhood joblessness may be related to two other urban trends: shifts in urban industrial structure and changes in patterns of urban residence, especially suburbanization.

Changes in the Urban Job Base

The proportion of all U.S. employment in manufacturing has steadily declined over the last 50 years due largely to increasing automation of production and foreign competition (Bell 1973; Featherman and Hauser 1978; Bluestone and Harrison 1982). Deindustrialization has been a widespread phenomenon, but nowhere has this transition been more rapid than in inner cities. Facilitated by truck transport, cheap labor, and land outside of the inner city, most new manufacturing jobs since 1970 have been in suburban and rural locations (Sassen 1990; Glaeser 1998). The combination of deindustrialization and relocation to

suburbs and rural areas has resulted in plummeting manufacturing employment in inner cities, both in absolute figures and as a share of total metropolitan employment (Berry and Kasarda 1977; Kasarda 1993a, 1995).

The decline of inner-city manufacturing employment is most likely to contribute to unemployment among inner city residents if workers are unable to adjust to shifts in the geography and occupational mix of employment. Kain (1968) famously argued that high suburban housing costs and racial discrimination in housing create a barrier that makes it difficult for many inner-city workers, especially minorities, to follow manufacturing employment to areas of suburban job growth. He concluded that the resulting spatial mismatch between jobs and inner-city residents has contributed to inner-city unemployment and to racial gaps in employment rates. An increasingly convincing body of empirical studies supports this explanation, finding that change in distance to jobs is positively related to male unemployment rates (Ihlanfeldt and Sjoquist 1990, 1991; Mouw 2000).

Although these theories are plausible, empirical studies have not established growing inner-city neighborhood joblessness as a reliable fact. Employment gains in the service sector and other areas of the economy could well have offset employment declines in manufacturing. Residents have increasingly migrated away from inner cities as part of a general spreading out of urban population (Berry and Kasarda 1977; White 1987). Because of this spreading out, the decline in inner-city manufacturing employment need not have caused a decline in the ratio of jobs to residents. Empirical studies testing the spatial mismatch hypothesis have accumulated evidence that distance to jobs is related to unemployment, but they have not established that joblessness has become more concentrated in certain neighborhoods over time.

Change in Residential Differentiation: Suburbanization

A second set of theories of the rise of “jobless” neighborhoods emphasizes changes in patterns of residence. Families are sorted into neighborhoods on the basis of several characteristics, especially income and race. If the process of neighborhood sorting has led to increasingly strong spatial

differentiation in residence related to employment status, this would contribute to more neighborhoods with high rates of male joblessness even without change in inner-city employment rates.

A popular form of this argument views increasing spatial differentiation as the result of suburbanization, thus linking suburban development and the impoverishment of inner cities (e.g., Downs 1997). Suburbs present several barriers that limit access by low-income families, including the need for automobile transit in suburbs and zoning regulations that have the effect of limiting the development of low-income housing (Mills and Lubuele 1997; Glaeser, Kahn, and Rappaport 2000). “Jobless ghettos” may then result because the employed are increasingly able to segregate themselves from the jobless by living in suburbs, even if they continue to work in the inner city.

A well-known specific case of this argument is Wilson’s (1987) black out-migration thesis. Wilson argues that a reduction in racial discrimination in housing markets beginning in the 1970s has increasingly made it possible for affluent African American families to move into white neighborhoods, resulting in increases in rates of poverty and joblessness in low-income neighborhoods. Studies have found evidence loosely consistent with middle-class black out-migration as a factor contributing to poverty concentration, although in some cases with important modifications to Wilson’s initial argument. Jargowsky (1996) concluded that economic segregation increased more for blacks than for whites from 1970 to 1990. Likewise, Quillian (1999) found evidence consistent with the movement of middle-class blacks into nonpoor and often white neighborhoods, although because of white flight, racial segregation has not declined.

DATA

The evidence and theories discussed above offer plausible reasons for why the number of male “jobless ghettos” may have increased. Yet, as explained above, processes such as deindustrialization, spatial mismatch, and suburbanization need not necessarily create neighborhoods with high rates of male joblessness. These past studies provide probable cause for a more systematic investigation, rather than direct and convincing evidence.

My study considers changes in male employment rates of census tracts, small areas of about 4,000 persons, usually consisting of a few city blocks.² Census tracts have their boundaries drawn by local census committees to contain relatively homogeneous population groups and to correspond to natural boundaries like major streets and waterways. Tracts are not perfect representations of neighborhoods, but they are the closest approximation available in official statistics.³

The analysis presented in this investigation is limited to men's employment. Wilson primarily addresses the employment of men, and many of the causes and consequences of neighborhood joblessness Wilson discusses, such as deindustrialization and rising crime, pertain most clearly to men's employment. With that in mind, however, the employment of women is important to understanding the overall patterns of neighborhood employment over time. In a separate investigation, I consider the overall trend in neighborhood employment when the employment of women is included.

My sample includes all tracts in 49 metropolitan areas from 1950 to 1990. The 49 metropolitan areas were selected largely on the basis of the availability of tract data in 1950.⁴ The sample somewhat overrepresents cities in the Midwest and East, but there are several cities from the West and South as well. Table 1 lists the metropolitan areas included in the sample. As discussed below, the trends found in this paper are quite uniform across cities, including smaller cities and those in the West and South, suggesting that most of the same results would hold in a true random sample of contemporary U.S. cities.

²I would like to be able to incorporate more detailed information on the spatial location of tracts such as geographic coordinates. Unfortunately, this is very difficult for census years before 1980, the first year for which census tiger/line boundary files are available.

³Tracts may or may not correspond to neighborhoods as defined by residents. In fact, many studies find no consensus among residents of most areas about the boundaries of their "neighborhood," making any measurement subject to debate about its accuracy (Lee and Campbell 1997).

⁴More exactly, they were selected on the basis of tract data availability in the Elizabeth Mullen Bogue file of tract data (Bogue 1975). Bogue included most, but not all, cities for which tract data were available in 1950. Tract data are available in printed form for some additional cities for 1950, such as New York City, but these data are not available in digitized form.

TABLE 1
Metropolitan Areas in Basic Sample
(N = 49)

Akron, OH	Nashville, TN
Atlanta, GA	New Haven, CT
Austin, TX	New Orleans, LA
Baltimore, MD	Norfolk, VA
Birmingham, AL	Oklahoma City, OK
Boston, MA	Omaha, NE
Buffalo, NY	Philadelphia, PA
Chattanooga, TN	Pittsburgh, PA
Chicago, IL	Portland, OR
Cincinnati, OH	Providence, RI
Cleveland, OH	Richmond, VA
Columbus, OH	Rochester, NY
Dallas/Ft. Worth, TX	Sacramento, CA
Dayton, OH	San Diego, CA
Denver/Boulder, CO	Seattle, WA
Detroit, MI	Spokane, WA
Duluth, MN	Springfield, MA
Flint, MI	St. Louis, MO
Greensboro, NC	Syracuse, NY
Hartford, CT	Toledo, OH
Houston, TX	Utica, NY
Indianapolis, IN	Washington, DC
Kansas City, MO	Wichita, KS
Louisville, KY	
Memphis, TN	
Milwaukee, WI	

Notes: All metropolitan tracts in the metropolitan area each year are included, including those in states other than the state containing the central city. Dallas/Ft. Worth and Denver/Boulder are counted as single SMSAs, although in some census years they are treated as separate SMSAs.

The basic data for this study are drawn from decennial census tract tabulations from the population censuses of 1950 to 1990.⁵ The 1950 census tract data come from the Elizabeth Mullen Bogue file of census data, digitized from printed census tract reports by a team led by Donald Bogue of the University of Chicago (Bogue 1975). The 1960 data are from the 1960 Census Tract Data (U.S. Bureau of the Census 1971). The 1970 data are from the 1970 Fourth Count Summary Tape Files (U.S. Bureau of the Census 1973). The 1980 data are from the 1980 Summary Tape File 3 aggregated to the tract level (U.S. Bureau of the Census 1983). The 1990 data are from the 1990 Summary Tape Files 3 and 4 (U.S. Bureau of the Census 1992, 1993). Some data for the city-level regressions are based on the economic censuses, and were extracted from files in the Urban Underclass Database (Kasarda 1993b) assembled by John Kasarda for the Social Science Research Council.

A concern in any study that covers such a long time span is data comparability. Tract boundaries are sometimes redrawn in response to population changes to maintain their status as relatively homogeneous, “natural area”-like units. Few tracts have remained stable in boundaries over the entire period from 1950 to 1990, making comparison of a specific tract over time difficult. The basic conceptual definition and average size of census tracts, however, have remained stable since first delineated in the 1940s. As a result, the aggregate characteristics of all tracts in a metropolitan area can be compared over time, even if the boundaries of some tracts are redrawn.

Comparability problems are potentially more difficult for metropolitan areas. In the 1960s the Census Bureau first introduced Standard Metropolitan Statistical Areas (SMSAs) for urban areas. SMSAs include both inner cities and their surrounding suburban areas, reflecting the fact that cities and suburbs form an interdependent system that extends across jurisdictional boundaries. From 1960 to 1980, the basic Census Bureau criteria for including a county in metropolitan area were largely unchanged. Since for the most part changes in SMSA boundaries during this time reflect the spatial growth of urban

⁵Unfortunately, the necessary 2000 census data are unavailable at the date of this writing. Wilson (1987, 1996) suggests that the 1970s were a key turning point for urban unemployment, an idea that is well tested with data from 1950 to 1990.

population areas, it makes sense to analyze metropolitan-level data including all tracts in an SMSA in each year, and most prior studies follow this practice (White 1987; Massey and Eggers 1990; Jargowsky 1997).

