

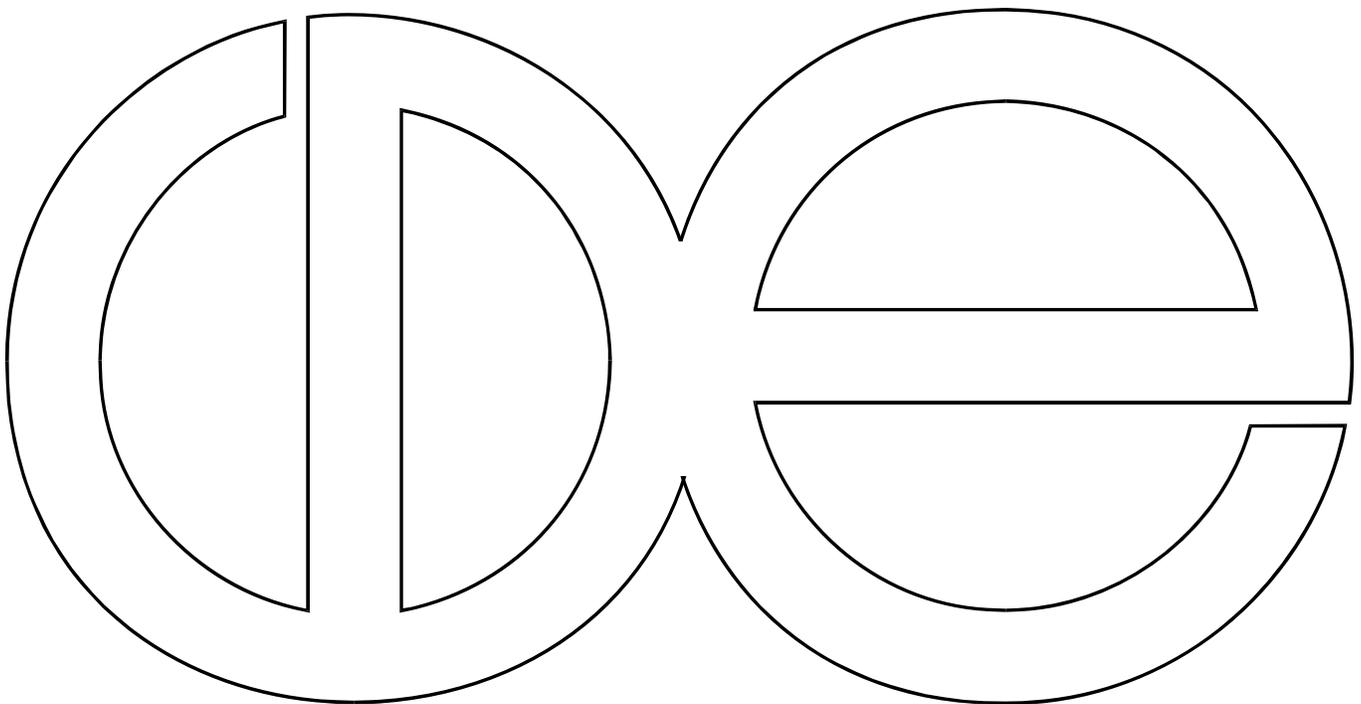
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**Racial Inequality in Southern Poverty, 1970-2000:
Compositional and Spatial Dynamics of Black Return Migration**

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CDE Working Paper No. 2011-03



RACIAL INEQUALITY IN SOUTHERN POVERTY, 1970-2000: COMPOSITIONAL AND SPATIAL DYNAMICS OF BLACK RETURN MIGRATION

ABSTRACT

This research examines how black return migration shaped racial inequality in local-area poverty in the U.S. South. Using census data for 1970 and 2000, we build from inequality and migration theory to investigate the consequences of migration on black-white differences in southern county poverty rates over the Return Migration period. Migration influences inequality through its impact on population composition. We find support for the racial threat thesis; the relative size of the black population is a key driver of inequality in poverty. We also find that migration impacts inequality through the embedded selection process. Overall, the results show return migration contributed to declines in racial inequality in southern poverty in recent decades with different implications for “new” and “old” southern destinations. Our results imply that models of black-white inequality are enhanced by accounting for the interplay of population composition and population processes generating local-area composition.

RACIAL INEQUALITY IN SOUTHERN POVERTY, 1970-2000: COMPOSITIONAL AND SPATIAL DYNAMICS OF BLACK RETURN MIGRATION

Since 1970, the South has experienced two important contemporaneous trends: a steady increase in net migration (Falk, Hunt, and Hunt 2004; Robinson 1990) and a steady decline in black-white inequality in poverty (citation suppressed). Our research is among the first to investigate whether the return migration of blacks to the South narrowed the black-white poverty gap and will inform debates about racial inequality. The theoretical perspective of this study concerns the impact of population redistribution on local inequality through the unique interplay of population composition and return migration. Theories and research on racial inequality focus on the relative size of the minority population as a key driver of inequality-generating processes (Blalock 1967; Lieberman 1980). Other theoretical perspectives identify labor queue dynamics (Lieberman 1980; Reskin and Roos 1990; Thurow 1975) and selection processes (see, for example, Vigdor 2002, 2006) as contributing factors to inequality. We assert that return migration is intertwined with each of these factors through its impact on local-area population composition. In this study, we examine the extent to which return migration alters population composition through the size and characteristics of its flows which, in turn, has implications for racial inequality in area-level poverty.

Drawing on the deep and multi-disciplinary migration literature, return migration could have both positively and negatively contributed to racial inequality in poverty depending on the type of migration and the geographical context of southern return migration. Surprisingly little research has focused on southern return migration, and what exists focuses mainly on selection into migration (e.g., Hunt, Hunt and Falk 2008; Vigdor 2002, 2006). The current study concerns the aggregate consequences of return migration, namely racial inequality in poverty. We examine which factors are at play and how they operate together, sometimes in contradictory directions, to affect racial inequality in poverty in southern counties.

Using census data on county-level attributes and migration flows for 1970 and 2000, we

investigate how return migration impacted racial inequality in poverty in the South by altering the concentration of blacks in southern counties and the characteristics of the southern black population. Moreover, we arbitrate between the influence of black concentration and the characteristics of the black population in shaping racial inequality with implications for corresponding theoretical perspectives. We extend current models of black-white inequality by considering the relationship between return migration and the proximate determinates of racial inequality in poverty to understand the various pathways through which return migration operates. Return migration is not a singular experience, but is comprised of migrants with different motivations, socio-demographic characteristics and, consequently, settlement patterns (Adelman, Morett, and Tolnay 2000; Alexander 2005; Falk et al. 2004; Fuguitt, Fulton, and Beale 2001; Vigdor 2002, 2006; White et al. 2005). This heterogeneity might produce divergent poverty outcomes at the local level and perhaps simultaneously ameliorate or aggravate racial inequality in poverty. This research is a first step to understand how return migration shapes the racial dynamics of economic processes in local areas.

BACKGROUND

A Great “Return Migration”

To paraphrase sociologist Amos Hawley (1950), migration involves psychological elements of the individual, but it is also a manifestation of external changes. The North and South underwent significant economic and cultural transformations in the decades leading up to, and arguably prompting, the Return Migration.

Since most African American southern migrants moved to large metropolitan areas in the North after leaving the South, they were disproportionately affected by social and economic transformations occurring in northern cities. The decline of well-paying blue-collar jobs in northern inner cities and the negative consequences for black male employment is well documented (Kasarda 1989, 1995; Wilson 1987, 1996) as are the generally deteriorating conditions. Economic contraction was linked to a general deteriorating of social conditions (Robinson 1986). Northerners and southern-born migrants living in the

North who were affected by this economic decline moved in search of better employment opportunities (Stack 1996). Those not directly affected decided to return to the South to escape the deteriorating social environment that often accompanies growing unemployment and poverty.

