Household Poverty in the Midwest: The Influence of Race/Ethnicity, Location, and Local Opportunity Structures

by Jean Kayitsinga
Julian Samora Research Institute, Michigan State University

Research Report No. 45
November 2010

Julian Samora Research Institute
MICHIGAN STATE UNIVERSITY
301 Nisbet Building
1407 S. Harrison Road
East Lansing, MI 48823-5286

Phone: (517) 432-1317
Fax: (517) 432-2221
E-mail: jsamorai@msu.edu
Web: www.jsri.msu.edu

The Midwest's premier Hispanic center undertaking research on issues of relevance to the Hispanic community in the social sciences and economic and community development. JSRI is a unit of the College of Social Science and is affiliated with various units on the Michigan State University campus.

MICHIGAN STATE UNIVERSITY

Household Poverty in the Midwest:
The Influence of Race/Ethnicity, Location, and Local Opportunity Structures

by

Jean Kayitsinga
Julian Samora Research Institute, Michigan State University

Research Report No. 45
September 2010

Abstract

Communities in the Midwest region have been experiencing demographic changes associated with a growing Latino population and an out-migration of the non-Latino population. These demographic changes have an impact on places and people and are linked to local social and economic conditions. The economic restructuring in the Midwest also had devastating effects on people, families, and communities, exacerbating old wounds of inequality and economic hardships. Racial/ethnic minorities are disproportionately affected by these structural economic changes—they have on average lower levels of education, lower access to employment, and lower wages, all of which contribute to higher levels of poverty. Using a multilevel framework, this study investigates the integrated influences of race/ethnicity, location, and local opportunity structures on household poverty. Data are drawn from the 2005–2007 American Community Survey Public Use Microdata Sample data for the individual and household characteristics and from the American Community Survey Summary Files for labor market area characteristics. Results indicate that racial/ethnic minorities remain disproportionately disadvantaged in terms of household poverty. The odds of poverty are largely the result of differences in residential location and local labor market area socioeconomic and opportunity structures, net of the effects of individual and household characteristics, such as education, household structure, and industry of employment. These findings imply that improving the local labor market opportunity structures—i.e., creating and keeping good jobs in the Midwest, concomitant with improving education and job skills, and helping forgotten and disadvantaged communities—can better address the well-being of racial/ethnic minorities.

About the Author

Dr. Jean Kayitsinga is a sociologist demographer for the Julian Samora Research Institute at Michigan State University (MSU). He received his Ph.D. in sociology from MSU in 1999. His areas of specialization include rural sociology, sociology of families, demography, research methods, and statistical methodologies.

Michigan State University
East Lansing, Michigan

Julian Samora Research Institute
Dr. Rubén O. Martinez, Director
Terri Bailey, Layout/Editor

SUGGESTED CITATION

Kayitsinga, Jean. (2010). Household poverty in the Midwest: The influence of race/ethnicity, location, and local opportunity structures. *JSRI Research Report #45*. East Lansing, MI: The Julian Samora Research Institute, Michigan State University.

The **Julian Samora Research Institute (JSRI)** is committed to the generation, transmission, and application of knowledge to serve the needs of Latino communities in the Midwest. To this end, it has organized a number of publication initiatives to facilitate the timely dissemination of current research and information relevant to Latinos.

Latinos in Michigan A new, focused approach to disseminating information on Latinos in the state of Michigan. These specialized reports include documents, charts, and graphs that utilize primary data from the JSRI's researchers and initiatives.

Research Reports JSRI's flagship publication for scholars who want to produce a quality publication with more detail than is usually allowed in mainstream journals. Research Reports are selected for their significant contribution to the knowledge base of Latinos.

Working Papers For scholars who want to share their preliminary findings and obtain feedback from others in Latino studies.

Statistical Briefs/CIFRAS For distribution of "facts and figures" on Latino issues and conditions. Also designed to address policy questions and to highlight important topics.

Occasional Papers For the dissemination of speeches, papers, and practices of value to the Latino community which are not necessarily based on a research project. Examples include historical accounts of people or events, "oral histories," motivational talks, poetry, speeches, technical reports, and related presentations.

Demographic Reports For JSRI demography summaries using primary data from private research projects and secondary data from government sources. Examples include Census evaluations; projected population summarizations; statistical looks at Latino Household size, educational attainment, and earned income; and localized and regional population projections.

NEXO Newsletter JSRI's official newsletter is produced in both printed and pdf formats. To add your name to the NEXO Mailing List, send an e-mail to jsamorai@jsri.msu.edu, including your name, mailing address, and other contact information.

Household Poverty in the Midwest: The Influence of Race/Ethnicity, Location, and Local Opportunity Structures

Introduction

Individual explanations of poverty suggest that individuals with lower levels of education and job experiences are employed in low-wage jobs and are therefore likely to have lower earnings and be in poverty. Alternatively, individuals with higher education and better job experiences should earn higher wages and hence are less likely to be poor. These views are used to explain why racial/ethnic minorities, who tend to have lower levels of education, are in low-wage jobs. Human capital theorists emphasize these same relationships (Becker, 1964; Lichter, Beaulieu, Findeis, & Teixeira, 1993).

The ongoing restructuring of Midwestern economies has not only created new structures of work but has also constrained choices available to workers in different labor markets and at home. *Structural* explanations of poverty stress the lack of access to opportunities in local labor market areas (LMAs) as the main cause of high levels of poverty among racial/ethnic groups, immigrants, and women (Iceland, 2006). Deindustrialization, racial segregation, and discrimination have hindered the economic well-being and mobility of minorities, especially those with lower levels of education and job skills (Alderson & Nielsen, 2002). According to Tickamyer et al. (1993), economic restructuring has been linked to the degradation of economic well-being of many families, race and gender inequality, increased poverty, a more polarized class structure, and a decline in employment opportunities.

Community social organization explanations of poverty stress the deterioration and/or lack of social capital that keeps other communities vibrant. In agreement with Coleman (1988), Putnam (1993 & 1995) defines social capital as features of social organization—such as networks, norms, and trust—that facilitate coordination and cooperation for mutual benefit (p. 36; p. 67). Social capital, Putnam believes, is a "precondition of economic development" (1993:37). Communities with higher levels of social capital are expected to foster better economic development and, therefore, lower poverty levels.

Spatial explanations of poverty highlight the uneven development of places, arguing that access to employment opportunities and associated economic well-being are unevenly distributed across geopolitical spaces (Lyson & Falk, 1993; Tickamyer et al., 1993). The impact of economic restructuring, for example, has been uneven across spaces, affecting individuals, families, and communities in different locations, especially those in nonmetropolitan areas and those in central cities of metropolitan areas (Tickamyer & Bokemeier, 1993; Tickamyer & Latimer, 1993; Wilson, 1987 & 1996).

Social stratification explanations of poverty underline the hierarchical and uneven access to opportunities across race/ethnicity, social class, gender, and immigrant status. Racial/ethnic minorities are on average more likely than Non-Hispanic Whites to have lower levels of education, lower levels of employment, lower wages, and chronic health conditions—all characteristics associated with higher poverty rates (Iceland, 2006; O'Hare, 1996). Women, compared to men, continue to occupy lower economic positions. Women—especially minority, female-headed households—are also more likely to be in poverty. Immigrant families are in general at a greater risk of poverty than non-immigrant families, and poverty rates are highest among recent immigrants (Starrels, Bould, & Nicholas, 1994).

An analysis that bridges the gaps between these conceptual explanations can improve our understanding of poverty and why poverty persists, especially among racial/ethnic and other socially disadvantaged groups. This study addresses four main research questions about household poverty in the Midwest: (1) How does race/ethnicity influence household poverty? (2) Does the association between race/ethnicity and household poverty persist after controlling for household structure, educational attainment, industry of employment, and other individual and household confounders? (3) Does the association between nonmetropolitan/metropolitan LMA and household poverty persist after controlling for individual and household predictors in a multilevel model? (4) How do local LMA opportunity structures, as measured by both industry structure and quality of jobs, influence household poverty after controlling for individual, household, nonmetropolitan/metropolitan location, and LMA compositional and structural characteristics, such as economic disadvantage, immigrant concentration, and residential stability?

Theoretical Background

The causes of household poverty include both micro- and macro-level theories. These theories can generally be grouped into five main categories:

(1) Individual explanations that emphasize the characteristics, attitudes, or behavior of the poor (e.g., human capital theory);

(2) Economic restructuring and global processes that highlight the forces that affect the distribution and changes in opportunity structures;

(3) Community social organization explanations that highlight the importance of social networks and social capital for economic development;

(4) Social stratification across social groups, including race/ethnicity, immigrant status, and gender; and
(5) Spatial theories that focus on the uneven distribution of opportunity structures across space.

Human Capital Theory Explanations

Neoclassical economic theory emphasizes the role of individual characteristics, such as family background and educational level, and how these factors affect people's economic well-being. The human capital theory (Becker, 1964; Lichter et al., 1993) posits that workers with weak skill levels due to lack of education or relevant experience are less productive at work and therefore poorly remunerated in the labor market and experience more job instability. Alternatively, more skillful or experienced workers are arguably more productive employees and therefore earn higher wages and experience more job stability (Castle, 1993; Snipp, Horton, Jensen, Nagel, & Rochin, 1993; Tickamyer et al., 1993). From this perspective, investments by individuals in education and skills are rewarded in the labor market.

Critics of the human capital theory indicate that it has not explained why poverty is more prevalent and persistent among minorities, women, female-headed households with children, immigrants, or among rural and central-city residents. While this view is informative and dominates research and policy on poverty, emphasis on individual attributes and actions often overlook the enormous impact of social, economic, and political systems on poverty (Iceland, 2006; O'Conner, 2001). These critics emphasize instead structural causes, arguing that people are poor because there are not enough good jobs rather than that they don't have enough skills or lack motivation (Falk & Lyson, 1988; Tomaskovic-Devey, 1987). The enormous importance of human capital, especially in today's information economy, cannot be overemphasized. Structural realities that are external to individuals' attributes and abilities, referred to as "opportunity structure," constrain the range of options available to individuals. Thus, while individual attributes such as human capital may partially explain poverty differentials and income gaps, existing opportunity structures may better explain the level of poverty and why it persists.

Economic Restructuring Explanations

In the last four decades, the U.S. economy has experienced three major, interrelated changes:
(1) deindustrialization—the transition in employment from extractive and manufacturing industries to service and information Industries;
(2) the increase in new technologies, especially in microelectronics and other high-tech industries; and
(3) globalization—the integration of international markets for goods, services, capital, information, and labor (Brady, Beckfield, & Zhao, 2007).

These economic transformations have created not only new structures of work, but they have constrained choices available to workers in different labor markets and at home. They have been linked to the degradation of economic well-being of households, race and gender inequality, increased poverty, a more polarized class structure, and reduced employment opportunities (O'Conner, 2001; Tickamyer, 1996).

