Race, Household, and Poverty:
A Comparative Study of Underdevelopment in the United States

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Introduction

Uneven development is both an international issue and a national concern. Among nations, sub-Saharan African countries, Haiti, or Somalia are falling further into poverty whereas South Asian countries have made substantial progress to reduce poverty. But uneven development within nation sometimes masked the overall improvement. Rural areas in many countries have long been neglected as a result of the urban bias of development. Despite China's spectacular economic development, many population groups in that country have been left behind. The emergence of a very rich upper class in Russia went hand in hand with the impoverishment of many Russians. Italy's South and North at times have seemed to be two very different countries.

In the United States, there have been three well-defined poverty regions: Appalachia, the lower Mississippi Delta, and the Texas Borderland. A clear historical context exists for the high poverty in those three regions. Appalachia is a mostly rural area with a heavy concentration of mining activity. The Delta is the core of the former plantation economy that was based on slavery. And the Borderland is heavily Latino; low-paid agricultural and small industry jobs, continued discrimination against Latinos, and steady immigration have contributed to a long history of poverty in that region. While development programs enacted in the 1960s—as part of the government's War on Poverty—succeeded in reducing poverty in Appalachia, few such efforts were undertaken in the Delta and the Borderland. As a consequence, those two regions are the home to a majority of the counties with the highest U.S. poverty rates. Similarly, a

majority of the counties in the two regions are persistently poor, i.e., their poverty rates have been above 20 percent for the past 30 years (see Figure 1).

The purpose of this paper is to estimate the correlates of poverty among counties in the two regions. The objectives are (a) to better understand the dynamics of poverty for the two historical poverty regions; (b) to investigate possible race/ethnicity differentials of poverty; and (c) to examine the factors that explain poverty for different family types. To that end, we built a model that is informed by development and poverty theory.

Past Research

While a significant body of poverty research has 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 (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 the homes of concentrated populations of rural racial/ethnic minorities, who face escalated racial/ethnic inequality and socioeconomic hardships due to the historical legacies of these locations (Saenz 1997a; Snipp 1996; Swanson et al. 1994).

While empirical attention has 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 blacks. There is 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 find little research 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).

Empirical Model

Employment structure. A large body of research has articulated a significant relationship between the employment structure of places and prevailing poverty levels. For example, research has shown the percentage of the working-age population employed in the manufacturing sector (Cotter 2002; Rupasingha and Goetz 2007) and the finance, insurance, and real estate (FIRE) sector (Parisi et al. 2003; Rupasingha and Goetz 2007; Singelmann 1978) are negatively associated with aggregate poverty levels. Further, research has shown that the percentage employed in agriculture is positively related to poverty (Albrecht, Albrecht, and Albrecht 2000; Levernier, Partridge, and Rickman 2000), though there is also evidence that agricultural employment is associated with lower levels of poverty in the South (Rupasingha and Goetz 2007). Lastly, research has found the percentage of the working age population that is employed (versus unemployed or out of the labor force) is negatively associated with poverty (Cotter 2002; Gunderson 2006). We therefore examine the following four variables related to county-level

employment structure: the percentage of the working age population that is employed, and the percentages employed in the agricultural, manufacturing, and FIRE sectors.[1]

Population structure. Several variables related to the population structure of places have been demonstrated to be important predictors of poverty. For example, positive net migration can serve as a proxy for a strong economy. Research has found that migrants are drawn to areas with stronger job opportunities (Frey and Liaw 2005), while areas with less in-migration are associated with higher poverty rates (Rupasingha and Goetz 2007). Age structure has also been shown to be an important correlate of poverty, with places characterized by a younger age structure tending to have higher poverty (Cotter 2002; Rupasingha and Goetz 2007). Immigration is another factor that influences poverty. For example, research has found poverty among Mexican immigrants exceeds that of their native-born counterparts at the individual level (Crowley, Lichter, and Qian 2006). However, at the aggregate level the percentage of the population that is foreign-born has actually been shown to be associated with lower levels of poverty (Rupasingha and Goetz 2007), likely reflecting the "pull" of immigrants to more attractive labor markets. Lastly, places characterized by higher minority concentrations also tend to be characterized by higher poverty rates (Friedman and Lichter 1998; Rupasingha and Goetz 2007; Saenz 1997b; Voss et al. 2006). For these reasons, we examine four variables related to county-level population structure: net migration, the percentage of the population that is under 15 years of age, the percentage foreign-born, and the percentage that are members of the predominate racial/ethnic minority group (i.e., percent Latino in the Borderland and percent black in the Delta).

[1] We also assessed the influence of low-wage service sector employment, but found the set of variables outlined above to hold the best explanatory power.

Human capital. A large body of literature has demonstrated significant linkages between aggregate-level human capital and poverty, with areas characterized by lower human capital being home to higher poverty rates (Friedman and Lichter 1998; Rupasingha and Goetz 2007; Voss et al. 2006). English-language fluency has also been identified as an important determinate of poverty among immigrant populations (Crowley, Lichter, and Qian 2006; Davila and Mora 2000; Davila, Bohara, and Saenz 1993). We therefore examine two variables related to county-level human capital: the percentage of the population aged 25 years and older with less than a high school degree or equivalent, and the percentage of the population that does not speak English well or at all.

Residence. Finally, an extensive literature has examined the higher incidence of poverty in rural compared to urban areas (see Jensen, McLaughlin, and Slack 2003). We therefore consider nonmetro residence as a predictor of poverty.