As the economic opportunities for blacks in northern cities deteriorated, the relative attractiveness of the South increased. Businesses and industries that traditionally provided the well-paying, blue-collar jobs in northern cities engaged in their own southward migration (Kasarda 1995). As a result, employment opportunities that had been relatively scarce for African Americans in the South grew more abundant. In addition, although attitudinal surveys show somewhat higher levels of racial prejudice among white southerners (Schuman et al. 1997), the prolonged struggle for Civil Rights finally ended formal, legal discrimination and segregation that had long plagued the South. Cultural attachments to the South also contributed to return migration. Retirement-age southerners heeded the call to home and children of southerners who left the South as part of the Great Migration “returned” to their southern roots (Berry 2000; Stack 1996). Different migrant streams and corresponding motivating factors amounted to net population gains in the South. By the early 1970s, the South experienced positive net migration for the first time in the 20th century (Robinson 1990). The current study investigates the implications of the broadly defined return migration for racial inequality in southern poverty.

Implications for Racial Inequality in Poverty

There is little research on return migration and it has primarily, if not exclusively, focused on the causes of migration. Our study addresses an important consequence of migration: how it affects local-area inequality. This research answers several questions vital to understanding recent trends in black-white inequality in the South. Inequality in southern poverty has declined since 1970 (citation suppressed); yet we do not know whether the decrease is due to a decline in poverty among the black population or an increase in poverty among the white population. We also do not know what is driving the decline; and we are interested in whether return migration is among the contributing factors.

There is reason to suspect return migration might be a major driving force. Inequality research has demonstrated that an area's population composition has significant implications for black income disadvantage (Beggs, Villemez, and Arnold 1997; Blalock 1957; Brown and Fuguitt 1972; Cohen 1998). In the contemporary and highly mobile United States, a significant factor determining population composition is migration. Migration shapes population composition in three ways with potential importance for racial inequality in poverty.

The first is by shaping the racial balance of the population. Inequality research suggests that racial concentration (e.g., percent black) impacts economic outcomes by promoting or decreasing labor market discrimination. For example, the racial threat hypothesis asserts that black population concentration will increase inequality by increasing competition for resources in a curvilinear fashion (Blalock 1967). Competition leads to threat which, in turn, promotes hostility and prejudice and leads to discrimination. Discrimination, ultimately, causes racial inequality. Support for this thesis is found in the association between black population concentration and racial inequality, since threat and prejudice are not observed in statistical models of aggregate-level processes.

The second way migration shapes population composition is through its impact on the labor queue. In contrast to the threat hypothesis, queuing theory posits that an increase in black population concentration reduces inequality by increasing black representation in the labor queue (Lieberman 1980; Reskin and Roos 1990; Thurow 1975). Greater representation of black workers relative to white workers in the labor queue promotes black workers to "overflow" to better jobs in the labor queue (Kornrich 2009:5). The labor supply is glutted; therefore, employers with desirable jobs must choose less desirable candidates (read: black workers). Higher rates of black employment thus promote lower racial inequality. In both of these theses, return migration affects inequality through its impact on population composition.

Alternatively, return migration could affect inequality by changing the characteristics of the population. We know from migration research that socio-demographic characteristics are not uniformly distributed across the population; migrants are positively or negatively selected into migration and, thus, differ from their non-migrating counterparts. Selection arguments generally focus on differences in

human capital, measured as education, between the migrant group and the non-migrant group at either origin or destination. Importantly, race is an attribute on which education and similar characteristics are stratified. Research supporting the positive selection perspective suggests that African American return migrants have higher human capital as well as financial, political and social capital from which to draw when they reach their southern destination (Adelman et al. 2000; Berry 2000; Hunt et al. 2008; Stack 1996; Vigdor 2002, 2006). Education, wages, social connections and political prowess gained in the non-South are introduced into southern destinations and thus ameliorate racial inequality in poverty. In contrast, research supporting the negative selection argument shows that black return migrants have lower levels of capital and possess socio-demographic characteristics associated with economic vulnerability which could aggravate racial inequality in poverty (Falk, Hunt, and Hunt 2004; Li and Randolph 1982; Lieberman 1978; Lieberman 1978; Long and Hansen 1975). Local-area racial inequality in poverty could increase by attracting economically vulnerable return migrants.

We have reason to expect that not all local areas would have experienced the same level of inequality or decline in inequality since return migration and black population concentration and characteristics are not uniformly distributed across southern counties. Studies on migration and the spatial concentration of poverty suggest that the selective nature of migration contributes to persistent poverty in certain places. Impoverished migrants tend to come from and move to places with higher poverty rates presumably because of housing affordability (Nord, Luloff, and Jensen 1995). Migration can influence the overall poverty level through the in-flow of people who are impoverished or have characteristics associated with a greater risk of living in poverty. Migration can influence local-area racial inequality in poverty if in-flows are more likely to be in poverty relative to the existing population at the destination, as is demonstrated in studies of selection into migration (Adelman et al. 2000; Alexander 2005; Vigdor 2002; Vigdor 2006); see also Fuguitt et al. 2001) and research on differences among southern-bound migrants (citation suppressed). Research has also shown African Americans and whites are not evenly distributed across the South. Historically, African Americans were concentrated in the Mississippi Delta and within the territory known as the “black belt.” We empirically assess whether return migration has

shifted the distribution of the black population in southern counties, including areas not historically home to blacks. We also examine the extent to which return migration has impacted the characteristics of the local black population with implications for racial inequality in poverty.

RESEARCH DESIGN

Data & Measurement

Our investigation is based on county-level data from decennial censuses for 1970 and 2000, and county-to-county migration flow files for the five years prior to each census.¹ We analyze data for 1,367 southern counties with a black population in both 1970 and 2000. Since our interest is inequality between black and white poverty rates, a black population must be observed in both decades to calculate inequality over the Return Migration period.

We measure racial inequality in poverty as the ratio of black to white poverty rates for both female- and male-headed family households.² Given the distribution of these sex-specific poverty ratios, we analyze square root transformations. Values greater than 1.0 indicate white advantage (or black disadvantage), whereas values less than 1.0 indicate white disadvantage (or black advantage). A value of 1.0 reflects no difference in racial inequality. We analyze racial inequality in poverty separately for female- and male-headed family households given gender differences in migration patterns and the potential implications for inequality. Additionally, different inequality-generating processes may be at work for these two household types. Female-headed households, for example, are more likely to be impoverished given gender inequality in earnings and the reliance on a single income. Male-headed households have a greater potential for earnings and, consequently, are less economically vulnerable. However, racial differences in male employment patterns and occupational segregation put black households at a greater risk of poverty relative to white male-headed households. We therefore detail race- and sex-specific poverty rates to identify the source of the reduction in inequality between 1970 and 2000 at the outset of our analysis.

The rate of return migration is measured for southern counties as all black in-migrants from non-

southern U.S. counties based on residence at enumeration and five-years prior to enumeration (1965 to 1969 and 1995 to 1999, respectively) divided by the black mid-period population at destination (1967 and 1997, respectively). This is consistent with prior aggregate-level analyses of return migration (Fuguitt et al. 2001). A potential data limitation concerns the point-in-time nature of census data. For example, if migration induces a temporary reduction in income, then the reported income at enumeration could result in a spurious association between migration and poverty status. This would be problematic for more recent migrants. Still, return migration would be associated with a realized reduction in income and, therefore, an increased risk of living in poverty. Given the dynamics of the migration system, we also account for other migration flows including total out-migration to southern and non-southern counties, total white in-migration from southern and non-southern counties, and black in-migration from southern counties.