It is also possible, however, that a portion of the increase in the number of tracts reflects increasing comprehensiveness of the Census Bureau's coverage of suburban space by tracts. White (1987) investigated this problem for 11 metropolitan areas by comparing tract maps with city maps and found this not to be a threat to validity. He concludes that "the census tracts for the early period include the inner city and many of the built-up suburbs, thus covering the vast majority of the metropolitan population" (p. 183). In addition, to assess any biases resulting from this problem, at points results are separately tabulated for inner-city areas only. Unlike metropolitan areas, inner cities have been entirely tracted for all cities in the sample for all census years, and inner-city boundaries are stable over time.

In 1990 the Census Bureau revised its definition of metropolitan areas, tightening the criteria necessary for a county to be considered part of a metropolitan area. To increase comparability, I have added counties back into metropolitan areas that were dropped in 1990.

Local Area Employment Measures

The two basic labor force concepts in official statistics are labor force participation and unemployment. Persons currently employed or who have looked for a job within the last 4 weeks are in the labor force. Persons looking for a job but unable to find one are unemployed. The unemployment rate is the percentage of persons in the labor force who are not employed.

A limitation of traditional unemployment rate measures is that they do not count workers as unemployed who have stopped looking because they are persistently unable to find work, often called "discouraged workers." Because of their narrow definition, unemployment rates underestimate joblessness and related employment problems.⁶

⁶For some purposes, it is considered desirable to adjust unemployment rates for changes in age structure in order to estimate "true" temporal change in unemployment, conceived as that that arises solely from changes in the

At points I use the traditional labor market status definitions. But the basic measure used in this study combines men out of the labor force and unemployed into a single measure of nonemployment. The male *nonemployment rate* is the share of working-age males living in a census tract who are not employed at the time of answering the census questionnaire, either because they are unemployed or not in the labor force. Persons out of the paid labor force, including persons keeping house, are included in the nonemployment rate.

Because of the limits of historical census tract data, creating measures of nonemployment for persons of “working age” only (excluding retirees) is not completely straightforward. The Appendix gives details of the construction of the labor force measures used in this study, which are best viewed as approximations of the ideally desired rates. At some points, alternative measures are used to remove persons enrolled in school from the rates, as discussed below.

The working-age population used to compute these measures is the population aged 14 to 64 for census years 1950 and 1960, and the population aged 16 to 64 for census years 1960 and 1970. This does introduce a small point of noncomparability. The direction of bias created by this problem will be to increase the apparent nonemployment rate of tracts in the 1950s and 1960s relative to the 1970s and later, thus dampening any upward trend over time.

It would be desirable to include further measures of labor force status or job quality, such as some measure of underemployment that includes persons employed for few hours or with below-poverty earnings. Unfortunately, measurement of underemployment at the tract level is possible only for the most recent census years, 1980 and 1990, and even then data availability imposes many limitations. Wages are not reported at the tract level for the earliest census years and are reported in counts based on wage

set of age- and sex-specific unemployment rates (see Antos, Mellow, and Triplett 1979; Clogg 1979). I do not adjust for age- and sex-specific composition (other than excluding persons over 64) for two reasons. First, such adjustments are not possible because age-specific labor force participation figures are not reported in tract data for most years. Second, if the concern is jobless concentration effects and related problems, it is probably best not to adjust for changes in the age distribution. There is no theoretical reason why problems resulting from concentrated joblessness should be more or less sensitive to the joblessness of persons in certain age ranges. In fact, Wilson explicitly cites shifting age distributions as a factor contributing to high rates of neighborhood joblessness (1996, pp. 42–43).

brackets that are inconsistent over time. Lichter (1988) finds that unemployment is the most frequent form of underemployment, suggesting that most persons with unsuitable employment arrangements are captured by the measures used in this analysis.

Race and Trends in Joblessness

Because racial segregation is a defining characteristic of U.S. cities, and because Wilson and theorists of spatial mismatch often direct their attention specifically to black neighborhoods, at points the analysis breaks down results by racial composition of tracts. *Racial composition* of tracts is measured in three categories: predominantly white tracts, which are more than 80 percent white; predominantly black tracts, which are more than 80 percent black; and racially mixed tracts, which constitute all other tracts. Racially mixed is a very heterogeneous category that is difficult to compare meaningfully over time, so my conclusions are mostly restricted to predominantly white and black tracts.

An important topic for future research will be to compare tracts based on more detailed racial and ethnic compositions, such as share of the population of Asian or Hispanic origin. Unfortunately, in tract-level data before 1970, race is reported only as white, black, and other (or white and nonwhite in some cases), and there are no separate Hispanic tabulations.⁷ The reporting of Hispanic ethnicity in tract data also changed significantly between 1970 and 1980. Only the racial categories of white and black are comparable for the period 1950 to 1990.

Defining Low-Income Tracts

Wilson and others specifically address the male jobless rate of low-income tracts. In the analysis that follows, tracts are categorized by their quintile in the distribution of per capita income for that census year.⁸ A tract is considered low-income if the per capita income of residents of the tract is in the lowest

⁷In some instances, separate tabulations are provided for particular Hispanic groups, such as Puerto Rican households, but only for certain states in particular years.

⁸Tract per capita income is the average income of all tract residents divided by the number of residents. Tract poverty rates or median family income, other possible candidates to measure tract income levels, cannot be computed from the tabulations available in tract data before 1970.

quintile, or the lowest 20 percent, of the decennial tract per capita income distribution.⁹ The per capita income ranges that bound the first and third quintiles are shown in Table 2.

RESULTS

Initially, I describe change in employment in metropolitan census tracts between 1950 to 1990. I then turn to an exploratory model to look at some possible causes of change over time.

Change in Employment in Low-Income and Affluent Neighborhoods

Has men's work "disappeared" from low-income neighborhoods? The first step in answering this question is to examine rates of employment in low-income tracts over time. Figure 1 displays trends in the male unemployment rate of the residents of tracts by tract income quintile. Low-income tracts are those in the first income quintile, or the poorest 20 percent of tracts. The unemployment rate is the percentage of persons in the labor force who are actively seeking work but unable to find it.¹⁰

Figure 1 shows that for most tract types there were small increases in male unemployment rates in the 1980s and 1990s. The major exception is predominantly black census tracts in the lowest income quintile, for which the male unemployment more than doubled, from 9.5 percent in 1950 to 21 percent in 1990. There is a clearly worsening problem of male unemployment in low-income black tracts over time, with male unemployment rates increasing substantially more for low-income black tracts than for other types of tracts.

Unemployment rates fluctuate with business cycles, especially for groups with historically high rates of unemployment (Freeman and Rodgers 2000). This is evident in Figure 1 in the dip in

⁹Per capita income quintiles are not racially specific. Low-income black neighborhoods, for instance, are the tracts in the lowest 20 percent of the total tract per capita income distribution, not the lowest 20 percent of the *black* tract per capita income distribution.

¹⁰The data points in Figure 1 are based on tabulations based on 5,361 to 4.5 million men, with an average of 1.1 million. Data points in Figures 2 through 4 are based on 6,072 to 4.8 million men, with a mean of 1.25 million. If the residents of a single tract type are taken as a simple random sample of all residents of that tract income level, standard errors are very small, and almost all differences among lines are statistically significant at $p < .05$. The data points based on the smaller number of individuals are for mostly black tracts in the fourth quintile and fifth quintile in 1950 and 1960.

TABLE 2
Tract Per Capita Income Range and Average for First Quintile and Third Quintile Tracts

Year	In Dollars			In 1990 Constant Dollars		
	Minimum	Maximum	Mean	Minimum	Maximum	Mean
<i>A. Range and Mean of Per Capita Income of Residents of Tracts in First Income Quintile</i>						
1950	\$0	\$876	\$693	\$0	\$4,751	\$3,759
1960	0	1,579	1,228	0	6,973	5,424
1970	0	2,596	2,052	0	8,747	6,913
1980	0	5,844	4,224	0	9,268	6,700
1990	0	10,779	7,582	0	10,779	7,582
<i>B. Range and Mean of Per Capita Income of Residents of Tracts in Third Income Quintile</i>						
1950	\$1,042	1,199	\$1,119	\$5,648	\$6,501	\$6,069
1960	1,891	2,149	2,018	8,352	9,490	8,913
1970	3,085	3,502	3,288	10,394	11,797	11,078
1980	7,093	8,139	7,607	11,249	12,909	12,064
1990	13,577	16,152	14,815	13,577	16,152	14,815

Note: Per capita income is the total income of tract residents divided by the number of residents. Quintiles are calculated with weights for tract population.