The transfer of jobs from manufacturing to service industries produced lower wages and greater poverty (Alderson & Nielsen, 2002; Gustafsson & Johansson, 1999; Moller, Huber, Stephens, Bradley, & Nielsen, 2003). The shift of employment in the economy from manufacturing to services resulted in the destruction of a disproportionate number of higher wage jobs, especially those that primarily require manual skill. In their place, the service and retail trade sectors of the economy generated millions of new jobs, but these tended to be associated with a polarized earnings distribution and poverty (Bluestone & Harrison, 1990; Iceland, 1997 & 2006). In traditional manufacturing LMAs of the Midwest, economic restructuring meant the loss of many good jobs, especially low-skilled, blue-collar jobs with greater incomes as well as health insurance and retirement benefits. The newly created jobs in the service sector of the economy were of two kinds: (1) those requiring high education and technical skills, and (2) those requiring lower job skills.

With deindustrialization, a growing number of jobs were part-time, contingency, subcontracted, or temporary, with irregular work schedules and high layoff and turnover rates (Seccombe, 2000). Technological changes in the economy also played a role in increasing inequality by raising the demand for high-skilled workers, such as engineers and programmers, while reducing the demand for lower-skilled, low-paid workers (Iceland, 2006). Thus, a major effect of deindustrialization has been that many families, especially those with lower skills and educational levels, have been unable to find jobs, especially jobs that pay well enough to lift them out of poverty and economic uncertainty, and that offer fringe benefits, such as health insurance and pensions.

Three aspects of globalization may have affected the incidence of poverty in advanced countries: an increase in imports from nonindustrial economies, capital mobility, and immigration (Alderson & Nielsen, 2002). First, the importation of manufactured goods from less developed countries places workers in advanced countries in direct competition with those in less developed countries. Workers in less developed countries are paid lower wages and

are not unionized, and labor and environmental regulations, if they exist, are less stringent than those in advanced countries. The lower labor costs and lack of environmental regulation costs make the import of manufactured goods economically beneficial to companies but costly to workers, because they reduce wages and increase unemployment, especially for the least-skilled workers.

A second aspect of globalization is capital mobility, known as "capital flight," from developed to developing economies. The reasons for capital flight include offers of tax incentives, low labor costs, and less regulations. As a result of capital flight, the deindustrialization process in advanced countries is exacerbated (Alderson & Nielsen, 2002). The global capital flight option empowers firms more than it does for government and labor because firms are able to demand tax and social policy concessions from the government and wage concessions from organized labor (Alderson & Nielsen, 2002; Moller et al., 2003).

Related to globalization and economic restructuring is the continuous decline of labor unions. Greater unionization is normally associated with reduced income inequality and well-being (Alderson & Nielsen, 2002; Gustafsson & Johansson, 1999; Kazarda, 1995), while nonunionized workers typically are paid lower wages and have less job security (Iceland, 2006). Yet, the proportion of the workforce that is unionized has been declining since the 1950s, with that decline accelerating after the mid-1970s (Danziger & Gottschalk, 1995).

The third component of globalization is immigration. According to estimates from the American Community Survey (ACS), 2005–2007, about 37.2 million people in the United States were foreign born, representing 12.5 percent of the U.S. population. Among the foreign-born population, 53.4 percent were born in Latin America, 26.7 percent in Asia, 13.4 percent in Europe, and the remaining 6.5 percent in other regions. The foreign-born population from Central America, including Mexico, accounted for 70.6 percent of the foreign-born population from Latin America. A higher rate of immigration has been linked both to greater poverty and to greater inequality in advanced countries (Alderson & Nielsen, 2002; Borjas, Freeman, & Katz, 1992).

Spatial Explanations

Theories of place emphasize the way in which poverty is distributed unevenly across space. Economic well-being is not only unevenly distributed across race/ethnicity, social class, gender, and other social strata, but it is also unevenly distributed across geopolitical spaces. The impact of economic restructuring has been uneven across spaces, affecting individuals, families, and communities in different locations (Lobao, 1990; Lyson & Falk, 1993; Tickamyer et al., 1993). Theories of place focus on local social and economic structures, arguing that the economic well-being of localities will increase the economic well-being of individuals (Tickamyer et al., 1993). From this perspective, poverty is a consequence of both local and extra-local distribution of resources, including economic and political power. In both rural and urban areas, many communities lack stable employment, opportunities for upward mobility, investment in the community or regions, and diversity in the economy and other social institutions (Tickamyer & Duncan, 1990). The uneven distribution of jobs and wages results in low opportunity and high poverty rates for people and places (Tickamyer & Bokemeier, 1993; Tickamyer & Latimer, 1993; Wilson, 1987 & 1996).

In urban areas, poverty persists because of the combined and interacting effects of joblessness, deteriorating neighborhoods, and the "oppositional" culture that these forces generate (Duncan, 1999; Wilson, 1987 & 1996). Wilson (1996) indicates that inner-city poverty was exacerbated during the 1970s and 1980s when work disappeared from those communities and the poor become isolated from the mainstream. In many parts of the Midwest, urban communities, like Chicago and Detroit, lost good blue-collar jobs to the suburbs and overseas locations. At the same time, stable working-class families were moving out because antidiscrimination laws opened suburban housing to African Americans, and affirmative action created new employment opportunities for many college-educated minorities (Duncan, 1999; Wilson, 1987 & 1996).

In rural areas, economic restructuring has intensified the already existing disadvantages of rural communities (Lyson, Falk, Henry, Hickey, & Warner, 1993; Tickamyer & Duncan, 1990). Rural communities not only differ in size, physical infrastructure, and economic base, but also in their social infrastructure (Flora & Flora, 1993). Nonmetropolitan families are more likely to be in economic distress and poverty than their metropolitan counterparts (Castle, 1993). Nonmetropolitan areas have relatively limited employment and earnings opportunities and less diversified labor markets (Tickamyer & Duncan, 1990).

Social Capital Explanations

Many social scientists have used distinct but complementary definitions of social capital (e.g., Bourdieu, 1985; Coleman, 1988 & 1990; Flora, 1998; Portes, 1998 & 2000; Portes & Sensebrenner, 1993; Putnam, 1993 & 1995; Woolcock, 1998). What they have in common is that social capital secures benefits to actors by virtue of membership in social networks or other social structures (Portes, 1998). For example, Putnam (1993 & 1995) defines social capital as features of social organization—

such as networks, norms, and trust—that facilitate coordination and cooperation for mutual benefit (p.36; p. 67). Social capital, Putnam believes, is a "precondition of economic development" (1993:37). He indicates that "working together is easier in a community that is blessed with a substantial stock of social capital" (Putnam 1993:35–36).

Social Stratification Explanations

In U.S. society, minorities are on average more likely than Non-Hispanic Whites to have lower levels of education, lower levels of employment, lower wages, and chronic health problems—all characteristics associated with higher poverty rates (Iceland, 2006; O'Hare, 1996). The lack of access to opportunities both in schools and labor markets results in minorities occupying disadvantaged positions in society. African Americans, Asian Americans, Latinos, and Native Americans—and even many White ethnic groups, such as the Irish—have all historically had to cope with limited opportunities though their experiences have qualitatively differed (Iceland, 2006).

Wilson (1987) indicates that it is not so much that racial segregation and discrimination have been eliminated as that they have become less rampant, whereas economic conditions play an increasingly important role in determining African American disadvantage. He argues that deindustrialization and class segregation in particular have hampered the economic mobility of less-skilled African Americans in the labor markets (Wilson, 1987). Massey & Denton (1993) also argue that segregation, interacting with economic forces, reinforces minority poverty by limiting access to a potentially broad range of metropolitan-area employment opportunities. Another factor that explains higher poverty rates among the African American population is that they have on average lower levels of education, quality of educational opportunities, and subsequent work experiences (Iceland, 2006).

Iceland (2006) indicates that some of the processes that have hampered African American economic well-being, such as discrimination, segregation, and human capital differentials, have also affected other minority groups—Latinos, Asian Americans, and Native Americans—though the experiences of each group differ considerably because of its regional concentration, population size, labor market niche, and the Non-Hispanic White population's reaction to its presence in, or immigration to, the United States (Iceland, 2006:84). According to Iceland (2006), Latinos and Asians have historically been discriminated against, have recently experienced increases in their population due to immigration, and are very heterogeneous in terms of their national origins and educational levels. Yet, Latinos are significantly more likely than Asians to be poor, and both groups have higher poverty rates than Non-Hispanic Whites.

Immigrant families in general are at greater risk of poverty and have lower incomes than non-immigrant families. Limited language proficiency and unfamiliarity with U.S. customs and the labor market considerably hinder immigrant economic mobility in the short run. But over time and in subsequent generations, labor market barriers become less important (Borjas, 1990; Iceland, 2006). In general, poverty rates are highest among recent immigrants, particularly among recent migrants from Mexico (Iceland, 2006).

The results of the influence of immigration on poverty and income levels are mixed. Some studies suggest that an increasing number and proportion of immigrants have been arriving with very low levels of skills, contributing to higher overall immigrant poverty rates (Borjas, 1990). This influx of low-skilled migrants is often viewed as increasing poverty, in part because they displace native workers and threaten their wages, although this relationship is contested (Portes & Zhou, 1992; Waldinger, 1996). Other studies argue that overall levels of racial and class polarization have increased, with immigrants concentrated in "casual" jobs and native Whites concentrated in professsional jobs (Frey & Liaw, 1998; McCall, 2001; Mollenkopf & Castells, 1991; Sassen, 1991). The influence of recent immigration on poverty and income levels is likely to depend on both the characteristics of immigrants and those of places in which they reside (Alba, Logan, & Stults, 2000).

In general, women tend to have higher poverty rates and lower incomes than men because they have fewer resources and because they are more likely to be the heads of single-headed families (Devine, Plunkett, & Wright, 1992; Iceland, 2006; Starrels et al., 1994; Stevens, 1999). The term "feminization of poverty" is often used to refer to females' greater likelihood of being poor and the growing number of poor people living in female-headed families.

Despite the narrowing gap in employment and earnings opportunities between men and women, women continue to occupy lower economic positions and to assume primary responsibility for childcare, household labor, and related family arrangements. Some scholars argue that women's lower economic status reflects the unequal distribution of power in society (England, 1994; Hartmann, 1994). Tickamyer et al. (1993) indicate that women's economic opportunities are conditioned and shaped by their disadvantage in the wage labor market; by their high participation in informal and unpaid labor, both productive and unproductive; and by state policies toward women, work, and welfare.

Minority women tend to be overrepresented among the poor because of their minority status and higher rates of single parenthood (Starrels et al., 1994). Poverty is most feminized among African American and Puerto Rican families, mainly because these women are more likely than other women to become single-parent householders, be out of the labor force, live in low-income neighborhoods, have low levels of education, and face labor-market discrimination (Lichter & Landale, 1995; Starrels, et al., 1994).

