Long-Term Poverty Among Black and White Children and its Demographic Correlates: 1973-1999[1]

Lloyd D. Grieger
Gerald R. Ford School of Public Policy
Department of Sociology
University of Michigan – Ann Arbor
lgrieger@umich.edu

Jessica JB Wyse
Gerald R. Ford School of Public Policy
Department of Sociology
University of Michigan – Ann Arbor
jwyse@umich.edu

DRAFT: March 6, 2008

[1] This research was funded by the National Poverty Center at the Gerald R. Ford School of Public Policy at the University of Michigan. The authors would like to thank Mary Corcoran, Sheldon Danziger, Robert Schoeni, Tecla Loup, Greg Duncan, Maria Cancian, Sasha Achen, and staff members of the Panel Study of Income Dynamics for their assistance and comments. Lloyd Grieger would like to thank Yu Xie and members of the Quantitative Methodology Program for their feedback. All opinions expressed here are solely those of the authors. For more information about this research, please contact Lloyd Grieger at lgrieger@umich.edu or Jessica Wyse at jwyse@umich.edu.

Abstract

Using the Panel Study of Income Dynamics we construct a post-tax, post-transfer measure of income to estimate long-term poverty rates among black and white children from the 1970s to the 1990s. We decompose the income packages of long-term poor families over time to examine changes in income composition. Finally, we examine how demographic differences contributed to the racial gap in long-term child poverty. We find that long-term poverty rates increased for black and white children from the 1970s to 1980s and declined from the 1980s to 1990s for white children but remained stable for black children. As a result, the gap between black and white children's long-term poverty rates actually grew in the 1990s with black children almost 20 times more likely to be long-term poor than white children. Income packages of the long-term poor shifted from consisting of roughly equal parts wages and government assistance in the 1970s to a plurality of government assistance and wage supplements in the 1990s. More than half of the large racial gap in long-term poverty is explained by black-white differences in employment, with black-white differences in education, the number of children in a family, and family structure accounting for about 20% of the gap.

1. Introduction

Annual poverty rates for African-American children, though remaining disproportionately higher than that of whites, reached an historic low in the late 1990s.[2] Among all children, annual poverty rates rose between the 1970's and 1980's and then returned to 1970's levels during the 1990's economic expansion. Economic and policy analysts have attributed this decline in the 1990s to a combination of a tight labor market together with policy changes – the 1996 welfare reform, increases in the minimum wage, expansion of the Earned Income Tax Credit (EITC), and the State Child Health Insurance Program (SCHIP) -- which increased the availability of jobs for low-skilled parents, increased earnings in low-skilled jobs, and increased incentives to work for low-skilled parents, while decreasing incentives for low-skilled single mothers to choose welfare over work. Demographic factors also affected poverty, with rising education levels, decreased family size and a plateau in the rate of female headship in the nineties contributing to the decline in poverty (Lichter & Crowley 2003). While these factors contributed to a decline in the annual rates of childhood poverty, there has been no current

[2] The drop in African-American poverty should not obscure the large differential between the black and white annual poverty rates: even at the height of the economic expansion, the poverty rate for black families was 25% compared to 10% for whites. Among African-American female headed families the poverty rate *dropped* to 40% in 2000 (substantially higher than the 25% rate of white female-headed families). Further, median white family income in 2000 was $53,000 while median black family income was $31,000--the equivalent of median white family income in 1965 (using 2000 constant dollars) (Stoll 2005).

research investigating how-and if-rates of long-term childhood poverty have likewise declined over time.

Those in long-term (multi-year) childhood poverty are more likely to experience the sustained hardship and accumulated disadvantage that poverty measurement is a proxy for than are those who experience short-term spells of poverty. Rates of *long-term* childhood poverty remained disproportionately high for African-Americans through the late eighties (Duncan & Rodgers 1991, Eggebeen & Lichter 1991). In this paper, we explore whether rates of *long-term* childhood poverty dropped for children as did rates of annual poverty from the 1980s through the late 1990s. We also examine the black-white racial gap in probability of experiencing long-term childhood poverty and explore changes in the gap over time. We use a broader income concept to measure poverty and include the Earned Income Tax Credit (EITC) and food stamps as part of a family's total income. Our comprehensive income measure more accurately describes the totality of family and governmental resources as they have changed over time.[3] Finally, we seek to uncover the relative contribution of demographic and economic factors to differences in long-term poverty rates by race between the 1970s and 1990s.

2. Literature Review

Childhood poverty has long-term effects on both opportunities in adulthood and throughout the life-course. The long-term, negative implications of childhood poverty range from disparities in physical and mental health, access to nutrition and medical care, educational opportunities and resources, to heightened criminality in adulthood (Brooks-Gunn & Duncan 1997; McLloyd 1998). Poor children obtain less education, are three times as likely to drop out of school, are twice as likely to be in poor or fair health, to die as infants, to have a learning disability, to be hospitalized, and are twice as likely to repeat a grade or be expelled from school. Poor girls are twice as likely to have a teen birth, while poor boys work fewer hours, have lower wages, and spend more time idle than the non-poor. Children born and raised in poverty have rates of poverty in their twenties of 24% while those not born into poverty experience poverty rates of only 4%. (Brooks, Gunn & Duncan 1997; Corcoran 2001). Race also affects mobility

[3] We refer to the declining welfare caseloads, drop in the use of the food stamp program, and simultaneous rise in the benefits accrued under the Earned Income Tax Credit program.

among the poor: of children born in the lowest income stratum, movement out of this stratum is significantly less likely for African Americans than whites (Hertz 2004).

While roughly one-third of children will be poor at some point during their childhood, for most, that poverty will be transitory. Analysts estimate that roughly one in twenty children will be poor for extended periods (Blank 1997, Corcoran 2001, Duncan 1991). Long-term poverty has more serious repercussions for children's outcomes than does a single spell of poverty, as the affects of poverty are cumulative. Children in long-term poverty experience more negative outcomes in terms of school attainment, IQ and socio-emotional functioning (Furstenberg 2006; McLloyd 1998). Race differences in long-term childhood poverty are also larger than those in single-year poverty. Duncan (1991) reports that, although white children comprised 60 percent of all poor children in 1982, almost 90 percent of children who were poor in 10 or more years over the 15 year period 1968 to 1982 were African-American. Given the accumulated disadvantage experienced by the long-term child poor, a decline in its prevalence, or an alteration in the race gap is likely to have important and lasting consequences. Despite this, most research has focused on annual poverty rates.[4]

A number of demographic and economic factors linked to child poverty have changed in the past three decades. Non-marital childbirth is one of the strongest correlates of childhood poverty; this has risen substantially since the 1970's. (Primus 2002; Carlson et al 2005). Due in part to declining marital fertility, single-parent births now account for one-third of new births (Cancian & Reed 2005). Single headship among African-American families has been and remains substantially greater than that of whites; from the 1940's through the 1960's, the fertility rate for blacks outside of marriage was ten times that of whites. While the gap has narrowed, the percentage of black children in single-parent family arrangements remained at 51% in the mid-nineties, while the percentage for white children increased to 17% (Stoll 2005).[5] In spite of the rise in extra-marital fertility, increases in maternal education and declines in family size put downward pressure on the childhood poverty rate. The American population as a whole made great gains in high school and college completion, while Blacks made substantial progress

[4] With the important exception of Duncan & Rodgers (1991) which set the stage for our current investigation.

[5] Eggebeen & Lichter (1991) pose the important, and still unanswered, question, "Is changing family structure a "cause" of poverty or a consequence of the deteriorating economic circumstances of individuals and families?"

towards closing the racial gap in high school completion (Stoll 2005). In addition, fertility rates have been declining since the 1970s, falling from 115.4 to 70.0 births per 1000 black women and 84.1 to 65.3 births per 1000 white women aged 15-44 in 2000 (CDC Report 2000). The average expected family size for women was 2.2 children per woman in 1995, 2.2 in 1988, and 2.4 in 1982 (CDC Report 1997).