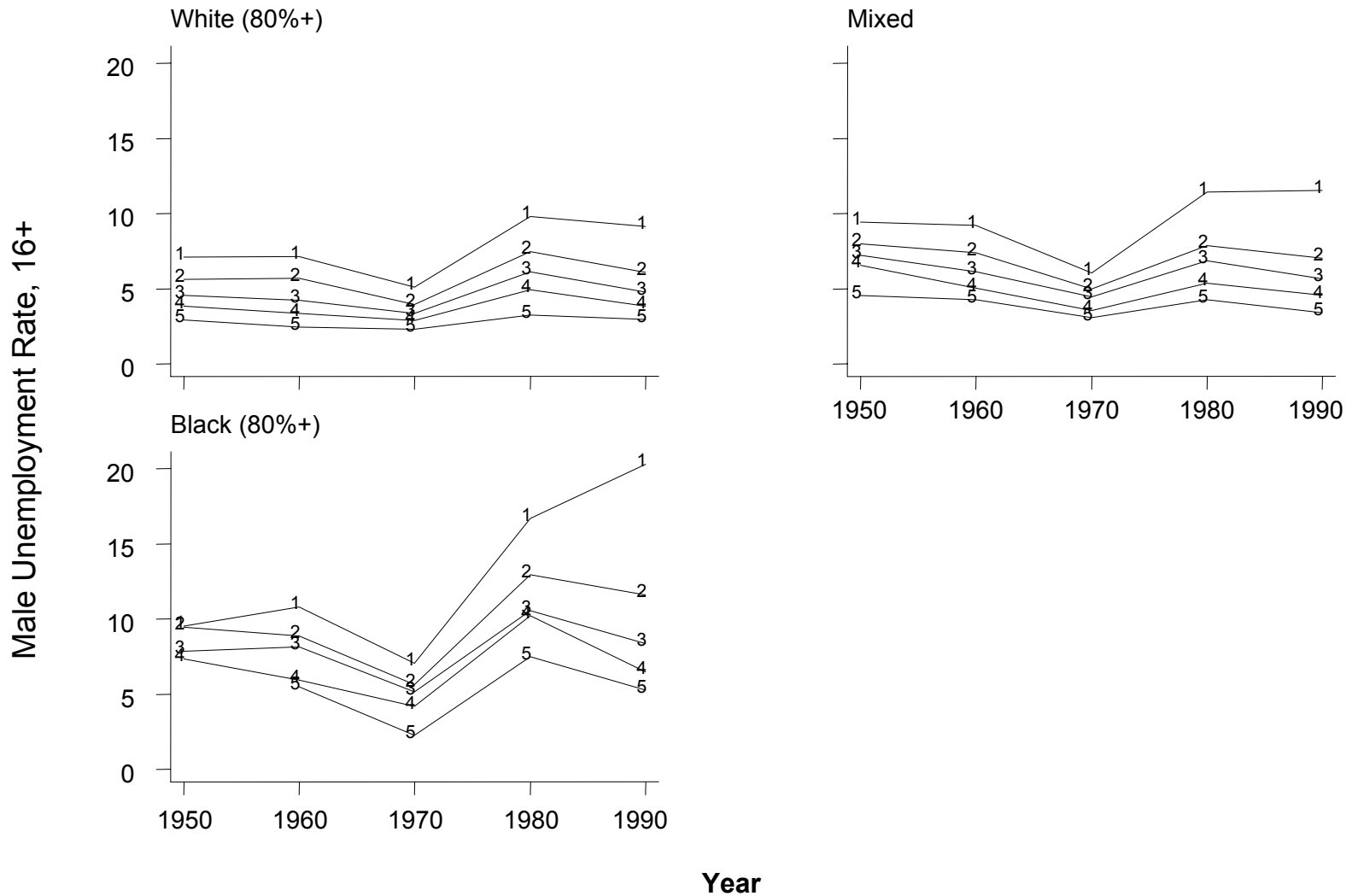


Figure 1: Male Unemployment Rates by Tract Income Quintile and Year

Note: Numbers indicate the tract per capita income quintile, from lowest (1) to highest (5).

unemployment and the compression of unemployment rates across tract income levels in 1970, a period of low unemployment. By contrast, the 1980 rates are calculated at the beginning of a recession. The increase in unemployment rates since 1970 does not just reflect cyclical variation, however, because the unemployment rate of low-income black tracts increased from 1980 to 1990 even though the national unemployment rate dropped.¹¹ The change from 1980 to 1990 suggests a structural shift in the distribution of unemployment across tract types.

In addition to the unemployment rate, trends in the overall level of work are influenced by rates of labor force participation. Figure 2 shows working-age labor force nonparticipation of men by tract income quintile. The figure shows that the share of working-age men out of the labor force has slightly increased for most neighborhood types. Again, the trend for low-income black census tracts stands out. The labor force nonparticipation of men in low-income black tracts increased by about 10 percentage points from 1950 to 1990, versus increases of less than 5 points in other types of tracts.

What are the combined results of trends in labor force nonparticipation and unemployment? In Figure 3, unemployment and labor force nonparticipation levels are combined into a single measure, the nonemployment rate. The nonemployment rate is the share of persons of working age in a tract who are not employed, either because they are unemployed or because they are not in the labor force.

As we would expect on the basis of the prior figures, Figure 3 shows starkly different trends for low-income black tracts than for other types of tracts. Most tracts, and especially black tracts, saw increases in rates of male nonemployment from 1970 to 1980. But the increase was by far the greatest for low-income black tracts. The nonemployment rate of men in low-income black tracts increased from about 25 percent in 1950 to about 44 percent in 1990. The results support Wilson's contention of skyrocketing rates of joblessness in low-income black tracts since the 1970s.

¹¹The national unemployment rates for each year in the study are: 1950, 5.3 percent; 1960, 5.5 percent; 1970, 4.9 percent; 1980, 7.1 percent; 1990, 4.6 percent (U.S. Bureau of the Census 1996).

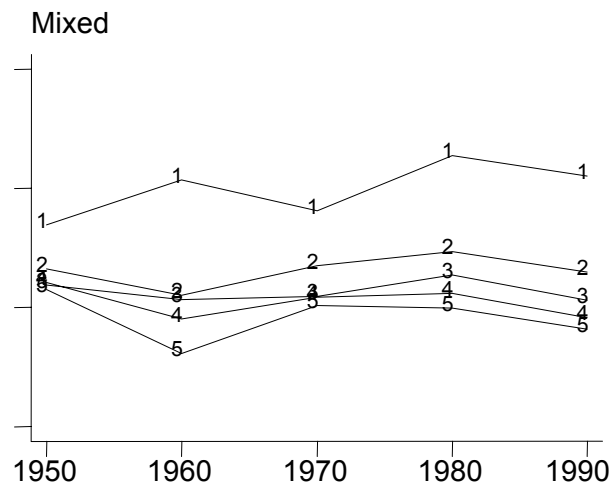
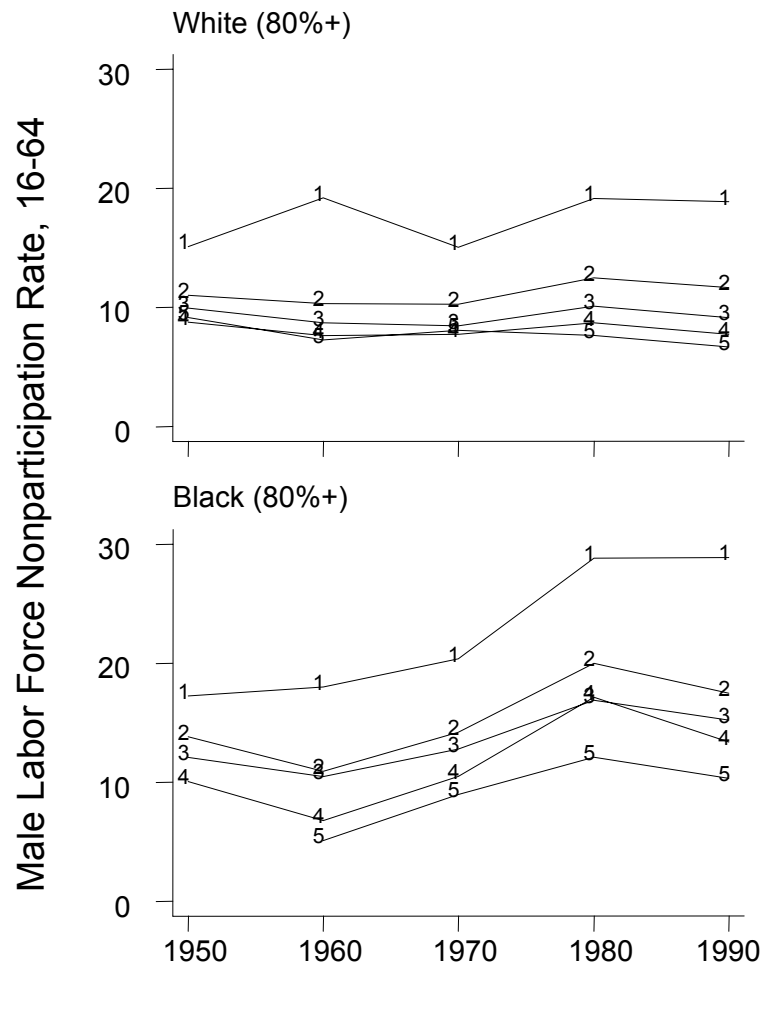


Figure 2: Male Labor Force Nonparticipation by Tract Income Quintile and Year

Note: Numbers indicate the tract per capita income quintile, from lowest (1) to highest (5).