Summary

This study integrates human capital, economic restructuring, social capital, social stratification, and spatial theories to explain household poverty. I argue that individual human capital, such as educational attainment and skills, partially explain household poverty. The transformation of the economy in the last four decades has affected household poverty as evidenced by the type of industrial employment and quality of jobs. From an economic restructuring perspective, household poverty has become increasingly dependent upon service industries, particularly lower-wage service industries, as compared to other industrial groups. Employment in agriculture and manufacturing industries, which has for a long time sustained the well-being of a large number of households, underwent sharp contractions while the service sector has increased. The restructuring of the economy has been associated with a shift not only in the quantity, but also in the quality of jobs. This shift in employment structure resulted, on the one hand, in a number of high-quality jobs offering high wages and benefits, security, and occupational mobility, and on the other hand a number of low-quality jobs.

The restructuring of the economy has placed much greater burdens on nonmetropolitan households. However, the rise in service-sector employment in rural areas was limited to low-wage jobs, while urban areas experienced a rise in jobs at both ends of the wage spectrum. This uneven spatial access to economic opportunities suggests that households in nonmetropolitan LMAs and those in economically disadvantaged and socially isolated metropolitan LMAs have higher poverty rates. In contrast, households in affluent, residentially stable, and immigrant-concentrated LMAs are expected to be associated with lower poverty rates. It is also expected that the LMA opportunity structure as measured by the quantity and quality of jobs explains much of household poverty.

The economic restructuring also impacted the social fabric of many communities as economic resources deteriorate and the middle-class members migrate out, creating conditions such as those illustrated in Wilson's inner-city neighborhoods in the Midwest (1987 & 1996). Communities with high levels of residential stability tend to have higher levels of social capital and greater employment opportunities. Communities with higher levels of social capital are expected to have lower poverty.

From a social stratification perspective, racial/ethnic minorities, immigrants, and female-headed households are further disadvantaged in terms of household poverty. The lack of access to opportunities in both schools and LMAs results in minorities having lower levels of income and higher levels of poverty. Deindustrialization, racial segregation, and discrimination have hindered the economic well-being and mobility of minorities, especially those with lower levels of education. Immigrant families, especially those with lower levels of education and financial capital, are also at greater risk of poverty than non-immigrant families. From a social stratification perspective, it is also expected that single female-headed households, particularly minority single-female–headed households, will be most likely to be in poverty.

Research Methods

Data

The data for this chapter are drawn from the ACS Public Use Microdata Sample (PUMS) 2005–2007 for individual and household characteristics and from the ACS Summary Files 2005–2007 for Public Use Microdata Area (PUMA)-level characteristics. The ACS PUMS is a sample of population and housing unit records from the ACS and the Puerto Rican Community Survey. The three-year ACS PUMS file combines responses from the 2005, 2006, and 2007 PUMS files and contains data for housing units and persons from households. The analysis in this chapter uses 2005–2007 PUMS data from Midwest states.

The level-1 unit of analysis is the household. Only households with the head, spouse, or partner (if present) of working age, i.e., between sixteen and sixty-four years, are used. Excluded from the analysis are non-family households living alone, sub-families within households, military households, households with zero income, and group-quarter units.

The ACS Summary File contains sample data about the characteristics of different geographic units. Summary tables for characteristics of interest at the PUMA level were tabulated and aggregated at the place of work (POWPUMA) using the relationship between PUMAs and POWPUMAs. Thus, the level-2 unit of analysis is the LMA, encompassing both the PUMA place of residence and PUMA place of work. For U.S. Census Bureau confidentiality requirements, PUMA places contain at least 100,000 people.

Measures

The outcome demographic and household characteristics were used as controls at level 1 (see Table 1): measure is household poverty. Three measures of household poverty are included in the analysis: household income below 100 percent of the federal poverty line; household income below 125 percent of the federal poverty line; and household income between 100 and 150 percent of the federal poverty line.

The following socio-demographic and household characteristics were used as controls at level 1 (see Table 1): householder's age (years); immigrant status (i.e., if foreign born); disability status (if at least the householder, spouse, or partner [if present] has a disability limitation); gender (female vs. male); household structure (formerly-married household [divorced, separated, or widowed], never-married household, dual-headed married couples, and dual-headed cohabiting with an unmarried partner); educational attainment (highest education of householder and spouse/partner, if present); industry of employment (agriculture, forestry, and fishing; construction/low-wage manufacturing; traditional high-wage industries [high-wage manufacturing, mining, and government]; distributional services; high-wage services; and consumer services); job quality (either the householder and/or spouse/partner, if present, was employed part-time; not working/unemployed; employed in service occupations); and length of residence (years).

At the LMA level, geographical location is measured by an indicator of nonmetropolitan status, which indicates whether a household was located in a nonmetropolitan LMA or not. The opportunity structure is measured by the LMA industrial structure and the percentage of good jobs. Industrial structure is measured by the percentage of residents sixteen years or older employed in the following industries: extractive industries, such as agriculture, forestry, fishing, and mining, and government industries (a standardized factor score); low-wage manufacturing (z-score); high-wage manufacturing (z-score); and consumer services (a standardized factor score combining retail trade, art, entertainment and recreational services, and other services, such as automotive, repair, and personal services). The quality of jobs available in an LMA is assessed by the ratio of core industries (traditional high-wage industries and high-wage services) to peripheral industries (agriculture, forestry, and fisheries; construction and low-wage manufacturing; and consumer services) and by the presence of good jobs—a standardized factor score of the following variables: the percentage of residents sixteen years or older employed in managerial, professional, and technical occupations; and the percentage holding jobs in the information, finance and insurance, real estate, and rental and leasing fields.

At the LMA level, the following structural characteristics are controlled: concentrated disadvantaged, a standardized factor score of the following variables: percentage of Non-Hispanic African Americans, percentage of female-headed families with children under eighteen years, percentage of residents in poverty, percentage of households on public assistance or receiving cash assistance, percentage of residents unemployed, and percentage of residents twenty-five years or older with less than high school education; immigrant concentration, a standardized factor score of the percentage of Latinos, the percentage of Asians, and the percentage of foreign-born populations; residential stability, a standardized factor score of the percentage of owner-occupied housing units and the percentage of residents who have been in the LMS for one year or longer and have stayed in the same house for the past year (non-movers). Another control included in the analysis is the population size of each LMA, transformed in logarithm to reduce skewness. All variables are summarized in Table 1 (page 7–8).

Analytical Strategy

A multilevel logistic regression model (Raudenbush & Bryk, 2002) is used to model the odds that a household in a given LMA is in poverty. The primary outcome of interest is whether the household is in poverty (125 percent poverty threshold), coded 1, or otherwise, coded 0. The odds that a household is in poverty are modeled as a function of individual, household, and LMA characteristics. Specifically, let $Y_{ij} = 1$ if household i in LMA j is in poverty and $Y_{ij} = 0$ if otherwise. Rather than modeling the probability that household i in LMA j is in poverty, Prob $(Y_{ij}=1) = \varphi_{ij}$, we model the natural logarithm of the odds ratio, $\eta_{ij} = \log [\varphi_{ij}/(1- \varphi_{ij})]$. The level-1 structural model is expressed as follows:

$$\eta_{ij} = \beta_{0j} + \sum_q \beta_q X_{qij} \quad (1)$$

where X_{qij} is the value of covariate q for household i in LMA j, β_q is the partial effect of covariate q, and β_{0j} the intercept of the level-1 model. At level 2, the level-1 intercept is expected to depend upon the nonmetropolitan/metropolitan location and other LMA characteristics, such as concentrated disadvantaged, immigrant concentration, residential stability, and LMA opportunity structure plus a random effect. The level-2 structural model is as follows:

$$\beta_{0j} = \gamma_{00} + \sum_s \gamma_{0s} W_{sj} + \mu_{0j}, \quad (2)$$

where γ_{00} is the average log-odds of household poverty across all LMAs, W_{sj} are the LMA-level predictors, γ_{0s} are LMA-level regression coefficients, and μ_{0j} the random

Table 1. Descriptive Statistics of Individual/Household and Labor Market Area (LMA) Characteristics, ACS 2005-2007

Variable Name	Mean	Std. Dev.	Min.	Max.
Individual/Household Characteristics (Weighted) (n=589942)				
Household Poverty (%)				
Below the official poverty level	9.88	29.84	0	1
Below 1.25 x poverty level	13.20	33.85	0	1
Below 1.5 x poverty level	16.67	37.27	0	1
Near poverty[1]	6.79	25.16	0	1
Race/Ethnicity				
Non-Hispanic Whites	82.09	38.34	0	1
Non-Hispanic African American	9.57	29.42	0	1
Latino	4.66	21.07	0	1
Mexican American	3.34	17.97	0	1
Other Latino	1.32	11.40	0	1
Non-Hispanic Asian/Pacific Islander	2.20	14.68	0	1
Other racial group	1.48	12.06	0	1
Age/Disability Status				
Householder's age (years)	42.94	11.86	16	64
Disability status[2] (%)	12.78	33.38	0	1
Foreign-Born (%)	7.04	25.59	0	1
Female (%)	42.05	49.36	0	1
Household Structure (%)				
Married-couple households	54.84	49.77	0	1
Single cohabiting households	6.67	24.95	0	1
Single formerly-married households	19.76	39.82	0	1
Single never-married households	18.74	39.02	0	1
Number of Own Children under 18 Years	0.74	1.09	0	5
Educational Attainment[3] (%)				
Less than high school	8.42	27.78	0	1
High school	29.08	45.42	0	1
Some college	32.74	46.93	0	1
College or greater	29.75	45.71	0	1
Length of Residence (years)	3.55	1.71	1	7
Industry of Employment (%)				
Agriculture, fishing, and forestry	1.58	12.48	0	1
Construction/Low-wage manufacturing	12.23	32.76	0	1
Traditional high-wage industries	16.44	37.06	0	1
Distributive services	15.40	36.10	0	1
High-wage services	35.80	47.94	0	1
Consumer services	18.55	38.87	0	1
Job Quality (%)				
Full-time employment	70.41	45.65	0	1
Part-time employment	9.85	29.80	0	1
Not working	19.75	39.81	0	1
Service occupations	12.84	33.6	0	1

[1] Household income is between 100% and 150% of federal poverty threshold.
[2] At least the householder, head, spouse or partner (if present) has a disability limitation.
[3] Educational attainment in married and cohabiting households refers to the highest education of householder and spouse/partner (if present).