Economic and policy changes have also affected child poverty. Women have entered the workforce in increasing numbers, while men's wages, particularly those of workers with a high school degree or less, have stagnated (DHHS 2003). Duncan & Rodgers (1991) found a substantial reduction in reliance on father's earnings from the period 1967-1972 to 1981-1986, particularly for black children; this drop was attributed to both increases in female headship and declining job opportunities for low-skilled men. In addition, women's wages increased relative to men's across the seventies and into the nineties, in part due to the drop or stagnation of men's wages (Blau & Kahn 1997; Wetzel 1995).[6] In the late eighties, the falling contribution of father's earnings was compensated for by an increased reliance on governmental support programs, both an increase in the proportion of income from public assistance and particularly Food Stamps (Duncan & Rodgers 1991). As of the 1990's, welfare caseloads dropped sharply and the employment rate, annual earnings, and incomes of single mothers and low-skilled women rose.[7] The rise in employment was dramatic for single mothers and for less educated African-American women (Blank 2002; Meyer and Rosenbaum 2001). Low-wage work was made more lucrative by expansion of the Earned Income Tax Credit (EITC).

The Earned Income Tax Credit was created in 1975 to increase after-tax income for low-income families where one or more parent worked. It became a significant social policy tool upon expansion in 1986, 1990 and again in 1993 (Berlin 2000). By 1996 the EITC paid out more to families than did total federal expenditures on AFDC. In 2003 the program expended $34.4 billion to 19.3 million families. Because the official poverty rate was defined in the 1960s prior to the passage of the EITC, its expenditures are not reflected in the Census Poverty Rate. A difficulty in assessing the results of these policy changes lies in the reliance upon the official Census pre-tax, pre-Food Stamp poverty measure. The failures of the current US poverty line as

an accurate measure of poverty are widespread and well-known, and we repeat them only briefly here.

The US poverty standard was created in 1963 based on 1955 consumption data and price-indexed to match inflation. In 1963, the poverty line represented 50% of median income; today it is just 35% (Burtless & Smeeding 2001). The calculation of income includes all cash benefits, including transfer payments, but does not factor in non-cash benefits such as health care, housing subsidies or food stamps (Burtless & Smeeding 2001). Brady (2003) laid out recommended advances in poverty measurement that would benefit sociological literature. Two of these recommendations: accurately assessing taxes and transfers, and adequately accounting for the depth of poverty and inequality among those labeled poor, will be taken up in this piece. We use our comprehensive poverty measure to assess how children's rates of long-term poverty by race have changed over time, given the substantial economic, public policy and cultural changes that have occurred across this period.

3. Data and Methods

We use the Panel Study of Income Dynamics to investigate changes in long-term childhood poverty for three cohorts of children: (1) children aged 0-10 years old in 1974 who were observed in the PSID between 1974 to 1980, (2) children aged 0-10 years old in 1984 who were observed between 1984 and 1990, and (3) children aged 0-10 years old in 1994 who were observed between 1994 and 1999. We choose this age range and the corresponding observation periods to assure each cohort contains the broadest sub-sample of children while minimizing macroeconomic variation across cohort. Each resulting cohort contains children aged 0 through 17 throughout the observation period, time periods are evenly spaced to prevent overlap in cohort eligibility, and the proportion of time during a major economic contraction is minimized.[8] For the first cohort, family income is reported over the years 1973 to 1979; for the second, family income is reported between 1983-1989; and for the third, family income is reported

[8] Only the observation period for the 1970s cohort contains an economic contraction. The National Bureau of Economic Research defines economic contraction (or recession) as "a significant decline in economic activity spread across the economy, lasting more than a few months" and identifies 12/1960-2/1961, 12/1969-11/1970, 11/1973-3/1975, 1/1980-7/1980, 7/1981-11/1982, 7/1990-3/1991, and 3/2001-11/2001 as recession periods (National Bureau of Economic Research 2007).

between 1993-1998.[9] Respondents must have been observed in all years during the observation period in order to be included in the analyses. Table 1 shows the unweighted number of children in the analysis sample and weighted proportions by race and cohort.

[Table 1 About Here]

Overall Trends in Long-Term Childhood Poverty

First we estimate trends in annual child poverty for each year in the long-term-poverty analysis between the 1973-1979, 1983-1989, and 1993-1998 time periods. We find results comparable with those of the CPS. We then compute the incidence of long-run poverty for the pooled sample of black and white children and for each race group individually in each period using three alternate definitions of long-run poverty. Under each definition, we estimate the incidence of both long-term child poverty and deep LTCP which we characterize as having an *n*-year income-to-needs ratio below 1.0 and below 0.75, respectively. To correct for sample attrition and over-sampling of low-income and African American respondents, we use the individual core weights for the final year of the observation period provided in the PSID data file.[10]

Under the first definition, a child is defined as long-term poor if the ratio of the family's pre-tax cash income summed over the entire period to the official summed Census poverty threshold for that family is less than or equal to 1.[11] Equation (3.1) shows this calculation, where $(pretaxinc)_j$ is equal to the family's annual pre-tax cash income in year *j*, $(pov)_j$ is the average

[9] After 1996, the PSID went to biennial interviews. Thus for the first two cohorts, income is observed over all 7 years, while for the third cohort income is observed in only five years – 1993, 1994, 1995, 1996, and 1998.

[10] The "Core Sample" weights in the PSID reflect the addition of immigrants to the core sample in the mid 1990s. There are no members of the immigrant sample in our analyses, since respondents must have been observed in all years during the observation period and immigrants didn't become a part of the sample until 1997. Therefore, our analysis is not representative of those arriving to the United States after 1968.

[11] Income and poverty thresholds are converted to constant dollars using the CPI-U-RS prior to summing. The census poverty threshold for a family in a given year is determined by family size. Prior to 1980, the census poverty threshold was determined by family size, gender, age, and farm/non-farm status. After 1980, the poverty threshold was determined by family size, age, and farm/non-farm status. We simplify this determination by using the average weighted threshold by family size for non-farm families in all years.

weighted census poverty threshold for the family in year *j*, and $(cpiurs)_j$ is the inflation adjustment in year *j*.

$$\frac{\sum_{j=1}^{n}\left[(pretaxinc)_j \times (cpiurs)_j\right]}{\sum_{j=1}^{n}\left[(pov)_j \times (cpiurs)_j\right]} \tag{3.1}$$

Under the second definition, a child is long-term poor if the ratio of the sum of the family's post-tax cash income plus Food Stamp benefits over the entire period to the summed poverty thresholds is less than or equal to 1. We estimate the federal tax burden (or credit) using the National Bureau of Economic Research Internet Taxsim version 8.0 software (Feenberg and Coutts 1993). Food stamps have been a significant (but declining) portion of the total resources available to low-income households throughout the last few decades and including them will decrease each cohort's long-term child poverty rate (Kornfeld 2007; USDA 2001; Dion and Pavetti 2000). The dollar amount of Food stamp usage for each family is taken directly from the PSID. As mentioned, the EITC has become an increasingly important component of low-income families' tax calculation. Including federal taxes in our income measure will reduce a family's income if their tax liability is higher than their refundable tax credits and increase family income if the reverse is true – the former more likely to happen in the early periods when the EITC was low and the latter more likely to be true in the 1990s when the EITC is much more substantial. Although EITC amounts are not taken directly from respondents, previous research suggests that low-income families are knowledgeable about the credit and that take-up rates are substantial (Scholz 1994). The second income-to-needs calculation is given in (3.2).

$$\frac{\sum_{j=1}^{n}\left[(pretaxinc + foodstamps + taxes)_j \times (cpiurs)_j\right]}{\sum_{j=1}^{n}\left[(pov)_j \times (cpiurs)_j\right]} \tag{3.2}$$

Under the third and final definition, a child is long-term poor if the ratio of the sum of post-tax cash income plus Food Stamps to the poverty threshold is less than or equal to 1 in at least half the years observed over the period.

Finally, we construct a table to display the racial gap in likelihood of experiencing long-term poverty, by comparing the proportion of black and white children in long-term poverty to their corresponding percentage of the population as a whole.