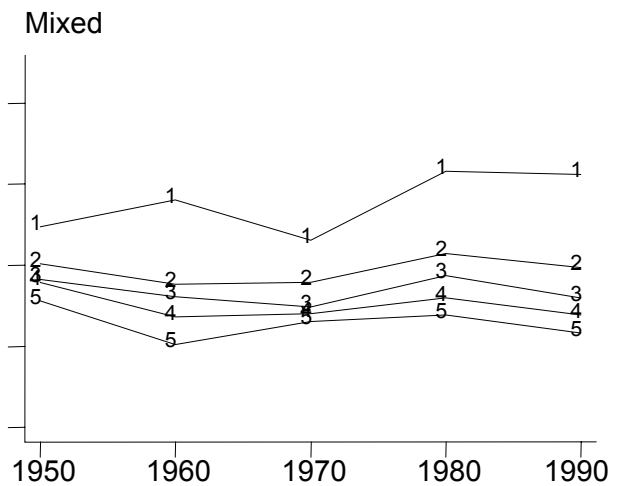
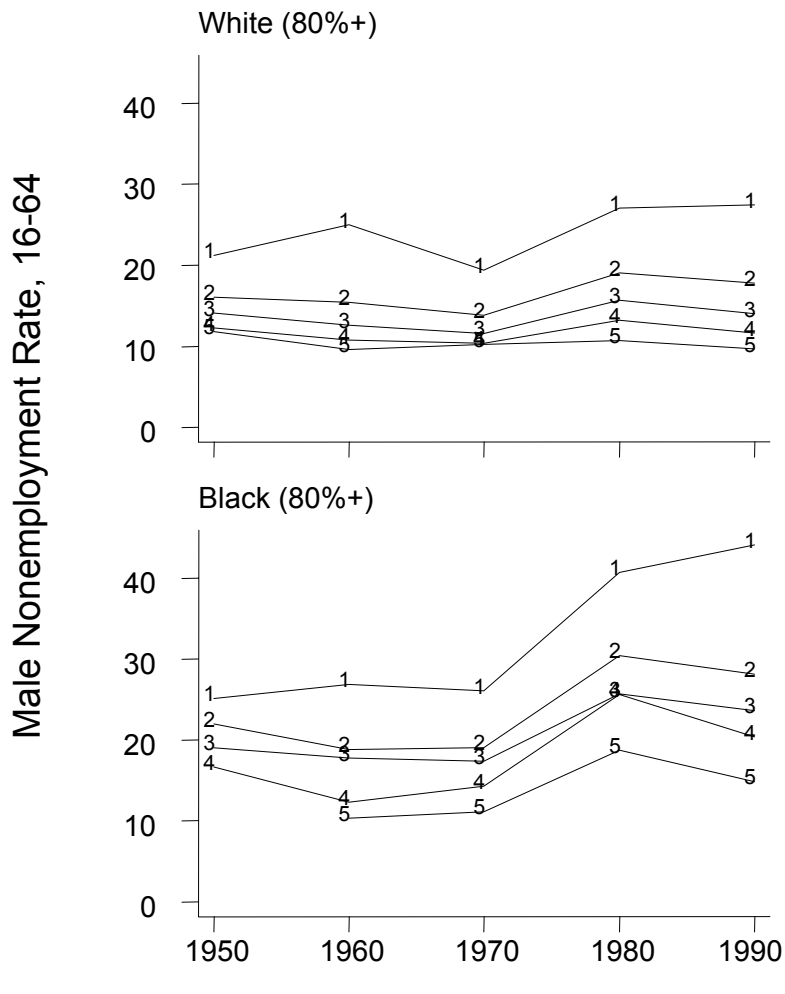


Figure 3: Male Nonemployment Rates by Tract Income Quintile and Year

Note: Numbers indicate the tract per capita income quintile, from lowest (1) to highest (5).

The graphs show trends for the residents of tracts pooled across cities. If tracts are classified by quintile of affluence within metropolitan areas, in which low-income tracts are the poorest 20 percent in each city, the trends are almost identical. Of the 37 cities with at least 10,000 black men in low-income tracts in 1950, all 37 experienced increasing nonemployment of men in low-income black tracts from 1950 to 1990. Generally, the trends displayed in Figures 1 through 4 are quite uniform across metropolitan areas.

Considering the *level* of nonemployment in 1990, the results are less supportive of Wilson's argument that low-income black neighborhoods are becoming "jobless ghettos," with almost no working residents. More than half of working-age men in low-income tracts in 1990 are employed. The view of low-income black neighborhoods as consisting almost entirely of men without jobs is inaccurate, although the level of nonemployment is comparatively very high.

A possible objection to this conclusion is that poorest quintile tracts are not poor enough to be the "truly disadvantaged" neighborhoods Wilson is talking about. To address this possibility, I tabulated male employment trends for residents of tracts in the poorest 5 percent of all tracts, rather than the poorest 20 percent. This standard roughly corresponds to the "40 percent poor" criterion used in many studies of neighborhood poverty levels (e.g., Jargowsky 1997). The nonemployment rate of men in black tracts in the poorest 5 percent of tracts in 1990 was 52 percent, contrasted to 44 percent for all black tracts in the poorest income quintile. For black tracts in the poorest 5 percent of all tracts, the rate of nonemployment is higher, but neither the trend nor the level of nonemployment is dramatically different in the poorest 5 percent of all tracts contrasted to the poorest 20 percent. In these very poor black tracts, roughly half of working-age men are employed.

An additional threat to the validity of these conclusions is that lengths of school enrollments increased during this time. Increasing nonemployment rates might simply reflect the increasing share of young adults who are full-time students. It is not possible to adjust for school enrollments for all years, but we can calculate approximate nonemployment rates excluding persons enrolled in school for the years

1960, 1970, and 1990. (Details of the measures are discussed in the Appendix.) Figure 4 is similar to Figure 3, but with nonemployment rates adjusted to eliminate persons in school. In the revised figure, levels of nonemployment are somewhat more similar across tract types; with this adjustment, nonemployment has increased more notably for white tracts over time. Nevertheless, the nonemployment trend for men in low-income black tracts is clearly distinct from the trend in other types of tracts.

Segregation on the Basis of Employment Status

The measures to this point consider levels of employment in neighborhoods categorized by their income level. A different way to consider change in the spatial distribution of unemployment is to use a measure of the extent to which the employed and the jobless are spatially segregated from one another. Unlike the level of nonemployment, measures of segregation quantify the extent of spatial sorting among neighborhoods on employment status independent of the total level of nonemployment in a metropolitan area.

As in many prior studies, I use the index of dissimilarity (D) to assess the extent of segregation on the basis of employment status.¹² The index of dissimilarity can be interpreted as the proportion of men who would need to move to achieve an even spatial distribution across the metropolitan area, in which each tract in the metropolitan area has the same male nonemployment rate. The indexes of dissimilarity are calculated for each metropolitan area, and metropolitan-level averages are presented in Table 3. The indexes are shown first for all tracts, then within racial tract types.

¹²The index of dissimilarity (D) is defined as

$$D = \sum_{n=1}^N \left[\frac{x_n}{X} - \frac{z_n}{Z} \right]$$

where x_n is the number of nonemployed men in tract n , X is the number of nonemployed men of working age in the metropolitan area, z_n is the number of employed men in tract n , and Z is the number of employed men in the metropolitan area. D is computed separately by city, with the city-level average reported in the paper. Measures were also calculated using Theil's entropy index of segregation (H), which many argue has better properties than D as an index of segregation but is more difficult to interpret (see James and Taeuber 1985). The conclusions based on H were identical to those using D .