Variable Name	Mean	Std. Dev.	Min.	Max.
Labor Market Area-Level Characteristics (n=318)				
Nonmetropolitan Areas	34.59	47.64	0	1
Population Size (ln)	12.83	0.73	7.40	15.48
Economic Disadvantage[4]	0.00	3.62	-6.71	19.01
Immigrant Status[5]	0.00	2.05	-2.12	13.70
Residential Stability[6]	0.00	1.48	-5.84	3.46
Industrial Structure				
Extractive[7] and government	0.00	1.54	-1.86	11.17
Manufacturing				
Low-wage manufacturing	0.00	1.00	-1.64	4.64
High-wage manufacturing	0.00	1.00	-1.90	3.65
Consumer services	0.00	1.31	-3.35	5.50
Core/periphery industry ratio	1.27	0.23	0.67	2.31
Percentage Good Jobs[8]	0	2.09	-3.23	8.87

[4] Standardized average score of the following variables: percentage of non-Hispanic African Americans, percentage of female-headed families with children under 18 years, percentage of residents in poverty, percentage of households on public assistance or receiving cash assistance, and percentage of residents unemployed.
[5] Standardized factor score of percentage of Latinos, percentage of Asians, and percentage foreign born.
[6] Standardized factor score of percentages of housing that are owner occupied and percentage of non-movers.
[7] Extractive refers to agriculture, forestry, fishing, and mining industries.
[8] Standardized factor score of percentage of residents employed in managerial, professional and technical occupations and the percentage of high-wage service industries.

effects, assumed to be normally distributed with mean 0 and variance τ.

In the final model, the coefficients for Latinos, β_{1j}, African Americans, β_{2j}, Asians, β_{3j}, and other racial groups, β_{4j}, are allowed to be a function of level-2 predictors plus a random effect, while coefficients for other predictors are considered fixed. The equations for these coefficients would be as follows:

$$\beta_{1j} = \gamma_{10} + \sum_s \gamma_{1s} W_{sj} + \mu_{1j}, (3)$$
$$\beta_{2j} = \gamma_{20} + \sum_s \gamma_{2s} W_{sj} + \mu_{2j}, (4)$$
$$\beta_{3j} = \gamma_{30} + \sum_s \gamma_{3s} W_{sj} + \mu_{3j}, (5)$$
$$\beta_{4j} = \gamma_{40} + \mu_{4j}, (6)$$
$$\beta_{pj} = \gamma_{p0}, p > 4 (7)$$

The analysis proceeds from examining the household effects to looking at the LMA's effects on the household's odds of being poor. The first set of models examines the effects of race/ethnicity (Model 1). The second stage adds household background (household structure and educational levels) and industry of employment (Models 2, 3, & 4). The last set of models examines the effects of LMA characteristics, including nonmetropolitan/metropolitan location (Model 5), LMA structural characteristics, such as economic disadvantage, immigrant concentration, and residential stability (Model 6), opportunity structure (Models 7 & 8), and combining LMA opportunity structure and the structural characteristics of LMAs (Models 9 &10) on households' odds of being poor, net of individual and household predictors.

Results

Descriptive Statistics

Table 2 (page 9) displays household poverty rates using the official poverty threshold (i.e., household income less than 100 percent poverty threshold) by race/ethnicity and nonmetropolitan/metropolitan residence. The statistics in Table 2 reveal that African Americans, followed by Native Americans and Latinos, especially Mexican Americans, rank among the poorest in the Midwest. African Americans in the Midwest are almost 4 times as likely as Non-Hispanic Whites to have poverty-level household incomes and Native Americans are more than 3 times as likely; compared with Latinos at 2.5 times as likely and Asians at 1.5 times as likely as Non-Hispanic Whites to have poverty-level household incomes. Household poverty rates are consistently higher in nonmetropolitan areas than in metropolitan areas, regardless of race/ethnicity. Racial/ethnic minority residents of nonmetropolitan areas experience the burden of economic hardship more than those in metropolitan areas.

Table 2 also displays household poverty rates calculated using the 125 percent poverty threshold by race/ethnicity and nonmetropolitan/metropolitan residence. The statistics in Table 2 reveal that African Americans are more than 3 times as likely as Non-Hispanic Whites to have poverty-level household incomes and Native Americans 3 times as likely. Latinos are almost 2.4 times as likely as Non-Hispanic Whites to have poverty-level

TABLE 2. Average Household Poverty Rates and Median Household Income by Race/Ethnicity and Nonmetropolitan/Metropolitan Residence, Midwest, 2005-2007

Race/Ethnicity	Total	Non-Hispanic White	African American	Latino			Asian	Native American	Other Race
				Total	Mexican American	Other Latino			
Household Poverty Rates (< 100% of the poverty threshold)									
Total	9.8	7.0	27.2	17.4	17.9	16.0	10.8	22.8	18.1
Nonmetropolitan	10.7	9.6	32.4	21.8	21.9	21.1	14.6	29.2	22.5
Metropolitan	9.6	6.2	27.0	16.8	17.4	15.4	10.6	17.7	17.0
Household Poverty Rates (< 125% of the poverty threshold)									
Total	13.4	10.1	33.5	24.4	25.7	20.8	13.9	29.8	23.7
Nonmetropolitan	15.2	13.9	40.4	29.5	30.1	27.4	18.0	38.0	31.0
Metropolitan	12.9	8.8	33.2	23.7	25.0	20.0	13.6	23.1	22.0
Near Poverty Rates (100–150% of the poverty threshold)									
Total	7.5	6.4	12.3	14.3	15.5	10.7	6.6	12.8	11.0
Nonmetropolitan	9.6	9.1	14.7	17.5	18.3	14.9	9.0	15.6	15.1
Metropolitan	6.9	5.5	12.2	13.8	15.1	10.2	6.4	10.6	10.0
Median Household Income (adjusted for inflation)									
Total	$57,533	$61,500	$33,556	$44,489	$43,299	$48,819	$70,000	$40,200	$46,546
Nonmetropolitan	$49,000	$50,020	$27,100	$37,602	$37,400	$39,000	$52,224	$32,807	$36,577
Metropolitan	$60,672	$66,012	$33,946	$45,540	$44,489	$50,000	$70,815	$47,002	$60,672
N ('000s)	60,895	49,232	5,538	3,543	2,646	897	1,412	309	860

household incomes, while Asians are 1.4 times as likely. Native Americans and Non-Hispanic Whites living in nonmetropolitan areas are 1.6 times as likely as their metropolitan counterparts to have poverty-level household incomes. African Americans, Latinos, and Asians living in nonmetropolitan areas are also more likely to have poverty-level household incomes, but the gap between them and their metropolitan counterparts is not as great. About 40 percent of African Americans, 38 percent of Native Americans, 30 percent of Latinos, 18 percent of Asians, and 14 percent of Non-Hispanic Whites living in nonmetropolitan areas did not earn enough to raise themselves above the margins of poverty. Among Latinos, 30 percent of Mexican Americans and 27 percent of other Latinos living in nonmetropolitan areas have poverty-level household incomes.

Table 2 also displays near-household poverty rates, defined as poverty between 100 and 150 percent of the poverty threshold, by race/ethnicity and nonmetropolitan/metropolitan area of residence. The statistics in Table 2 show that Latinos, especially Mexican Americans, are more likely than other racial/ethnic groups to have near poverty-level household incomes—2.2 times as likely as Non-Hispanic Whites. African Americans and Native Americans are almost twice as likely as Non-Hispanic Whites to have near poverty-level household incomes. The statistics in Table 2 show that Asians are not significantly different from Non-Hispanic Whites in terms of having near poverty-level household incomes. Near-poverty household income rates are slightly higher in nonmetropolitan areas than in metropolitan areas, regardless of race/ethnicity.

Table 2 also displays median household income by race/ethnicity and nonmetropolitan/metropolitan residence. The statistics in Table 2 reveal that African Americans and Native Americans, followed by Latinos, have lower median household incomes than Non-Hispanic Whites and Asians. Among Latinos, Mexican Americans have lower median household incomes than other Latinos. The median household income for Latinos is 60 percent lower than the median household income for Non-Hispanic Whites. Asians have the highest median household income, while African Americans have the lowest median household income. The statistics in Table 2 also show that the median household income in nonmetropolitan areas for Latinos is about 17 percent lower than the median household income in metropolitan areas; 20 percent lower for African Americans; 24 percent lower for Non-Hispanic Whites; and 26 percent lower for Asians.

Multivariate Analysis

Table 3 displays the results of separate unconditional models of household poverty for men and women. The average log-odds of household poverty are estimated at -2.099 (se = 0.028). This corresponds to estimated average odds of household poverty of 0.123 (95% Confidence Interval [CI]: 0.116, 0.130). Converted into probabilities, this corresponds to an average probability of household

poverty of 0.109. The random part of the model also provides valuable information about the between-LMA variability in terms of household poverty rates. Given the variance estimate of 0.249, 95 percent plausible values of LMA average log-odds of household poverty fall between -3.077 and -1.121. This corresponds to a 95 percent CI of the LMA-average odds of household poverty that ranges from 0.046 to 0.326, suggesting greater variability in household poverty rates between LMAs.

The results in Table 3 also show that women are more likely than men to be poor. The average log-odds of household poverty are estimated at -2.518 (se = 0.030) for men and -1.646 (se = 0.027) for women. This corresponds to average odds of being poor of 0.081 (95% CI: 0.076, 0.086) for men and 0.193 (95% CI: 0.183, 0.203) for women. In terms of probabilities, the average probability of being poor is estimated at 0.075 for men and 0.162 for women. The between-LMA variability in odds of household poverty ranges from 0.030 to 0.219 for men and from 0.076 to 0.488 for women.

Table 3. Multilevel Logistic Regression of Household Poverty Rates—Unconditional Models

	All	Men	Women
	Coeff. (SE)	Coeff. (SE)	Coeff. (SE)
Fixed effects			
Intercept	-2.099 (0.028)***	-2.518 (0.030)***	-1.646 (0.027)***
Random effects, variance components			
$\hat{\tau}_{00}$	0.249	0.261	0.225
95% CI of LMA-average log-odds of household poverty	(-3.077, -1.121)	(-3.520, -1.516)	(-2.575, -0.717)
95% CI of LMA-average odds of household poverty	(0.046, 0.326)	(0.030, 0.219)	(0.076, 0.488)

*** p < .001; ** p < .01; * p < .05

Table 4 displays the results of a multilevel logistic regression model of household poverty on race/ethnicity for both men and women. The results indicate that the log-odds of household poverty are significantly higher for Latinos, African Americans, Asians, and other racial groups than those of Non-Hispanic Whites. Taking antilog of coefficients in Table 4 for both men and women, these results indicate that the odds of household poverty are 2.823 (95% CI: 2.668, 2.986) times higher for Latinos; 3.665 (95% CI: 3.415, 3.934) times higher for African Americans; 1.489 (95% CI: 1.348, 1.644) times higher for Asians; and 2.743 (95% CI: 2.522, 2.982) times higher for other racial groups than those of Non-Hispanic Whites. Also notice that the intercept variance, $\hat{\tau}_{00}$, was reduced from 0.249 (unconditional model) to 0.216, corresponding to about a 13 percent variance reduction.

