



Research Report

Lloyd Grieger and Jessica Wyse

The Growing Racial Divide in U.S.
Children's Long-Term Poverty at the
End of the Twentieth Century

Report 08-660
November 2008

The Growing Racial Divide in U.S. Children's Long-Term Poverty at the End of the Twentieth Century

Lloyd Grieger

University of Michigan

Jessica Wyse

University of Michigan

Population Studies Center Research Report 08-660

November 2008

Lloyd Grieger, Department of Sociology, Gerald R. Ford School of Public Policy, Population Studies Center, University of Michigan, 2030C Institute for Social Research, 426 Thompson Street, Ann Arbor, MI 48104; e-mail: lgrieger@umich.edu.

Jessica Wyse, Department of Sociology, Gerald R. Ford School of Public Policy, University of Michigan.

Support for this research was provided by the National Poverty Center at the Gerald R. Ford School of Public Policy at the University of Michigan. An earlier version of this manuscript was presented at the 2008 annual meetings of the Population Association of America, New Orleans. The authors wish to thank Sasha Achen, Maria Cancian, Mary Corcoran, Sheldon Danziger, Greg Duncan, Tecla Loup, Robert Schoeni, Yu Xie, and staff members of the Panel Study of Income Dynamics for their assistance and comments. All opinions expressed here are solely those of the authors.

Abstract

Using the Panel Study of Income Dynamics we construct a post-tax, post-transfer measure of income to estimate long-term childhood poverty rates (LTCP) among black and white children in the 1970s, 1980s, and 1990s. We calculate the black/white gap in LTCP for each cohort and examine the demographic and economic contributions to changes in this gap for the most recent cohorts. Finally, we decompose the income packages of long-term poor families to examine changes in income composition over time. We find that the LTCP rate increased for black and white children from the 1970s to 1980s. From the 1980s to 1990s LTCP declined for white children but remained stable for black children. As a result, the race gap in LTCP grew in the 1990s with black children almost 20 times more likely to be long-term poor than white children. We show that the widening of the race gap is due to the stronger association between employment and long-term poverty status in the 1990s. The proportion of long-term poor children's family income derived from the EITC increased slightly in the 1990s, while the proportion of income from welfare and father's wages declined.

INTRODUCTION

The annual poverty rate for African-American children, though remaining disproportionately higher than that of white children, reached an historic low in the late 1990s.¹ Among all children, annual poverty rate rose between the 1970s and 1980s and then returned to 1970s levels during the 1990s economic expansion (see Figure 1). Economic and policy analysts attribute the 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 these 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 1990s contributing to the decline in poverty (Lichter and Crowley 2004). While these factors contributed to a decline in the *annual* rates of childhood poverty, there has been no current research investigating how – and if – rates of long-term childhood poverty (LTCP) and rates of long-term deep childhood poverty (LTDCP) have likewise declined over time.

[Figure 1 here]

¹ The drop in African-American poverty should not obscure the large differential between black and white annual poverty rates: even at the height of the 1990s 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 (Stoll 2005).

Those in 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 this *long-term* childhood poverty as well as long-term deep childhood poverty remained disproportionately high for African-Americans through the late eighties (Duncan and Rodgers 1991; Eggebeen and Lichter 1991; Lichter 1997). In this paper, we explore whether rates of *long-term* childhood poverty dropped from the 1980s through the late 1990s as did annual rates of poverty. We also examine the black-white racial gap in the proportion of children experiencing long-term poverty, and changes in this gap over time. We seek to uncover how changes in demographic and economic factors contributed to differences in long-term poverty rates by race between the 1980s and 1990s. Finally, we decompose the total family income of black and white children in order to discover how resources of long-term poor families have changed over time. In all of our analyses, we use a comprehensive income measure that includes the Earned Income Tax Credit (EITC) and food stamps as part of a family's total income, more accurately describing the totality of family and governmental resources.

LITERATURE REVIEW

Childhood poverty has long-term effects on 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 and Duncan 1997; Duncan and Brooks-Gunn 2000; McLoyd 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 (Brooks-Gunn and Duncan 1997; Corcoran 2001). 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% (Corcoran 2001). Race also affects mobility among the poor: of children born in the lowest income stratum, movement out of this stratum is significantly less likely for blacks than whites (Hertz 2005).

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 effects of poverty are cumulative. The depth of this poverty is also important for children's outcomes (Lichter 1997). Children in long-term and deep poverty experience more negative outcomes in terms of school attainment, IQ and socio-emotional functioning (Furstenberg 2006; McLoyd 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 1968-1982 were black. Given the accumulated disadvantage experienced by long-term poor children, 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.

A number of demographic and economic factors linked to child poverty have changed over the past three decades. Non-marital childbirth is one of the strongest correlates of childhood

poverty and has risen substantially since the 1970s (Carlson et al. 2004; Primus 2006). Due in part to declining marital fertility, single-parent births now account for one-third of new births (Cancian and Reed 2001). Single headship among black families has been and remains substantially greater than that of whites; from the 1940s through the 1960s, 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 was 17% (Stoll 2005).² Despite the rise in extra-marital fertility, increases in maternal education and decreases 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 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 (Centers for Disease Control).

Economic and policy changes also affected child poverty. Women entered the workforce in increasing numbers, while men's wages, particularly those of workers with a high school degree or less, stagnated (U.S. Department of Health and Human Services 2003). Duncan and 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

² Eggebeen and 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?

to the drop or stagnation of men's wages, although women's poverty remained higher than men's (Bianchi 1999; Blau and Kahn 1997; Wetzel 1995). 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 and Rodgers 1991). During the 1990s, welfare caseloads dropped sharply and the employment rate, annual earnings, and incomes of single mothers and low-skilled women rose. The rise in employment was dramatic for single mothers and for less educated black women (Blank 2002; Meyer and Rosenbaum 2001). Low-wage work was also made more lucrative by expansion of the Earned Income Tax Credit (EITC).

The EITC was created in 1975 to increase after-tax income for low-income working families. It became a significant social policy tool upon expansion in 1986, 1990 and again in 1993 (Berlin 2000). By 1996 the EITC outpaced total federal expenditures on Aid to Families with Dependent Children (AFDC), and by 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, these outlays are not reflected in the official census poverty rate. One difficulty in assessing the impact of these policy changes lies in researchers continued 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; by 2001 it was just 35% (Burtless and 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 and Smeeding 2001). Our comprehensive measure more accurately assesses how children's long-term poverty has changed over time, given the substantial economic, public policy and social changes that occurred across this period.

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- to 10-years-old in 1974 who were observed in the PSID between 1974-1980, (2) children aged 0- to 10-years-old in 1984 who were observed between 1984-1990, and (3) children aged 0- to 10-years-old in 1994 who were observed between 1994-1999. We choose this age range and the corresponding observation periods to assure that each cohort contains the broadest sub-sample of children while minimizing macroeconomic variation across cohort. Each resulting cohort contains children aged 0-17 throughout the observation period with time periods evenly spaced to prevent overlap in cohort eligibility and to minimize the proportion of time a member of any given cohort would be subject to a major economic contraction.³ For the first cohort, family income is reported over the years 1973-1979; for the second, family income is reported from 1983-1989; and for the third, family

³ Only the observation period for the 1970s cohort contains an economic contraction. The National Bureau of Economic Research (NBER) 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).

income is reported for 1993-1998.⁴ 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 here]

Overall Trends in Long-Term Childhood Poverty

We 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.⁵ Under each definition, we estimate the incidence of both LTCP and LTDCP, which we characterize as having an n -year income-to-needs ratio below 1.0 and below 0.75, respectively.⁶ To correct for sample attrition and over-sampling of low-income and black

⁴ 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.