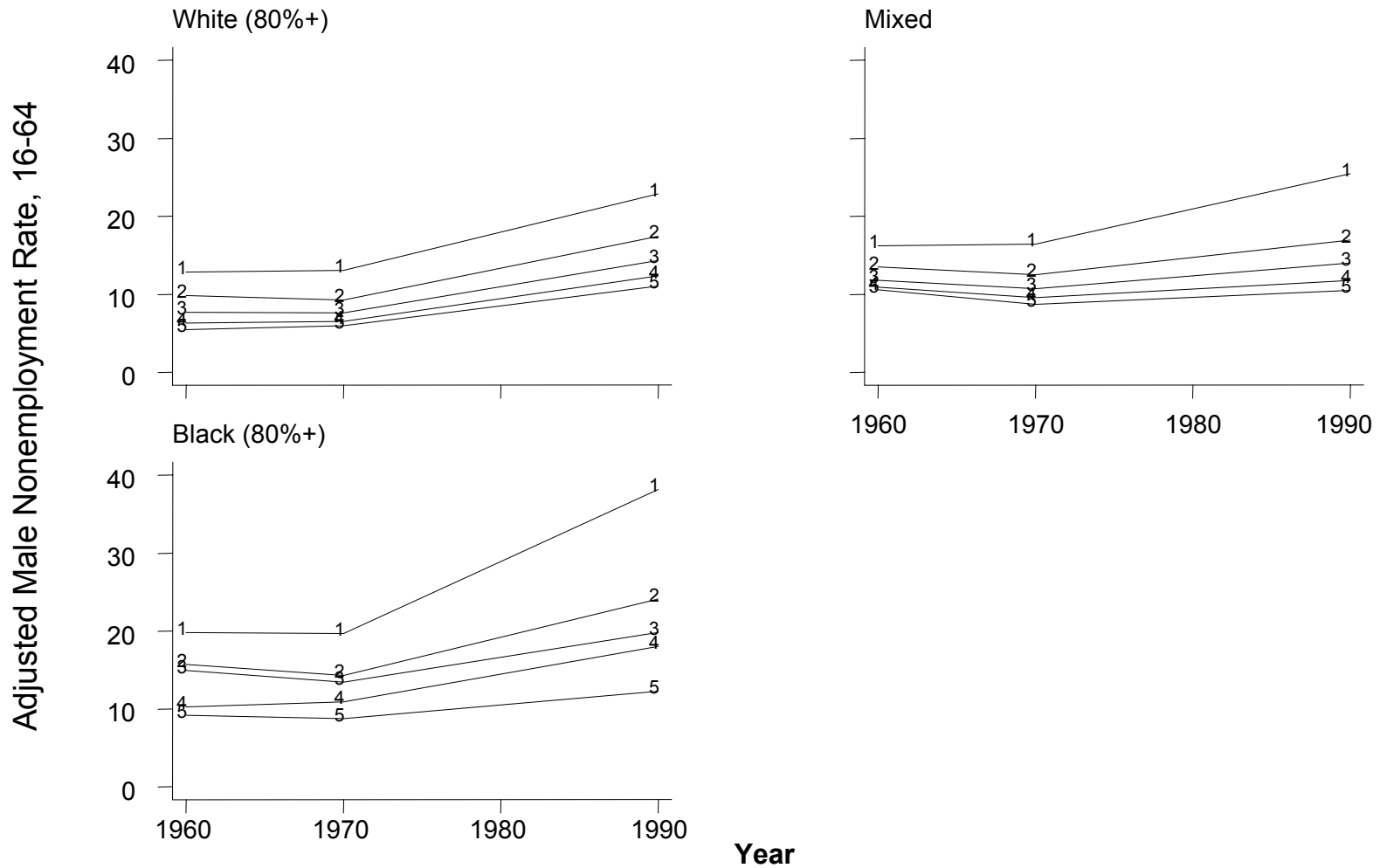


Figure 4: Working Age Nonemployment Rate, Adjusted for School Enrollment

Note: Numbers indicate the tract per capita income quintile, from lowest (1) to highest (5). School enrollment data unavailable for 1950 and 1980.

TABLE 3
Indexes of Dissimilarity of Employed vs. Nonemployed, Tracts in 49 SMSAs

Year	[1] D Index SMSA Average	[2] D Index Excluding Persons Enrolled in School	[3] D Index Central City Average	N
1950	0.21	N/A	N/A	49
1960	0.24	0.26	0.26	49
1970	0.23	0.25	0.25	49
1980	0.25	N/A	0.27	49
1990	0.27	0.21	0.29	49
<u>White Tracts (80%+)</u>				
1950	0.18	N/A	N/A	49
1960	0.21	0.22	0.23	49
1970	0.19	0.20	0.22	49
1980	0.18	N/A	0.20	49
1990	0.19	0.14	0.22	49
<u>Black Tracts (80%+)</u>				
1950	0.11	N/A	N/A	18
1960	0.15	0.15	0.15	22
1970	0.17	0.18	0.17	27
1980	0.18	N/A	0.18	28
1990	0.19	0.19	0.19	28
<u>Racially Mixed Tracts</u>				
1950	0.16	N/A	N/A	29
1960	0.25	0.18	0.24	33
1970	0.22	0.20	0.22	39
1980	0.21	N/A	0.21	46
1990	0.22	0.19	0.22	46

Note: The shares of persons employed and nonemployed are calculated among all persons of “working age,” which is 14–64 for 1950 and 1960 and 16–64 for 1970 to 1990 (see text). The D index is only calculated for metropolitan areas with at least 10,000 working-age men in the tract type in the metropolitan area. City means are weighted by number of working-age men used in the calculation of D.

The first column of Table 3 shows that the average indexes of dissimilarity have increased moderately, but this apparent increase is eliminated for white and mixed tracts when we adjust for persons in school. White and mixed tracts show little change or a decrease in segregation of employed from nonemployed men. Low-income black tracts, on the other hand, show increasing levels of segregation of the employed to the nonemployed. The increase for black tracts persists after adjustments for school enrollment. For mostly black tracts, spatial segregation on the basis of employment status increased from 0.11 in 1950 to 0.19 in 1990.

The indexes of dissimilarity are far lower than indexes commonly computed in studies of racial segregation. Urban areas are much more divided on the basis of race than on the basis of employment status. Yet this degree of segregation is enough to create substantial differences in the nonemployment rate between tracts toward the high and low end of the nonemployment distribution, as shown in Figure 3 and as will be discussed below.

The third column of Table 3 displays results for inner-city areas only.¹³ The variable used to delineate inner-city and suburban areas is not available in the 1950 census data, so this year is excluded. The trend for tracts in inner cities is almost identical to the trend for metropolitan areas as a whole. Since inner-city areas have not seen changes over time in their boundaries or tract coverage that metropolitan areas have, this implies that the trends seen overall are not simply the result of increasing comprehensiveness of tracting of metropolitan space.

The Age Pattern of Nonemployment

Individual-level studies of black employment problems have especially highlighted the deteriorating employment situation of *young* black men. Although the employment rate of men has fallen for all age groups and for whites, the decline has been by far the largest for black men aged 16 to 24

¹³Inner-city boundaries sometimes cross tract boundaries. Inner-city tracts are those in which at least half of the population resides in the inner-city portion of the tract.

(Freeman and Holzer 1986; Jaynes et al. 1988, pp. 302–303). Is the unemployment and nonemployment problem in black neighborhoods largely a youth phenomenon?

Because data on hours worked by age are not reported for most census years, the data do not allow for a historical answer to that question. Patterns of employment by age are available in tract data, however, for the year 1990.¹⁴ Table 4 shows the distribution of unemployment and nonemployment by age for the male residents of tracts in the first and third income quintiles. The age distribution of unemployment and nonemployment is similar across these different types of tracts. Men aged 16 to 24 make up between 33 and 36 percent of the unemployed and 35 to 42 percent of the nonemployed, regardless of the racial composition or income level of residents.

Unemployment and nonemployment in low-income tracts, then, are not primarily youth problems, nor are male unemployment and nonemployment more likely to be youth problems in low-income black tracts than in other tracts. The real employment problem among men in low-income black tracts is the high rates of nonemployment among men of all ages, not high rates of nonemployment among youth.

What Went Wrong? An Exploratory Model of Trends over Time

The results to this point suggest that male joblessness in low-income black tracts has increased markedly, and has diverged from male joblessness rates in other types of tracts. In the second part of the analysis I use a series of metropolitan-level models of nonemployment to examine possible causes of the decline of male employment rates in low-income black census tracts.

A metropolitan-level analysis has several advantages over analyses based on smaller spatial units.¹⁵ The formation of sectors of a metropolitan area with high rates of nonemployment is a result of metropolitan-wide job availability and relocation decisions. The metropolitan area best represents the

¹⁴The data are extracted from the detailed tabulations in Summary Tape File 4a and aggregated to the tract level (U.S. Bureau of the Census 1993).

¹⁵Metropolitan-level measurement also has some disadvantages, most notably crudeness of measurement.

TABLE 4
Age Distribution of Unemployed and Nonemployed Men in 1990, First and Third Quintile Tracts, by Racial Composition

	Unemployed Men				Nonemployed Men			
	Age			Total	Age			Total
	16-24	25-44	45-64		16-24	25-44	45-64	
<u>White Tracts (80%+)</u>								
First Income Quintile	34.0%	50.0%	16.0%	100.0%	36.4%	33.0%	30.6%	100.0%
Third Income Quintile	33.6	47.3	19.1	100.0	37.5	27.2	35.3	100.0
<u>Black Tracts (80%+)</u>								
First Income Quintile	34.3	51.9	13.8	100.0	35.4	38.1	26.5	100.0
Third Income Quintile	33.6	48.0	18.4	100.0	42.3	28.7	29.0	100.0
<u>Racially Mixed Tracts</u>								
First Income Quintile	34.5	51.1	14.4	100.0	37.6	38.0	24.4	100.0
Third Income Quintile	35.9	48.4	15.6	100.0	40.8	33.2	25.9	100.0

Source: Author's tabulations from 1990 Summary Tape File 4a. Based on the 49 SMSAs listed in Table 1.

likely choice-set for most residential decisions, a city and surrounding suburbs.¹⁶ In analyses that use smaller units like tracts as the basic unit, it is difficult to distinguish if changes in tract employment levels represent merely a reshuffling of population across tracts or an overall change in the spatial organization of employment within the metropolis.

Because the analysis of trends indicates a troubling and unique trend for men in low-income black neighborhoods, the models focus on the nonemployment rate of the male residents in low-income black census tracts. The dependent variable is the nonemployment rate of working-age men in predominantly black census tracts in the poorest 20 percent of census tracts in each of 49 metropolitan areas.