Changes in Income Packages

Next, we explore changes in the income packages of long-term poor families across the seventies, eighties, and nineties using the post-tax+food stamps measure. For each race and cohort, we estimate the proportion of family income derived from the following sources: labor and asset income (including fathers' earnings and mothers' earnings), total transfer and social security income (including cash welfare), Food Stamps, and income from the EITC.[12]

Demographic Profiles

Next we explore changes in the demographic profiles of long-term poor children's families between the seventies, eighties, and nineties. We present descriptive statistics of children's families on four key demographic dimensions: age of household head, education of household head, (less than high school, high school graduate, more than high school), number of children, family configuration (always one-parent, always two-parent, mixed), employment status (at least 1 parent working in all years, at least 1 parent working in some years, no parents employed during observation years), and region (south, northeast, midwest, west). These statistics provide information about demographic change over time and differences between racial groups.

We ascertain how much of the difference in black-white long-term poverty rates in the 1990s is due to differences between racial groups in key demographic factors using a modified version of the Oaxaca-Blinder regression decomposition method for models with binary outcomes, as described in Fairlie (1999) and Fairlie (2005). The regression decomposition for a group difference in a continuous outcome can be expressed as:

[12] All income components are taken directly from the PSID except for income from the EITC, which is taken from the NBER Taxsim simulations. Missing values for any of the income components in the 1970s and 1980s were imputed by PSID staff and those values are used in this analysis. In the 1990s, some income components were not imputed, and as a result, respondents with a missing income component of interest had to be dropped from this part of the analysis. Because of a very concerted effort to avoid non-response in the 1990s, the number of respondents dropped due to missing income components is very small and likely to only have a small impact on the results. For more information about the imputation process used by the PSID, please see the PSID documentation, available on line at http://psidonline.isr.umich.edu/.

(3.3) $$gap = \left|\left(\overline{\mathbf{X}}^1 - \overline{\mathbf{X}}^2\right)\hat{\mathbf{B}}^1\right| + \left|\overline{\mathbf{X}}^2\left(\hat{\mathbf{B}}^1 - \hat{\mathbf{B}}^2\right)\right|$$

Where $\overline{\mathbf{X}}^1$ and $\overline{\mathbf{X}}^2$ are row vectors consisting of the average values for each of the independent variables for group 1 and 2, respectively, and $\hat{\mathbf{B}}^1$ and $\hat{\mathbf{B}}^2$ are column vectors consisting of the coefficients from group-specific regressions. The first term of (3.3) represents the part of the gap that is due to group differences in the distributions of the independent variables – or the difference due to coefficients. The second term represents the part of the gap due to differences in unobserved endowments (Oaxaca 1973; Blinder 1973; Jones 1983; Cain 1986; Fairlie 2005).

Since the outcome we are interested in is binary (LTP or not LTP), it is not ideal to use the regular Blinder-Oaxaca decomposition method because it would require the use of a linear probability model to obtain coefficient estimates. Rather, we are interested in a regression decomposition method suitable for a logistic regression model. Following Farlie 2005, such a decomposition can be expressed as:

(3.4) $$gap = \left[\sum_{i=1}^{n^1}\frac{F(\mathbf{X}_i^1\mathbf{B}^1)}{n^1} - \sum_{i=1}^{n^2}\frac{F(\mathbf{X}_i^2\mathbf{B}^1)}{n^2}\right] + \left[\sum_{i=1}^{n^2}\frac{F(\mathbf{X}_i^2\mathbf{B}^1)}{n^2} - \sum_{i=1}^{n^2}\frac{F(\mathbf{X}_i^2\mathbf{B}^2)}{n^2}\right]$$

Where $F(\cdot)$ is the logistic cumulative density function, $\mathbf{X}_i^k$ is a vector of independent variables for individual *i* in group *k*, $\mathbf{B}^k$ is a vector of coefficients from a logistic regression of the outcome on the independent variables for group *k*, and n^k is the number of observations in group *k*. Essentially, the first expression in the first set of brackets is the proportion of group 1 with the outcome and the last expression in the second set of brackets is the proportion of group 2 with the outcome of interest. When the two bracketed terms are combined, the middle expressions subtract away leaving only the gap between group 1 and 2.

Although the first term in (3.4) gives the amount of the gap between groups explained by all observed values, we are interested in how much each specific demographic factor contributes to group differences. To find the portion of the gap explained by a single independent variable x, samples consisting of equal numbers of group 1 and 2 must be used. First, each observation is assigned a predicted probability, which is derived from the group specific logistic regression. Then, the observations in each group are ordered and paired into *n* comparison pairs, with the observations having the lowest predicted probabilities from both groups compared to each other,

the observations with the second lowest predicted probabilities compared to each other, and so on. The amount of the gap due to differences in the distribution of x_1 is:

$$(3.5) \qquad \frac{1}{n}\sum_{i=1}^{n}\left[F(\hat{\beta}_0^p + x_{i1}^1\hat{\beta}_1^p + x_{i2}^1\hat{\beta}_2^p + x_{i3}^1\hat{\beta}_3^p ...) - F(\hat{\beta}_0^p + x_{i1}^2\hat{\beta}_1^p + x_{i2}^1\hat{\beta}_2^p + x_{i3}^1\hat{\beta}_3^p ...)\right]$$

where $\hat{\beta}_j^p$ is a coefficient from a pooled logistic regression with both groups and x_{ij}^k is the value of the *jth* independent variable for group *k* in comparison pair *i*. Essentially, the amount of the gap due to a specific variable is the difference between estimates when the *x's* for group one are switched to group two, holding all other variables constant. As such, the amount of the gap due to x_2 is:

$$(3.6) \qquad \frac{1}{n}\sum_{i=1}^{n}\left[F(\hat{\beta}_0^p + x_{i1}^2\hat{\beta}_1^p + x_{i2}^1\hat{\beta}_2^p + x_{i3}^1\hat{\beta}_3^p ...) - F(\hat{\beta}_0^p + x_{i1}^2\hat{\beta}_1^p + x_{i2}^2\hat{\beta}_2^p + x_{i3}^1\hat{\beta}_3^p ...)\right]$$

and the amount of the gap due to differences in the distribution of x_3 is:

$$(3.7) \qquad \frac{1}{n}\sum_{i=1}^{n}\left[F(\hat{\beta}_0^p + x_{i1}^2\hat{\beta}_1^p + x_{i2}^2\hat{\beta}_2^p + x_{i3}^1\hat{\beta}_3^p ...) - F(\hat{\beta}_0^p + x_{i1}^2\hat{\beta}_1^p + x_{i2}^2\hat{\beta}_2^p + x_{i3}^2\hat{\beta}_3^p ...)\right]$$

and so on.

For our analysis, groups 1 and 2 represent white and black children, respectively. Each of the *x's* represents one of our key demographic variables. Because the number of observations in groups 1 and 2 are not equal (thus disrupting a one-to-one match for the comparison groups required in the calculation of 3.5, 3.6, and 3.7), we draw a random sample of observations from the larger group (white children) to match the number of observations in the smaller group (black children). We conduct this randomization 1,000 times, each time computing the amount of the gap due to differences in the distribution in each variable.[13] As the models are non-linear, the contribution of a single variable could depend on the order of the switching.[14] We compute the simulations twice, the second time with the variables switched in reverse order. The results we show represent the mean values of the individual contributions of each variable from the 2,000 total simulations (1,000 initial simulations and 1,000 with switching in reverse order). Finally, because we use sample weights to calculate the proportion of white and black children who are

[13] Fairlie 2005 finds that using 100 random samples provided estimates identical to the fourth decimal place, which were similar to estimates derived from 10,000 simulations.

[14] More specifically, in a logistic regression the contribution of a variable depends on the values at which the other variables are held constant. This is particularly important when an outcome occurs at the tails of a variables distribution.

long term poor and to obtain the logistic regression coefficients, we must apply sample weights to each term in the decomposition in 3.5, 3.6, and 3.7.[15]

4. Results

[Figure 1 about here]

Figure 1 shows the annual poverty rate for white, black, and all children for each year in the observation period. These estimates include only children aged 0-10 at the beginning of each 7-year observation period and observed over all years. The post-tax family income plus food stamps measure is used to calculate poverty rates. The annual poverty rates are generally higher in the 1980s than in the 1970s. In the early 1990s annual poverty rates begin high but decline by the end of the decade. For all black and white children, poverty fell from 12.55% in 1993 to 7.9% in 1998, similar to the rate for all black and white children in 1974-1975. For black children, the poverty rate fell from 48.58% in 1993 to 28.96% in 1998, similar to the rate in the mid-1970s. For white children, poverty fell from 5.66% in 1993 to 3.19% in 1999, the lowest in all years observed. These rates are roughly consistent with national trends for all children under 18 (U.S. Census Bureau 2007). Overall, poverty rates derived from the PSID using the Census Bureau poverty thresholds are consistent with the CPS, although PSID estimates of poverty are lower than the CPS because the PSID uses a more broad measure of income (Grieger, Danziger, and Schoeni 2007; Duncan 1984).