Building on migration and inequality research, we anticipate that migration shapes inequality through its impact on population composition. We examine three compositional factors which correspond to a specific thesis: black population concentration (racial threat), black unemployment (labor queue), and black education (selection). Focus is on the characteristics of the black population since we are analyzing racial inequality in poverty.

Black population concentration is measured as the size of the black population relative to the total population in each county. We analyze a natural log transformation of black population concentration, which is consistent with Blalock's (1967) theoretical model. In this formulation, the rate of change in racial inequality in poverty is inversely proportional to the relative size of the black population. We also consider a spatially-lagged measure—the average percent black in across all adjacent counties—since the factors driving the association between black population concentration and racial inequality in poverty are not necessarily restricted to administratively-defined county boundaries (Beggs, Villemez, and Arnold 1997).

Black unemployment is measured as the proportion of the black population age 16 and older actively engaged in the labor force but not employed. The extent of black unemployment in surrounding

counties is also considered since the labor market and the associated dynamics may extend beyond the county boundary. As with black concentration, we use a spatially-lagged measure to reflect the average black unemployment across all adjacent counties (a first-order queen contiguity definition).

Research suggests that migrants are selected on human capital characteristics. In terms of inequality, the selection process may have important impacts on the inequality structure. Human capital is measured as the proportion of the black population that has less than a high school education. We examine a spatially-lagged measure of human capital to explore whether the relationship extends beyond the local area; for example, whether counties within a cluster of a low educated black population are likely to face higher inequality.

We account for county attributes in the multivariate analysis commonly associated with economic inequality, including dominant industry (measured as dependency on farming, government, mining, manufacturing, services, and other industries)³ to broadly account for racial sorting by economic sector; Hispanic population concentration since the presence of this group complicates black-white relations and introduces additional competition in the labor force; metropolitan status since more progressive race views tend to be concentrated in more urban areas; and a measure of black elected officials to indicate the general racial or institutional environment.⁴ Studies of poverty typically examine old age dependency, disability prevalence and the prevalence of female-headed households. However, ours is an analysis of inequality in poverty; therefore, analytical focus is on factors that are suspected to contribute to racial differences in the levels of poverty and not poverty, per se.

Analytical Approach

We begin by establishing general trends in racial inequality in poverty and return migration. Next, we use spatially-informed random effects tobit regression techniques to assess the impact of return migration on racial inequality in poverty (Breen 1996; Maddala 1987; Wooldridge 2006). We adopt this approach to simultaneously address the censored nature of the data (racial inequality has a lower bound of 0) and the underlying spatial and temporal processes in the data.⁵ Standard analytic methods typically do

not apply to the analysis of spatial units given the potential biasing effects of spatial autocorrelation (Cliff and Ord 1973). Yet the spatial process can be part of the temporal process and, thus, the technical problems associated with spatial autocorrelation can be partially addressed by treating both the unit effects (differences between counties) and serial correlation (differences within counties).

As with all mixed effects models, the variance is decomposed into two components. The first component reflects the amount of variation contributed by the counties themselves, which purges the models of bias resulting from omitted variables. The second variance component indicates the extent of variation within counties over time. With respect to the former, a Moran's *I* test for spatial autocorrelation (Anselin 1988; Moran 1950) on the regression residuals revealed a non-significant statistic, indicating that spatial autocorrelation in the distribution of racial inequality in poverty is sufficiently accounted for by this strategy. With respect to the latter, we pool the 1970 and 2000 data and include a binary term for year. This term can be interpreted as the time trend, where a negative coefficient indicates a downward trending in racial inequality in poverty over the Return Migration period.

The analytical focus on return migration and its relationship to racial inequality through its impact on population composition, measured as population size and characteristics, yields four potential substantive conclusions. First, if the association between return migration and racial inequality in poverty is attenuated by black population concentration, it indicates that migration influences inequality through its effect on the relative population size. Second, if the association between return migration and racial inequality is attenuated by black unemployment, it would suggest that migration affects inequality through its influence on the labor queue by increasing the relative number of black workers or the number of competitive black workers. Third, if the association between migration and inequality is attenuated by low black education, this is evidence that the selection process of migration is shaping inequality. Finally, an independent influence of return migration net of the compositional factors can be interpreted as a direct association between return migration and racial inequality in poverty possibly indicating selection or cumulative causation not accounted for in the measure of human capital.

RESULTS

Patterns of Racial Inequality in Poverty

Analysis of race-specific poverty rates for female-headed and male-headed family households in the South demonstrates three important findings. First, poverty declined for all southern households, but there was a larger decrease for male-headed households compared to female-headed households. Table 1 shows that black male-headed households experienced a 63% decline in poverty rates between 1970 and 2000. White male-headed households had the second highest percent change at -56%. Both figures are significantly higher than the 37% and 30% declines for black and white female-headed households, respectively.

[Table 1: County Race-Specific Poverty Rates by Household Type, 1970 and 2000]

The percent change in poverty does not reflect the percent of the population living in poverty. Female-headed households had higher poverty rates than male-headed households in 1970 and in 2000. Approximately 60% of black female-headed households and 40% of white female-headed households were living in poverty in 1970 compared to 36% and 16% of black and white male-headed households in the same year. These percentages declined over the Return Migration period, yet 38% and 27% of black and white female-headed households lived in poverty in 2000 whereas 13% and 7% of black and white male-headed households were living in poverty, correspondingly. To contextualize the magnitude of southern poverty rates, the national average was 10.9% in 1970 and 9.6% in 2000. While conditions generally improved in the South, a remarkable percentage of southern family households remained in poverty in 2000.

Second, poverty fell most dramatically for black households and especially for black male-headed households over the period. In 1970, 36% of southern black male-headed households were living in poverty. By 2000, the rate fell to 13% marking a 23 percentage-point change. Poverty among southern white male-headed households also fell, declining from 16% in 1970 to 7% in 2000. The reduction was

14 percentage-points greater for black male-headed households.

Third, racial differences in poverty were more persistent for female-headed households relative to male-headed households. In 1970, the gap in poverty was 20 percentage-points higher for black female-headed households and black male-headed households as compared to their white counterparts. In contrast, the gap fell to a 6 percentage-point disparity for male-headed households in 2000, but a 10 percentage-point disadvantage was reported for black female-headed households compared to white female-headed households.

Overall, results show a general narrowing of racial inequality in poverty and a convergence in the extent of inequality for female- and male-headed households. Poverty declined for southern black and white households, although not to equal degrees and with consequences for racial inequality. Poverty remained significantly higher for black and female-headed households over the 30-year period and the extent of racial differences in poverty was larger for female-headed households by the end of the Return Migration period. The reduction in racial inequality in poverty was due largely to declines in poverty for black male-headed households, likely related to gains in economic stability among black men over the Return Migration period. The economic vulnerability of female-headed households generally persisted throughout the Return Migration period, although modest relative gains were made for black female-headed households. The remainder of the analysis investigates how return migration contributed to the reduction in the racial disparity in poverty.

Racial Inequality and Return Migration

Return migration is negatively associated with racial inequality in southern poverty. Figure 1 shows that areas with higher rates of black in-migration had a lower estimated level of inequality in 1970 and 2000. Predicted values derived from Model 1 are reported in Tables 2 and 3 by adjusting the decadal means of return migration by the percentage indicated along the x-axis. Results show that the relationship is stronger in 2000 as momentum in migration flows increased and, likely, as the cumulative impacts of migration altered the institutional characteristics of the local context (see Eichenlaub, Tolnay, and

Alexander 2010; Massey 1990; Myrdal 1957; and White and Lindstrom 2005).