⁵ 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 broader measure of income (Grieger, Danziger and Schoeni 2008).

⁶ We choose an n -year income-to-needs ratio of 0.75 over the more commonly used 0.50 to demarcate “deep” poverty because of the relatively small number of (particularly white) children who are below the 0.50 poverty threshold once food stamps and EITC have been taken into account.

respondents, we use the individual core weights for the final year of the observation period provided in the PSID data file.⁷

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 observation period to the summed official census poverty threshold for that family is less than or equal to 1.⁸ Equation (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 weighted census poverty threshold for the family in year j , and $(cpiurs)_j$ is the inflation adjustment in year j .

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

⁷ The core sample weights in the PSID reflect the addition of immigrants 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 US after 1968.

⁸ 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.

Under the second definition, which will be our primary definition of LTCP, 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). The dollar amount of food stamp usage for each family is taken directly from the PSID. 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 (2).

$$\frac{\sum_{j=1}^n [(pretaxinc + foodstamps + taxes)_j \times (cpiurs)_j]}{\sum_{j=1}^n [(pov)_j \times (cpiurs)_j]} \quad (2)$$

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.

Once the LTCP rates are calculated, we illustrate the racial gap in the likelihood of experiencing long-term poverty by computing the ratio of black to white children in long-term poverty. This calculation reveals how the race gap in LTCP has changed over time. The remainder of our analysis attempts to explain the change in the race gap in long-term poverty from the 1980s to the 1990s by examining both changes in family characteristics across this period as well as changes in the *importance* of these characteristics as predictors of long-term poverty status.

Examining Changes in the Race Gap in Long-Term Child Poverty

Changes in the race gap in LTCP from one cohort to the next can be explained either by 1) a change in the black/white gap in the factors which predict LTCP, 2) a change in the “importance” of a particular factor in predicting LTCP, or 3) some combination of the two. For example, if the black/white gap in education decreased from 1980 to 1990, *ceteris paribus*, we would expect to see a reduction in the race gap in LTCP during that period. If the importance of education as a “predictor” of LTCP decreased from 1980 to 1990, *ceteris paribus*, we would expect stability in the black/white education gap to narrow the race gap over that period. We explore each of these possibilities by examining descriptive statistics and using regression analysis. Additionally, we quantify and compare the amount of the race gap explained by differences in the distribution of family characteristics between black and white families in the 1980s and 1990s using a modified regression decomposition method.

We examine descriptive statistics of children’s families on the following 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), and employment status (at least 1 parent working in all years, at least 1 parent working in some years, no parents employed during observation years). These statistics provide information about demographic change over time and the differences between racial groups. We then compute the race gap in each of these variables for both cohorts and compare. This will tell us whether the black/white gap in a certain characteristic has widened or narrowed over time.

Next, we estimate logistic regression models with the key variables described above as predictors of LTCP status separately for the 1980s and the 1990s. Comparing the magnitudes of

the coefficients will indicate whether the “importance” of a factor in predicting LTCP status has increased or decreased. Taken together, these techniques will help explain changes in the overall race gap in LTCP.

We numerically ascertain how much of the difference in black-white LTCP rates between the 1980s and 1990s is due to differences between racial groups in the distribution of key demographic factors using a modified version of the Oaxaca-Blinder regression decomposition method for binary outcomes, as described in Fairlie (Fairlie 1999, 2005). These methods are described in greater detail later in the paper.

Changes in Income Packages

Finally, we explore changes in the income packages of long-term poor children’s families across the seventies, eighties, and nineties using our primary post-tax plus food stamp measure. For each racial group and cohort, we estimate the proportion of family income derived from the following sources: labor and asset income (including fathers’ and mothers’ earnings), total transfer and social security income (including cash welfare), food stamps, and income from the EITC.⁹

⁹ 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 portion 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 have only a

RESULTS

The Prevalence and Severity of Long-Term Child Poverty

Table 2 provides estimates for rates of long-term child poverty by race and cohort, using three different measures of poverty. Using our primary measure (which combines post-tax and post-transfer income with food stamps), the long-term poverty rates for all children increased from 5.9% in the 1970s to 10.0% in the 1980s and then decreased to 7.3% in the 1990s. Examining the LTCP rates by race, we notice differing trajectories for black and white children after the 1980s. LTCP for both black and white children increased from the 1970s to the 1980s. For white children, LTCP increased from 2.7% to 5.1% and for black children it increased from 24.6% to 34.2%. However, from the 1980s to the 1990s, LTCP for white children decreased to 1.7%, the lowest point in three decades, while LTCP for black children remained high and statistically unchanged. Thus, most of the decrease in overall LTCP from the 1980s to the 1990s was due to declining poverty for white children.

[Table 2 here]

Our alternative measures of poverty produce results consistent with the patterns observed above. As the middle portion of Table 2 indicates, excluding food stamps, federal taxes, and transfers from income increases the LTCP rate for both white and black children. For all children, the LTCP rate using pre-tax income increased from 7.3% in the 1970s to 11.3% in the 1980s, and dropped to 8.7% in the 1990s, similar to the pattern observed using our primary measure. Separately by race, white and black children experienced an increase in long-term

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/>.

poverty from the 1970s to the 1980s. LTCP for whites increased from 3.7% in the 1970s to 5.9% while LTCP for blacks increased from 28.6% in the 1970s to 37.7% in the 1980s. After the 1980s, patterns in LTCP for white and black children diverged, with white LTCP dropping to 2.1% during the 1990s and black LTCP remaining statistically unchanged. Again, the overall decline in LTCP using this alternative measure from the 1980s to the 1990s was due to a decrease in long-term poverty among white children.

The lower part of Table 2 shows our second alternative measure, the proportion of children poor at least half of the observed years in each period (using the post-tax and transfer income plus food stamp measure). The proportion of all children who were poor for at least half of the years in the observation period increased from 6.9% in the 1970s to 11.1% in the 1980s, and then decreased to 8.9% in the 1990s. For black children, 26.7% were poor for at least half of all years in the 1970s increasing to 36.4% in the 1980s and was statistically unchanged through the 1990s. For white children, the proportion poor in at least half the years observed increased from 3.5% in the 1970s to 5.9% in the 1980s and then decreased to 2.5% in the 1990s.

We illustrate the large differences in likelihood of experiencing LTCP between races by examining the racial gap. Table 3 contains black/white poverty ratios by cohort and income measure. Using our primary measure (post-tax and transfer income plus food stamps), the long-term poverty rate for black children is 9.1 times higher than that of white children in the 1970s (.246/.027), 6.7 times higher in the 1980s (.342/.051), and 18.9 times higher in the 1990s (.322/.017). 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 of substantial decreases in white LTCP and because black LTCP remained

high and stable from the 1980s through the 1990s. The alternate measures produce similar results.