[Table 2 about here]

Table 2 gives estimates for rates of long-term child poverty by race and cohort, using three different measures of poverty. The upper part of the table contains the long-term poverty rate using pre-tax family income. The center portion of the table contains rates using the post-tax income plus food stamp measure. The bottom portion of the table shows the proportion of children whose post-tax+food stamps income fell below the poverty threshold at least half of the years under observation.

Overall, the long-term poverty rate using pre-tax income for all children increased from 7.34% in the 1970s to 11.26% in the 1980s, and dropped to 8.71% in the 1990s. For black

[15] An indexing problem occurs when faced with the choice of whether to use sample weights from group 1 or group 2 to weight observations in the comparison pairs. We present the results from both weights.

children, long-term poverty rates increased from 28.55% in the 1970s to 37.74% in the 1980s and then rose slightly to 38.39% during the 1990s, although the difference between the 1980s and 1990s rates for black children is not statistically significant. Using this pre-tax measure, white children experienced an increase in long-term poverty from 3.70% in the 1970s to 5.93% in the 1980s, followed by a drop to 2.07% during the 1990s. Although there was an overall decline in the long-term child poverty rate from the 1980s to the 1990s, most of this difference was due to a decrease in the long-term poverty rate of white children.

As the middle portion of Table 2 indicates, inclusion of food stamps and federal taxes lowers the long-term poverty rate for both white and black children. Long-term poverty rates for all children using post-tax income plus food stamps increased from 5.88% in the 1970s to 10.01% in the 1980s and then decreased to 7.29% in the 1990s. As before, most of this decrease is due to declining poverty for white children, which increased from 2.66% in the 1970s to 5.13% in the 1980s and then dropped to 1.73% in 1990s. For black children, the long term poverty rate increased from 24.63% in the 1970s to 34.22% in the 1980s and is not statistically different in the 1990s.

The lower part of Table 2 shows the proportion of children poor at least half of the observed years in each period using the post-tax income plus food stamp measure. These estimates yield findings very similar to those of our previous analyses. The proportion of all children who were poor for at least half of the years in the observation period increased from 6.88% in the 1970s to 11.05% in the 1980s, and then decreased to 8.91% in the 1990s. For black children, 26.71% were poor for at least half of all years in the 1970s increasing to 36.44% in the 1980s and remaining constant through the 1990s. For white children, the proportion poor in at least half the years observed increased from 3.49% in the 1970s to 5.94% in the 1980s and then decreased to 2.51% in the 1990s.

[Table 3 about Here]

Each of the three long-term poverty measures (using pre-tax income, post-tax income plus food stamps, and counting the number of years poor) tell the same story about long-term poverty – that for whites it increased from the 1970s to 1980s and decreased substantially in the 1990s, while for blacks long-term poverty increased from the 1970s to the 1980s and remained steady in the 1990s. The three measures also tell similar stories about the differences in long-term poverty by race. Table 3 contains black/white poverty ratios by cohort and income

measure. Using the post-tax income plus food stamp measure, the long-term poverty rate for black children is 9.3 times higher than white children in the 1970s (.2463/.0266), 6.7 times higher in the 1980s (.3422/.0513), and 18.6 times higher in the 1990s (.3220/.0173). The narrowing of the black/white gap in the 1980s is explained by the substantial increase in the proportion of poor white children from the 1970s to the 1980s. The gap widened in the 1990s because white decreases in poverty were substantial and because black long-term poverty did not change from the 1980s to the 1990s. The pre-tax income and number of years poor yield similar conclusions about the race gap.

Tables 2 and 3 also give information about long-term deep poverty, defined as having an n-year income-to-needs ratio of less than 0.75. Using pre-tax income, long-term deep poverty increased for all children from 2.92% in the 1970s to 7.87% in the 1980s and was not statistically different in the 1990s. Long-term deep poverty rates for black children were much higher than whites in all periods, but unlike the divergence in black white poverty trends discussed above, changes in the rates using pre-tax income follow a similar pattern for both race groups. For black children, the long-term deep poverty rate increased from 14.3% in the 1970s to 31.46% in the 1980s and was not statistically different in the 1990s. For white children, long-term deep poverty increased from 0.97% in the 1970s to 3.12% in the 1980s, and dropped to 1.43% in the 1990s. Taking federal taxes and food stamps into account, the black/white trends are more divergent with long-term deep poverty among black children increasing from 9.37% in the 1970s to 21.38% in the 1980s with no significant change in the 1990s. For white children, long-term deep poverty was 0.64% in the 1970s and not statistically different in the 1980s or 1990s. Overall, long-term deep poverty using post-tax income plus food stamps increased from 1.92% in the 1970s to 4.75% in the 1980s and remained constant in the 1990s. Unlike long-term poverty which by all measures dropped in the 1990s due to a substantial decrease in white long-term poverty rates, long-term deep poverty did not change from the 1980s to the 1990s because within group rates remained constant at relatively high levels for black children and relatively low levels for white children. As a result, the race gap in long-term deep poverty remained generally constant at 14.6 times higher for blacks than whites in the 1970s, 15.3 times higher in the 1980s, and 17.74 times higher in the 1990s.

[Table 4 about Here]

Another way to envision the race gap in long-term (n-year income-to-needs ratio less than 1.0) and long-term deep (n-year income-to-needs ratio less than 0.75) poverty is to compare the proportion of black and white children in each income category to their corresponding percentage in the population as a whole. Table 4 shows the proportion of black/white children by income category. The first row in Table 4 shows that in each cohort, black children make up between 15% and 20% of all children. The second row shows that black children make up a much higher share of long-term poor children than proportional representation would suggest. In the 1970s, black children made up 61.4% of all long-term poor children, four times their representation in the population at large. In the 1980s, this proportion fell slightly to 57.3%. During the 1990s, black children made up 80.7% of all long-term poor children, roughly five times their representation in the population. Among deeply poor children, black children in the 1970s and 1980s are even more overrepresented with 71.5% and 75.5% of long-term deeply poor children being black. During the 1990s, the proportion of long-term deeply poor children who were black rose to 80%.

Next, we decompose the complete income packages of our long-term poor families. Long-term poor children have an n-year post-tax plus food stamp family income-to-needs ratio of less than 1. The proportion of total family income from each source is given in Table 5.

[Table 5 about here]

Post-tax plus food stamp income is the sum of labor and asset income, transfer and social security insurance income, income from others, federal taxes, and food stamps.[16] In the 1970s, the families of white long-term poor children derived nearly half (49.67%) of their income from father's earnings. Cash welfare (19.23%) and food stamps (11.97%) made up the next largest proportion, together making up about a third of total family income. Mother's earnings (6.47%) and EITC (1.43%) made up much smaller proportions. By the 1990s, long term poor white children still received the largest share of their income from father's earnings (19.72%), followed by food stamps (16.53%) and cash welfare (12.78%), mother's earnings (10.04%), and EITC (4.58%), although the diminished contributions of father's earnings are quite visible. The income packages of black long-term poor children were very different from white children in the 1970s, but look more similar by the 1990s. In the 1970s, income from cash welfare and food

[16] These categories sum to just above 100 since federal tax liability (a small but negative quantity for long term poor and low-income) is not included.

stamps made up a slightly larger proportion of black long-term poor children's family income (about 38%) than parental earnings (about 33%). Fathers and mothers contributed roughly the same proportion (about 16.5% each) of the total family income of black long term poor children in the 1970's period. In the 1970s, EITC makes up a minimal proportion of the total family income of black children at 1.22%, similar to that of white children. By the 1990s, black long term poor children derive nearly half of their total family income from food stamps (25.60%) and cash welfare (21.04%), while the proportion of income from parental earnings dwindles to about one-fifth, with mother's earnings accounting for an increased proportion (18.51%) and father's earnings declining to only 3.3%; the lowest single component for black long term poor children in the 1990s.