[Figure 1: Estimated Racial Inequality in Poverty for Female- and Male-Headed Households, 1970 and 2000]

[Table 2: Estimated Racial Inequality in Poverty for Female-Headed Households, 1970 and 2000]

[Table 3: Estimated Racial Inequality in Poverty for Male-Headed Households, 1970 and 2000]

Adjusting the estimated inequality in poverty according to the level of return migration highlights the positive benefits of return migration and re-emphasizes differences between female- and male-headed households. The predicted racial inequality in poverty for female-headed households (Panel A) is 1.32 in 1970 and 1.18 in 2000 when the decadal means of return migration are reduced by 50%, and 1.31 in 1970 and 1.15 in 2000 when increased by 50%. For male-headed households (Panel B), predicted racial inequality ranged from 2.18 in 1970 and 1.60 in 2000 when the level of in-migration is reduced by 50%, to 2.18 in 1970 and 1.55 in 2000 when migration is increased by 50%. For both female- and male-headed households, there is virtually no difference in inequality between counties with average in-migration as compared to counties with half the in-migration rate. Differences are only found for counties with higher than average return migration.

The extent of the difference, however, is greater for male-headed households. Focusing on female-headed households, predicted racial inequality in poverty is 1.32 in 1970 and 1.16 in 2000, on average, meaning that poverty rates for black female-headed households were higher than those for white female-headed households in both periods, although the disparity was reduced by 11% in 2000. For male-headed households, predicted racial inequality dropped even more substantially between the two decades, from 2.18 in 1970 to 1.57 in 2000, on average. These values demonstrate that male-headed households began and ended the period with higher levels of inequality, yet the disparity narrowed by 30%, nearly 3 times the reduction estimated for female-headed households.

Implications of Return Migration

Drawing from migration research and theories of inequality, migration likely impacts inequality through its influence on population composition. Rather than directly impacting racial disparity, migration shapes compositional factors which, in turn, affect area-level inequality. We present a test of this assertion and identify which factors are at play in Models 2-6 in Tables 2 and 3, separately for female- and male-headed households.

Turning first to the threat thesis, results (Model 2) show that black population concentration is positively and significantly associated with inequality among female- and male-headed households. Counties with a higher concentration of blacks are more likely to have greater inequality in poverty as compared to counties with a lower black concentration. We also find support for a broader spatial conceptualization of black concentration. Counties with a high black concentration tend to neighbor other counties with high concentrations (results not shown). However, high concentration in the surrounding area does not operate in the same way as it does within the county. This is likely do to the de-stigmatizing effect of living in a larger geographic context with a high black concentration. In the language of the threat thesis, racial threat is higher in places with a high black concentration and, at the same time, it is lower in places that are part of a cluster of high black concentration. It appears that the curvilinear effect of racial concentration articulated in earlier research (Blalock 1967; see also Tolnay 2001) and modeled with our measure of black concentration extends to the broader geographic context; not only does the black population within the county count towards the threshold effect, but so too does the population within the surrounding spatial context. The association persists when accounting for other covariates of inequality (Model 6).

Mixed support is found for the labor queue thesis. For female-headed households, there is no association between black unemployment and inequality in poverty and only weak evidence of a spatially contextual association (Model 3). However, unemployment has a stronger association with inequality among male-headed households. Counties with higher black unemployment are likely to face higher racial inequality in poverty. In contrast, and consistent with queuing theory, counties with low black

unemployment have lower levels of inequality. There is no evidence that the relationship extends to surrounding counties. The association, however, is attenuated after accounting for other characteristics of the local area, namely black concentration as elaborated below (see also Model 5).

Research on migration suggests that migrants are heavily selected on human capital, characteristics most often measured as education (Vigdor 2002, 2006). Similarly, studies suggest that low education and differences in education explain aggregate-level poverty in terms of a competitive labor force (e.g., Levernier, Partridge, and Rickman 2000; education is included in nearly every analysis of U.S. county poverty). Our results show that education is strongly associated with inequality in poverty for female- and male-headed households (Models 4-6). Counties with a less-educated black population tend to have high racial inequality in poverty. Moreover, counties within larger areas that have a high concentration of less educated blacks are likely to have high inequality. The selective process identified in previous studies of the return migration has important implications for local-area inequality.

The direct association between return migration and inequality is almost entirely explained by these compositional factors. Return migration reduces the racial disparity in poverty through its impact on population composition, as indicated by the reduced coefficient and weakened statistical association in Model 5. The association is completely attenuated once additional local-area attributes are considered (Model 6).

Of course, migration is a dynamic system of in-flows and out-flows. Although our substantive focus is on return migration, we need to consider the larger migration system in southern counties to speak with confidence about the specific role of return migration in shaping local-area racial inequality in poverty. Unless we consider the larger migration system we would be unable to determine whether our findings are an artifact of changing population composition driven by alternative migrant streams. We consider the role of total out-migration to southern and non-southern counties, total white in-migration from southern and non-southern counties, and black in-migration from southern counties (Model 6). In doing so, we “close” the migration system by exhausting the all possible sources of population movement.^{6,7}

Controlling for the alternative migrant flows does little to alter the relationship between return migration and racial inequality in poverty, as it operates through compositional factors. The total rate of out-migration functions much like a release valve for female-headed households, reducing racial inequality in poverty. For male-headed households, however, there is no statistically significant association. This is consistent with queuing theory, at least superficially, which posits the proportionate representation of blacks in the labor queue is a means for reducing racial inequality in poverty (Lieberson 1980; Reskin and Roos 1990; Thurow 1975). Unlike with an area's female-headed households, male-headed households do not experience declines in racial inequality in poverty in the presence of out-migration perhaps because these flows likely include black workers and thus reduce the proportionate representation of blacks in the labor queue. The dynamics driving these results are worthy of further scrutiny in future studies.

The rate of total white in-migration is associated with an increase in local area racial inequality in poverty among female-headed households, but not male-headed households. The arrival of white migrants might instigate and perpetuate competition over resources and the subsequent chain of events involving hostility, prejudice and ultimately discrimination as per the compositional threat thesis. Alternatively, white migrants of working age might chip away at the proportionate representation of blacks in the labor queue, thus relegating blacks to less desirable jobs and the consequent disadvantages of unemployment and underemployment, income and poverty. Whatever the process, it appears to impact inequality in poverty for female-headed households only. Not surprisingly, then, black in-migration from southern counties is associated with a decrease in racial inequality in poverty, though the magnitude of this effect is comparatively small. The association, however, is found for both female- and male-headed households alike.

There are a host of local area characteristics that also might shape racial inequality in poverty. For instance, economic conditions and employment opportunities in the South grew more abundant during the Return Migration period due to the migration of well-paying, blue-collar jobs from northern to southern cities (Kasarda 1995). The emergence of these opportunities overlapped Civil Rights legislation and the

associated social progress. We present but do not elaborate the results for the covariates since the central focus is on the role of migration and its impact on inequality through local-area compositional factors. We maintain this focus and discuss the associations within the context of observed migration patterns to more directly illustrate the implications of the return migration.

Estimated values of racial inequality in poverty, illustrated in Figure 2, are derived from Model 6. The value of black in-migration is adjusted by the percentage indicated along the x-axis. Additionally, we adjust the value of the compositional factors to reflect the association with return migration. Based on the indicated change in return migration, we solve Model 6 to produce the corresponding change in each of the compositional factors. We then use the change in return migration and the calculated values for each of the compositional factors to generate predicted racial inequality in poverty. All other factors are held at their decadal means. This approach permits us to tease out the compositional link between return migration and racial inequality in poverty.