The results in Table 4 also show that the odds of household poverty not only differ by race/ethnicity, but also by gender. The odds of household poverty are 3.126 times (95% CI: 2.910, 3.358) higher for Latino men; 3.013 times (95% CI: 2.764, 3.284) higher for African American men; 1.727 times (95% CI: 1.538, 1.938) higher for Asian men; and 2.683 times (95% CI: 2.424, 2.970) times higher for men in other racial groups than they are for Non-Hispanic White men. In comparison, the odds of household poverty are 2.685 times (95% CI: 2.504, 2.879) higher for Latinas; 3.433 times (95% CI: 3.181, 3.706) higher for African American women; 1.434 times (95% CI: 1.270, 1.620) higher for Asian women; and 2.528 times (95% CI: 2.303, 2.775) higher for women in other racial groups than for Non-Hispanic White women. In the model for men, the intercept variance, $\hat{\tau}_{00}$, was reduced by 10 percent, from

Table 4. Multilevel Logistic Regression of Household Poverty on Race/Ethnicity and Gender, 2005-2007 (Unadjusted Coefficients)[1]

	All	Men	Women
	Coeff. (SE)	Coeff. (SE)	Coeff. (SE)
Fixed Effects			
Intercept	-2.245 (0.027)***	-2.643 (0.029)***	-1.799 (0.027)***
Race/ethnicity			
Latino	1.038 (0.029)***	1.140 (0.037)***	0.988 (0.036)***
African American	1.299 (0.036)***	1.103 (0.044)***	1.234 (0.039)***
Asian	0.398 (0.051)***	0.546 (0.059)***	0.361 (0.062)***
Other race	1.009 (0.043)***	0.987 (0.052)***	0.927 (0.048)***
Random Effects, Variance Components			
$\hat{\tau}_{00}$	0.216	0.235	0.205
Proportion of variance explained	13.3	10.0	8.9

*** p < .001; ** p < .01; * p < .05

[1] Unadjusted estimates are from models with only race/ethnicity as a predictor.

0.261 (unconditional model) to 0.235 (see Table 3), while in the model for women, it was reduced by 9 percent, from 0.225 to 0.205.

Table 5 displays the results of a multilevel logistic regression model of household poverty rate on individual and household predictors (full model—both men and women). Model 1 presents coefficient estimates from a model of household poverty on race/ethnicity, controlling for householder's gender, age, disability status, and immigrant status. Exponentiating the log-odds coefficients, these results indicate that Latinos' odds of poverty are exp (0.710) = 2.035 times those of Non-Hispanic Whites, on average (95% CI: 1.867, 2.217). The odds of poverty for African Americans are 3.041 times those of Non-Hispanic Whites (95% CI: 2.816, 3.284), and the odds of poverty for other racial groups are 1.922 times those of Non-Hispanic Whites (95% CI: 1.762, 2.097). The odds of poverty for Asians are not statistically different from those of Non-Hispanic Whites. The results in Model 1 also indicate that household poverty is 2.073 times higher among female-headed households than male-headed households (95% CI: 2.015, 2,133); 1.635 times higher among immigrant house-

Table 5. Multilevel Logistic Regression of Household Poverty (< 125 poverty thresholds) Rates on Individual/Household Characteristics and Nonmetropolitan Location

	Model 1	Model 2	Model 3	Model 4	Model 5
	Coeff. (SE)	Coeff. (SE)	Coeff. (SE)	Coeff. (SE)	Coeff. (SE)
Fixed effects					
Intercept	-3.006 (0.026)***	-3.688 (0.032)***	-2.562 (0.033)***	-3.216 (0.035)***	.330 (0.036)***
Race/Ethnicity					
Latino	0.710 (0.044)***	0.624 (0.045)***	0.201 (0.031)***	0.296 (0.034)***	0.299 (0.034)***
African American	1.112 (0.039)***	0.780 (0.041)***	0.558 (0.028)***	0.581 (0.024)***	0.590 (0.024)***
Asian	0.064 (0.054)	0.078 (0.052)	0.335 (0.053)***	0.244 (0.053)***	0.247 (0.053)***
Other race	0.653 (0.044)***	0.533 (0.040)***	0.450 (0.039)***	0.412 (0.043)***	0.412 (0.043)***
Gender					
Female	0.729 (0.014)***	0.430 (0.014)***	0.487 (0.014)***	0.091 (0.013)***	0.091 (0.013)***
Age/Disability status					
Householder's age	-0.042 (0.001)***	-0.027 (0.001)***	-0.017 (0.001)***	-0.022 (0.001)***	-0.022 (0.001)***
Disability status	1.750 (0.014)***	1.664 (0.013)***	1.435 (0.013)***	0.781 (0.013)	0.780 (0.013)***
Immigrant status					
Foreign born	0.492 (0.030)***	0.627 (0.031)***	0.457 (0.034)***	0.500 (0.036)***	0.502 (0.036)***
Household Structure					
Cohabiting households		0.810 (0.023)***	0.575 (0.023)***	0.590 (0.024)***	0.590 (0.024)***
Formerly married households		1.595 (0.022)***	1.440 (0.021)***	1.630 (0.023)***	1.631 (0.023)***
Never married households		1.797 (0.029)***	1.776 (0.030)***	1.831 (0.028)***	1.833 (0.028)***
Number of children		0.432 (0.007)***	0.423 (0.006)***	0.469 (0.006)***	0.469 (0.006)***
Educational Attainment					
High school education			-0.773 (0.016)***	-0.571 (0.017)***	-0.571 (0.017)***
Some college education			-1.132 (0.018)***	-0.874 (0.017)***	-0.874 (0.017)
College education or more			-1.975 (0.024)***	-1.485 (0.024)***	-1.482 (0.024)***
Length of residence (years)			-0.159 (0.004)***	-0.140 (0.004)***	-0.140 (0.004)***
Industry of employment					
Agriculture, fishing, and forestry				0.445 (0.043)***	0.437 (0.043)***
Low-wage manufacturing				-0.377 (0.025)***	-0.379 (0.025)***
High-wage manufacturing				-0.872 (0.020)***	-0.873 (0.020)
Distribution services				-0.148 (0.021)***	-0.149 (0.021)***
High-wage services				-0.450 (0.017)***	-0.450 (0.017)***
Job quality					
Part-time employment				1.657 (0.019)***	1.657 (0.019)***
Not working				1.975 (0.019)***	1.976 (0.019)***
Service occupations				0.456 (0.015)***	0.455 (0.015)***
LMA characteristics					
Nonmetropolitan					0.332 (0.036)***
Population (ln)					-0.080 (0.029)**
Random Effects, Variance Components					
$\hat{\tau}_{00}$	0.178	0.188	0.141	0.119	0.089
Proportion of variance explained	28.5	24.5	43.4	52.2	64.3

*** p < .001; ** p < .01; * p < .05

holds (95% CI: 1.542, 1.734); and 5.587 times higher among households in which the householder or spouse/ partner (if present) has a disability limitation (95% CI: 5.432, 5.747); and that poverty is negatively related to age. Also notice that the intercept variance, $\hat{\tau}_{00}$, was reduced from 0.249 (unconditional model) to 0.178 (Model 1), corresponding to about 29 percent variance reduction.

Model 2 in Table 5 introduces controls for household structure and composition. The results in this model show that the odds of poverty for cohabiting households (i.e., single householders living with unmarried partners) are 2.248 [exp (0.810)] times those of married-couple households (95% CI: 2.150, 2.351). As expected, the odds of poverty for single- and formerly-married (divorced, separated, and widowed)–headed households are 4.931 times those of married-couple households (95% CI: 4.723, 5.147). The odds of poverty are even higher for formerly-married-female–headed households—about 7.576 times those of married-couple households. The results in Model 2 also show that the odds of poverty for single- and never-married–headed households are 6.030 times those of married-couple households (95% CI: 5.699, 6.380). For never-married-female–headed households, the odds of poverty are 9.272 times those of married-couple households. Having children under eighteen years of age increases the odds of poverty by a factor of 1.541 [exp (0.432)] (95% CI: 1.519, 1.563). Notice that adding household structure indicators in the model reduces the logistic regression coefficient that describes the gap between Latinos and Non-Hispanic Whites by 12 percent. The odds ratio describing that gap drops from 2.035 to 1.866 (95% CI: 1.708, 2.039). Adjusting for household structure also reduces the gap between African Americans and Non-Hispanic Whites by 30 percent. The odds ratio describing that gap drops from 3.041 to 2.181 (95% CI: 2.013, 2.363). Introducing household structure in the model also drops the gap between other racial groups and Non-Hispanic Whites by 18 percent. The odds ratio describing that gap drops from 1.922 to 1.703 (95% CI: 1.575, 1.842).

Model 3 in Table 5 adds controls for educational attainment and length of residence. As expected, the results in Model 3 show that the higher the educational attainment of householder or spouse/partner (if present), the lower the odds of poverty. The odds of poverty for householders with a college education are 0.861 = [1 - exp (-1.975)] times lower than those of householders with less than a high school education. Similarly the odds of poverty for householders with some college education are 0.678 [1-exp (-1.132)] times lower than those of householders with less than a high school education. In a similar vein, the odds of poverty for householders with a high school education are 0.538 [1-exp (-0.773)] times lower than those of householders with less than a high school education. The results in Model 3 also show that a one-year additional length of residence reduces the odds by 0.853 [exp (-0.159)] times.

Notice that adding educational attainment and length of residence in Model 3 significantly reduces the odds ratio describing the gaps between different minority groups and Non-Hispanic Whites, implying that one reason Non-Hispanic Whites have lower levels of poverty than minority groups is that they are more likely to have higher levels of education. The log-odds coefficient that describes the gap between Latinos and Non-Hispanic Whites is reduced by an additional 68 percent. The odds ratio describing that gap drops from 1.866 to 1.223 (95% CI: 1.152, 1.299). Adjusting for these controls also reduces the gap between African Americans and Non-Hispanic Whites by an additional 28 percent. The odds ratio describing that gap drops from 2.181 to 1.748 (95% CI: 1.655, 1.846). Introducing these controls also drops the gap between other racial groups and Non-Hispanic Whites by an additional 16 percent. The odds ratio describing that gap drops from 1.703 to 1.568 (95% CI: 1.452, 1.694). However, adding these controls made the coefficient for Asians significant. When education and length of residence are controlled, the odds of poverty for Asians are 1.398 (95% CI: 1.1261, 1.550) times those of Non-Hispanic Whites.

Model 4 in Table 5 assesses the influence of industry of employment while controlling for measures of job quality. The results reveal that the odds of poverty for householders who were employed in agriculture, fishing, and forestry industries are 1.561 times those of householders in consumer-service industries (95% CI = 1.436, 1.697). In contrast, the odds of poverty for householders who were employed in low-wage manufacturing are 0.314 times lower than those of householders employed in consumer-service industries. Also, the odds of poverty for householders who were employed in high-wage manufacturing are 0.582 times lower than those of householders employed in consumer-service industries. In a similar vein, the odds of poverty for householders who were employed in distributional service industries are 0.138 times lower than those of householders employed in consumer-service industries. The results in Model 4 show that the odds of poverty for householders employed in high-wage services are 0.362 times lower than those of householders employed in consumer-service industries. Comparing these results suggest that householders employed in high-wage manufacturing industries are the least likely to be poor.