[Table 6 about here]

Table 6 gives descriptive information on demographic and economic characteristics of children's families by race and cohort. Children's families are divided into three mutually-exclusive categories depending on the presence of parents in the household during the observation period: always two-parent, always single parent, and mixed.[17] For both black and white children, the proportion of children spending at least some time in a non-two parent household (mixed or always one-parent) increases over time although rates are much higher for black children than white children. By 1990, over three quarters of black children spent some time in a single-parent household with 56.65% in single parent families the entire observation period. For white children, only about one-fifth spent some time in a single-parent family and just 6.35% were in single parent families during the entire observation period in the 1990s.

The education of the head is classified either as less than high school degree, high school degree, or more than high school.[18] For black and white children, the proportion of children living with a household head with less than a high school degree decreased sharply from the

[17] The head of the household and his/her partner are assumed to be the "parents" of the child. This definition may include those who have a non-biological relationship to a child such as step-parents and cohabiting partners of biological parents. This definition may also include grandparents, other relatives, and non-relatives if the child resides with them and they are the head of the household.

[18] Because it is possible for the education level of household head or the actual headship itself to change over the course of the observation period, the category represented in most years during the observation period is the one used in the analysis.

1970s to the 1980s and only slightly from the 1980s to the 1990s. By the 1990s, about one-third of black children and 12.25% of white children lived with a household head with less than a high school degree (compared to over half and one-quarter, respectively, in the 1970s). Conversely, the proportion of children living with a household head with more than a high school degree increased and then stagnated at about one quarter for black children whereas for whites, the proportion increased (albeit at a decreasing rate) to 59.40 percent in the 1990s.

At least one parent worked some of the time during the observation period for most black and white children. For black children, 91.63% had at least one parent working some of the time in the 1970s (the sum of "worked all years" and "worked some years"), while this declined to 83.18% in the 1980s, and rose slightly to 84.57% in the 1990s. White children had more fully employed parents with 98.79% in the 1970s with at least one parent employed some of the time, 99.24% in the 1980s, and 98.83% in the 1990s. As a result, living in a household without a working parent, at least some of the time, is uncommon in black families and quite rare in white families. However, white children were almost twice as likely as black children to be living in a household where a parent worked every year in the observation period (80.05% vs. 48.38% in the 1970s, 80.28% vs. 43.48% in the 1980s, and 90.92% vs. 53.30% in the 1990s). Overall, families in the 1990s are characterized by more time in a single-parent family arrangement, more educated household heads, more time with an employed household head, and slightly smaller family size on average than families in the 1970s, although there is a substantial difference between black and white families for these characteristics.

[Table 7 about here]

The demographic traits described above are used to model the log-odds of a child being long-term poor (using post-tax income plus food stamps) in each cohort for black and white children individually and for a pooled sample of black and white children together. The coefficients from each of the logistic regression models are presented in Table 7. Each of the models is significant and has a pseudo r-squared (a very rough estimate of model fit) of between 0.34 and 0.69. As expected, more time with a single parent, the number of children in the family, more education and less time employed are all associated with a higher probability of

being long-term poor in most of the models[19]. Age of household head is negatively associated with being long-term poor.

The coefficients from the pooled logistic regression models are used to calculate the modified Blinder-Oaxaca decomposition estimates for each variable, which estimates the race gap in long-term poverty due to race differences in the distribution of key demographic factors. Table 8 gives the results of the decomposition.

[Table 8 about here]

In the 1970s, the race gap in long-term child poverty was 21.97 percentage points. According to the decomposition results, about 30% of this difference is accounted for by differences in the black-white employment distribution. Black white differences in the number of children in the family accounted for the next largest share of the gap (about 14%), followed by differences in education (9.3%) and differences in family structure (about 6%). In the 1980s, the race gap in long-term child poverty increased to 29.09 percentage points. Again, the largest portion of the gap (about 41.6% to 47.5%) was explained by black-white differences in employment, followed by differences in education (8 to 9.5%), differences in family structure (6 to 8%), and differences in the number of children in the family (6.2 to 8.3%). During the 1990s, the race gap in long-term poverty remained high at 30.47 percentage points. A majority of this gap (52.7 to 64.4%) was explained by black-white differences in employment, followed by differences in education (8.9 to 9.8%), differences in the number of children (6.4 to 8.1%), and family arrangement (3.6 to 4.3%).

5. Discussion

Previous research has shown a substantial difference between black and white long-term poverty rates during the late 1960s through the early 1980s. Using different time periods, Duncan and Rodgers (1991) find an increase in persistent poverty from the late 1960s to the early 1980s using pre-tax income, but no change in the persistent poverty rates when income tax and food stamps are taken into account. They find that changes in demographic and economic factors underlie the stationary poverty rate. Since their study, we have seen no work which examines more recent changes in children's long-term poverty rates by race group. In this paper,

[19] The addition of employment status to the models reduced most of the family structure effects, which were large and significant in models without employment status (not shown).

we extend the knowledge of long-term child poverty by uncovering trends through the 1990s and by attempting to disentangle the economic and demographic factors that contribute to the substantial black/white race gap. We select our observation periods to maximize the number of meaningful cohorts in our analysis while also minimizing macroeconomic differences between cohorts (avoiding a design where one cohort is in a time period characterized by recession and the other in a time period characterized by economic growth). Inconsistencies between our findings and previous work are generally minor and are likely explained by our differing observation periods.

According to our analysis, over the last three decades long-term poverty rates (like annual poverty rates) have always been higher for black children than for white children. This finding, while alarming, is neither new nor surprising. However, our finding that long-term poverty substantially decreased in the 1990s for white children while remaining stable for black children is surprising. This stagnation in the high poverty rate for blacks from the 1980s to the 1990s and corresponding substantial decrease in the already low poverty rate for whites contributed to a marked increase in the race gap in long-term poverty. As a result, in the 1990s about 1 in 3 black children were long-term poor compared to 1 in 50 white children – a black long-term poverty rate 18.6 times higher than whites, and double the figure in the 1970s. In the last 30 years of the twentieth century, black children were never as overrepresented among the long-term poor as they were in the 1990s.

Duncan and Rodger's were the first to point out that demographic changes are an important factor underlying trends in long-term child poverty. In general, we find that demographic/economic trends are more favorable for white children than black children in the 1990s. The divergence in demographic trends between black and white families-the leveling off of single headship among whites and the leveling-off of high school graduation rates among blacks-contribute to the widening racial gap between black and white children in the 1990s.

Our decomposition results explain the race gap in long-term poverty rates over time. Despite the divergence in education and family arrangement trends between blacks and whites from the 1980s to the 1990s (with black children disadvantaged in both cases), these differences account for a constant or slightly decreasing proportion of the race gap from the 1980s to the 1990s. Employment differences, on the other hand, account for a much larger proportion of the race gap in the 1990s than in previous periods, despite the fact that employment trends for both

groups remained steady from the 1980s to the 1990s. This could indicate that even though employment differentials remained in the 1990s as they were in the 1980s, the strengthened link between employment and social grants (like increases in the EITC and changes to state – and later, federal – welfare laws) and lower wages made employment status a more important factor in determining if a family was long-term poor. Perhaps this explains why despite similar employment figures in the 1980s and 1990s, long-term poor families got less of their total income from wages (particularly among whites) and welfare payments.

Although *annual* poverty rates in the 1990s returned to near 1970s levels after a large jump in the 1980s, *long-term* poverty only followed the same pattern for white children. Although not a primary goal of this paper, we briefly explore why this divergence occurs.

[Table 9 about here]

In Table 9, we estimate the proportion of our sample that is long-term poor out of all sample members who are poor in a year. While this basic descriptive analysis is not adequate to make a causal argument, it does give a conceptual idea of how much of the population is transitorily poor and how many are more permanently poor. According to Table 9, about 68.9% of the black annual poor were long-term poor on average in the 1970s compared to only 35.2% of white children. By the 1990s, black long-term poor children made up nearly 80% of all poor black children on average compared to 27.5% for whites. This indicates that poverty is much more transitory on average for white children than it is for black children. Although we do not have direct empirical evidence to support the claim, it makes theoretical sense that the persistently poor may face circumstances that make them less responsive to short-term economic fluctuations.