[Table 3 here]

Each of these measures tell the same story about long-term poverty: for white children it increased from the 1970s to 1980s and decreased substantially in the 1990s, while for black children long-term poverty increased from the 1970s to the 1980s and remained steady in the 1990s. We next address the question of the severity of this poverty by measuring long-term *deep* poverty, defined as having an n-year income-to-needs ratio of less than 0.75. Table 4 gives the proportion of children experiencing long-term deep poverty by race and cohort using all three measures. Using our primary measure, the black/white trends in long-term deep poverty tell a slightly different story. For all children, long-term deep poverty using post-tax income plus food stamps increased from 1.9% in the 1970s to 4.8% in the 1980s and remained constant into the 1990s. Long-term deep poverty among black children increased from 9.4% in the 1970s to 21.4% in the 1980s with no significant change in the 1990s. For white children, long-term deep poverty was 0.6% in the 1970s and was statistically unchanged into the 1980s and 1990s. Unlike long-term poverty which by all measures dropped in the 1990s due to a substantial decrease in the rate of white LTCP, LTDPCP 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.

[Table 4 here]

Using pre-tax income (alternative measure 1), LTDCP increased for all children from 2.9% in the 1970s to 7.9% in the 1980s and was not statistically different in the 1990s. For black children, the LTDCP rate increased from 14.3% in the 1970s to 31.5% in the 1980s and was not statistically different in the 1990s. For white children, LTDCP increased from 1.0% in the 1970s to 3.1% in the 1980s, and dropped to 1.4% in the 1990s. Comparing our pre- and post-tax measures reveal the large, positive effect of food stamps and the EITC, particularly on black children's likelihood of experiencing LTDP, though the race gap remains large. Our second alternative measure (proportion in poverty for at least half of observed years) tells a roughly similar story as that of the pre-tax income measure.

Black children in all cohorts are consistently much more likely to experience long-term deep poverty than their white counterparts, with black children 15.7, 15.3, and 17.6 times more likely to experience deep poverty than white children in the 1970s, 1980s, and 1990s, respectively (Table 3). Finally we note that, over time, the share of the long-term poor who are long-term deeply poor has increased for both black and white children, albeit in different periods. Using our post-tax and food stamp measure, in the 1970s, about 38% of the black long-term poor were long-term deeply poor compared to 24.1% of whites. By the 1980s, the number of black LTCP who were deeply poor nearly doubled to about 62.5%, but remained steady at about 27.3% for whites. By the 1990s, though, the difference between white and black children disappeared, with 66.2% of long-term poor black children falling into the long-term deeply poor category compared to 68% of whites. This trend indicates that over time, long-term poor children are, on average, poorer in the 1990s than they were in the 1970s.

Examining the Race Gap in Long-Term Childhood Poverty

To explore what underlies the large increase in the racial gap from the 1980s to the 1990s, we begin with an examination of black and white children’s key family and household characteristics and track how they have changed over time. Table 5 provides descriptive information on demographic and economic characteristics of children’s families by race and cohort along with the changes in the black/white gap in these characteristics. The columns labeled “difference” indicate the difference in the average for black children minus the average for white children. The final column in Table 5 represents the percentage change in the difference in these characteristics between black and white children from the 1980s to the 1990s. Thus, a positive percentage represents growth in the black/white difference of a given factor, while a negative percentage represents a decline in the difference.

[Table 5 here]

The average age of the household head was similar for black and white children in the 1980s at 34.6 and 35.8 years old, respectively – a difference of 1.2 years. In the 1990s, the heads of black children’s households were 36.6 years of age on average compared to white children’s household heads’ average age of 37.7. The difference in the 1990s, 1.11 years, represents a 10.5% decrease in the black/white gap in the age of household head from the 1980s (with whites having a higher average than blacks). The average number of children in the family for black children was 2.6 and 2.4 for white children in the 1980s, a difference of 0.2. In the 1990s, the difference grew 76.2% with the average number of children in black children’s households increasing to 2.7 and decreasing to 2.3 in white children’s households.

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.¹⁰ In the 1980s, 42.9% of black children lived with only one parent compared to 5.8% of white children, a difference of 37.1 percentage points. In the 1990s, the difference between black and white children increased by 35.6%, with 56.7% of black children and 6.4% of white children living with only one parent. The black/white gap in the proportion of children who always lived in two parent families also increased from the 1980s to the 1990s. In the 1980s, 32.9% of black children lived with two parents compared with 77% of whites. In the 1990s, only 22.3% of black children always lived with two parents compared to 78.1% for white children. The difference between white and black children, 44.1 percentage points in the 1980s, increased 26.5% to 55.8 percentage points in the 1990s. On the other hand, the black/white gap in the proportion of children who lived in mixed families (sometimes two parent, sometimes one parent) decreased from the 1980s to the 1990s. In the 1980s, 24.2% of black children lived in a mixed family compared to 17.2% of white children, a difference of 7 percentage points. By the 1990s, 21.1% of black children and 15.6% of white children lived in mixed families yielding a 5.5 percentage point gap, a 21.3% decrease from the previous decade. Together this indicates that for both black and white children, the proportion of time spent in mixed families decreased from the 1980s to the 1990s, but much of this decrease was absorbed by an increase in single parent only arrangements for black children and an even increase in single and two parent family arrangements for white children. For both black and white children, the proportion spending at

¹⁰ 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 stepparents 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.

least some time in a non-two parent household (mixed or always one-parent) increased over time although rates were much higher for black than white children. By the 1990s, over three-quarters of black children spent some time in a single-parent household with 56.7% in single parent families the entire observation period. For white children, only about one-fifth spent some time in a single-parent family 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.¹¹ Despite general improvements in the education level of household heads in both black and white families, the race gap in all education categories grew in the 1990s for members of our sample. In the 1980s, 32.1% of black children lived with a household head that did not earn a high school degree compared with about 15.1% of white children, a difference of 17 percentage points. By the 1990s, roughly the same proportion (about a third) of black children lived with a household head that did not finish high school compared with 11.6% of white children. The difference between blacks and whites on this measure was 20.6 percentage points in the 1990's, a 21.7% increase over the previous cohort. The difference between blacks and whites in the proportion of household heads with only a high school degree increased 116.6% from 5.9 percentage points in the 1980s to 12.8 percentage points in the 1990s. As for the most educated, the difference between blacks and whites in the proportion of household heads with more than a high school degree increased by 46.3% from 22.9 percentage points in the 1980s to 33.4 percentage points in the 1990s. Despite improvements in educational

¹¹ 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.

attainment, the distribution of household head education became more unequal from the 1980s to the 1990s.

The employment status of the head of household is characterized using three different categories: employed all years, employed some years, and employed no years. We find that at least one parent worked some of the time during the observation period for most black and white children. For black children, 83.2% had at least one parent working some of the time in the 1980s (the sum of “worked all years” and “worked some years”), increasing slightly to 84.6% in the 1990s. Nearly all white children (99.3%) lived in a household where at least one parent was employed some of the time in the 1980s, and this changed little in the 1990’s at 98.8%. 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 (80.3% vs. 43.5% in the 1980s, and 90.9% vs. 53.3% in the 1990s). The difference in the proportion of black and white families who lived in a household with a head who worked no years decreased by 11.3% in the 1990s, (with black non-work outpacing white) mostly due to a decrease in the proportion of black household heads who did not work in any year. However, the white advantage in working some or all years also grew across this period. The black/white difference in the proportion of children living with a household head who worked some or all years increased by 12.6% and 2.2% respectively.

Overall, families in the 1990s are characterized by more time in single-parent families, more educated household heads, more time spent with employed household heads, older household heads, and slightly smaller family size on average than were families in the 1980s,

although there is a substantial difference between black and white families among these characteristics.