Model 5 also adds controls for job quality. The odds of poverty for householders working part-time are 5.246 times those of full-time householders (95% CI = 5.052, 5.447). The odds of poverty are, as expected, even higher

for households in which neither the householder nor spouse/partner (if present) was working. For such households, the odds of poverty are 7.207 times those of householders working full-time (95% CI = 6.944, 7.480). The results in Model 5 also show that the odds of poverty for householders employed in service occupations are 1.577 times those of householders employed in other occupations.

Adding controls for industry of employment and job quality in the model increases the logistic regression coefficient that describes the gap between Latinos and Non-Hispanic Whites by 47 percent. The odds ratio describing that gap increases from 1.223 to 1.344 (95% CI: 1.257, 1.437). Adjusting for industry of employment and job quality also increases the gap between African Americans and Non-Hispanic Whites by 4 percent. The odds ratio describing that gap increases from 1.748 to 1.788 (95% CI: 1.705, 1.876). In contrast, introducing industry of employment and job quality in the model reduces the gap between Asians and Non-Hispanic Whites by 27 percent. The odds ratio describing that gap drops from 1.398 to 1.277 (95% CI: 1.152, 1.416). Introducing these controls also drops the gap between other racial groups and Non-Hispanic Whites by 8 percent. The odds ratio describing that gap drops from 1.568 to 1.509 (95% CI: 1.386, 1.643). Also notice that the intercept variance, $\hat{\tau}_{00}$, was significantly reduced, from 0.249 in the unconditional model to 0.119 after all individual and household predictors were included in the model, corresponding to about a 52 percent variance reduction.

Model 5 adds an indicator of nonmetropolitan status, controlling for population size. The results in Model 5 show that for households in nonmetropolitan areas, the odds of poverty are 1.394 times those of households in metropolitan areas (95% CI = 1.300, 1.495). Notice that when introducing residential location and population size in the model, the intercept variance, $\hat{\tau}_{00}$, was reduced from 0.119 to 0.089, corresponding to about a 25 percent variance reduction.

Table 6 (page 14) displays the results of models that include LMA factors. In Table 6, individual and household coefficients are omitted; they are essentially identical to those shown in Model 5 (Table 5) in terms of direction and relative influence on poverty. Instead, only race/ethnicity and LMA-level coefficients are displayed.

Model 6 in Table 6 controls for measures of an LMA's economic disadvantage, immigrant status, and residential stability. The results in Model 6 show that a one standard deviation increase in economic disadvantage increases the odds of poverty by exp (0.039 * 3.62) = 1.152 times. The results in Model 6 also show that a one standard deviation increase in immigrant concentration reduces the odds of poverty by exp (-0.049 * 2.05) = 0.904 times. In a similar vein, a one standard deviation increase in residential stability reduces the odds of poverty by exp (-0.076 * 1.48) = 0.894 times. Notice that the intercept variance, $\hat{\tau}_{00}$, was reduced from 0.089 in Model 5 to 0.041 in Model 6, once LMA economic disadvantage, immigrant status, and residential stability indicators were introduced, corresponding to 54 percent variance reduction.

Model 7 in Table 6 drops controls for an LMA's economic disadvantage, immigrant status, and residential stability and adds the LMA ratio of core industries to peripheral industries. The results in Model 7 show that a higher ratio of core to periphery industries in an LMA reduces the odds of poverty by exp (-0.218) = 0.804 times (95% CI = (0.675, 0.959). This suggests that the greater the proportion of good jobs (core industries) in a place, the lower the odds of poverty.

To assess specific influences of LMA industrial structure on the odds of poverty, Model 8 in Table 6 removes the ratio of core to periphery industries and adds standardized measures of the percentage of residents sixteen years or older in an LMA employed in the following industries: extractive (agriculture, forestry, fishing, and mining) and government industries; low-wage manufacturing; high-wage manufacturing; and consumer services. The results in Model 8 show that a one standard deviation increase in the percentage of LMA residents sixteen years or older employed in extractive and government industries increases the odds of poverty by exp (0.031 * 1.54) = 1.049 times. Similarly, a one standard deviation increase in the percentage of LMA residents sixteen years or older employed in consumer service industries increases the odds of poverty by exp (0.029 * 1.31) = 1.039 times. In contrast, a one standard deviation increase in the percentage of LMA residents sixteen years or older employed in low-wage manufacturing industries reduces the odds of poverty by exp (-0.068) = 0.935 times, while a one standard deviation increase in the percentage of LMA residents sixteen years or older employed in high-wage manufacturing industries reduces the odds of poverty by exp (-0.079) = 0.924 times.

Model 8 also adds the percentage of good jobs—the percentage of LMA residents sixteen years or older employed in managerial, professional, and technical occupations. The percentage of good jobs in an LMA is linked to lower odds of poverty. A one standard deviation increase in the percentage of LMA residents sixteen years or older employed in managerial, professional, and technical occupations reduces the odds of poverty by exp (-0.094 * 1.54) = 0.865 times. Notice that nonmetropolitan residence remains significantly linked to higher odds of poverty. The odds of poverty for those in nonmetropolitan LMAs are 1.127 times those in metropolitan areas, even after control-

ling for LMA industrial structure indicators. Notice also that the intercept variance, $\hat{\tau}_{00}$, was reduced from 0.089 in Model 5 to 0.058 in Model 8, once industry structure indicators were introduced in the model, corresponding to an additional reduction in variance of 35 percent.

Model 9 includes nonmetropolitan residence, LMA opportunity structure as measured by industrial structure and the percentage of good jobs, and LMA socio-structural characteristics, including economic disadvantage, immigrant status, and residential stability, controlling for population size and individual and household characteristics. The results in Model 9 show that the odds of poverty are higher in nonmetropolitan LMAs than in metropolitan ones; higher in economically disadvantaged LMAs and in LMAs with a greater proportion of extractive and government industries; but lower in LMAs with greater concentration of immigrants and in LMAs with more residential stability; and lower in LMAs with greater proportions of both low-wage and high-wage manufacturing industries, as well as in LMAs with good jobs, i.e., with a greater proportion of residents sixteen years or older employed in managerial, professional, and technical occupations.

The results in Model 9 also show that, even after controlling for individual, household, and LMA characteristics, poverty remains significantly higher among Latinos, African Americans, Asians, and other racial groups than among Non-Hispanic Whites. Latinos' odds of poverty are 1.340 times those of Non-Hispanic Whites [95% CI: (1.252, 1.434)]; African Americans' odds are 1.766 times those of Non-Hispanic Whites [95% CI: (1.680, 1.857)]; Asians' odds are 1.278 times those of Non-Hispanic Whites [95% CI: (1.152, 1.417)]; and other racial groups' odds are 1.504 times those of Non-Hispanic Whites [95% CI: (1.381, 1.638)]. Overall, the intercept variance, $\hat{\tau}_{00}$, was reduced from 0.249 (unconditional model) to 0.030 after all individual, household, and LMA predictors were

Table 6. Multilevel Logistic Regression of Household Poverty (< 125 poverty thresholds) Rates—Race/Ethnicity and Labor Market Area Predictors[1,2]

	Model 6	Model 7	Model 8	Model 9	Model 10[3]
	Coeff. (SE)	Coeff. (SE)	Coeff. (SE)	Coeff. (SE)	Coeff. (SE)
Fixed Effects					
Intercept	-3.313 (0.032)***	-3.313 (0.037)***	-3.260 (0.033)***	-3.271 (0.031)***	-3.267 (0.031)***
Race/Ethnicity					
Latino, intercept	0.296 (0.034)***	0.299 (0.034)***	0.300 (0.035)***	0.293 (0.035)***	0.229 (0.036)***
Residential stability					-0.043 (0.017)**
African American, intercept	0.568 (0.026)***	0.591 (0.024)***	0.594 (0.024)***	0.569 (0.026)***	0.617 (0.031)***
Economic disadvantage					-0.015 (0.004)***
Low-wage manufacturing					0.084 (0.037)*
Asian, intercept	0.244 (0.053)***	0.248 (0.053)***	0.251 (0.053)***	0.245 (0.053)***	0.134 (0.060)*
Residential stability					-0.069 (0.022)**
Other race	0.411 (0.043)***	0.412 (0.043)***	0.411 (0.044)***	0.408 (0.044)***	0.397 (0.040)***
LMA characteristics					
Non-metropolitan	0.279 (0.029)***	0.281 (0.042)***	0.120 (0.042)**	0.156 (0.034)***	0.147 (0.032)***
Population (ln)	-0.048 (0.016)**	-0.082 (0.029)**	-0.076 (0.024)**	-0.050 (0.014)***	-0.046 (0.013)***
Industrial structure					
Core/periphery ratio		-0.218 (0.089)*			
Extractive industries and government			0.031 (0.013)*	0.039 (0.009)***	0.040 (0.009)***
Low-wage manufacturing			-0.068 (0.017)***	-0.046 (0.013)***	-0.046 (0.012)***
High-wage manufacturing			-0.079 (0.022)***	-0.038 (0.017)*	-0.035 (0.016)*
Percentage good jobs			-0.094 (0.012)***	-0.059 (0.010)***	-0.056 (0.009)***
Consumer service			0.029 (0.013)***		
Economic disadvantage	0.039 (0.006)***			0.029 (0.005)***	0.033 (0.005)***
Immigrant concentration	-0.049 (0.007)***			-0.027 (0.006)***	-0.027 (0.005)***
Residential stability	-0.076 (0.011)***			-0.076 (0.013)***	-0.071 (0.013)***
Random Effects, Variance Components					
$\hat{\tau}_{00}$,intercept	0.041	0.088	0.058	0.030	0.030
Proportion of variance explained	83.5	64.7	76.7	88.0	88.0

[1] Model standard error is based on unit-specific model with robust standard errors.
[2] All models include race/ethnicity and labor market predictors and control for other individual and household characteristics in model 4.
[3] Variance components for race/ethnic group slopes are not presented.

included in the model, corresponding to an 88 percent variance reduction.

Finally, Model 10 treats the intercept and the coefficients that describe the racial-ethnic poverty gaps as random. In this model, the racial-ethnic gaps are partially explained by LMA predictors. Most of the patterns described in Model 9 remain the same in Model 10. The odds of poverty in nonmetropolitan areas are 1.159 times those in metropolitan households. The odds of poverty are also higher in economically disadvantaged LMAs and in those with relatively greater percentage of extractive and government industries. A one standard deviation increase in economic disadvantage increases the odds of poverty by about 13 percent [exp (0.033 * 3.62) – 1], while a one standard deviation increase in extractive and government industries increases the odds of poverty by 6 percent. In contrast, the odds of poverty are lower in LMAs with a greater proportion of low-wage manufacturing industries, high-wage manufacturing industries, and good jobs. A one standard deviation increase in low-wage manufacturing, high-wage manufacturing industries, and percentage of good jobs reduces the odds of poverty by 4 percent, 3 percent, and 11 percent, respectively. The results in Model 10 also show that a one standard deviation increase in immigrant concentration reduces the odds of poverty by 5 percent, while a one standard deviation increase in residential stability reduces the odds of poverty by 10 percent.