Finally, our research shows that rates of long-term deep poverty (n-year income-to-needs ratio below 0.75) were very low and statistically unchanged for white children over the last three decades while long-term deep poverty among black children peaked in the 1980s and remained steady into the 1990s. As a result, in the 1990s 1 in 5 black children were long-term deeply poor compared to 1 in 85 white children. While it is not surprising that black children are overrepresented in the most severe category of long-term poverty, the relative degree of overrepresentation is noteworthy. In the 1970s, the long-term deep poverty rate was 14.6 times higher for blacks than whites and by the 1990s it was 17.74 times as high. This means that by

1990, black children are as overrepresented in *long-term poverty* as they are in *long-term deep poverty*.

6. References

Berlin, G. 2000. "Encouraging Work, Reducing Poverty: the impact of wage incentive programs." http://www.mdrc.org/publications/18/full.pdf

Bianchi, S. M. 1999. "Feminization and Juvenilization of Poverty: Trends, Relative Risks, Causes, and Consequences." Annual Review of Sociology.

Blank, R. 1997. It Takes a Nation. Princeton, N.J.: Princeton University Press

Blank, R. 2002. Evaluating Welfare Reform in the United States. Journal of Economic Literature. 40(4): 1105-1166.

Blau, F and L. Kahn 1997. "Swimming Upstream: Trends in the Gender Wage Differential in the 1980's." *Journal of Labor Economics. Vol. 15 no 1.*

Blinder, A. 1973. "Wage Discrimination: Reduced Form and Structural Variables." *Journal of Human Resources* 8: 436-455.

Brady,D.. 2003. "Rethinking the Sociological Measurement of Poverty." Social Forces 81(3):715–751.

Brooks-Gunn, J. & G. Duncan. 1997. "The Effects of Poverty on Children." *The Future of Children Vol. 7 No.2.*

Burtless, G. & T.Smeeding. (2001) "The Level, Trend and Composition of Poverty." in Danziger& Haveman (eds) Understanding Poverty.

Cain, Glen G. 1986. "The Economic Analysis of Labor Market Discrimination: A Survey." *Handbook of Labor Economics* Vol 1, eds. O. Ashenfelter and R. Laynard, Elsevier Science Publishers BV.

Cancian, M. & D. Reed. (2001) "Changes in Family Structure: Implications for Poverty and Related Policy." in Danziger & Haveman (eds) Understanding Poverty.

Carlson, M. Garinkel, I, Mclanahan, S Mincey, R 2005. "The Effects of Welfare and Child Support Policies on Union Formation." *Population Research and Policy Review.*

Centers for Disease Control Report on Live Births, Birth Rates and Fertility Rates by Race in the United States 1909-2000. www.cdc.gov/nchs/data/statab/t001x01.pdf. Accessed September 20, 2007.

National Center for Health Statistics New Report Documents Trends in Childbearing Reproductive Health. http://www.cdc.gov/nchs/pressroom/97facts/nsfgfact.htm. Accessed January 11, 2008.

Corcoran, M. 2002. “Mobility, Persistence, and the Consequences of Poverty for Children”. In S. H. Danziger and R. H. Haveman (eds.), Understanding Poverty, Cambridge, MA: Harvard University Press, 127-161.

Currie, Janet & J. Grogger. (2001) “Explaining Recent Declines in Food Stamp Program Participation.” *Brookings Paper on Urban Affairs*.

Danziger, S. & R. Haveman (eds). (2001) “Understanding Poverty.”

Danziger, Sandra K. and K.Seefeldt. 2003. ”Barriers to Employment and the ’Hard to Serve’: Implications for Services, Sanctions, and Time Limits.” *Social Policy and Society* 2: 151-160.

Department of Health and Human Services Report Indicators of Welfare Dependence: Annual Report to Congress 2007.

Department of Health and Human Services Report Indicators of Welfare Dependence: Annual Report to Congress 2003.

Dion, MR & LD Pavetti, (2000) Access to and Participation in Medicaid and the Food Stamp Program: A Review of the Recent Literature: Final Report. NJ: Mathematica Policy Research Inc.

Duncan, G. 1984. Years of Poverty, Years of Plenty: The Changing Economic Fortunes of American Workers and Families. Ann Arbor, MI: Institute for Social Research.

Duncan, G. 1991. “The Economic Environment of Childhood.” In A. Huston (ed.) Children in Poverty; Child Development and Public Policy. N.Y.: Cambridge University Press.

Duncan, G. J. and J. Brooks-Gunn. 2000. "Family poverty, welfare reform, and child development." Child Development 71(1):188-196.

Duncan, G. and W. Rodgers. 1991. “Has Children’s Poverty Become More Persistent?” American Sociology Review. 56:538-550.

Edin, K. and M. Kefalas (2005) Promises I Can Keep: why low-income women put motherhood before marriage. University of California Press.

Eggebeen, D. J. and D. T. Lichter. 1991. "Race, Family Structure, and Changing Poverty Among American Children." American Sociological Review 56(6):801-817.

Fairlie, R. 2003. “An Extention of the Blinder-Oaxaca Decomposition Technique to Logit and Probit Models.” Yale University Economic Growth Center Discussion Paper No. 873.

Feenberg, D. and E. Coutts. 1993. "An Introduction to the Taxsim Model." *Journal of Policy Analysis and Management* 12(1): 189-194. http://www.nber.org/taxsim/

Freeman, R. (2001) "The Rising Tide Lifts all. . . ?" in Danziger& Haveman (eds) Understanding Poverty.

Furstenberg, F. 2006. "Diverging Development: the not-so-visible hand of social class in the united states." Network to Transitions to Adulthood Research Network Working Paper.

Grieger, Lloyd D., Sheldon H. Danziger, and Robert F. Schoeni. 2007. "Estimating and Benchmarking the Trend in Poverty from the Panel Study of Income Dynamics." http://psidonline.isr.umich.edu/Publications/Papers/grieger-danz-schoeni.pdf. Accessed November 2007.

Hertz, T. 2004. "Rags, Riches and Race: The Intergenerational Economic Mobility of Black and White Families in the United States." Forthcoming in Samuel Bowles, Herbert Gintis, and Melissa Osborne (editors).Unequal Chances: Family Background and Economic Success.Princeton: Princeton University Press and Russell Sage

Holzer, H. P. Offner & E. Sorenson. 2005. "Declining Employment Among Young Black Less-Educated Men: The Role of Incarceration and Child Support". Journal of Policy Analysis and Management: 24(5), 329-350.

Holt, S. 2006. "The Earned Income Tax Credit at Age 30: What We Know." Metropolitan Policy Program The Brooking Institution. Research Brief. February 2006.

Iceland, J. 2003. Poverty in America. University of California Press Berkeley, CA.

Jones, F. L. 1983. "On Decomposing the Wage Gap: A Critical Comment on Blinder's Method." *Journal of Human Resources* 18(1): 126-130.

Kornfeld, R. 2002. *Explaining Recent Trends in Food Stamp Program Caseloads*. Washington, DC: U.S. Department of Agriculture, Economic Research Service (no. EFAN-02-008).

Lichter, D. T. 1997. "Poverty and Inequality among Children." Annual Review of Sociology 23.

Lichter, D.T., and M. Crowley 2003. "Welfare Reform and Child Poverty: effects of maternal employment, marriage and cohabitation." Social Science Research 33: 385-408.

Lichter, D. T. and D. J. Eggebeen. 1993. "Rich Kids, Poor Kids: Changing Income Inequality

among American Children." Social Forces 71(3):761-780.

McLanahan, S. 1985. "Family Structure and the Reproduction of Poverty." The American Journal of Sociology 90(4):873-901.

McLoyd, V. 1998. "Socioeconomic Disadvantage and Child Development." American Psychologist 53(2): 185-204.

Merrick, Morad & Carmelli 2003. "Poverty, Children And Families In Israel: A Public Health Concern." The *Internet Journal of Pediatrics and Neonatology*.