Data and Methods

The units of analysis in our study are counties (133 in the Delta and 41 in the Borderland). We then estimate ordinary least squares (OLS) regression models to examine the way in which race/ethnic and family type-specific poverty is related to county-level employment structure, population structure, human capital, and nonmetro residence in each region.

Results

As illustration for this abstract, we present findings in four tables: model estimates for race/ethnicity specific poverty in the Borderland and the Delta (Tables 1 and 2), and estimates for family-type specific poverty in the same two regions (Tables 3 and 4). Those findings clearly

show that the mechanisms of poverty differ by region, race/ethnicity, and family-type. Thus, our findings strongly suggest that successful anti-poverty programs need to be place specific and target specific demographic groups in order to be successful.

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Table 1. Correlates of Family Poverty in the Borderland

Variables	Total	White	Black
% FIRE	-0.081†	-0.194**	-0.124*
% manufacturing	-0.117**	-0.302***	-0.150*
% agriculture	0.044	-0.087	0.035
Net migration	-0.075*	-0.046	-0.077
% < high school	0.206***	0.587***	0.159*
Nonmetro	0.143***	0.223***	0.115*
% under age 15	0.143**	0.071	0.389***
% employed	-0.184**	-0.095	-0.519***
% female-headed	0.471***	0.193**	0.187**
Intercept	5.783	5.463†	18.721***
Adjusted R-square	0.902	0.727	0.757

Note: Cell entries are standardized OLS coefficients. Race-specific variables are used for the race-specific models with the exception of net migration and nonmetro. (N=119)
† p < .1 * p < .05; ** p < .01; *** p < .001

Table 2. Correlates of Family Poverty in the Delta

Variables	Total	White	Black
% FIRE	-0.081†	-0.194**	-0.124*
% manufacturing	-0.117**	-0.302***	-0.150*
% agriculture	0.044	-0.087	0.035
Net migration	-0.075*	-0.046	-0.077
% < high school	0.206***	0.587***	0.159*
Nonmetro	0.143***	0.223***	0.115*
% under age 15	0.143**	0.071	0.389***
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Note: Cell entries are standardized OLS coefficients. Race-specific variables are used for the race-specific models with the exception of net migration and nonmetro. (N=119)
† p < .1 * p < .05; ** p < .01; *** p < .001

Table 3. Standardized OLS Coefficients for Lagged Panel Models of County-Level Poverty by Family Type in the Borderland

	Employment Structure		Population Structure		Human Capital		Residence		Reduced Full Model	
Independent Variables	**MC**	**SF**	**MC**	**SF**	**MC**	**SF**	**MC**	**SF**	**MC**	**SF**
Percent employed	0.228 †	-0.102								
Percent agriculture	-0.042	-0.093								
Percent manufacturing	0.063	-0.069								
Percent FIRE	-0.043	-0.473 *								-0.343 *
Net migration			0.009	-0.186						
Percent under age 15			0.168	-0.036						
Percent foreign-born			0.183 *	0.041					0.211 **	
Percent minority			-0.132	0.342						
Percent less than h.s.					-0.149	0.677 *				0.484 **
Percent no English					0.238 †	-0.062				
Nonmetro							-0.125 *	0.063		
1990 family-type poverty	1.094 ***	0.285	0.797 ***	0.250	0.859 ***	0.089	0.921 ***	0.580 ***	0.789 ***	
Adjusted R-square	0.875	0.442	0.894	0.352	0.880	0.441	0.887	0.304	0.895	0.529

Source: 1990 and 2000 U.S. Census Summary Files.

Notes: MC = married couple-headed families with related children under age 18. SF = single female-headed families with related children under age 18. Percent minority = percent Latino. The full model was reduced via stepwise selection. N=38.

† < p .10; * p < .05; ** p < .01; *** p < .001

Table 4. Standardized OLS Coefficients for Lagged Panel Models of County-Level Poverty by Family Type in the Delta

	Employment Structure		Population Structure		Human Capital		Residence		Reduced Full Model	
Independent Variables	**MC**	**SF**	**MC**	**SF**	**MC**	**SF**	**MC**	**SF**	**MC**	**SF**
Percent employed	-0.129 †	-0.160 †							-0.126 *	-0.253 **
Percent agriculture	0.228 **	0.057							0.210 **	
Percent manufacturing	-0.044	-0.015								
Percent FIRE	-0.040	-0.124								
Net migration			-0.176 **	-0.338 ***					-0.112 *	-0.340 ***
Percent under age 15			0.030	0.000						0.219 *
Percent foreign-born			-0.081	-0.154 *						
Percent minority			-0.053	-0.164 †						-0.267 **
Percent less than h.s.					0.158 *	0.197 **				
Percent no English					0.009	0.046				
Nonmetro							0.072	0.174 **		0.229 ***
1990 family-type poverty	0.561 ***	0.563 ***	0.739 ***	0.611 ***	0.691 ***	0.607 ***	0.776 ***	0.667 ***	0.560 ***	0.353 ***
Adjusted R-square	0.678	0.543	0.669	0.590	0.657	0.543	0.652	0.546	0.691	0.641

Source: 1990 and 2000 U.S. Census Summary Files.

Notes: MC = married couple-headed families with related children under age 18. SF = single female-headed families with related children under age 18. Percent minority = percent black. The full model was reduced via stepwise selection. N=133.

† < p .10; * p < .05; ** p < .01; *** p < .001

Figure 1. Poverty in the Borderland and Delta Relative to the National Average in 2000

Source: 2000 U.S. Census Summary Files