In addition, the results in Model 10 reveal that Latinos, African Americans, Asians, and other racial groups remain more likely than Non-Hispanic Whites to be poor after all individual and LMA predictors are included. First, the odds of poverty for Latinos are about 26 percent higher than those of Non-Hispanic Whites. However, this poverty gap between Latinos and Non-Hispanic Whites narrows in LMAs with relative greater residential stability. Second, African Americans' odds of poverty are about 85 percent higher than those of Non-Hispanic Whites, but this gap narrows in LMAs with a relative increase in economic disadvantage and widens in LMAs with a disproportionate share of lower-wage manufacturing industries. Third, Asians' odds of poverty are about 14 percent higher than those of Non-Hispanic Whites; the Asian-White gap in poverty is reduced in LMAs with relative greater residential stability. Finally, the results in Model 10 reveal that other racial groups' odds of poverty are about 49 percent higher than those of Non-Hispanic Whites.

Discussion and Conclusions

This research highlights racial/ethnic differences in household poverty in the Midwest. The first question of concern focused on the effect of race/ethnicity on household poverty, comparing Latinos to other racial/ethnic groups in the Midwest. Household poverty significantly differs by race/ethnicity, with racial minorities disproportionately overrepresented in the lower levels of the social hierarchy. Drawing on the results in Table 4, Latinos are almost 3 times as likely as Non-Hispanic Whites to be poor; African Americans 4 times; Asians 1.5 times; and other racial groups 3 times. Household poverty not only varies by race/ethnicity, but also by gender. Female-headed households, particularly African American female-headed households, are most likely to be in poverty.

The second research question focused on the association between race/ethnicity and household poverty while accounting for known confounding factors, such as educational attainment, household structure, and industry of employment and job quality. First, less-educated householders are more likely to be poor. Second, single-headed households, especially never-married-female–headed households, are more likely than households headed by married couples to be in poverty. Finally, householders who were employed in high-wage manufacturing industries were the least likely to be in poverty, followed by those in high-wage services, low-wage manufacturing, and distributional services. At the other end of the spectrum, householders employed in agriculture, fishing, and forestry industries were more likely than those in consumer services to be in poverty. This implies that jobs in the service sector, including both high-wage services and consumer services, are not equivalent substitutes for traditional high-wage jobs in manufacturing that offer better pay. Latinos and other minorities, women, and immigrants—especially those with lower educational skills—tend to concentrate in secondary labor markets that offer lower-skill, part-time, intermittent, and low-paying jobs with little opportunity for upward mobility.

Consistent with previous studies on poverty, educational attainment, household structure, employment industry, and job quality predictors partially explain household poverty and the gaps in household poverty among racial/ethnic groups. While improving the educational skills of Latinos and African Americans is likely to improve their employment opportunities and incomes, it may help to examine the barriers that keep them from primary labor markets even when they have positive human capital characteristics. Creating better-paying jobs equivalent to those in high-wage industries is crucial to the financial well-being of families. Households headed by single females, especially never-married singles, are significantly more likely to be poor. Therefore, creating better employment opportunities for women and supplementing their incomes, especially if they are the only earner in the household, are paramount.

The third research question focused on the association between nonmetropolitan/metropolitan LMAs and household poverty, controlling for individual and household predictors. Findings show that household poverty rates vary significantly by LMA, ranging from 5 percent to 33 percent (see Table 3). Despite the fact that individual/household characteristics explain much of the variance in poverty between LMAs, much more of the variance is accounted for by labor market characteristics, especially structural characteristics and labor market opportunity structures. As expected, this study demonstrates that poverty is higher in nonmetropolitan than in metropolitan areas, suggesting that economic restructuring has placed greater burdens on nonmetropolitan households than on metropolitan ones. This suggests that to alleviate poverty it is imperative to address LMA predictors, including creating quality employment opportunities in the rural Midwest.

In addition, economically disadvantaged LMAs—likely to be concentrated in metropolitan areas—are associated with higher poverty rates. Racial/ethnic minorities tend to live in these LMAs. Economic restructuring hit these communities hardest, with loss of manufacturing jobs and the flight of middle-class families (Wilson, 1987 & 1996). Minorities who lost those manufacturing jobs were not able to secure comparably paying jobs in the restructured economy due to limited education levels. In addition, the flight of the middle class produced inner-city environments with limited tax bases and reduced social resources. These areas have higher unemployment rates, a higher proportion of less-skilled workers, higher proportions of African Americans and single-headed households with children, and a greater proportion of families relying on public assistance for survival. Residents in these communities not only have less access to better employment opportunities but are also socially isolated.

Not surprisingly, this study also shows that immigrant-concentrated and residentially stable LMAs are associated with lower poverty rates. Residents in these LMAs tend to have higher skill levels, access to employment opportunities, and social capital, and therefore have better opportunities for higher incomes and, consequently, lower poverty rates. Much of the variance in poverty among LMAs is accounted for by these socio-demographic and structural characteristics. This implies that addressing the uneven spatial access to opportunities, especially in forgotten places, may significantly address poverty and income inequalities of many families. This can be addressed with better economic development plans focusing on reinvesting in these communities and creating better and long-lasting job opportunities.

The fourth research question focused on the effect of LMA opportunity structures—both industry structure and percentage of good jobs—on household poverty. According to these findings, a higher ratio of core industries to peripheral industries in an LMA reduces poverty. More specifically, LMAs with a relatively higher proportion of extractive, government, and consumer service industries are associated with higher poverty rates. In contrast, LMAs with a greater proportion of low-wage and high-wage manufacturing are associated with lower poverty rates. Furthermore, LMAs with a higher proportion of good jobs (i.e., greater proportion of residents in managerial, professional, and technical occupations and in higher-wage services) are associated with lower poverty rates. Not surprisingly, these labor market opportunity structure indicators plus nonmetropolitan/metropolitan residence explain about 51 percent of the between-LMA variance in poverty. This suggests that the creation of higher-wage jobs in LMAs and a relatively even distribution of those job opportunities across different communities should be a priority. This must be concomitant, of course, with on-the-job training and workforce development programs so that residents with fewer skills might have a chance to fill these positions as they are created.

Finally, this study shows that, even after accounting for individual, household, nonmetropolitan/metropolitan location and LMA opportunity structure and structural characteristics, racial/ethnic minorities remain disproportionately disadvantaged in terms of household poverty. This suggests that there are other factors not accounted for that may explain the persistent gaps in poverty rates. Future research should focus on other structural barriers that reproduce poverty and household income inequalities among racial/ethnic minorities, different sources of household income for racial/ethnic minorities, and community development in forgotten places.

References

Alba, R. D., Logan, J. R., & Stults, B. J. (2000). The changing neighborhood contexts of the immigrant metropolis. *Social Forces, 79*(2), 587–621.

Alderson, A. S., & Nielsen, F. (2002). Globalization and the great u-turn: Income inequality trends in 16 OECD countries. *American Journal of Sociology, 107*(5), 1244–1299.

Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education.* New York, NY: National Bureau of Economic Research.

Bluestone, B., & Harrison, B. (1990). The great u-turn revisited: Economic restructuring, jobs, and the redistribution of earnings. In K. Kasarda (Ed.), *Jobs, earnings, and employment growth in the United States* (pp. 7–37). Boston, MA: Kluer Academic Publishers.

Borjas, G. J. (1990). *Friends and strangers: The impact of immigrants on the U.S. economy*. New York, NY: Basic Books.

Borjas, G. J., Freeman, R. B., & Katz, L. F. (1992). On the labor market impacts of immigration and trade. In G. J. Borjas & R. B. Freeman (Eds.), *Immigration and the workforce: Economic consequences for the United States* (pp. 213–244). Chicago, IL: University of Chicago Press.

Bourdieu, P. (1985). The forms of capital. In J. G. Richardson (Ed.), *Handbook for theory and research for the sociology of education* (pp. 241–258). New York, NY: Greenwood.

Brady, D., Beckfield, J., & Zhao, W. (2007). The consequences of economic globalization for affluent democracies. *Annual Review of Sociology, 33*, 313–334.

Brown, D. L., & Hirschl, T. A. (1995). Household poverty in rural and metropolitan-core areas of the United States. *Rural Sociology, 60*(1), 44-66.

Castle, E. N. (Ed.). (1993). *Persistent poverty in rural America: Rural Sociological Society Task Force on Persistent Rural Poverty*. Boulder, CO: Westview Press.

Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology, 94*, S95–S120.

Coleman, J. (1990). *Foundations of social theory.* Cambridge, MA: Belknap Press.

Danziger, S. H., & Gottschalk, P. (1995). *America unequal*. Cambridge, MA: Harvard University Press.

Devine, J. A., Plunkett, M., & Wright, J. D. (1992). The chronicity of poverty: Evidence from the PSID, 1968–1987. *Social Forces, 70*(3/March), 787–812.

Duncan, C. M. (1999). *Worlds apart: Why poverty persists in rural America*. New Haven, CT: Yale University Press.

England, P. (1994). Wage appreciation and depreciation: A test of neoclassical economic explanations of occupational sex segregation. In D. B. Grusky (Ed.), *Social stratification: Class, race, and gender in sociological perspective* (pp. 590–603). Boulder, CO: Westview Press.

Falk, W. W., & Lyson, T. A. (1988). *High tech, low tech, no tech: Recent industrial and occupational changing in the South.* Albany, NY: State University of New York Press.

Flora, C. B., & Flora, J. L. (1993). Entrepreneurial social infrastructure: A necessary ingredient. *ANNALS, AAPSS, 529*, 48–58.

Flora, J. L. (1998). Social capital and communities of place. *Rural Sociology, 63*(4), 481–506.

Frey, W., & Liaw, K. (1998). The impact of recent immigration on population redistribution within the United States. In J. Smith (Ed.), *The immigration debate* (pp. 388–488). Washington, DC: National Academy Press.

Gustafsson, B., & Johansson, M. (1999). In search of smoking guns: What makes income inequality vary over time in different countries? *American Sociological Review, 64*, 585–605.

Harrison, B., & Bluestone, B. (1988). *The great u-turn: Corporate restructuring and the polarization of America*. New York, NY: Basic Books.

Hartmann, H. (1994). The unhappy marriage of Marxism and feminism: Towards a more progressive union. In D. B. Grusky (Ed.), *Social stratification: Class, race, and gender in sociological perspective* (pp. 570–576). Boulder, CO: Westview Press.

Iceland, J. (1997). Urban labor markets and individual transitions out of poverty. *Demography, 34*(3), 429–441.

Iceland, J. (2006). *Poverty in America: A handbook* (2nd ed.). Berkeley and Los Angeles, CA: University of California Press.

Kazarda, J. D. (1995). Industrial restructuring and the changing location of jobs. In F. Reynolds (Ed.), *State of the Union: America in the 1990s* (Vol. 1) (pp. 215–258). New York, NY: Russell Sage Foundation.

