# Race and Place Differentials of Poverty and Their Determinants: A Comparative Analysis of Poverty in the Texas Borderland and the Lower Mississippi Delta

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In 1967, at the height of America's War on Poverty, the President's National Advisory Commission on Rural Poverty issued its report, The People Left Behind. In this report, the Commission noted that not only were rural poverty rates substantially higher than those in urban areas, but that those places characterized by the greatest economic distress were in the rural South and Southwest and, with the exception of Appalachia, were characterized by high concentrations of racial and ethnic minorities. Nearly 40 years after issuing its report, the observations of the Commission remain sadly unchanged. The two poorest regions in the United States continue to be the Texas Borderland, characterized by a highly concentrated Latino population with a strong immigrant presence (primarily of Mexican descent), and the Lower Mississippi Delta, characterized by a highly concentrated black population. The Borderland and the Delta have long been the two most economically distressed regions of the country. In fact, most of the counties in the two regions are designated as "persistent poverty" counties by the Economic Research Service of the USDA (i.e., 20 percent or more of residents classified as poor as measured by each of the last four censuses, 1970, 1980, 1990, and 2000) (see Figure 1). In 2000, all but 7 of the 133 Delta counties had poverty rates exceeding the national average; the same was true of 40 of the 41 Borderland counties. Indeed, of the nation's 100 poorest counties, 48 are located in one of these two regions (16 in the Borderland and 32 in the Delta).

While empirical attention has been paid to persistently poor regions of the country, there is an absence of comparative research examining the experiences of racial/ethnic minority groups in such places.

This paper has two main objectives: (1) to develop a comparative model to determine whether and, if so, how the patterns of poverty differ between the Borderland and the Delta; and (2) to investigate differences in the mechanisms that influence poverty rates across racial and ethnic groups.

## **Overview of Literature**

While a significant body of poverty research has been accumulated over the last half century, one of the newest developments concerns the importance of place in understanding socioeconomic stratification and, more specifically, poverty. In particular, social scientists have observed enduring links between geographic location and poverty (Brown and Warner 1991; Friedman and Lichter 1998; Glasmeier 2002; Lobao 1990; Lobao and Saenz 2002; Lyson and Falk 1993; Massey and Denton 1993; Massey and Eggers 1990; Rosenbaum et al. 2002; Rural Sociological Society Task Force on Persistent Rural Poverty 1993; Saenz and Thomas 1991; Tickamyer and Duncan 1990; Weinberg 1987). For example, research has identified pockets of persistent poverty in the United States, including Appalachia, the Mississippi Delta, the Ozarks, the Texas Borderland, and Native American reservations. With the exception of Appalachia and the Ozarks, these places are home to concentrated populations of rural racial/ethnic minorities, who face escalated inequality and socioeconomic hardships due to the historical legacies of these locations (Saenz 1997a; Snipp 1996; Swanson et al. 1994).

While empirical attention has been focused on persistently poor regions of the country, there continues to be an absence of comparative research examining the conditions of racial and ethnic minority groups in such places, including Latinos and African Americans. Thus, we find a body of research that focuses on the Latino population along certain parts of the Texas border (Davila and Mattila 1985; Fong 1998; Maril 1989; Saenz and Ballejos 1993; Tan and Ryan 2001) and one that focuses on the black population in the Delta (Allen-Smith et al. 2000; Duncan 1997, 2001; Kodras 1997) and the Black Belt (Allen-Smith et al. 2000; Falk and Rankin 1992; Rankin and Falk 1991; Wimberley and Morris 2002). Yet, we do not find any research in the literature that compares the poverty experiences of Latinos and blacks living in persistently poor areas (for an exception based on a brief descriptive piece, see Shaw 1997). The present paper aims at filling this void.

Our comparative approach allows us to assess the extent to which there are commonalities in the relationships between selected predictors and poverty rates among the various population groups. The selected characteristics used in the analysis (elaborated below) are drawn from the poverty literature and encompass a variety of dimensions (e.g., Hirschl and Brown 1995) such as economic structure, family/household structure, demographic structure, human capital, minority concentration, and metropolitan (metro)/nonmetropolitan (nonmetro) location. For example, we know that poverty at the aggregate level is negatively associated with the prevalence of manufacturing (or industrial structure) (Brady and Wallace 2001), employment (Cotter 2002; Slack and Jensen 2002), population growth, and educational attainment (Saenz 1997a),