[Figure 2: Estimated Racial Inequality in Poverty for Female- and Male-Headed Households Net of Local-Area Compositional Factors and Covariates, 1970-2000]

Figure 2 demonstrates only a modest improvement in inequality as migration rates increase. The coefficient for return migration in Model 6 is positive (though not significant) and the factors through which migration operates are negatively associated with inequality. Why, then, is there a decline in racial inequality poverty as return migration increases? Analysis of the bivariate associations between return migration and the compositional factors shed light on this otherwise counter-intuitive finding, reported in Table 4. In 1970, evidence of a significant correlation is only found with education; return migration is otherwise not significantly associated with population composition. This year marks the beginning of the Return Migration period and results suggest that return migration had not yet begun to systematically affect the composition of the black southern population. However, by 2000 return migration was associated with black population size and was even more strongly associated with black education.

[Table 4: Bivariate Associations between Return Migration and Local-Area Compositional Factors, 1970 and 2000]

Magnitudes of the associations aside, return migration is consistently and negatively associated with each of the compositional factors that would otherwise promote inequality. Black population concentration, unemployment, and education are each positively associated with inequality in poverty (Tables 2 and 3), yet negatively associated with return migration. Counties that became home to return migrants were those that had a relatively small black population, lower black unemployment, and a more educated black population. The nature of these associations is key to understanding how return migration has contributed to the reduction of racial differences in southern poverty.

Patterns of Return Migration

Return migrants did not go to places where the compositional factors that promote inequality had high values. In 1970 return migration was concentrated in the Mississippi Delta and within the territory known as the “black belt,” illustrated in Figure 3. By comparison, return migration in 2000 was mostly concentrated in the westernmost part of the South where black population concentration was historically low. Analysis of spatial autocorrelation in return migration indicates a weak and non-significant Moran’s I value in 1970 ($I=0.002$, with a first-order queen contiguity spatial weights matrix) and a stronger and statistically significant value in 2000 ($I=0.16$, $p < 0.001$). Moran’s I is similar to a Pearson correlation coefficient in terms of magnitude and direction (Moran 1950). The pattern of settlement changed and strengthened over the Return Migration period, with implications for understanding racial inequality in “new” and “old” destinations.

[Figure 3: Return Migration and County Racial Inequality in Poverty, 1970-2000]

The data do not permit us to conclude that migration is causally related to the compositional factors, but we can assert that higher levels of return migration occur in places with lower values on black population concentration, black unemployment, and the proportionate concentration of less educated blacks. Moreover, drawing on selection research, we know that individual return migrants are generally positively selected (Vigdor 2002, 2006). We also know that total in-migration to the South is heterogeneous and that migrants who return “home” have a higher odds of living in poverty relative to migrants to other southern destinations (citation suppressed). The county-level patterns we observe are consistent with results of individual-level studies. Focusing on the aggregate-level enables us to better articulate the structural dynamics of the inequality-generating process. Return migration shapes racial inequality by changing and reinforcing the existing population size and characteristics.

What sets new and old southern destinations apart is the historical concentration of blacks and, related (Table 4), low black unemployment and high black education. New destinations tend to have lower inequality than old destinations. For instance, the average level of racial inequality among new destinations, counties with a black population less than the mean percent black for each respective census, was consistently lower than inequality among old destinations, counties with a black population greater than the respective decadal mean. The racial disparity in poverty among male-headed households was 3.74 in old destinations as compared to 2.03 in new destinations in 1970. Similarly, in 2000, the race gap was 1.87 for new destinations and 2.96 for old destinations. A comparable pattern was found for female-headed households, although the gap was smaller in both decades. Overall, then, racial inequality in poverty was higher in old destinations relative to new destinations.

Although lower in the later year, racial inequality persisted. How can we resolve the enduring racial inequality in new and old destinations? In new destinations, racial inequality in poverty might be explained by the absence of the proportionate representation of blacks in the labor queue given that black population concentration in these counties was already low. Despite high rates of return migration in these counties and the likelihood that migrants were endowed with high levels of human capital (Vigdor 2002, 2006; citation suppressed), the level of migration may have been insufficient to initiate an overflow of

blacks into better jobs. In this scenario, racial inequality in poverty may have persisted because return migrants contributed to the concentration of blacks at levels high enough to provoke a response from the dominant white race group and at levels too low to prompt high employment or, conversely, with levels of human capital too low to counterbalance the negative impacts of high black concentration. Similarly for old southern destinations, inequality might have been due to a rate of return migration that was not large enough to initiate an overflow of blacks into (better) jobs, or the in-flow was comprised of migrants who possessed non-competitive labor qualifications (i.e., low education). However, in this scenario, racial inequality persisted because there was not sufficient in-migration to significantly change the population composition and, in turn, alter existing inequality-generating dynamics rooted in black concentration.

DISCUSSION

The South has experienced a steady increase in net migration and a continual decline in racial disparity in poverty since 1970. Research on black-white inequality has focused on population composition as a primary inequality-generating force. Existing research, however, has overlooked the importance of migration in shaping population composition and, in turn, local-area inequality. Our research extends traditional models of inequality to examine how migration is associated with racial differences in economic vulnerability, drawing primarily on migration theories. We find that migration is associated with declines in southern racial inequality during the period of Return Migration most importantly by shaping the inequality-promoting influence of high black population concentration and low black education.

Consistent with the compositional threat thesis, racial inequality in poverty is higher among counties with a larger relative black population. However, counties within a cluster of high black concentration tend to have lower inequality, suggesting that population size loses its stigmatizing effect among counties in areas with a relatively large black population. This result builds on earlier work that finds threshold effects by extending the definition of the relative size of the black population to the larger geographical context. Results also demonstrate that the selection process embedded in migration

contributes to inequality in poverty. Counties with a high proportion of low-educated blacks tend to face higher racial inequality as compared to counties with a lower proportion. These patterns apply to inequality in poverty among both female- and male-headed households.

Mixed support is found for the queuing thesis. Black unemployment is related to inequality among male-headed households, but not among female-headed households. Moreover, the association for male-headed households is attenuated by black concentration; as the black population increases, black unemployment increases.

On a general theoretical level, our results provide knowledge about how migration affects change in local area stratification for different types of places. We acknowledge that considerable heterogeneity in migrant profiles is masked by the broad measure of black in-migration from the non-South (citation suppressed). Yet we can deduce the implications of such heterogeneity by considering the settlement patterns within the larger black in-migration stream. Earlier research on the trends in regional migration show the Return Migration to the South began around 1970 as the Great Migration period came to a close (Robinson 1990). The southern-bound migration stream gained momentum over time and was considerably larger in 2000 than 1970 (Adelman et al. 2000; Falk et al. 2004). We show the broadly defined return migration was largely experienced by “new” destinations rather than “old” destinations. Patterns of in-migration grew stronger over the period as black in-migrants increasingly settled in counties that were not historically home to high concentrations of blacks. The largest in-migration rates were concentrated in western Texas, counties that had historically low proportions of black residents. By comparison, in-migration was lower in the Delta region, counties that had historically high concentrations of black households.

Results are foundational for understanding inequality in new and old destinations. Areas with a historically high concentration of blacks tend to have lower rates of black in-migration and higher inequality. These data do not permit us to draw causal conclusions. However, we can conclude that southern places with higher black in-migration tend to have lower values on all inequality-promoting factors, including black concentration. Analysis of the spatial distribution of return migration shows that

return migration is more heavily concentrated in areas with a historically low black concentration. Together, the findings suggest that while black concentration remains positively associated with inequality, consistent with the threat thesis, the levels of black in-migration to destinations with a historically low black concentration are not sufficient to invoke a negative reaction from the dominant white race group. Alternatively, or perhaps additionally, places with historically low black concentration may have a racial climate that is more conducive to equality compared to areas with a high concentration, which is often linked to dependence on slavery (Swanson et al. 1994). Future studies should arbitrate the reasons for such differences in the dynamics between new and old destinations.