Meyer, B. and D. Rosenbaum, (2001). "Welfare, The Earned Income Tax Credit , and the Labor Supply of Single Mothers". The Quarterly Journal of Economics. 116(3): 1063-1114.

Musick, K. & R. Mare. 2004. "Recent Trends in the Inheritance of Poverty and Family Structure." California Center for Population Research, On-line Working Paper Series.

National Bureau of Economic Research. "Business Cycle Expansions and Contractions." http://www.nber.org/cycles/. Accessed November 2007.

Oaxaca, R. 1973. "Male-Female Wage Differentials in Urban Labor Markets." *International Economic Review* 14: 693-709.

Pavetti, L. (2001) "Welfare Policy in Transition: Redefining the Social Contract for Poor Citizen Families with Children and for Immigrants." in Danziger & Haveman (eds) Understanding Poverty.

Primus, W. 2006. Reductions in Poverty Significantly Greater in the 1990s Than Official Estimates Suggest Review of Policy Research 23 (3), 781–797.

Schoeni, R. F. and R. M. Blank. 2000. What has Welfare Reform Accomplished? Impacts on Welfare Participation, Employment, Income, Poverty, and Family Structure.

Scholz, J. 1994. "The Earned Income Tax Credit: Participation, Compliance and Anti-Poverty Effectiveness." *National Tax Journal* 48(1): 59-81.

Stoll, M. A. 2005. "African Americans and the Color Line," in R. Farley and J. Haaga (eds.), The American People: Census 2000, pp. 380–414

Turner, L. Danziger S. & K. Seefeldt. 2006. "Failing the Transition from Welfare to Work." Social Science Quarterly, Volume 87, Number 2, June 2006.

U.S. Census Bureau. "Historical Poverty Tables – Table 3." http://www.census.gov/hhes/www/poverty/histpov/hstpov3.html. Accessed September 15, 2007.

Western, B., B. Petit & J. Guetzko. 2002 “Black Economic Progress in the Era of Mass Imprisonment.” *Invisible Punishment: The Collateral Consequences of Mass Imprisonment:* 165-80.

Wetzel, JR. 1995. Labor force, unemployment, and earnings-America in the 1990s " State of the Union: America in the 1990s” Volume One; Economic Trends Reynolds Farley (Ed.)

Table 1: Sample Cuts by Race and Cohort

	Black	White	Total
1970s			
n (unweighted)	1275	1474	2749
Proportion (weighted)	14.65%	85.35%	
1980s			
n (unweighted)	1342	1779	3121
Proportion (weighted)	16.76%	83.24%	
1990s			
n (unweighted)	1179	1415	2594
Proportion (weighted)	18.30%	81.70%	

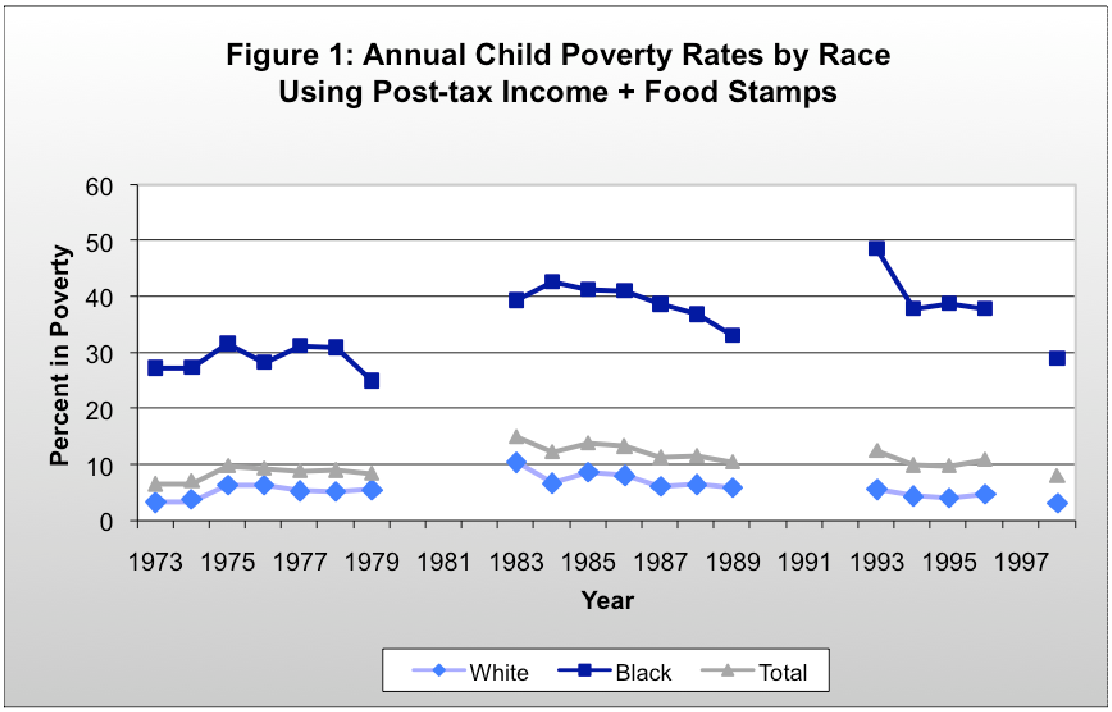
Figure 1: Annual Child Poverty Rates by Race
Using Post-tax Income + Food Stamps
Percent in Poverty
60
50
40
30
20
10
0
1973 1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997
Year
White
Black
Total

Table 2: Rates of Long-Term Poverty for Children by Race and Cohort									
	Black Children			White Children			All Children		
Measure of Poverty	1973-1979	1983-1989	1993-1998	1973-1979	1983-1989	1993-1998	1973-1979	1983-1989	1993-1998
Ratio of n-year pre-tax cash income to poverty threshold:									
<1.25	42.97	47.21	48.15	7.10	10.12**	5.15**	12.35	16.34**	13.01**
<1.00	28.55	37.74**	38.39	3.70	5.93**	2.07**	7.34	11.26**	8.71**
<.75	14.30	31.46**	30.71	0.97	3.12**	1.43**	2.92	7.87**	6.78
Ratio of n-year post-tax cash income plus food stamps to poverty threshold:									
<1.25	38.67	47.65**	41.39*	6.58	9.40**	4.39**	11.28	15.81**	11.15**
<1.00	24.63	34.22**	32.20	2.66	5.13**	1.73**	5.88	10.01**	7.29**
<.75	9.37	21.38**	21.12	0.64	1.40	1.19	1.92	4.75**	4.83
Number of Years Poor:									
At Least 1 Year	58.38	62.71	57.84	17.10	20.07**	13.14**	23.14	27.22**	21.31**
At Least Half Years	26.71	36.44**	37.48	3.49	5.94**	2.51**	6.88	11.05**	8.91**
All Years	5.35	17.10**	18.88	0.46	1.57**	0.63	1.17	4.17**	3.97
n	384	497	314	2238	2468	1402	2622	2965	1716
* = p<.10; **=p<.05									

Table 3: Ratio of black to white poverty rates.			
Income Category	1970s	1980s	1990s
Long Term Poor			
Pre-tax income	7.72	6.36	18.55
Post-tax income plus FS	9.26	6.67	18.61
Long-term Deeply Poor			
Pre-tax income	14.74	10.08	21.48
Post-tax income plus FS	14.64	15.27	17.75

Table 4: Proportion of Black and White Children Comprising Each Income Category.						
	1970s		1980s		1990s	
Income Category	Black	White	Black	White	Black	White
All	0.147	0.854	0.168	0.832	0.183	0.817
Long-Term Poor	0.614	0.386	0.573	0.427	0.807	0.194
Long-Term Deeply Poor	0.715	0.285	0.755	0.245	0.799	0.201

Table 5: Income from Various Sources as a Proportion of Post-Tax Plus Food Stamp Income (%) by Race and Cohort.

