## Racial and Ethnic Differences in the Relationship between Income Inequality and Family Structure: A Cohort Analysis

## **OVERVIEW**

Since the early 1970s, the United States has seen significant reductions in the amount of differential treatment and discrimination on the basis of race and ethnicity. However, at the same time that these types of categorical inequalities were declining, income inequality was increasing. Concurrently, the composition of households and the types of families in which Americans reside were becoming increasingly diverse and dissimilar. These changes are not unrelated; indeed, the evidence to date suggests that changes in family structure can account for some of the increase in income inequality (Burtless 1999; Lee 2005; Lerman 1996; Thomas and Sawhill 2005). However, previous research in this area has left several crucial questions unanswered including how the relationship between family change and income inequality varies across racial groups. Research on the relationship between family structure and poverty rates suggest that an assumption of uniform effects of family structure across racial and ethnic groups is unwarranted; Iceland (2003) finds that family structure accounts for more of change in poverty rates for non-Hispanic blacks than for Hispanics or whites. Additionally, many previous analyses have made strong assumptions about how family structure affects employment and earnings despite research showing that employment levels and wage rates are closely related to marital and parental status, particularly for women. In this paper, I try to fill this gap by calculating a range of estimates that show how much of the increase in income inequality is associated with changes in family structure under different assumptions about how family structure affects employment and earnings. I consider how this relationship (between family structure and income inequality) varies across four racial/ethnic groups for working age adults from birth cohorts born 1935-1970.

## **DATA**

Data for these analyses come from the 1970-2000 decennial census data (IPUMS 1% samples) and the 1970-2005 March Annual Demographic Supplement of the Current Population Survey. Both of these data sources have been used in previous analyses of income inequality (Burtless 1999; Lee 2005; Lerman 1996; Thomas and Sawhill 2005). The IPUMS 1% samples have a much larger number of cases than the Current Population Survey, which has a sample size of between 50,000 and 70,000 for the period of the study. The larger sample size in the census data allows for more precise estimations of income inequality for racial and ethnic subgroups of the population, but using the Census precludes using data from intercensal years. In contrast, CPS has a smaller sample but has data from every year and includes more detailed information than census data, making a more detailed analysis possible.

In this analysis, I consider differences among four racial/ethnic groups: non-Hispanic whites, non-Hispanic blacks, Hispanics, and others. Family structure has been defined in numerous ways in the literature, ranging from a simple dichotomy between married couple families and all other families to very complex classification systems yielding a number of family structures too numerous for meaningful analyses. Given the constraints of the data, I settle on a classification scheme which classifies individuals into one of six family types based on their marital status, the presence of children in the family, and the number of adults in the family. These family types include married couples with children, married couples without children, unmarried individuals with children (no other adults in the family), unmarried individuals with children and other adults, unmarried individuals with other adults but no children, and unmarried

individuals living alone. I focus on pre-tax income inequality and do not consider the effects of taxes and transfers on inequality. To measure income inequality, I use the 90/10 ratio and decile shares. The 90/10 ratio is widely used in the literature and gives a good one number estimate of the disparity in income of families at the top and the bottom of the distribution. However, the 90/10 ratio cannot tell us about how inequality throughout distribution is changing. To better understand the dynamics of income inequality for the whole distribution, I use a measure created by Handcock and Morris (1999) based on fractile shares that allows us to see changes at each income decile.

## **METHODS**

To measure the effect of changes in family structure on the growth of income inequality, I use standardization and simulation models, following closely the strategies that Danziger and Gottschalk (1995) and Iceland (2003) used to isolate the effects of family structure on poverty. First, I calculate mean income and dispersion indices for race-sex-education groups by birth cohort and age. Then, I produce estimates of income inequality for each cohort by race under a variety of assumptions about how income and family structure are related. These assumptions include 1) that family structure has no effect on individual employment levels or wage rates (e.g. that family structure only affects which household an individual is in and who else is in that household); 2) that family structure affects employment levels, particularly women's, but not wage rates; 3) that family structure affects both employment levels and wage rates. From these simulations, I show how much of the change in income inequality within and between racial and ethnic groups can be explained by changes in family structure under a variety of conditions.