while poverty is positively associated with the prevalence of households with unmarried/unpartnered females (Albrecht et al. 2000; Goe and Rhea 2000; Lichter et al. 2003; Lichter and McLaughlin 1995), relative size of minority populations (Saenz 1997a; Swanson et al. 1994), population youthfulness, and nonmetro location (Jensen and Tienda 1989; O'Hare 1988; Parisi et al. 2003; Rank and Hirschl 1988; Rural Sociological Society Task Force on Persistent Rural Poverty 1993; Saenz and Thomas 1991; Singelmann et al. 2002). However, most of those studies either focused on the total population, one race/ethnic group, or a single region. In the paper we will model the effects of a broad set of determinants on the poverty rate of various race/ethnic groups and in the two poorest regions of the country. As noted below, our preliminary findings show that the correlates of poverty differ in substantial ways across race/ethnic groups.

Given the different historical legacies of the two regions, a comparison of what affects poverty among their populations is highly policy relevant. The social and economic positions of Latinos in the Borderland and African Americans in the Delta have been firmly rooted in the historical dynamics of racial and ethnic relations in these places. Indeed, rural and economic development has bypassed these regions, thus assisting in the persistently-poor nature of these places and their people.

We believe that our results can have important implications for public policies aimed at reducing poverty and increasing economic self-sufficiency across racial/ethnic groups and in the areas of our country suffering from the most intractable and persistent poverty.

# **Research Hypotheses**

In the paper, we conduct a variety of analyses, estimating the effects on poverty for both regions combined as well as separately. We expect to show that poverty rates will be higher for Latinos and blacks than for whites. We further expect that the disparity will increase with increases in levels of poverty. Thus, in high poverty counties in the Borderland we expect that the ratios of Latino-to-white poverty rates will be greater than in low poverty counties in the Borderland. A similar expectation exists regarding the ratio of black-to-white poverty in high and low poverty counties in the Delta. Moreover, we expect that substantial differences exists in the correlates of poverty among various family types of poor populations. While this differentiation is not central to the present paper, we will incorporate some results from other analyses that we are currently carrying out in which we examine the variance in poverty among family types. Thus, in addition to the overall poverty rate for each race/ethnic group, we expect to contrast those findings with others that pertain to specific family types. Finally, we will test an assortment of substantive hypotheses examining the effects of economic structure, family structure, demographic structure, human capital, and minority concentration, on racial/ethnic minority and majority poverty, as well as on the ratio of the two. We expect that our models will explain less variance in the poverty rates of racial/ethnic minorities than they will for whites.<sup>1</sup> We also expect, given our preliminary findings, that nonhispanic and minority poverty responds to quite a different set of structural factors.

<sup>&</sup>lt;sup>1</sup> Note that for the purpose of this paper racial/ethnic minority status refers to Latinos and blacks, not to the racial/ethnic group that is the numerical minority in a particular region. As discussed in the following section, in many counties in the Borderland and Delta whites are the numerical minority.

### **Research Design, Data, and Methods**

The Borderland stretches from El Paso in the west along the Rio Grande River to Brownsville in the east (see Figure 1). Following Saenz (1997b), we include all counties in this region whose largest city is within 100 miles of the U.S.-Mexican border. Latinos represent the largest racial/ethnic minority group in this region, making up 80.2 percent of the total population. In fact, Latinos are the numerical majority in 30 of the 41 counties in the Borderland, reaching as high as 98 percent in several of the Borderland counties.

The Delta is defined according to the geography delineated by the Lower Mississippi Delta Development Commission, as established by the U.S. Congress in the 1980s (now the Delta Regional Authority). For the proposed project, we restrict the analysis of county-level poverty to the core Delta area made up of Arkansas, Louisiana, and Mississippi (see Figure 1). In these three states, 133 counties belong to the Delta area. Blacks are the largest racial/ethnic minority group in the Delta, making up 35 percent of the total population. In 30 of the 133 counties in the Delta, blacks represent a majority of the population, reaching as high as 86 percent in some counties.

Using data from the 2000 Census and other data sources, we will examine the patterns and correlates of poverty in these two regions. The dependent variable will be the poverty rate of nonhispanic whites, Latinos, and blacks. Depending on the outcome of separate analyses that focus on family types, we will include one dependent variable from those analyses (e.g. poverty among female-headed single-parent households). The independent variables of primary interest will be the relative size of the Latino populations in the Borderland

counties, and the relative size of the non-Hispanic black population in the Delta counties. We will also focus on the influence of immigration, by paying attention to the relative size of the foreign-born population in a county as well as the percentage of foreign-born that have become naturalized citizens.