The independent variables represent four processes, discussed above, that urban theorists consider likely causes of these trends: deindustrialization, spatial mismatch, suburbanization, and out-migration by middle-class blacks. Table 5 lists variables used in the analysis and defines their measurement. If deindustrialization is an important part of understanding changing patterns of employment in inner-city neighborhoods, then the share of metropolitan employment in manufacturing should be negatively related to rates of nonemployment in low-income black tracts. If spatial mismatch is a key process contributing to neighborhood joblessness, then the share of manufacturing jobs in inner-city locations should be negatively associated with rates of labor force nonparticipation in low-income black tracts. If the movement of employed persons from inner-city to suburban destinations has contributed to nonemployment in low-income black tracts, we should find that nonemployment rates of black tracts increase as the share of the population in the central city decreases. Finally, if the movement of employed blacks away from all-black neighborhoods and into white neighborhoods has increased the concentration of joblessness in low-income black tracts, then we should see a positive relationship between percentage

¹⁶Metropolitan areas are defined by the Census Bureau based on commuting data to represent the area around a city within which there is extensive commuting into the inner city.

TABLE 5
Description of Independent Variables Used in Metropolitan-Level Analyses

Variable	Description	Source
<i>Deindustrialization and Spatial Mismatch</i>		
Proportion of Employment in Manufacturing	Percentage of employed population in metropolitan area in manufacturing.	Census of Population
Proportion of Manufacturing Employment in Central City	Percentage of metropolitan manufacturing jobs located within the central city. 1960 year from 1958; 1970 from 1967; 1980 from 1977; 1990 from 1987.	Economic Census
Proportion of Total Employment in Central City	Percentage of metropolitan jobs in manufacturing, retail, wholesale, and service jobs located within the central city. 1960 year from 1958; 1970 from 1967; 1980 from 1977; 1990 from 1987.	Economic Census
<i>Racial Segregation</i>		
Dissimilarity Index White/Black	Metropolitan dissimilarity index, white vs. black persons, computed from all tracts in the metropolitan area.	Census of Population
<i>Suburbanization and Black Middle-Class Out-Migration</i>		
Percentage of Population in Central City	Proportion of metropolitan population who live in the central city.	Census of Population
Percentage of Metropolitan Black Population in White Census Tracts	Percentage of metropolitan black population living in census tracts that are at least 80% white.	Census of Population
Percentage of Metropolitan Black Population in Racially Mixed Census Tracts	Percentage of metropolitan black population living in census tracts that are less than 80% black and less than 80% white.	Census of Population
Percentage of Metropolitan Black Population in Suburbs	Percentage of metropolitan black population living in suburban census tracts (tracts are suburban if at least 50% of population of the tract lives outside the central city).	Census of Population
<i>Metropolitan Employment and Sorting</i>		
Dissimilarity Employed to Nonemployed	Index of dissimilarity, employed men to nonemployed men of working age.	Census of Population
Metropolitan Nonemployment Rate	Percentage of the working-age metropolitan male population nonemployed, excluding residents of tracts in the lowest income quintile.	Census of Population
<i>Other Controls</i>		
Percent Black	Percentage of metropolitan population black.	Census of Population
Logged Metropolitan Population	Log of total metropolitan population.	Census of Population

of the black population in white, racially mixed, and/or suburban census tracts and the nonemployment rate of low-income black tracts.

It is also possible that suburbanization or black middle-class out-migration is a result of high rates of joblessness rather than a cause of it. This would occur if movement to the suburbs were motivated by a desire to avoid high rates of inner-city joblessness. A positive association between the share of the population in suburbs and joblessness is ambiguous in its meaning, then, but a finding of no relationship is clearly inconsistent with the importance of suburbanization to growing inner-city joblessness.

The index of dissimilarity between blacks and whites is included to account for the likely role of black-white segregation in forming neighborhoods with high rates of joblessness. Massey and Denton (1993) argue that black-white racial segregation will tend to create tracts with especially high levels of concentrated social problems, including joblessness, because segregation separates a low-employment population, blacks, from a high-employment population, whites. Massey and Eggers (1990) have also argued that segregation tends to concentrate economic shocks in predominantly minority neighborhoods, although past empirical studies of this hypothesis have been mixed (see Jargowsky 1997 and Massey and Fischer 2000). Interactions of economic segregation and level of nonemployment are included to allow for this possibility. Size of the city and percentage black are included as control variables.

The models are estimated with weighted least squares regression with fixed effects for metropolitan areas. The weights are proportional to the number of black men in the metropolitan area. The fixed effects control for any stable, unchanging metropolitan area characteristics (Mundlak 1978).¹⁷ Variables that represent unchanging characteristics, such as region of the country, are not included because they are absorbed by the metropolitan fixed effects. With the fixed effects, the model is estimated based on changes about the metropolitan means in the independent variables and the dependent variables.

Many of the independent variables are not available for 1950, so I use data only for 1960 to 1990. For some years, certain metropolitan areas have fewer than 10,000 black male working-age residents

¹⁷For a clear discussion of the advantages of fixed effects, and an example, see England et al. (1988).

living in tracts, and for those years these metropolitan areas are excluded. Also excluded are two cities for which the independent variables from the economic censuses are not available. As a result, 147 metropolitan years are available from a total of 47 metropolitan areas

Table 6 shows estimates of metropolitan-level models of the nonemployment rate of men in low-income black census tracts. The dependent variable is the nonemployment rate of the working-age male population of black tracts among the least affluent 20 percent of tracts in each city. Model 1 shows positive coefficients for 1980 and 1990, reflecting the increase in the male nonemployment rate of low-income tracts in 1980 and 1990 (displayed graphically in Figure 3).

Model 2 includes control variables corresponding to the basic model. The proportion of employment in manufacturing is negatively related to share nonemployed in low-income black tracts, supporting the importance of deindustrialization. The relationship is strong—a 10 percent increase in the share of employment in manufacturing is associated with a decline in the nonemployment rate of low-income black tracts of about 4.8 percent. The dummy variable coefficients for years are also reduced, indicating that some of the change over time is explained by declining manufacturing employment. Manufacturing change explains about a third of the increase in male nonemployment from 1960 to 1980, and nearly half from 1960 to 1990.

The other variables in the model, representing spatial mismatch, suburbanization, and movement of blacks into white neighborhoods, are not statistically significant. None of these factors are strongly related to declining male employment in low-income tracts. The results suggest that the industrial restructuring of urban economies away from manufacturing has had a substantially stronger impact on the employment rate of black men in low-income tracts than has relocation of jobs or persons to suburban locations.

Model 3 introduces two measures that we may think of as proximate causes of the nonemployment rate of low-income black tracts: the overall nonemployment rate of men in the metropolitan area (excluding the residents of low-income tracts) and the index of dissimilarity of

TABLE 6
Models of Nonemployment Rate of Low-Income Black Tracts, 49 SMSAs, 1960–1990, with SMSA Fixed Effects¹

	Models							
	[1]		[2]		[3]		[4]	
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
Year = 1960	(ref.)		(ref.)		(ref.)		(ref.)	
Year = 1970	0.146	1.024	-1.364	1.869	2.633	1.220*	2.344	1.264
Year = 1980	14.637	0.920*	10.049	2.905*	7.110	1.763*	7.152	1.795*
Year = 1990	17.010	0.929*	8.855	4.131*	8.135	2.517*	8.236	2.547*
Percentage of Employment in Manufacturing			-0.484	0.210*	-0.233	0.128	-0.232	0.131
Percentage of Manufacturing Employment in Central City			0.029	0.122	-0.024	0.074	0.490	0.541
Percentage of Total Employment in Central City			-0.011	0.146	-0.011	0.088	-0.359	0.477
Dissimilarity White/Black (0 to 1)			-21.292	20.942	-4.076	12.682	-3.398	22.989
D White/Black * Pct. Manufacturing Employment CC							-0.686	0.726
D White/Black * Pct. Total Employment CC							0.477	0.650
Percentage of Metropolitan Population in Central City			-0.127	0.091	0.035	0.056	0.047	0.058
Percentage of Metro Black Population in White Tracts			0.005	0.244	-0.021	0.148	-0.065	0.154
Percentage of Metro Black Population in Racially Mixed Tracts			0.064	0.093	0.116	0.057*	0.097	0.060
Percentage of Metro Black Population in Suburbs			-0.101	0.070	-0.013	0.045	0.002	0.048
Dissimilarity Employed/Nonemployed (0 to 1)					53.895	12.348*	52.605	12.695*
Male Nonemployment Rate of Metropolitan Areas, Excluding Lowest Quintile					2.049	0.160*	1.643	1.009
D White/Black * Male Nonemployment Rate							0.457	1.270
Percent Black			0.553	0.363	-0.064	0.225	-0.087	0.233
Metropolitan Population (logged)			-4.268	4.042	1.646	2.496	1.908	2.546
N (city years)	147		147		147		147	

¹Dependent variable: nonemployment rate of predominantly black (80%+) tracts in lowest income quintile of each metropolitan area.

Notes: All models include metropolitan fixed effects. Models are estimated with a constant, but the constant is not shown. Models are weighted by the number of black men in low-income tracts in the metropolitan area in each year. * = p < .05

employed to nonemployed men in the metropolitan area. The first variable represents the overall employment situation of the city, excluding the residents of low-income tracts to avoid a purely mathematical relationship among the measures. Both are excellent predictors of the rate of nonemployment in low-income black tracts. A 1 percent change in the nonemployment rate of men in metropolitan tracts is associated with a 2 percent change in the nonemployment rate of tracts in the lowest quintile. Likewise, a change of .1 in the index of dissimilarity between employed and nonemployed persons is associated with an increase in the nonemployment rate of the lowest income tracts of about 5 percent.

