More Difficulties with CPS Measures of Trends in Earnings Inequality

An Addendum to "Is Earnings Inequality Really Increasing?"

Robert I. Lerman

My policy brief[1] noted that the Current Population Survey (CPS) annual supplement is in principle a less appropriate data source for measuring trends in wage rate inequality than the Survey of Income and Program Participation (SIPP). Unlike the SIPP, the CPS does not capture the actual hours and earnings of each job every month and thus cannot reflect wage rate differences within a given year. However, I did not devote sufficient attention to other measurement problems with the CPS. This addendum completes the discussion by examining two problems in the CPS, neither of which affects SIPP: 1) top coding of the top earnings brackets and 2) slight changes in CPS data collection methods since 1992 that could distort the trend.

to bias in the measurement of trends in earnings inequality if the proportion of earners so affected changes over time. I made no adjustment for top coding in the CPS estimates shown in the brief. The unadjusted numbers, repeated for convenience in figure 1 of this addendum, yield a

Figure 1
Trends in the Gini Coefficients of Wage Rates for All Hours Worked Using SIPP and CPS Data: 1979-1995
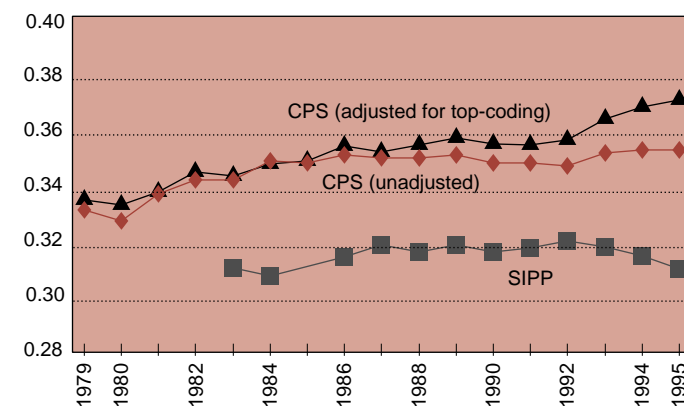
Source: Urban Institute tabulations based on CPS and SIPP data.

trend that is essentially stable from 1986 to 1989, drops from 1989 to 1992, increases from 1992 to 1993, and changes little thereafter. Between 1985 and 1995 the proportion of earners affected by the top coding increased from about 0.3 percent to about 1.6 percent, however. Other things equal, therefore, I almost certainly underestimated any trend toward increased earnings inequality

that might have taken place at the top of the earnings distribution, as measured by the CPS.

The top-coding problem cannot be definitively corrected, because the data are unknown. Jared Bernstein and Lawrence Mishel of the Economic Policy Institute have made an adjustment for the top coding, based on the assumption of a Pareto distribution in the range near and above the top-code value. Using their adjusted estimates yields a trend line that is also shown in figure 1. As can be seen, the Bernstein-Mishel adjustments yield somewhat higher Gini coefficients than the unadjusted numbers but a very similar trend until 1992, after which they show more steeply rising inequality than the unadjusted numbers.[2] But that is not the end of the story.

Top Coding

In the releases of CPS data available to the public, the Census Bureau caps the top of the earnings distribution at $99,999 a year. All earners above that level appear in the CPS public use data base as earning $99,999 a year, whatever their actual earnings are. This top coding can lead

Changes in CPS Procedures and Questions

In January 1994, just in time for the collection of CPS earnings data for 1993, the Census instituted a new computer-assisted survey collection method, which allowed for the inte-

gration of the monthly and annual demographic surveys. This method, because it avoids any significant interruption of the interview process, could have led to higher reported earnings, particularly for the top earners. (Both my unadjusted CPS trend and the Bernstein-Mishel adjusted trend show an upward blip between 1992 and 1993.) In addition, the form of the question about "last year's earnings" changed in time for the March 1995 survey (asking about 1994 income), from asking simply for earnings before all deductions to asking explicitly for earnings before taxes and other deductions—a change that is also likely to solicit higher earnings totals, again particularly for top earners. Finally, the proportion of earnings not reported by respondents has been steadily rising, again particularly for top earners, requiring increased amounts of imputations based on a Census matching procedure. Increasing imputations near the top of the distribution can introduce an unknown amount of bias.

Overall Assessment

Given all these uncertainties, it is my judgment that we cannot draw conclusions about earnings inequality as reflected in the CPS data since 1992. The SIPP data are our best alternative (also shown for convenience in figure 1). The SIPP trend, although it shows uniformly lower Gini coefficients, follows the CPS unadjusted and adjusted trend pretty well between 1986 (the first SIPP year) and 1992. For the years since then, the SIPP trend diverges sharply from both CPS trends.

Notes

1. "Is Earnings Inequality Really Increasing?" *Economic Restructuring and the Job Market.* Brief No. 1 (Urban Institute, Washington, D.C.: March 1997).

2. Another common measure of inequality, the 90/10 ratio—earnings at the 90th divided by earnings at the 10th percentile—is largely unaffected by the top code adjustment. By this measure, earnings inequality was no higher in 1995 than in 1986.

Robert I. Lerman is director of the Human Resources Policy Center at the Urban Institute and professor of economics, American University.

For extra copies call (202: 857-8687) or visit the Urban Institute's web site (http://www.urban.org).

Designed by Barbara Willis

Telephone: (202) 833-7200 ■ Fax: (202) 429-0687 ■ E-Mail: paffairs@ui.urban.org ■ Web Site: http://www.urban.org

THE URBAN INSTITUTE
2100 M Street, N.W.
Washington, D.C. 20037

Address Correction Requested