By examining the pathways through which migration operates, our results emphasize that a theoretical framework of black-white inequality that incorporates the influence of migration is necessary to gain a comprehensive understanding of area-level inequality. Our study is a first step in articulating the impact of population redistribution on area inequality. Further research about the interrelationship between migration and the labor force as well as the influence of the area-level relationships on household inequality in poverty would provide additional insight on the role of migration in theorized racial inequality-generating processes, especially in terms of racial queuing theory and theories attempting to link micro- and macro-level processes. Continued analysis of the return migration to the South is critical for determining anti-poverty policies because migration shapes area population composition and the overall spatial distribution and, thus, unequally changes or reinforces the magnitude and the distribution of poverty for people and places.

Our results also highlight the significance of analyzing migration as a heterogeneous process. Although our conceptual argument is centered on the role of return migration, measured as black in-migration from non-southern counties, we recognize the potential influence of the relationships between in-flows and out-flows from southern and non-southern counties. We can discuss the role of the return migration as it operates through compositional factors only after accounting for corresponding in-migration among whites from non-southern counties, the in-migration of black southerners, and the out-migration of black and white southerners to southern and non-southern counties. Like return migration,

these contemporaneous migration flows are associated with racial inequality in poverty. Although beyond the scope of the current study, our results help identify avenues for future research on the contradictory effects of the separate components of the larger migration system including the potential conditioning influence of the various streams.

Finally, important gender differences emerge in our results and suggest that much of the story of declining inequality in southern poverty is due to changes experienced by area male-headed households. The narrowing of the race gap in poverty rates is due to a decline in poverty among black households, not an increase among white households. The most significant declines over the Return Migration period were found for black male-headed households followed by white male-headed households. Poverty also declined among female-headed households, yet at significantly lower rates. The race gap in poverty rates was comparable for female- and male-headed households in 1970, but gendered trends in poverty translated into racial disparity for male-headed households at 60% of the gap reported for female-headed households in 2000.

Migration had the same basic relationship with inequality in poverty for area female- and male-headed households. Gender differences, however, were found in the overall magnitude of the association. Migration ameliorated inequality through its association with local-area compositional factors to a larger extent for inequality among male-headed households. Our findings provide additional motivation for future research to unpack the labor dynamics that promote or reduce local area racial inequality in poverty, especially in terms of persistent racial differences in labor force participation and the gendered nature of these patterns in light of observed changes in the racial and gender composition of southern-bound migrants (Falk et al. 2004; Hunt et al. 2008).

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ENDNOTES

¹ County boundaries in 2000 were adjusted to reflect 1970 units.

² Race-sex-specific poverty rates are not available for all households in 1970. We use data on poverty status by family type by presence of related children made available by the NHGIS to calculate a race-sex-specific poverty rate for family households by male-headed and female-headed family type. To compare 1970 and 2000, we collapsed family type categories in the 2000 census to match the categories

in 1970. Categories in the 2000 census are married, male with no spouse, and female with no spouse. We recoded both married and male with no spouse as “male-headed” and female with no spouse as “female-headed.”

³ Categories are based on the county typologies reported by the USDA Economic Research Service (<http://www.ers.usda.gov/Data/TypologyCodes/>). Due to a lack of comparable data between decades, we constructed our own set of county typology codes for metropolitan status, farm-, mine-, manufacturing-, government-, and service-dependence, and non-specialized economic dependence from the 1970 Census of Population and Housing and Census 2000. Restricting our focus to the level of employment for county-years, employment totals were aggregated and relevant proportions were calculated for each industry and county-year. We recoded each value into a binary indicator using the thresholds provided in the ERS methodology to produce county typology codes, calculated on the basis of employment levels.

⁴ These data are from “Black Elected Officials” published by the Joint Center for Political and Economic Studies. Drawing from Beggs et al. (1997), the BEO variable is the number of black elected officials weighted by the black population age 18 years and older. We calculated the total number of blacks age 18 years and older for the South and determine what proportion each county contributes to this total. We then use the calculated proportions to weight the number of black elected officials in each county.

⁵ We opt for a mixed effects mode since there is not presently a sufficient statistic for conditioning fixed effects out of the likelihood function, although semi-parametric approaches have been developed (Honoré 1992).

⁶ Correlations between the migration rates are small, although the bivariate association between black return and black south-to-south migration is 0.75. VIFs showed that black return and black south-to-south migration capture different processes (VIFs were well below 10).

⁷ We capped total out-migration at 1.0 to reflect that a county cannot lose more than 100% of its population. We permit in-migration variables to exceed 1.0 since it is possible for the number of in-migrants to exceed the number of persons already at destination. Numerators and denominators for each year are race-specific which, in part, is why the reported in-migration rates are so high.

Table 1: County Race-Specific Poverty Rates by Household Type, 1970 and 2000

	Poverty (%)		Difference	% Change
	1970	2000		
Black Female-Headed	59.5	37.6	-21.9	-36.8
White Female-Headed	39.1	27.4	-11.7	-30.0
Black Male-Headed	36.4	13.5	-23.0	-63.1
White Male-Headed	16.3	7.2	-9.1	-55.7

Table 2: Estimated Racial Inequality in Poverty for Female-Headed Households, 1970 and 2000

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Return Migration Rate (Black, Non-South)	-0.0004*** (0.0001)	-0.0002** (0.0001)	-0.0004*** (0.0001)	-0.0003*** (0.0001)	-0.0002* (0.0001)	0.0001 (0.0001)
% Black		0.4535*** (0.0165)			0.3648*** (0.0175)	0.3479*** (0.0177)
Spatially-lagged (SL) % Black		-0.0101*** (0.0012)			-0.0104*** (0.0012)	-0.0099*** (0.0012)
Black Unemployment			0.0021 (0.0013)		0.0002 (0.0012)	0.0010 (0.0012)
SL Black Unemployment			0.0049* (0.0028)		0.0016 (0.0024)	0.0040 (0.0024)
% Black Less than High School Educated				0.0128*** (0.0007)	0.0076*** (0.0007)	0.0080*** (0.0007)
SL % Black Less than High School Educated				0.0147*** (0.0010)	0.0037*** (0.0011)	0.0031*** (0.0011)
Out Migration Rate (Total)						-0.0040** (0.0017)
In Migration Rate (White)						0.0027** (0.0011)
In Migration Rate (Black, South)						-0.0001** (0.0001)
Black elected officials						-0.0016 (0.0010)
% Hispanic						-0.0012 (0.0010)
Metropolitan Area						0.1201*** (0.0234)
Farming Dependent						-0.0582* (0.0351)
Mining Dependent						-0.0495 (0.0738)
Manufacturing Dependent						-0.0353 (0.0311)
Service Dependent						0.1775*** (0.0486)
Government Dependent						-0.0679** (0.0288)
Non-Specialized Dependence						0.0252 (0.0397)
Constant	1.1486*** (0.0185)	0.2591*** (0.0284)	1.1031*** (0.0263)	-0.9548*** (0.0783)	-0.3974*** (0.0793)	-0.3185*** (0.0949)
Year	-0.0552*** (0.0167)	-0.0236 (0.0167)	-0.0922*** (0.0226)	1.2394*** (0.0500)	0.4863*** (0.0611)	0.4195*** (0.0616)
<i>ui</i>	0.5283*** (0.0159)	0.2728*** (0.0146)	0.5249*** (0.0159)	0.2976*** (0.0161)	0.2379*** (0.0157)	0.2123*** (0.0169)
<i>eit</i>	0.4216*** (0.0089)	0.4229*** (0.0088)	0.4224*** (0.0089)	0.4491*** (0.0097)	0.4257*** (0.0090)	0.4264*** (0.0091)
County years	2,734	2,734	2,734	2,734	2,734	2,734
Counties	1,367	1,367	1,367	1,367	1,367	1,367