Additional independent variables we plan to incorporate into our models can be categorized into four types: economic structure, family structure, demographic structure, and human capital. At least four variables will be used to measure the economic structure of a county: the percentage of the working age population employed in finance, insurance, and real estate (FIRE); the percentage of the working age population employed in manufacturing; the percentage of the working-age population employed in agriculture; and the percentage of the working-age population that is employed (as opposed to those who are unemployed, discouraged, or not in the labor force for other reasons). FIRE services and the employment rate have been show to depress poverty, whereas the percent of employment in agriculture has been shown to be positively associated with poverty (Singelmann 1978). The relationship between percent manufacturing and poverty has been found to be less clear (Mencken and Singelmann 1998).

At least two variables will be used to tap family structure: the percentage of families headed by married couples and the percentage of families headed by females with no spouse present. The demographic structure of a county will be measured by examining net migration rates and the natural increase/decrease of its population. At least three variables will be used to assess the influence of human capital variables on poverty: the percentage of the population 25 years of

age and older who are high-school graduates; the percentage of the population 25 years of age and older who are college graduates; and the percentage of the population 25 years of age and older who have less than a 9<sup>th</sup> grade education. In addition, we will estimate the effect of nonmetro status on the poverty rate of a county; and we will control for the percentage of the population under age 15.

The analyses will be conducted using Ordinary Least Squares (OLS) regression. Models will be run separately for the Delta and Borderland counties. The only difference between the Borderland and the Delta models concerns the minority population: Latinos in the Borderland and African Americans in the Delta. The OLS regressions will contain the county-level poverty rate as the dependent variable and as predictors, the relative size of the black (or Latino) population, the relative size of the foreign-born population, the variables comprising the four categories of correlates (economic structure, family structure, population structure, and human capital), the percentage of the population under age 15, and metro-nonmetro location.

Those separate models allow us to assess how the mechanisms influencing poverty differ across racial/ethnic groups. Before estimating the final OLS models we will examine a series of regression diagnostics to better address such statistical issues as multicollinearity, heteroscedasticity, skewed distributions, influential outlier counties, and other factors. We note as well that we will also control in our macro-models for spatial autocorrelation (Cressie, 1993; Griffith, 1988). Recent quantitative examinations of county-level poverty (e.g., White, Voss and Long, 2005; Voss, Long, Hammer and Friedman, 2004; Petrucci, Salvati and Seghieri, 2003) have shown that the level of poverty of a neighboring

spatial unit (such as a county) often has a statistically significant independent and positive effect on the poverty level of a given county, over and above the effects of the kinds of independent variables (discussed above) that we propose to incorporate in our explanatory models. Voss and colleagues (2004: 1) have correctly observed that formal tests for spatial autocorrelation "are important because regression models that exclude explicit specification of spatial effects, when they exist, can lead to inaccurate inferences about predictor variables." We therefore control for spatial auto-correlation when estimating our county-level models in the Borderland and Delta.

#### **Preliminary Findings**

To date, we have conducted some preliminary county-level analyses of poverty in the Borderland and Delta areas. In earlier research (Poston et al. 2005) we showed that the gap in poverty between whites and ethnic and racial minorities is greater in the Borderland (whites vs. Latinos, mainly Mexican Americans) and in the Mississippi Delta (whites vs. blacks) than for the nation as a whole. We also found that the poverty of Latinos and African Americans is especially pronounced in the core of the two regions (along the Mexican border for Latinos in the Borderland, along the Mississippi river for African Americans in the Delta). In contrast, nonhispanic whites in these core poverty areas tend to have a lower poverty rate than the average of the states to which those core counties belong. We further showed the importance of using selected poverty measures (i.e., poverty for various household and family types) for statistical analyses, because not all poverty measures are highly correlated. Among the

Borderland counties, for example, low education contributed to the total and family poverty rate, but not to female poverty. Similar differential effects on the different poverty rates were found for percent female employed and average household size. Our analyses for the Delta region showed, furthermore, that factors related to poverty differ in their effects by race. For example, counties with a relatively large producer-services sector (FIRE) tended to have lower rates of white poverty, but no such effect exists for black poverty. These examples demonstrate the importance of selecting appropriate poverty measures. Moreover, our findings regarding the differential effects on race by factors related to economic development clearly show the importance of examining poverty in a comparative perspective. Without such differentiation, one runs the risk of developing poverty-reduction strategies that likely by-pass one or more segments of the population.

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Figure 1. Persistent Poverty Counties in the Borderland and Delta