The demographic traits described above are used to model the log-odds of a child being long-term poor (using the post-tax income plus food stamps measure) for each cohort. The coefficients from each of the logistic regression models are presented in Table 6.¹² The differences in the coefficient values are tested for statistical significance by estimating a model with members of each cohort pooled together and a cohort interaction term on each variable. 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, greater 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.¹³ Age of household head is negatively associated with being long-term poor. We are specifically interested in how the coefficient values changed from one cohort to the next as an indication of whether a certain trait's association with long-term poverty status changed in importance. An increase in "importance" is

¹² We also ran logistic regressions that included an interaction between employment status and family structure (not shown). We chose to display the non-interacted model because only two of the eight interactions were marginally statistically significant (but relatively small in magnitude) and because we use the non-interacted model for our decomposition analysis. The advantage to using a non-interacted model for the decomposition is that it allows for analysis of the individual contributions of employment and family structure to the race gap, which is not possible with the interacted model.

¹³ 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).

indicated by a change in the value of the regression coefficient away from zero (i.e. positive coefficient in 1980s is higher in 1990s, negative coefficient in the 1980s is lower in the 1990s). Of all the variables, the coefficient on “No Years Worked” is the only one with a statistically significant difference from the 1980s to the 1990s. In the 1980s, living with a household head who worked no years was associated with a 2.964 unit increase in the log-odds of being long-term poor holding all other observed factors constant. In the 1990s, living with a household head that worked no years was associated with a 5.877 unit increase in the log-odds of being long-term poor, controlling for other observed factors. The difference, 2.913, is statistically significant and indicates an increase in the “importance” of non-employment as a predictor of long-term poverty status in the 1990s.

[Table 6 here]

The second column of Table 7 summarizes the changes in the distribution of family characteristics between children in the 1980s and 1990s (from Table 5) and the third column summarizes changes in the magnitude of the association between family characteristics and long-term poverty status (from Table 6). Examining these together, we can predict how the race gap in LTCP would be expected to change from the 1980s to the 1990s as a result of changes in black/white family characteristics. Table 7 reveals that shifts in the educational attainment and the number of children in the household both would be expected to widen the LTCP race gap from 1980s to the 1990s. The proportion of children who live with a household head who did not complete high school or did not graduate from high school is higher for black children in the 1980's, and the black/white gap increased into the 1990s. The association between educational attainment and LTCP was positive (compared to living with a household head with more than a high school degree) in the 1980's and increased slightly into the 1990's. Thus, we would expect

the changes in the race gap and importance of educational attainment to widen the race gap, all other things being equal. The same pattern is evident for the number of children residing in the household. Thus, the widening of the black/white difference in the distribution of these characteristics and the slight strengthening of the association between the characteristics and LTCP indicate a widening of the black/white gap in LTCP from the 1980s to the 1990s.

[Table 7 here]

Table 7 helps illustrate the necessity of the regression decomposition analysis we conduct. For example, Table 7 reveals that the difference in average age of household head between black and white children decreased. At the same time, however, the negative association between age of household head and LTCP became slightly weaker in the 1990s. As a result, it is difficult to predict the resulting change in the race gap because these factors should move the LTCP race gap in different directions. This occurs similarly for the family structure and employment status variables. To clarify the problem outlined above, we estimate the amount of the race gap due to differences in the distribution of these key characteristics separately in the 1980s and 1990s using a regression decomposition technique and compare the results. The coefficients from the pooled logistic regression models are used to calculate the modified Blinder-Oaxaca decomposition estimates for each variable, which estimate the proportion of the race gap in long-term poverty due to differences in the distribution of key factors. The regression decomposition for a group difference in a continuous outcome can be expressed as:

$$gap = \left| (\bar{\mathbf{X}}^1 - \bar{\mathbf{X}}^2) \hat{\mathbf{B}}^1 \right| + \left| \bar{\mathbf{X}}^2 (\hat{\mathbf{B}}^1 - \hat{\mathbf{B}}^2) \right| \quad (3)$$

Where $\bar{\mathbf{X}}^1$ and $\bar{\mathbf{X}}^2$ 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) represents the portion of the

gap due to group differences in the distributions of the independent variables – or the difference due to coefficients. The second term represents the portion of the gap due to differences in unobserved endowments (Blinder 1973; Cain 1987; Fairlie 2005; Jones 1983; Oaxaca 1973).

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 Fairlie (2005), such a decomposition can be expressed as:

$$gap = \left[\sum_{i=1}^{n^1} \frac{F(\mathbf{X}_i^1; \mathbf{B}^1)}{n^1} - \sum_{i=1}^{n^2} \frac{F(\mathbf{X}_i^2; \mathbf{B}^1)}{n^2} \right] + \left[\sum_{i=1}^{n^2} \frac{F(\mathbf{X}_i^2; \mathbf{B}^1)}{n^2} - \sum_{i=1}^{n^2} \frac{F(\mathbf{X}_i^2; \mathbf{B}^2)}{n^2} \right] \quad (4)$$

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 of interest and the second 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 (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 find the portion of the gap explained by a single independent variable x , samples consisting of equal numbers of each group 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 one another, the observations with the second lowest predicted probabilities compared to one another, and so on. The portion of the gap due to differences in the distribution of x_1 is:

$$\frac{1}{n} \sum_{i=1}^n \left[F(\hat{\beta}_0^p + x_{i1}^1 \hat{\beta}_1^p + x_{i2}^1 \hat{\beta}_2^p + x_{i3}^1 \hat{\beta}_3^p \dots) - F(\hat{\beta}_0^p + x_{i1}^2 \hat{\beta}_1^p + x_{i2}^2 \hat{\beta}_2^p + x_{i3}^2 \hat{\beta}_3^p \dots) \right] \quad (5)$$

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 j th independent variable for group k in comparison pair i . 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:

$$\frac{1}{n} \sum_{i=1}^n \left[F(\hat{\beta}_0^p + x_{i1}^2 \hat{\beta}_1^p + x_{i2}^1 \hat{\beta}_2^p + x_{i3}^1 \hat{\beta}_3^p \dots) - F(\hat{\beta}_0^p + x_{i1}^2 \hat{\beta}_1^p + x_{i2}^2 \hat{\beta}_2^p + x_{i3}^1 \hat{\beta}_3^p \dots) \right] \quad (6)$$

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

$$\frac{1}{n} \sum_{i=1}^n \left[F(\hat{\beta}_0^p + x_{i1}^2 \hat{\beta}_1^p + x_{i2}^2 \hat{\beta}_2^p + x_{i3}^1 \hat{\beta}_3^p \dots) - F(\hat{\beta}_0^p + x_{i1}^2 \hat{\beta}_1^p + x_{i2}^2 \hat{\beta}_2^p + x_{i3}^2 \hat{\beta}_3^p \dots) \right] \quad (7)$$

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 equations (5), (6), and (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.¹⁴ As the

¹⁴ 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.

models are non-linear, the contribution of a single variable could depend on the order of the switching.¹⁵ To correct for this, 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 both to calculate the long-term child poverty rate as well as to obtain the logistic regression coefficients, we must also apply sample weights to each term in the decomposition in (5), (6), and (7).¹⁶

[Table 8 here]

According to table 8, differences in the black/white distribution in education accounted for about 2.4-2.9 percentage points of the overall race gap in LTCP in the 1980s, compared with 2.7-3.0 percentage points in the 1990s. The (small) increase in the race gap is due to changes in the education distribution and association with LTCP and is in line with our predictions in Table 7. Similarly, differences in the black/white distribution of number of children in the household accounted for 1.9-2.5 percentage points of the overall race gap in LTCP in the 1980s versus 2.0-2.5 percentage points in the 1990s. This small change means that the increase in the distributional gap (a 76.2% increase in the difference between black and white from the 1980s to

¹⁵ 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 variable's distribution.