The strong connection between these two measures and the nonemployment rate of low-income tracts indicates a strong connection in employment rates across tracts of different racial compositions and income levels in the same metropolis. Paralleling Jargowsky's (1997) result for tract poverty rates, low-income black tracts are not a world unto themselves. Instead, low-income tracts are strongly linked to the overall metropolitan economy and metropolitan-wide processes of neighborhood sorting.

When variables for employment segregation and the level of nonemployment are introduced, the coefficient of share of employment in manufacturing becomes statistically nonsignificant. This indicates that the effects of manufacturing share in models 2 and 3 on the nonemployment of low-income black tracts are indirect, and act through the metropolitan male nonemployment rate and dissimilarity between the distribution of employed and nonemployed men over tracts. Models estimated with each term entered separately (not shown) show that the level of manufacturing employment influences the male nonemployment rate in low-income black tracts primarily through influencing the overall metropolitan nonemployment rate.

Model 4 also adds three interaction terms to test theories about the interaction of spatial and residential segregation. If the spatial mismatch hypothesis is correct, black nonemployment rates have increased because segregation limits the access of black workers to suburban areas, where most employment growth has occurred since 1970. The models test this idea by adding interaction terms

between racial segregation and the proportion of manufacturing employment and total employment in the inner city. If spatial mismatch operates, then employment relocation should have more deleterious effects on employment rates in low-income black tracts in cities with high levels of racial segregation than in cities with low levels of racial segregation. Neither of these interaction terms is statistically significant.

The fourth model also adds an interaction term between racial segregation and the nonemployment rate of tracts in the third quintile. This is to examine Massey and Eggers' (1990) argument that racial segregation concentrates employment shocks in minority neighborhoods, creating stronger cyclical fluctuations in mostly black and low-income neighborhoods. The interaction is not statistically significant, contradicting this argument in the case of jobless rates.

CONCLUSION AND DISCUSSION

The decline of male employment in low-income urban neighborhoods is a central claim and premise of Wilson's recent work on urban decline, and is taken as a fact in many theoretical discussions of urban change. No systematic study, however, has examined if Wilson's description is accurate. The results of this analysis largely confirm Wilson's suspicion about the trend over time. Low-income black tracts have seen roughly a doubling in their rates of male unemployment from 1950 to 1990, and an increase of about 50 percent in rates of working-age male labor force nonparticipation. The male nonemployment rate of working-age men in low-income black neighborhoods has increased from 25 percent in 1950 to 44 percent in 1990. Poverty in low-income black neighborhoods in the 1950s and 1960s was more prevalent than it is today, but it resulted predominantly from low wages rather than nonemployment. In the 1980s and 1990s, black neighborhoods with high rates of poverty also tend to have low employment rates of their male residents.

Male nonemployment rates have also increased in white and more affluent black neighborhoods, but not nearly to the extent they have among men in low-income black neighborhoods. Further, the increase in nonemployment in white and racially mixed tracts appears to have been fairly evenly distributed across tract income levels, especially after adjusting for school enrollment. By contrast,

increasing male nonemployment in black census tracts has been especially concentrated in low-income tracts, increasing the spatial segregation of the employed and the jobless in black tracts. As a result, the employment rate of men in low-income black tracts has become increasingly dissimilar to the employment situation of men living in other types of tracts.

Viewed historically, the nonemployment rate of men in low-income black tracts is extremely high. An interesting point of comparison is the national employment situation in 1933, during the Great Depression. The male unemployment rate in low-income black tracts in 1990 was 21 percent, slightly below the national unemployment rate of 25 percent in 1933. Male labor force nonparticipation of black men aged 16–64 in low-income tracts in 1990 was 29 percent, higher than the nonparticipation rate of 22 percent for all men over 14 in 1930 (U.S. Bureau of the Census 1975). Differences in measurements make an exact comparison of rates impossible, but on the basis of these figures it is probable that rates of working-age male nonemployment are higher among men in low-income black tracts in 1990 than they were among all men at the peak of the Great Depression.¹⁸ By most standards, this is a crisis level of male joblessness.

The one respect in which Wilson's discussion may be misleading is in his description of contemporary low-income black neighborhoods as completely "jobless." In fact, the results indicate that more than half of working-age men in low-income black neighborhoods were employed in 1990. Substantial numbers of men remain employed in low-income black census tracts, although by historical standards the level of joblessness is very high.

The models of metropolitan change support the importance of declining manufacturing employment in inner cities as one of the major causes of declining rates of male employment in low-income neighborhoods. This is consistent with recent studies that link deindustrialization to falling

¹⁸Based on historical estimates, however, the rate of nonemployment among working-age men in low-income black neighborhoods in 1990 is probably lower than the rate of nonemployment among all *black* men in urban areas during the Great Depression (see Sundstrom 1992). The unemployment rate of blacks during the Depression is estimated to have been close to 40 percent.

employment rates for black men at the individual level (Bound and Holzer 1993) and increasing income inequality (Chevan and Stokes 2000). Black men appear to have had substantial difficulty in making the transition from manufacturing into employment in other sectors of the economy, leading to declining rates of black male employment in low-income tracts.

The evidence is not consistent with the importance of spatial mismatch, suburbanization, or migration of employed blacks into white neighborhoods in explaining these trends. Change in the industrial and occupational mix of jobs has had a larger impact than changes in the location of jobs or people in explaining declining employment rates of men in low-income black neighborhoods.

Of course, an important limitation of this study is its exclusive focus on men. Wilson's work is focused primarily on the employment of men, and many of the causes and problems Wilson discusses (e.g., deindustrialization) are really issues only for men's employment. Because women's employment has increased over time, the story for women is in many respects different from that for men. Including the employment of women in evaluating neighborhood employment rates adds several complexities, and is the topic of another paper.

In conclusion, Wilson's concern for eroding male employment in low-income black tracts is well placed. The level of male nonemployment in modern low-income black tracts is unprecedented in the postwar United States, and is in part explained by the decline of traditional factory jobs. The many problems that Wilson and other scholars discuss as resulting from concentrated male joblessness are likely to become increasingly serious problems over time.

APPENDIX
Definitions of Employment Measures

The reporting of employment statistics in historical tract data imposes several limitations on the ability to investigate trends in tract-level employment. For many census years, the only labor force statistics reported are counts of the number of all persons over the age of 14 (years 1950 and 1960) or 16 (1970 to 1990) in the labor force, employed, and unemployed. Adjusting to eliminate persons 65 and over, and to eliminate persons enrolled in school, thus necessitates the use of proxies that are imperfect measures of the desired rates. In most cases we can assess the likely direction of bias resulting from these imperfections.

1. Basic Measures

The basic components are:

EMP = Number of men in the tract employed for pay, aged 14+ in 1950 and 1960, 16+ in 1970, 1980, and 1990.

UE = Number of men looking for work but unable to find it, aged 14+ in 1950 and 1960, 16+ in 1970, 1980, and 1990.

LF = Number of men in the tract in the labor force, defined as employed or looking for work, aged 14+ in 1950 and 1960, 16+ in 1970, 1980, and 1990.

POP = Male population of the tract aged 14–64 in 1950 and 1960, 16–64 in 1970, 1980, and 1990.

Tract UE RATE = $100 * UE/LF$.

Tract Labor Force Participation Rate = $100 * LF/POP$.
Recoded to be 0 if this ratio is less than 0, or 100 if greater than 100.

Tract Nonemployment Rate = $100 * (POP - EMP) / POP$.
Recoded to be 0 if this ratio is less than 0, or 100 if greater than 100.

Comments: These measures are accurate measures of the working-age tract unemployment, labor force participation, and nonemployment rate *if* no men aged 65+ are in the labor force (e.g., all such persons are retired). This is, of course, an inaccurate assumption. To the extent this assumption is incorrect, the labor force participation rate is likely to overestimate labor force participation among men 16–64, and the nonemployment rate is likely to underestimate nonemployment among persons 16–64.

2. Measures Adjusted to Eliminate Persons Enrolled in School and Institutions

Data to adjust these measures are available only for 1960, 1970, and 1990.

All measures are recoded so that tracts with rates below 0 are recoded to 0, and those with rates above 100 are recoded to 100.

For 1960:

OUT60 = Number of men in tract who are not in the labor force *and* who are not enrolled in school or in jail, aged 14–64 (directly available from summing sex-specific counts available in 1960 tract data).

Adjusted Nonemployment Rate 1960 = $100 * (\text{OUT60} + \text{UE}) / \text{POP}$.

For 1970:

OUT70 = Number of men in the tract who are not in the labor force *and* who are not enrolled in school or in jail, aged 16–64 (directly available from summing sex-specific counts available in 1970 tract data).

Adjusted Nonemployment Rate 1970 = $100 * (\text{OUT70} + \text{UE}) / \text{POP}$.

For 1990:

OUT90 = Number of persons in tract who are not in the labor force *and* who are not enrolled in school, aged 16–64 (directly available from summing counts extracted from 1990 Summary Tape File 4a).

PMOUT = Proportion of all persons not in the labor force in the tract who are men.

Adjusted Nonemployment Rate 1990 = $100 * (\text{OUT90} * \text{PMOUT} + \text{UE}) / \text{POP}$.