Lichter, D. T., Beaulieu, L. J., Findeis, J. L., & Teixeira, R. A. (1993). Human capital, labor supply, and poverty in rural America. In E. N. Castle (Ed.), *Persistent poverty in rural America: Rural Sociological Society Task Force on Persistent Rural Poverty* (pp. 39–67). Boulder, CO: Westview Press.

Lichter, D. T., & Landale, N. (1995). Parental work, family structure, and poverty among children. *Journal of Marriage and the Family, 57*(May), 346–354.

Lobao, L. (1990). *Locality and inequality: Farm and industry structure and socioeconomic conditions.* Albany, NY: SUNY Press.

Lyson, T. A., & Falk, W. W. (1993). Forgotten places redux. In T. A. Lyson & W. W. Falk (Eds.), *Forgotten places: Uneven development in rural America* (pp. 257–270). Lawrence, KS: University Press of Kansas.

Lyson, T. A., Falk, W. W., Henry, M., Hickey, J., & Warner, M. (1993). Spatial location of economic activities, uneven development, and rural poverty. In E. N. Castle (Ed.), *Persistent poverty in rural America: Rural Sociological Society Task Force on Persistent Rural Poverty* (pp. 106–135). Boulder, CO: Westview Press.

Massey, D., & Denton, N. A. (1993). *American apartheid: Segregation and the making of the underclass.* Boston, MA: Harvard University Press.

McCall, L. (2001). Sources of racial wage inequality in metropolitan labor markets: Racial, ethnic, and gender differences. *American Sociological Review 66*(August), 520–541.

Mollenkopf, J., & Castells, M. (1991). *Dual city: Restructuring New York*. New York, NY: Russell Sage Foundation.

Moller, S., Huber, E., Stephens, J. D., Bradley, D., & Nielsen, F. (2003). Determinants of relative poverty in advanced capitalist democracies. *American Sociological Review, 68*(February), 22–51.

O'Conner, A. (2001). *Poverty knowledge: Social science, social policy, and the poor in the twentieth-century U.S. history*. Princeton, NJ: Princeton University Press.

O'Hare, W. P. (1996). A new look at poverty in America. *Population Bulletin, 51*(2). Washington, DC: Population Reference Bureau.

Portes, A. (1998). Social capital: Its origins and application in modern sociology. *Annual Review of Sociology, 24*, 1–24.

Portes, A. (2000). The two meanings of social capital. *Sociological Forum, 15*, 1–11.

Portes, A., & Sensebrenner, J. (1993). Embeddedness and immigration: Notes on the social determinants of economic action. *American Journal of Sociology, 98*, 1320–1350.

Portes, A., & Zhou, M. (1992). Gaining the upper hand: Economic mobility among immigrants and domestic minorities. *Ethnic and Racial Studies, 15*, 491–521.

Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy.* Princeton, NJ: Princeton University Press.

Putnam, R. D. (1995). Bowling alone: America's decline in social capital. *Journal of Democracy, 6*, 65–78.

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Newbury Park, CA: Sage Publications.

Sassen, S. (1991). *The global city*. Princeton, NJ: Princeton University Press.

Seccombe, K. (2000). Families in poverty in the 1990s: Trends, causes, consequences, and lessons learned. *Journal of Marriage and the Family, 62*(November), 1094–1113.

Snipp, M., Horton, H. D., Jensen, L., Nagel, J., & Rochin, R. (1993). Persistent rural poverty and racial and ethnic minorities. In E. N. Castle (Ed.), *Persistent poverty in rural America: Rural Sociological Society Task Force on Persistent Rural Poverty* (pp. 173–199). Boulder, CO: Westview Press.

Starrels, M. E., Bould, S., & Nicholas, L. J. (1994). The feminization of poverty in the United States: Gender, race, ethnicity, and family factors. *Journal of Family Issues, 15*(4), 590–607.

Stevens, A. H. (1999). Climbing out of poverty, falling back in: Measuring the persistent poverty over multiple spells. *Journal of Human Resources, 34*(3/Summer), 557–588.

Tickamyer, A. (1996). Sex, lies, and statistics: Can rural sociology survive restructuring? (or) What is right with rural sociology and how can we fix it? *Rural Sociology, 61*(1), 5–24.

Tickamyer, A. R., & Bokemeier, J. L. (1993). Alternative strategies for labor market analyses: Multi-level models of labor market inequality. In J. Singelmann & F. A. Deseran (Eds.), *Inequalities in labor market areas* (pp. 49–68). Boulder, CO: Westview Press.

Tickamyer, A. R., Bokemeier, J. L., Feldman, S., Harris, R., Jones, J. P., & Wenk, D. (1993). Women and persistent rural poverty. In E. N. Castle (Ed.), *Persistent poverty in rural America: Rural Sociological Society Task Force on Persistent Rural Poverty* (pp. 200–229). Boulder, CO: Westview Press.

Tickamyer, A. R., & Duncan, C. M. (1990). Poverty and opportunity structure in rural America. *Annual Review of Sociology, 16*, 67–86.

Tickamyer, A. R., & Latimer, M. (1993). A multi-level analysis of income sources of the poor and the near poor. In J. Singelmann & F. A. Deseran (Eds.), *Inequalities in labor market areas* (pp. 83–106). Boulder, CO: Westview Press.

Tomaskovic-Devey, D. (1987). Labor markets, industrial structure, and poverty: A theoretical discussion and empirical example. *Rural Sociology, 52*, 56–74.

Waldinger, R. (1996). *Still the promised city? African Americans and new immigrants in postindustrial New York.* Cambridge, MA: Harvard University Press.

Wilson, W. J. (1987). *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago, IL: University of Chicago Press.

Wilson, W. J. (1996). *When work disappears: The world of the new urban poor.* New York, NY: Alfred A. Knopf.

Woolcock, M. (1998). Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society, 27*(2), 151–208.

Appendix A. Descriptive Statistics of Selected Variables by Race/Ethnicity (Mean and Standard Deviations)

Variables	All Racial/Ethnic Groups (n=39544) Mean (SD)	Non-Hispanic White (n=30376) Mean (SD)	Mexican American (n=3656) Mean (SD)	African American (n=3654) Mean (SD)
General health	1.660 (.801)	1.590 (.768)	1.900 (.850)	1.860 (.887)
Excellent	.523 (.499)	.559 (.497)	.386 (.487)	.439 (.496)
Very good	.311 (.463)	.307 (.461)	.355 (.478)	.290 (.454)
Good	.147 (.354)	.119 (.324)	.237 (.425)	.242 (.428)
Fair	.015 (.121)	.013 (.111)	.019 (.137)	.026 (.159)
Poor	.003 (.053)	.003 (.054)	.004 (.061)	.002 (.048)
Family income-to-poverty ratio (IPR)[1]	3.408 (1.663)	3.099 (1.567)	4.419 (1.370)	4.548 (1.566)
Child poverty (< 1.0 IPR)	.165 (.371)	.104 (.306)	.293 (.455)	.421 (.494)
Child poverty (< 1.25 IPR)	.214 (.410)	.144 (.351)	.397 (.489)	.495 (.500)
Near child poverty (1.0 – 1.5 IPR)	.099 (.298)	.080 (.272)	.199 (.399)	.139 (.345)
Race/ethnicity[2]				
Non-Hispanic White	.739 (.439)	-----	-----	-----
African American	.130 (.337)	-----	-----	-----
Latino	.102 (.302)	-----	-----	-----
Mexican	.081 (.273)	-----	-----	-----
Other Latino	.021 (.142)	-----	-----	-----
Asian	.029 (.167)	-----	-----	-----
Child immigrant/generation status				
First generation	.024 (.152)	.009 (.092)	.097 (.295)	.013 (.112)
Second generation	.103 (.304)	.037 (.189)	.540 (.498)	.053 (.224)
Third generation or higher	.873 (.333)	.955 (.208)	.363 (.481)	.934 (.248)
Gender				
Male	.513 (.500)	.515 (.500)	.492 (.500)	.516 (.500)
Female	.487 (.500)	.485 (.500)	.508 (.500)	.484 (.500)
Child age (in years)	8.512 (5.183)	8.614 (5.203)	7.751 (5.009)	8.657 (5.135)
Household structure				
Two-parent married-couple family	.717 (.450)	.785 (.411)	.691 (.462)	.325 (.469)
One-parent male-headed family	.056 (.230)	.055 (.227)	.057 (.231)	.064 (.245)
One-parent female-headed family	.227 (.419)	.160 (.367)	.253 (.435)	.610 (.488)
Number of related children	2.319 (.985)	2.261 (.956)	2.616 (.994)	2.469 (1.078)

[1] Family income-to-poverty ratio is reverse-coded into the following categories: 1 = 5.00 and over; 2 = 4.00 – 4.99; 3 = 2.50 – 3.99; 4 = 1.50 – 2.49; 5 = 1.00 – 1.49; 6 = < 1.0.

[2] Other racial groups were excluded.

Family size	4.314 (1.254)	4.276 (1.192)	4.728 (1.299)	4.224 (1.462)
Presence of extended household members	.100 (.300)	.069 (.254)	.186 (.389)	.203 (.402)
Parental education[3]				
Less than high school	.083 (.276)	.039 (.194)	.337 (.473)	.159 (.366)
High school	.233 (.423)	.209 (.407)	.344 (.475)	.326 (.469)
Some college	.311 (.463)	.324 (.468)	.213 (.410)	.340 (.474)
College or higher	.373 (.483)	.428 (.495)	.106 (.308)	.175 (.380)
Average age of parents	38.332 (8.2281)	38.900 (7.932)	35.573 (8.084)	36.764 (9.711)
Household employment status[4]				
Two full-time earners	.288 (.453)	.322 (.467)	.205 (.403)	.155 (.362)
One full-time earner and one part-time earner	.157 (.364)	.189 (.391)	.080 (.272)	.038 (.191)
Two part-time earners	.378 (.485)	.362 (.480)	.468 (.499)	.394 (.489)
One part-time earner	.063 (.242)	.053 (.224)	.094 (.292)	.099 (.299)
Not working/unemployed	.114 (.318)	.075 (.264)	.153 (.360)	.313 (.464)
Health insurance coverage				
Government health insurance only	.179 (.383)	.118 (.323)	.331 (.471)	.412 (.492)
Government and private health insurance	.138 (.345)	.129 (.336)	.182 (.386)	.162 (.368)
Private health insurance only	.637 (.481)	.716 (.451)	.383 (.486)	.364 (.481)
Uninsured	.046 (.209)	.036 (.186)	.105 (.306)	.063 (.243)
Metropolitan/nonmetropolitan status				
Metropolitan	.782 (.413)	.734 (.442)	.829 (.377)	.968 (.176)
Nonmetropolitan	.218 (.413)	.266 (.442)	.171 (.377)	.032 (.176)

[3] Parental education refers to the highest educational attainment of head and spouse for two-headed households and education of head for single-headed households.

[4] Employment status for the head and spouse (if present) were combined to create a typology of household employment status.