¹⁶ 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 using both weights.

the 1990s) and the small but statistically insignificant increase in the magnitude of the coefficient were not enough to meaningfully change the LTCP gap from the 1980s to the 1990s. Further, Table 8 reports that the age of the household head accounts for about 0.5-0.7 percentage points in the black/white LTCP rate in the 1980s vs. 0.1-0.2 percentage points in the 1990s. This (small) decrease is also in line with our predictions in Table 7.

Earlier we were unable to determine how distributional changes in family structure would affect the race gap in LTCP. Using the regression decomposition, we find that black/white differences in family structure accounted for 1.8-2.5 percentage points of the LTCP race gap in the 1980s, while in the 1990s, differences in family structure accounted for 1.1-1.3 percentage points of the LTCP race gap. This (small) decrease indicates that the distributional changes in family structure (particularly the increased share of single parent only families among black children) did not offset the decrease in strength of the association between single parent arrangement and LTCP status. Alternatively, the decrease in the race gap in LTCP on account of family structure could be due to changes in the distribution of mixed families outweighing changes in single parent families from the 1980s to the 1990s.

Finally, differences in the distribution of employment status accounted for 12.7-14.5 percentage points of the overall race gap in LTCP in the 1980s. In the 1990s, this amount increased to 16.1-19.6 percentage points. This likely indicates that the slight decrease in the difference between the proportion of black and white children with parents who worked no years was more than offset by the increase in the strength of the association between no years worked and LTCP. Essentially, what this means is that despite improvements in the black/white employment gap between the 1980s and the 1990s, employment status became a more

“important” correlate of LTCP status, thus widening the race gap in LTCP by a substantial amount.

Change in Long-Term Poor Children’s Income Resources

The above analysis increases our understanding of how changing family characteristics are associated with changes in the overall race gap in LTCP. Changes in demographic and economic variables are also associated with long-term poverty through the direct link to income resources, a much more proximal determinant of whether a child is experiencing long-term poverty. In the final portion of our analysis, we decompose the complete income packages of long-term poor families. Figure 2 shows the breakdown of family resources for long-term poor children in the 1980s and 1990s by race. A breakdown for the 1970s is included as a reference point.

[Figure 2]

For every race/cohort category, the two bottom portions of each chart indicate the proportion of total family income derived from parental earnings. Two important trends regarding parental earnings are apparent. First, overall parental earnings make up a decreasing portion of the family income of long-term poor children over time. Mothers and fathers of long-term poor white children had earnings that accounted for 56.1% of the total family income in the 1970s, decreasing to 49.0% in the 1980s and 29.8% in the 1990s. The parents of long-term poor black children had earnings that accounted for 33.3% of the total family income in the 1970s, decreasing to 25.0% in the 1980s and 21.8% in the 1990s. Second, most of the decrease in parental income is due to sharp decreases in the proportion of income from fathers, (proportion of income from mothers increased). Father’s earnings accounted for 49.7% of the total family

income of long-term poor white children in the 1970s, compared to 31.0% in the 1980s and 19.7% in the 1990s. For long-term poor black children, father's earnings accounted for only 16.7% of total family income in the 1970s, 6.6% in the 1980s and 3.3% in the 1990s. The difference between black and white children is likely due to the black/white differential in family structure and employment. Even among the subset of long-term poor, black children spend more time than whites in female-headed single parent family arrangements and are more likely to have parents who are not fully employed. On the other hand, the proportion of total family income from mother's earnings increased over time for both the black and white long-term poor. For long-term poor white children, mother's earnings accounted for only 6.5% of total family income in the 1970s, growing to 17.9% in the 1980s and declining slightly to 10.0% in the 1990s. For long-term poor black children, mother's earnings accounted for 16.6% of total family income in the 1970s, slightly increasing to 18.4% in the 1980s and remaining constant at 18.5% in the 1990s.

The proportion of total family income derived from cash welfare has generally decreased for both black and white long-term poor children over time. For long-term poor white children, the proportion of total family income derived from cash welfare was 19.2% in the 1970s, decreasing to 16.4% in the 1980s and 12.8% in the 1990s. For black children, the proportions were 25.7% in the 1970s, 29.0% in the 1980s, and 21.0% in the 1990s. This decrease in the 1990s might be due to changes in welfare policy, which made welfare harder to receive, less-generous, and increasingly tied to employment. The proportion of total income from food stamps increased sharply from the 1970s to the 1980s and then decreased slightly in the 1990s. For long-term poor white children, food stamps made up 12.0% of total family income in the 1970s, 17.3% in the 1980s, and 16.5% in the 1990s. For long-term poor black children, the contribution

was 12.5% in the 1970s, 26.2% in the 1980s, and 25.6% in the 1990s. The increase in the 1980s coincides with the expansion of the food stamp program and increased outreach associated with the program. In the 1990s, food-stamp take-up rates were slightly lower due to a widespread, misplaced belief that welfare reform limited the availability of Food Stamps, as well as increased stigma associated with the receipt of public benefits, although the introduction of electronic funds transfer may have reversed the effect of negative stigma by the end of the decade (Figlio, Gundersen and Ziliak 2000).

Finally, the proportion of long-term poor children's total family income from the EITC increased over time, especially in the 1990s. For long-term poor white children, income from the EITC accounted for 1.4% of total family income in the 1970s, growing to 2.2% in the 1980s and 4.6% in the 1990s. For long-term poor black children, the EITC accounted for 1.2% of total family income in the 1970s, 2.0% in the 1980s, and 5.7% in the 1990s. Generous expansion of the EITC in the 1990s is likely responsible for its increasing contribution to total family income, though long-term-poor families would be expected to benefit less from this expansion, as the EITC is as a wage supplement, and long-term poor families are less likely to be employed.

DISCUSSION

Previous research revealed a substantial difference between black and white children's likelihood of experiencing long-term poverty from the late 1960s through the early 1980s. Duncan and Rodgers (1991) find an increase in persistent poverty across this period using pre-tax income, but no change in persistent poverty when income tax and food stamps are taken into account. They find that changes in demographic and economic factors underlie the stability of the long-term poverty rate for both black and white children. Since their study, we have seen no

work that examines more recent changes in children's long-term poverty rates by race group. In this paper, we both update and extend prior work on long-term child poverty by uncovering trends through the 1990s, and by disentangling the economic and demographic factors that contribute to the substantial black/white race gap. According to our analysis, over the last three decades long-term poverty rates (like annual poverty rates) have been consistently and substantially higher for black children than for white children. This finding, while troubling, is neither new nor surprising. Our contribution is the finding that long-term poverty substantially decreased in the 1990s for white children while remaining stable for black children.

The stability in the long-term poverty rate for blacks from the 1980s to the 1990s and corresponding substantial decrease in the already low 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 18.9 times higher than whites, double the 1970s gap. In the final 30 years of the twentieth century, black children were never as overrepresented among the long-term poor as they were during the 1990s.