References

- Antos, J., W. Mellow, and J. Triplett. 1979. "What Is a Current Equivalent to Unemployment Rates of the Past?" *Monthly Labor Review* 102: 36–46.
- Anderson, Elijah. 1990. *Streetwise: Race, Class, and Change in an Urban Community*. Chicago: University of Chicago Press.
- Bell, Daniel. 1973. *The Coming of Post-Industrial Society*. New York: Basic Books.
- Berry, Brian, and John Kasarda. 1977. *Contemporary Urban Ecology*. New York: Macmillan.
- Bogue, Donald. 1975. CENSUS TRACT DATA, 1950: ELIZABETH MULLEN BOGUE FILE [computer file]. ICPSR version. University of Chicago, Community and Family Study Center [producer], 1975. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2000.
- Bound, John, and Harry Holzer. 1993. "Industrial Shifts, Skill Levels, and the Labor Market for White and Black Males." *Review of Economics and Statistics* 75(3): 387–396.
- Bluestone, Barry, and Bennett Harrison. 1982. *The Deindustrialization of America*. New York: Basic Books.
- Chevan, Albert, and Randall Stokes. 2000. "Growth in Family Income Inequality, 1970–1990: Industrial Restructuring and Demographic Change." *Demography* 37: 365–380.
- Clogg, Clifford C. 1979. *Measuring Underemployment: Demographic Indicators for the United States*. New York: Academic Press.
- Cogan, John. 1982. "The Decline in Black Teenage Employment: 1950–70." *American Economic Review* 72(4): 621–638.
- Downs, Anthony. 1997. "The Challenge of Our Declining Big Cities." *Housing Policy Debate* 8(2): 359–408.
- England, Paula, George Farkas, Barbara Kilbourne, and Thomas Dou. 1988. "Explaining Occupational Sex Segregation and Wages: Findings from a Model with Fixed Effects." *American Sociological Review* 53: 544–558.
- Farley, Reynolds, Sheldon Danziger, and Harry J. Holzer. 2001. *Detroit Divided*. New York: Russell Sage Foundation.
- Featherman, David, and Robert Hauser. 1978. *Opportunity and Change*. New York: Academic Press.
- Freeman, Richard. 1996. "Why Do So Many Young American Men Commit Crimes and What Might We Do about It?" *Journal of Economic Perspectives* 10(1): 25–42.
- Freeman, Richard, and Harry Holzer. 1986. *The Black Youth Employment Crisis*. Chicago: University of Chicago Press.

- Freeman, Richard, and William M. Rodgers III. 2000. "Area Economic Conditions and the Labor-Market Outcomes of Young Men in the 1990s Expansion." In *Prosperity for All? The Economic Boom and African-Americans*, edited by R. Cherry and W. M. Rodgers III. New York: Russell Sage Foundation. Pp. 50–87.
- Glaeser, Edward. 1998. "Are Cities Dying?" *Journal of Economic Perspectives* 12(2): 139–160.
- Glaeser, E. L., M. E. Kahn, and J. Rappaport. 2000. "Why Do the Poor Live in Cities?" National Bureau of Economic Research Working Paper #7636.
- Ihlanfeldt, Keith, and David Sjoquist. 1990. "Job Accessibility and Racial Differences in Youth Employment Rates." *American Economic Review* 80: 267–276.
- Ihlanfeldt, Keith and David Sjoquist. 1991. "The Effect of Job Access on Black and White Youth Employment: A Cross-Sectional Analysis." *Urban Studies* 28: 255–265.
- James, David, and Karl Taeuber. 1985. "Measures of Segregation." In *Sociological Methodology 1985*, edited by N. Brandon Tuma. San Francisco: Jossey-Bass. Pp. 1–32.
- Jargowsky, Paul. 1996. "Take the Money and Run: Economic Segregation in U.S. Metropolitan Areas." *American Sociological Review* 61: 984–998.
- Jargowsky, Paul. 1997. *Poverty and Place: Ghettos, Barrios, and the American City*. New York: Russell Sage Foundation.
- Kain, John F. 1968. "Housing Segregation, Negro Employment, and Metropolitan Decentralization." *Quarterly Journal of Economics* 82: 165–197.
- Kasarda, John. 1993a. "Urban Industrial Transition and the Underclass." Chapter 3 in *The Urban Underclass*, edited by W. J. Wilson. Newbury Park, CA: Sage Publications.
- Kasarda, John. 1993b. Urban Underclass Database [computer file]. New York: Social Science Research Council [producer]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor].
- Kasarda, John. 1995. "Industrial Restructuring and the Changing Location of Jobs." In *State of the Union: America in the 1990s*, Vol. 1., edited by R. Farley. New York: Russell Sage Foundation. Pp. 215–267.
- Krivo, Lauren, Ruth D. Peterson, Helen Rizzo, and John Reynolds. 1998. "Race, Segregation, and the Concentration of Disadvantage: 1980–1990." *Social Problems* 45(1): 61–80.
- Lee, Barrett, and Karen Campbell. 1997. "Common Ground? Urban Neighborhoods as Survey Respondents See Them." *Social Science Quarterly* 78: 922–936.
- Lichter, Daniel. 1988. "Racial Differences in Underemployment in American Cities." *American Journal of Sociology* 93: 771–792.
- Mare, Robert D., and Christopher Winship. 1984. "The Paradox of Lessening Racial Inequality and Joblessness among Black Youth: Enrollment, Enlistment, and Employment, 1964–1981." *American Sociological Review* 49: 39–55.

- Massey, Douglas S., and Mitchell L. Eggers. 1990. "The Ecology of Inequality: Minorities and the Concentration of Poverty, 1970–1980." *American Journal of Sociology* 95: 1153–1188.
- Massey, Douglas S., and Mitchell L. Eggers. 1993. "The Spatial Concentration of Affluence and Poverty during the 1970s." *Urban Affairs Quarterly* 29: 299–315.
- Massey, Douglas S., and Nancy Denton. 1993. *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, MA: Harvard University Press.
- Massey, Douglas S., and Mary J. Fischer. 2000. "How Segregation Concentrates Poverty." *Ethnic and Racial Studies* 23(4): 670–691.
- Massey, Douglas S., and Kumiko Shibuya. 1995. "Unraveling the Tangle of Pathology: The Effect of Spatially Concentrated Joblessness on the Well-Being of African-Americans." *Social Science Research* 24: 352–366.
- Mills, Edwin S., and Luan Sende Lubuele. 1997. "Inner Cities." *Journal of Economic Literature* 35: 727–756.
- Mouw, Ted. 2000. "Job Relocation and the Racial Gap in Unemployment in Detroit and Chicago, 1980 to 1990." *American Sociological Review* 65: 730–753.
- Mundlak, Y. 1978. "On the Pooling of Time Series and Cross-Section Data." *Econometrica* 46: 69–85.
- Quillian, Lincoln. 1999. "Migration Patterns and the Growth of High-Poverty Neighborhoods, 1970–1990." *American Journal of Sociology* 105: 1–37.
- Sassen, Saskia. 1990. "Economic Restructuring and the American City." *Annual Review of Sociology* 16: 465–490.
- Sundstrom, William A. 1992. "Last Hired, First Fired? Unemployment and Urban Black Workers during the Great Depression." *Journal of Economic History* 52(2): 415–429.
- Sugrue, Thomas. 1996. *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit*. Princeton, NJ: Princeton University Press.
- U.S. Bureau of the Census. 1971. CENSUS OF POPULATION AND HOUSING, 1960: CENSUS TRACT-LEVEL DATA [computer file]. ICPSR version. Washington, DC: U.S. Department of Commerce, Bureau of the Census [producer], 1971. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 1999.
- U.S. Bureau of the Census. 1973. CENSUS OF POPULATION AND HOUSING, 1970: SUMMARY STATISTIC FILE 4A—POPULATION AND HOUSING [FOURTH COUNT] [computer file]. ICPSR version. Washington, DC: U.S. Department of Commerce, Bureau of the Census [producer], 1973. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 1997.
- U.S. Bureau of the Census. 1975. *Historical Statistics of the United States: Colonial Times to 1970*. Washington, DC: Government Printing Office.

- U.S. Bureau of the Census. 1983. CENSUS OF POPULATION AND HOUSING, 1980 [UNITED STATES]: SUMMARY TAPE FILE 3A [computer file]. Washington, DC: U.S. Department of Commerce, Bureau of the Census [producer], 1983. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 1999.
- U.S. Bureau of the Census. 1992. CENSUS OF POPULATION AND HOUSING, 1990 [UNITED STATES]: SUMMARY TAPE FILE 3A [computer file]. Washington, DC: U.S. Department of Commerce, Bureau of the Census [producer], 1992. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 1994.
- U.S. Bureau of the Census. 1993. CENSUS OF POPULATION AND HOUSING, 1990 [UNITED STATES]: SUMMARY TAPE FILE 4A [computer file]. Washington, DC: U.S. Department of Commerce, Bureau of the Census [producer], 1993. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 1995.
- U.S. Bureau of the Census. 1996. *Statistical Abstract of the United States*. Washington, DC: Government Printing Office.
- Wacquant, Loic. 1996. "The Rise of Advanced Marginality: Notes on Its Nature and Implications." *Acta Sociologica* 39: 121–139.
- White, Michael. 1987. *American Neighborhoods and Residential Differentiation*. New York: Russell Sage Foundation.
- Wilson, William Julius. 1987. *The Truly Disadvantaged*. Chicago: University of Chicago Press.
- Wilson, William Julius. 1996. *When Work Disappears: The World of the New Urban Poor*. New York: Knopf.