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.10

Table 3: Estimated Racial Inequality in Poverty for Male-Headed Households, 1970 and 2000

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Return Migration Rate (Black, Non-South)	-0.0005*** (0.0001)	-0.0003** (0.0001)	-0.0005*** (0.0001)	-0.0003*** (0.0001)	-0.0002* (0.0001)	0.0001 (0.0001)
% Black		0.4577*** (0.0197)			0.3260*** (0.0209)	0.3062*** (0.0207)
Spatially-lagged (SL) % Black		-0.0039*** (0.0015)			-0.0037** (0.0015)	-0.0024* (0.0014)
Black Unemployment			0.0033** (0.0016)		0.0004 (0.0014)	0.0015 (0.0014)
SL Black Unemployment			-0.0001 (0.0034)		-0.0021 (0.0029)	0.0005 (0.0029)
% Black Less than High School Educated				0.0167*** (0.0008)	0.0115*** (0.0008)	0.0121*** (0.0008)
SL % Black Less than High School Educated				0.0179*** (0.0012)	0.0044*** (0.0013)	0.0040*** (0.0013)
Out Migration Rate (Total)						0.0024 (0.0020)
In Migration Rate (White)						0.0020 (0.0013)
In Migration Rate (Black, South)						-0.0001** (0.0001)
Black elected officials						-0.0022* (0.0012)
% Hispanic						-0.0005 (0.0011)
Metropolitan Area						0.2346*** (0.0277)
Farming Dependent						-0.1029** (0.0411)
Mining Dependent						0.0569 (0.0855)
Manufacturing Dependent						-0.1047*** (0.0364)
Service Dependent						0.0633 (0.0569)
Government Dependent						-0.1117*** (0.0337)
Non-Specialized Dependence						-0.0156 (0.0465)
Constant	1.4786*** (0.0221)	0.4639*** (0.0337)	1.4578*** (0.0314)	-1.1710*** (0.0919)	-0.4340*** (0.0939)	-0.4645*** (0.1110)
Year	-0.2056*** (0.0197)	-0.1649*** (0.0199)	-0.2226*** (0.0267)	1.4227*** (0.0582)	0.5785*** (0.0717)	0.5187*** (0.0716)
<i>ui</i>	0.6367*** (0.0185)	0.3325*** (0.0171)	0.6344*** (0.0186)	0.3789*** (0.0172)	0.3071*** (0.0171)	0.2652*** (0.0185)
<i>eit</i>	0.4968*** (0.0103)	0.5051*** (0.0105)	0.4971*** (0.0104)	0.5057*** (0.0107)	0.4931*** (0.0103)	0.4940*** (0.0105)
Observations	2,734	2,734	2,734	2,734	2,734	2,734
Number of d_id	1,367	1,367	1,367	1,367	1,367	1,367

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 4: Bivariate Associations between Return Migration and Local-Area Compositional Factors, 1970 and 2000

	Return Migration Rate	% Black	Black Unemployment
1970			
% Black	-0.0354	-	
Black Unemployment	-0.0256	0.1277 ***	-
% Black Less than High School Educated	-0.1009 ***	0.3641 ***	0.1844 ***
2000			
% Black	-0.1405 ***	-	
Black Unemployment	-0.0311	0.059 **	-
% Black Less than High School Educated	-0.2118 ***	0.5436 ***	0.0379

*** $p < 0.01$, ** $p < 0.05$

Figure 1: Estimated Racial Inequality in Poverty for Female- and Male-Headed Households, 1970-2000

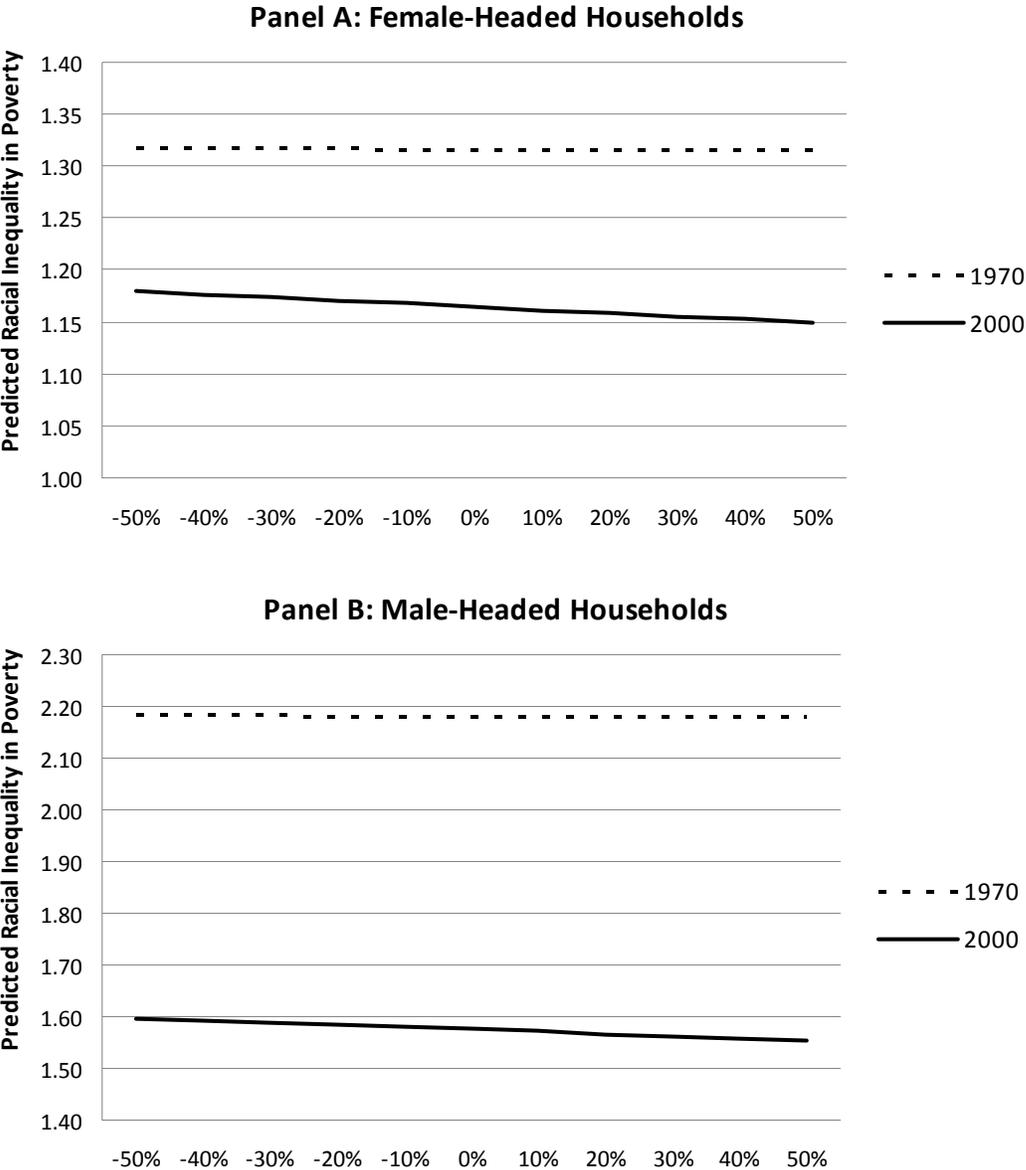


Figure 2: Estimated Racial Inequality in Poverty for Female- and Male-Headed Households Net of Local-Area Compositional Factors and Covariates, 1970-2000