Duncan and Rodgers (1991) were the first to point out that demographic changes are an important factor underlying trends in long-term child poverty. Our decomposition results reveal this explicitly. In general, we find that demographic trends are generally more favorable for white children than black children in the 1990s. Despite the divergent trends in education and family arrangement between blacks and whites from the 1980s to the 1990s (with black children disadvantaged in both cases), these factors accounted for a relatively constant portion of the race gap across this period.

In terms of the effects of changing public policies, it is clear that interventions like the Food Stamp Program and the EITC are reducing LTCP. In the 1980s, the LTCP rate for all children was reduced by 11.5% (11.3% compared to 10.0% long-term poor) when EITC and food stamps are taken into account. In the 1990s EITC and food stamps reduce LTCP by an even larger amount, 16.3%, likely due to increases in employment and EITC generosity. All children benefit from these interventions; by the 1990s the reduction in long-term poverty due to food stamps and the EITC are roughly equal for black and white children.

Other policies were less race-neutral: black/white employment differences accounted for a much larger portion of the race gap in the 1990s than 1980s, despite the fact that the employment gap remained roughly steady across these periods. This could indicate that, though employment increased for both white and black parents in the 1990s, the increased tying of social grants to employment (primarily EITC and TANF) and lower wages made employment status a more important factor in determining whether a family would be long-term poor. This, along with declining income from fathers, may explain why long-term poor families received less of their income from wages (particularly among blacks) and welfare payments in the 1990s.

Finally, our research shows both that black children increasingly over-represent the poorest of the long-term poor and that the long-term poor have become poorer over time. 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 rose in the 1980s and remained consistently high 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. In the 1970s, the long-term deep poverty rate was 15.7 times higher for blacks than whites while by the 1990s it was 17.6 times as high.

In the 1970s, only 38% of the black long-term poor were long-term deeply poor. By the 1980s, this proportion increased to 64.5% and remained steady at 66.2% into the 1990s. For whites the increase occurred later – 24.1% of the white long-term poor were long-term deeply poor in the 1970s, increasing slightly to 27.3% in the 1980s and substantially to 68% in the 1990s. Thus, the long-term poor are *poorer* now than ever before. The sharp increase in the 1980s for black children and later the 1990s for white children could indicate that demographic, economic, and public policy changes had a skimming effect on the long-term poor, pulling the children closest to the poverty threshold out of long-term poverty, but not affecting the long-term deeply poor.

On the one hand, this research shows that, for some, these employment-supporting policies were a success: an important outcome that should not be neglected. Yet, employment-supporting policies also leave some people out: because the persistently poor are more likely to face multiple barriers to employment, it is likely that the increased connection between employment and social support programs exacerbates poverty, making upward mobility out of long-term poverty even more difficult. Public policies that tie benefits to employment (like the EITC and welfare) cannot help those unable to become or remain employed, making persistent, deep poverty more likely for the children of these families. This may explain why long-term poor white and black children are more deeply poor in the 1990s.

To supplement our findings, we suggest directions for future work. First, changes in the income packages of the long-term poor, specifically in transfer income, could be more thoroughly investigated. While the income of fathers declined, due in part to family structure changes but also due to declining father wages, child support enforcement has substantially increased. Although fathers may not be present in the households in which their children are

raised, the financial contribution of absent fathers is likely to play a more prominent role in the 1990s as enforcement increased.

At the time of publication, there were not enough waves of the PSID to conduct an analysis of long-term child poverty for a full cohort past the year 2000. As data become available, we hope to examine the effects of EITC and welfare policy changes of the 1990s in the less robust economic environment of the new century.

Finally, with the PSID entering its fourth decade, it is now possible to examine the adult outcomes of those children who experienced long-term poverty in their youth. For all cohorts, early adult outcomes such as educational attainment, family formation, fertility, and labor market outcomes can now be examined. For the earliest cohorts, questions of intergenerational LTCP can also be explored. These avenues of research might increase our understanding of the long reach of poverty, and the lasting implications of contemporary policy and demographic change.

REFERENCES

- Berlin, G.L. 2000. "Encouraging Work Reducing Poverty: The Impact of Work Incentive Programs." Manpower Demonstration Research Corporation.
- Bianchi, S.M. 1999. "Feminization and juvenilization of poverty: Trends, relative risks, causes, and consequences." *Annual Review of Sociology* 25:307-334.
- Blank, R.M. 1997. *It takes a nation : a new agenda for fighting poverty*. New York Princeton, N.J.: Russell Sage Foundation; Princeton University Press.
- . 2002. "Evaluating welfare reform in the United States." *Journal of Economic Literature* 40(4):1105-1168.
- Blau, F.D.and L.M. Kahn. 1997. "Swimming upstream: Trends in the gender wage differential in the 1980s." *Journal of Labor Economics* 15(1):1-42.
- Blinder, A.S. 1973. "Wage Discrimination: Reduced Form Structural Estimates." *The Journal of Human Resources* 8(4):436-455.
- Brooks-Gunn, J.and G.J. Duncan. 1997. "The Effects of Poverty on Children." *The Future of Children* 7(2):55-71.
- Burtless, G.and T.M. Smeeding. 2001. "The Level, Trend and Composition of Poverty." Pp. 27-68 in *Understanding Poverty*, edited by S.H. Danziger and R.H. Haveman. Cambridge, MA: Havard University Press.
- Cain, G.G. 1987. "The Economic Analysis of Labor Market Discrimination: A Survey." Pp. 693-781 in *Handbook of Labor Economics*, edited by O. Ashenfelter and R. Layard. New York: Elsevier Science Pub. Co.
- Cancian, M.and D. Reed. 2001. "Changes in Family Structure: Implications for Poverty Related

- Policy." Pp. 69-96 in *Understanding Poverty*, edited by S.H. Danziger and R.H. Haveman. Cambridge, MA: Harvard University Press.
- Carlson, M., I. Garfinkel, S. McLanahan, R. Mincy, and W. Primus. 2004. "The effects of welfare and child support policies on union formation." *Population Research and Policy Review* 23(5-6):513-542.
- Centers for Disease Control. "Report on Live Births, Birth Rates and Fertility Rates by Race in the United States: 1909-2000."
- Corcoran, M. 2001. "Mobility, Persistence, and the Consequences of Poverty for Children." Pp. 127-161 in *Understanding Poverty*, edited by S.H. Danziger and R.H. Haveman. Cambridge, MA: Harvard University Press.
- Duncan, G. 1991. "The Economic Environment of Childhood." Pp. 23-50 in *Children in Poverty*, edited by A.C. Huston: Cambridge University Press.
- Duncan, G.J. and J. Brooks-Gunn. 2000. "Family poverty, welfare reform, and child development." *Child Development* 71(1):188-197.
- Duncan, G.J. and W. Rodgers. 1991. "Has Children's Poverty Become More Persistent?" *American Sociological Review* 56(4):538-551.
- Eggebeen, D.J. and D.T. Lichter. 1991. "Race, Family Structure, and Changing Poverty Among American Children." *American Sociological Review* 56(6):801-818.
- Fairlie, R.W. 1999. "The absence of the African-American owned business: An analysis of the dynamics of self-employment." *Journal of Labor Economics* 17(1):80-109.
- . 2005. "An extension of the Blinder-Oaxaca decomposition technique to logit and probit models." *Journal of Economic and Social Measurement* 30(4):305-317.
- Feenberg, D. and E. Coutts. 1993. "An Introduction to the Taxsim Model." *Journal of Policy*