	Black Children			White Children			All Children		
Income Source	1973-1979	1983-1989	1993-1999	1973-1979	1983-1989	1993-1999	1973-1979	1983-1989	1993-1999
Long-Term Poor Children									
Labor and Asset Income	**33.23**	**25.08**	**22.15**	**56.83**	**52.12**	**27.64**	**42.37**	**36.62**	**23.21**
Father's Earnings	16.71	6.58	3.30	49.67	30.98	19.72	29.47	16.99	6.48
Mother's Earnings	16.63	18.42	18.51	6.47	17.97	10.04	12.70	18.23	16.87
Transfer and SS Income	**41.52**	**42.40**	**37.90**	**25.66**	**25.07**	**48.04**	**35.38**	**35.01**	**39.86**
Cash Welfare	25.65	29.03	21.04	19.23	16.38	12.78	23.16	23.63	19.40
Income from Others	**11.82**	**4.66**	**8.75**	**5.20**	**3.62**	**3.80**	**9.25**	**4.22**	**7.80**
EITC	**1.22**	**1.95**	**5.71**	**1.43**	**2.19**	**4.58**	**1.30**	**2.05**	**5.49**
Food Stamps	**12.47**	**26.17**	**25.60**	**11.97**	**17.33**	**16.53**	**12.27**	**22.40**	**23.84**
Non-Long-Term Poor Children									
Labor and Asset Income	**77.77**	**87.69**	**81.81**	**102.18**	**103.52**	**103.19**	**99.32**	**101.58**	**100.33**
Father's Earnings	47.71	42.64	31.13	80.85	74.31	68.02	76.97	70.42	63.09
Mother's Earnings	29.50	43.38	49.68	15.25	23.49	26.62	16.92	25.93	29.70
Transfer and SS Income	**16.04**	**9.01**	**12.77**	**6.22**	**5.92**	**6.16**	**7.37**	**6.30**	**7.05**
Cash Welfare	8.27	2.38	1.33	1.70	0.74	0.21	2.47	0.94	0.36
Income from Others	**9.06**	**9.67**	**6.11**	**4.87**	**3.95**	**3.28**	**5.36**	**4.66**	**3.66**
EITC	**0.47**	**0.71**	**3.18**	**0.13**	**0.18**	**0.81**	**0.17**	**0.24**	**1.13**
Food Stamps	**3.44**	**1.58**	**2.50**	**0.57**	**0.49**	**0.32**	**0.90**	**0.62**	**0.61**

Table 6: Demographic Information for Children by Race and Cohort						
	Black Children			White Children		
Demographic Trait	1973-1979	1983-1989	1993-1999	1973-1979	1983-1989	1993-1999
Family Arrangement (%):						
Always Single Parent	28.89	42.90	56.65	3.69	5.80	6.35
Mixed Single and Two Parent	27.51	24.20	21.06	16.93	17.21	15.56
Always Two Parent	43.60	32.89	22.29	79.38	76.99	78.09
Age of Household Head (years)	36.82	34.57	36.60	36.34	35.81	37.71
Number of Children in Family	3.30	2.60	2.71	2.68	2.39	2.34
Education of Household Head (%):						
Less Than High School	52.58	32.07	32.18	25.64	15.12	11.56
High School Degree	34.22	39.87	41.49	35.88	33.95	28.67
More Than High School	13.20	28.07	26.33	38.48	50.93	59.77
Employment Status of Parents (%)						
Worked No Years	8.36	16.83	15.42	1.21	0.76	1.17
Worked Some Years	43.25	39.70	31.27	18.73	18.96	7.91
Worked All Years	48.38	43.48	53.30	80.05	80.28	90.92
n	384	497	314	2238	2468	1402

Table 7: Coefficients from Logistic Regression of Long-Term Child Poverty on Demographic Traits by Cohort																		
	1970s						1980s						1990s					
Model Parameter	Black Only		White Only		Pooled		Black Only		White Only		Pooled		Black Only		White Only		Pooled	
Family Arrangement (Always Two Parent Omitted)																		
Always Single Parent	1.311	*	1.360		1.140	*	1.895	*	0.314		0.715	*	1.257		0.925		0.618	
Mixed Single and Two Parent	0.840	*	0.573		0.683	*	1.951	*	-0.893	*	0.166		0.735		-2.460	^	-0.389	
Age of Household Head (years)	-0.003		-0.057	*	-0.023		-0.075	*	-0.046		-0.076	*	-0.027		-0.208	*	-0.067	*
Number of Children in Family	0.406	*	0.771	*	0.561	*	0.463	*	0.993	*	0.639	*	0.549	*	1.571	*	0.679	*
Education of Household Head (More Than High School Omitted)																		
Less Than High School	2.405	*	3.355	*	3.055	*	0.663	^	3.265	*	1.425	*	2.560	*	1.529		2.276	*
High School Degree	1.640	*	2.338	*	2.307	*	-0.209		2.006	*	0.626	^	1.541	*	1.786	^	1.371	*
Employment Status (Always Employed Omitted)																		
Never Employed	4.703	*	3.418	*	3.972	*	3.279	*	2.584	*	2.990	*	4.175	*	8.686	*	5.883	*
Some Years Employed	1.968	*	1.461	*	1.678	*	1.581	*	2.518	*	1.911	*	2.595	*	4.002	*	2.949	*
Region (South Omitted)																		
New England	-2.669	*	-3.383	*	-2.990	*	0.852		-1.880	*	-0.214		-1.285	^	0.999		-0.937	
Midwest	-2.361	*	-0.977	^	-1.613	*	-0.014		0.189		0.200		0.458		-0.257		0.102	
West	-2.446	*	-0.041		-0.679	^	-2.446	*	-0.663		-0.660		-0.444		-1.222		-0.534	
White	--		--		-0.922	*	--		--		-1.144	*	--		--		-1.918	*
Constant	-5.906	*	-6.856	*	-6.183	*	-2.426	*	-6.691	*	-2.439	*	-5.65836	*	4.66173	*	-4.048	*
p> wald chi-squared	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	
pseudo r-squared	0.420		0.348		0.460		0.422		0.402		0.435		0.488		0.694		0.655	
* = p<0.05 ^ = p<0.10																		

Table 8: Modified Oaxaca-Blinder Regression Decomposition Results for Race Differences in Long Term Child Poverty Rates						
	1970s		**1980s**		**1990s**	
Black Long-Term Poverty Rate	0.2463		0.3422		0.3220	
White Long Term Poverty Rate	0.0266		0.0513		0.0173	
Gap	0.2197		0.2909		0.3047	
Weights Used in Decomposition	Black	White	Black	White	Black	White
Contributions from group differences in:						
Age of Household Head	-0.0031	-0.0042	0.0049	0.0069	0.0005	0.0016
	-1.0%	-1.4%	1.6%	2.3%	0.2%	0.5%
Number of Children	0.0443	0.0422	0.0189	0.0252	0.0196	0.0246
	14.6%	13.8%	6.2%	8.3%	6.4%	8.1%
Education	0.0282	0.0284	0.0244	0.0288	0.0299	0.0272
	9.3%	9.3%	8.0%	9.5%	9.8%	8.9%
Family Arrangement	0.0208	0.0177	0.0245	0.0183	0.0132	0.0109
	6.8%	5.8%	8.0%	6.0%	4.3%	3.6%
Employment	0.0954	0.0910	0.1448	0.1267	0.1963	0.1605
	31.3%	29.9%	47.5%	41.6%	64.4%	52.7%
Region	0.0112	0.0326	0.0063	0.0063	-0.0034	0.0060
	3.69%	10.71%	2.07%	2.08%	-1.11%	1.96%
Total From All Variables	0.1969	0.2077	0.2238	0.2122	0.2560	0.2309
	89.61%	94.55%	76.94%	72.96%	84.03%	75.77%

Table 9: Proportion of Annual Poor who are Long-term Poor		
	Black	White
1973	0.626	0.322
1974	0.724	0.374
1975	0.562	0.304
1976	0.763	0.299
1977	0.651	0.376
1978	0.728	0.382
1979	0.770	0.410
70s Average	**0.689**	**0.352**
1983	0.747	0.328
1984	0.687	0.608
1985	0.761	0.515
1986	0.786	0.551
1987	0.824	0.521
1988	0.828	0.531
1989	0.819	0.476
80s Average	**0.779**	**0.504**
1993	0.668	0.246
1994	0.814	0.318
1995	0.816	0.271
1996	0.792	0.254
1998	0.834	0.288
90s Average	**0.785**	**0.275**