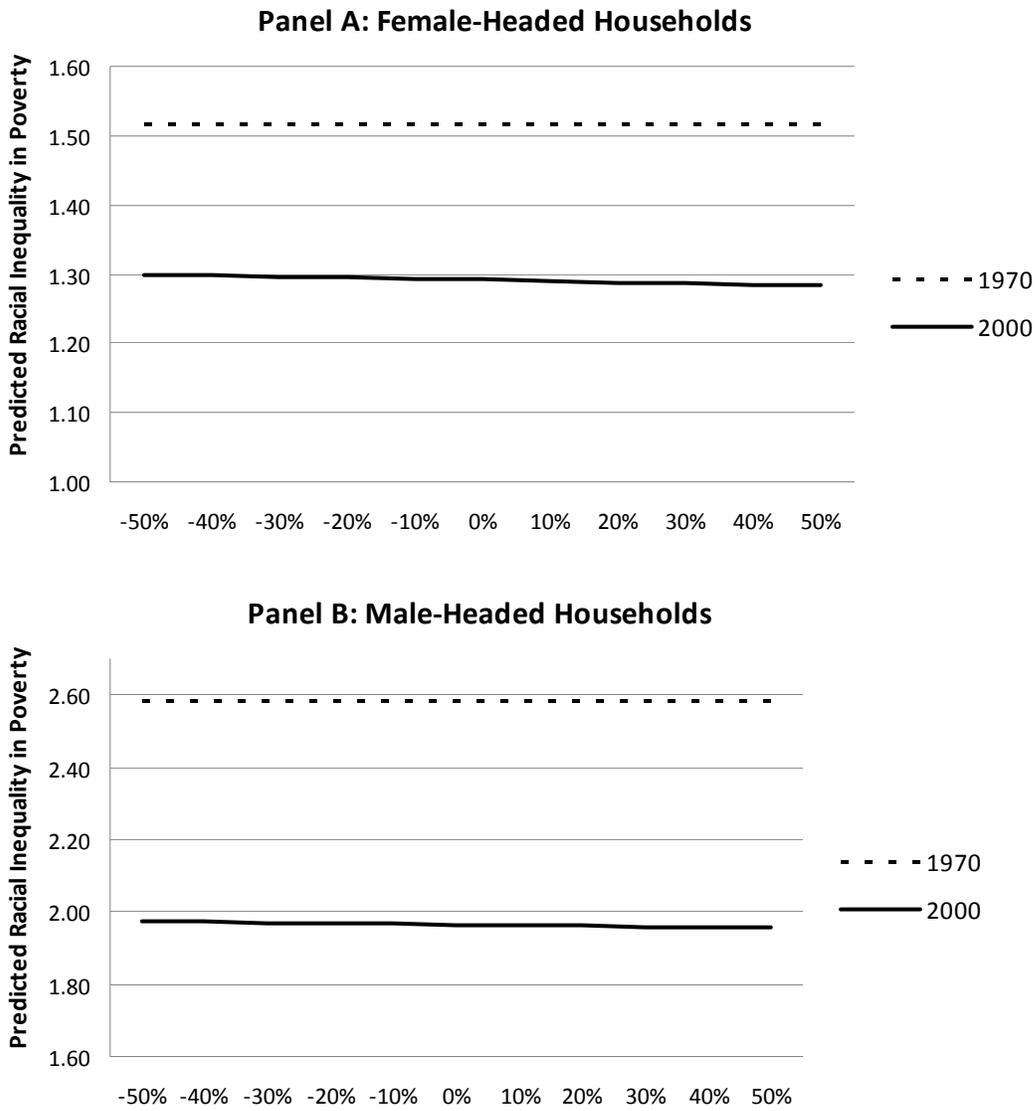
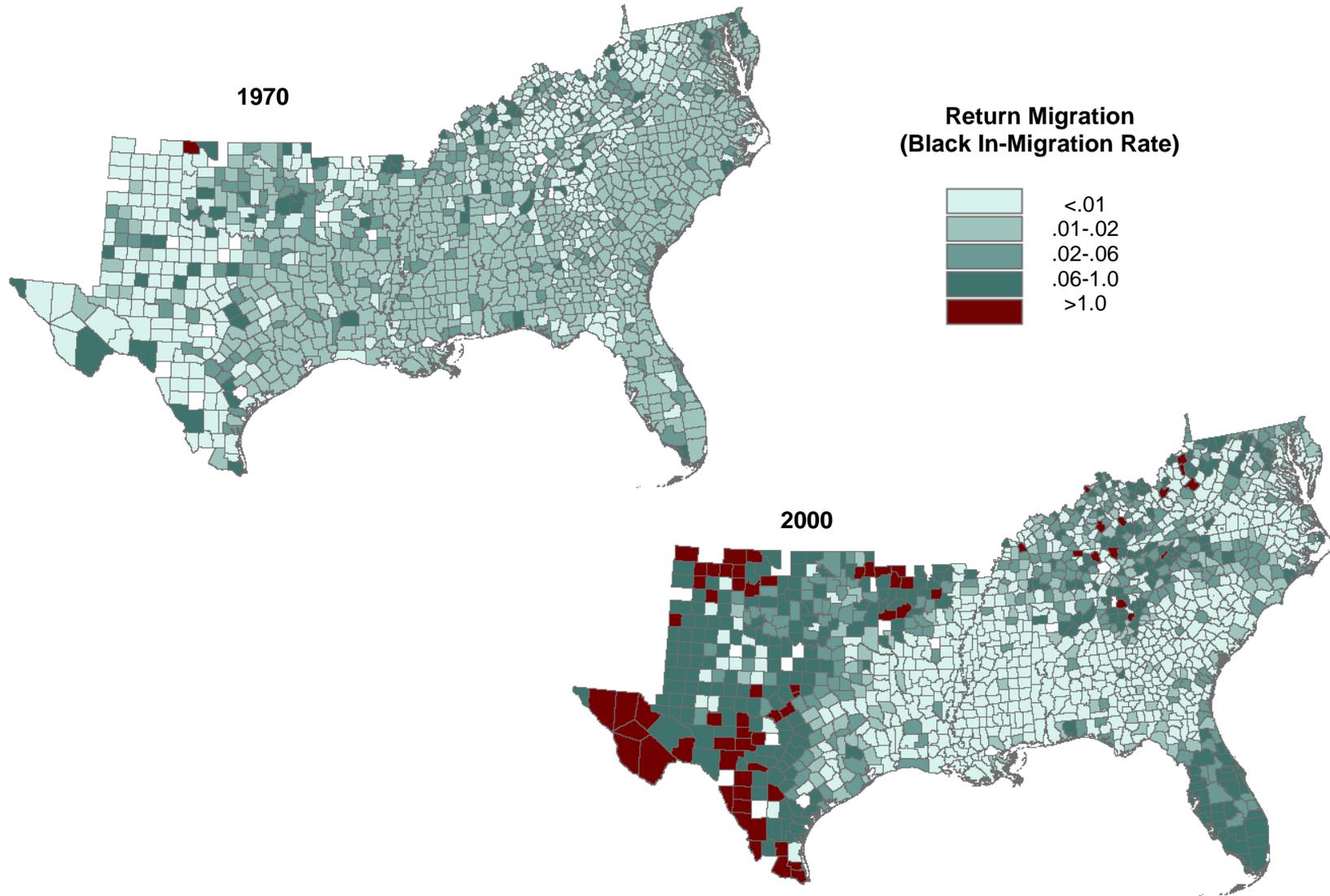


Figure 3: Return Migration and County Racial Inequality in Poverty, 1970-2000



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