- Analysis and Management* 12(1):189-194.
- Figlio, D.N., C. Gundersen, and J.P. Ziliak. 2000. "The effects of the macroeconomy and welfare reform on food stamp caseloads." *American Journal of Agricultural Economics* 82(3):635-642.
- Furstenberg, F.F. 2006. "Diverging Development: The Not-so-Invisible Hand of Social Class in the United States." in *The Network on Transitions to Adulthood*. Philadelphia, PA: University of Pennsylvania.
- Grieger, L.D., S.H. Danziger, and R.F. Schoeni. 2008. "Accurately Measuring the Trend in Poverty in the United States Using the Panel Study of Income Dynamics." in *Panel Study of Income Dynamics Technical Paper Series*. Ann Arbor, MI: University of Michigan.
- Hertz, T. 2005. "Rags, Riches, and Race: The Intergenerational Economic Mobility of Black and White Families in the United States." Pp. 165-191 in *Unequal Chances: Family Background and Economic Success*, edited by S. Bowles, H. Gintis, and M.O. Groves. Princeton, NJ: Princeton University Press; Russell Sage Foundation.
- Jones, F.L. 1983. "On Decomposing the Wage Gap: A Critical Comment on Blinder's Method." *The Journal of Human Resources* 18(1):126-131.
- Lichter, D.T. 1997. "Poverty and Inequality among Children." *Annual Review of Sociology* 23:121-146.
- Lichter, D.T. and M.L. Crowley. 2004. "Welfare reform and child poverty: Effects of maternal employment, marriage, and cohabitation." *Social Science Research* 33(3):385-408.
- McLoyd, V.C. 1998. "Socioeconomic disadvantage and child development." *The American Psychologist* 53(2):185-204.
- Meyer, B.D. and D.T. Rosenbaum. 2001. "Welfare, the earned income tax credit, and the labor

- supply of single mothers." *The Quarterly Journal of Economics* 116(3):1063-1115.
- National Bureau of Economic Research. "Business Cycle Expansions and Contractions."
Washington D.C.
- Oaxaca, R. 1973. "Male-Female Wage Differentials in Urban Labor Markets." *International Economic Review* 14(3):693-709.
- Primus, W.E. 2006. "Reductions in Poverty Significantly Greater in the 1990s Than Official Estimates Suggest." *Review of Policy Research* 23(3):781-797.
- Scholz, J.K. 1994. "The Earned Income Tax Credit: Participation, Compliance and Anti-Poverty Effectiveness." *National Tax Journal* 47(1):160-162.
- Stoll, M.A. 2005. "African-Americans and the Color Line." Pp. 380-414 in *The American People: Census 2000*, edited by R. Farley and J. Hagga. New York: Russell Sage Foundation.
- U.S. Department of Health and Human Services. 2003. "Indicators of Welfare Dependence: Annual Report to Congress." edited by U.S.D.o.H.a.H. Services. Washington, D.C.
- Wetzel, J.R. 1995. "Labor Force, Unemployment, and Earnings." in *State of the Union: American in the 1990s, Volume 1: Economic Trends*, edited by R. Farley. New York: Russell Sage Foundation.

Table 1

Table 1. Sample Cuts by Race and Cohort

Cohort	Race of Child		Total
	Black	White	
1970s			
n (unweighted)	1275	1474	2749
Proportion (weighted)	14.7%	85.4%	
1980s			
n (unweighted)	1342	1779	3121
Proportion (weighted)	16.8%	83.2%	
1990s			
n (unweighted)	1179	1415	2594
Proportion (weighted)	18.3%	81.7%	

Table 2.

Table 2. Long-Term Child Poverty Rates by Race and Cohort*

Measure/Race	Cohort				
	1970s	1980s	1990s		
Main Measure (Post-tax/post-transfer income + FS)					
Black	0.246	0.342	*	0.322	
White	0.027	0.051	*	0.017	*
All	0.059	0.100	*	0.073	*
Alternative 1 (Simple income)					
Black	0.286	0.377	*	0.384	
White	0.037	0.059	*	0.021	*
All	0.073	0.113	*	0.087	*
Alternative 2 (At-least half of years observed are in poverty)					
Black	0.267	0.364	*	0.375	
White	0.035	0.059	*	0.025	*
All	0.069	0.111	*	0.089	*

* significantly differs from previous cohort at the 0.05 level.

Table 3.

Table 3. Ratio of Black to White Long-Term Child Poverty Rates*

Poverty Level	Cohort		
	1970s	1980s	1990s
Long-Term Poor	9.1	6.7	18.9
Long-Term Deeply Poor	15.7	15.3	17.6

*calculated using main income measure (post-tax/post-transfer income + FS)

Table 4.

Table 4. Long-Term Deep Child Poverty Rates by Race and Cohort*

Measure/Race	Cohort		
	1970s	1980s	1990s
Main Measure (Post-tax/post-transfer income + FS)			
Black	0.094	0.214 *	0.211
White	0.006	0.014	0.012
All	0.019	0.048 *	0.048
Alternative 1 (Simple income)			
Black	0.143	0.315 *	0.307
White	0.010	0.031 *	0.014 *
All	0.029	0.079 *	0.068
Alternative 2 (At-least half of years observed are in poverty)			
Black	0.054	0.171 *	0.189
White	0.005	0.016 *	0.006
All	0.012	0.042 *	0.040

* significantly differs from previous cohort at the 0.05 level.

Table 5.

Table 5. Family Characteristics of Black and White Children by Cohort and Resulting Changes in the Black/White Gap.

	1980s			1990s			% Change in Diff.
	Black	White	Difference	Black	White	Difference	
Age of Household Head (in years)	34.57	35.81	-1.240	36.60	37.71	-1.110	-10.48%
Number of Children in Family	2.60	2.39	0.210	2.71	2.34	0.370	76.19%
Family Arrangement (%)							
Always Single Parent	0.429	0.058	0.371	0.567	0.064	0.503	35.58%
Mixed Single and Two Parent	0.242	0.172	0.070	0.211	0.156	0.055	-21.32%
Always Two Parent	0.329	0.770	-0.441	0.223	0.781	-0.558	26.53%
Education of Household Head (%)							
Less Than High School	0.321	0.151	0.170	0.322	0.116	0.206	21.65%
High School Degree	0.399	0.340	0.059	0.415	0.287	0.128	116.55%
More Than High School	0.281	0.509	-0.229	0.263	0.598	-0.334	46.28%
Employment of Household Head (%)							
Worked No Years	0.168	0.008	0.161	0.154	0.012	0.143	-11.33%
Worked Some Years	0.397	0.190	0.207	0.313	0.079	0.234	12.63%
Worked All Years	0.435	0.803	-0.368	0.533	0.909	-0.376	2.23%

Table 6.

Table 6. Logistic Regression Coefficients of Long-Term Poverty Status on Demographic/Employment Factors by Cohort*

Coefficient	1980s			1990s			Diff. bet.	
	Beta	SD	sig	Beta	SD	sig	cohorts	sig
Age of Head	-0.075	0.016	*	-0.069	0.022	*	-0.007	
Education (More than high school omitted)								
Did Not Complete High School	1.488	0.337	*	2.216	0.512	*	-0.728	
High School Graduate	0.605	0.320		1.253	0.580	*	-0.648	
Number of Children in HH	0.632	0.114	*	0.670	0.147	*	-0.038	
Family Arrangement (Always 2-parent Omitted)								
Always Single Parent	0.690	0.295	*	0.612	0.521		0.078	
Mixed	0.155	0.389		-0.388	0.444		0.543	
Employment Status of Head (Worked All Years Omitted)								
No Years Worked	2.964	0.545	*	5.877	0.981	*	-2.913	*
Worked Some Years	1.913	0.371	*	2.945	0.407	*	-1.032	
White	-1.150	0.315	*	-1.933	0.391	*	0.783	
Constant	-2.415	0.802	*	-3.857	0.920	*		

*p<.05.

Table 7.

Table 7. Summary of Changes in the Distribution of Family Characteristics and Association with Long-term Poverty Status

Family Characteristic	Change in Race Gap/ Group with Higher Average	Direction of Association with LTP / Change in importance	Predicted Change in LTCP Race Gap
Age of Head	Decrease/White	Negative*/Slight Decrease	Unknown
Education			
More than High School	Increase/White	Omitted	--
Did Not Complete High School	Increase/Black	Positive*/Slight Increase	Widen
High School Graduate	Increase/Black	Positive*/Slight Increase	Widen
Number of Children in HH	Increase/Black	Positive*/Slight Increase	Widen
Family Arrangement			
Always Two Parent	Increase/White	Omitted	--
Always Single Parent	Increase/Black	Positive*/Slight Decrease	Unknown
Mixed	Decrease/Black	Negative*/Slight Decrease	Unknown
Employment Status			
Worked All Years	Increase/White	Omitted	--
No Years Worked	Decrease/Black	Positive*/Increase*	Unknown
Worked Some Years	Increase/Black	Positive*/Slight Increase	Widen

* Indicates association/change is statistically significant at the 0.05 level.

Table 8.

Table 8. Proportion of Difference in Poverty Rate Explained by Black/White Differences in Covariates With and Without Interaction Term Between Family Structure and Employment.

Cohort	<u>1980s</u>	<u>1990s</u>
Black Long-Term Child Poverty Rate	0.3422	0.3220
White Long-Term Child Poverty Rate	0.0513	0.0173
Difference	0.2909	0.3047

	Weights Used	White	Black	White	Black
Age of HH Head		0.0069	0.0049	0.0016	0.0005
Number of Children in HH		0.0252	0.0189	0.0246	0.0196
Education		0.0288	0.0244	0.0272	0.0299
Family Structure		0.0183	0.0245	0.0109	0.0132
Employment		0.1267	0.1448	0.1605	0.1963
Region		0.0063	0.0063	0.0060	-0.0034
Total		0.2122	0.2238	0.2309	0.2560

Figure 1: Annual Poverty Rate for Children Under 18 by Race, 1974-1999

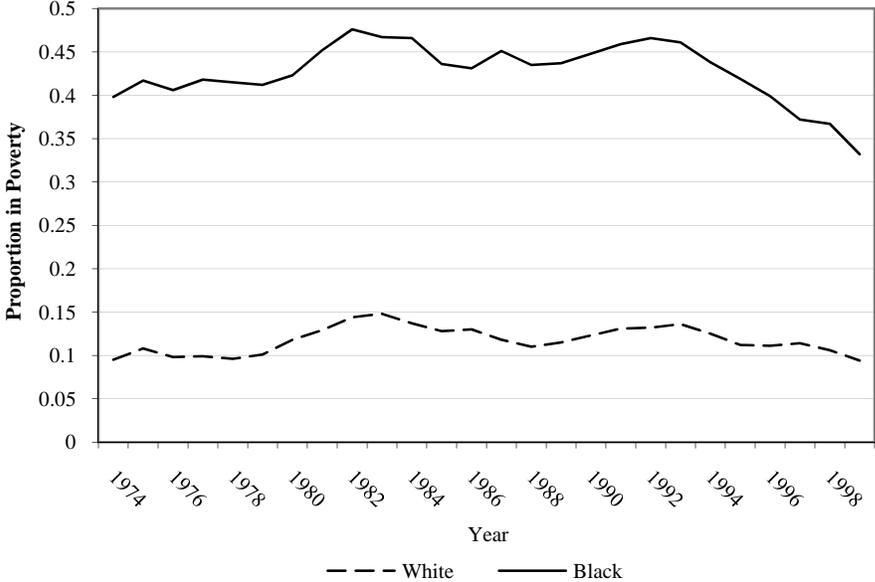
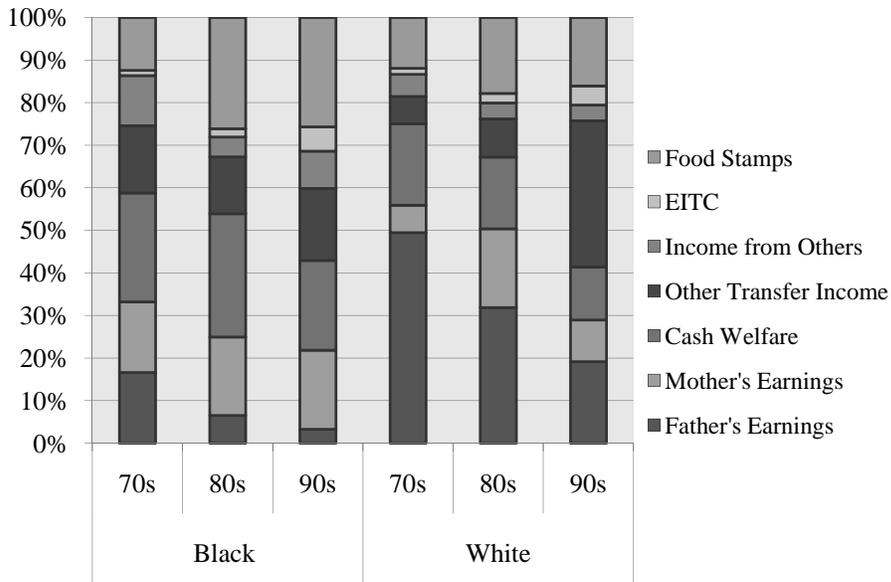


Figure 2. Breakdown of Long-Term Poor Children's Family Income by Race and Cohort





Population Studies Center Research Reports

The **Population Studies Center (PSC)** at the University of Michigan is one of the oldest population centers in the United States. Established in 1961 with a grant from the Ford Foundation, the Center has a rich history as the main workplace for an interdisciplinary community of scholars in the field of population studies. Currently PSC is one of five centers within the University of Michigan's Institute for Social Research. The Center receives core funding from both the Eunice Kennedy Shriver National Institute of Child Health and Human Development (R24) and the National Institute on Aging (P30).

PSC Research Reports are prepublication working papers that report on current demographic research conducted by PSC-affiliated researchers. These papers are written for timely dissemination and are often later submitted for publication in scholarly journals. The PSC Research Report Series was begun in 1981.

Copyrights for all Reports are held by the authors. Readers may quote from this work as long as they properly acknowledge the authors and the Series and do not alter the original work.

Population Studies Center
University of Michigan
Institute for Social Research
PO Box 1248, Ann Arbor, MI 48106-1248 USA
<http://www.psc.isr.umich.edu/pubs/>