

Income Inequality Measurement Sensitivities

by Christopher Sarlo, Jason Clemens, and Joel Emes

Income inequality has been an animating policy issue over the last number of years. Unfortunately, it has too often been treated simplistically. This study measures both the current state of income inequality and its change over time (since 1982), paying particular attention to how different definitions of income and the choice of economic unit (individuals or families) influence the results.

A number of important analytical results emerge. Earnings, a narrow definition of income consisting largely of wages, salaries, and net small business income, have the highest level of inequality, one which has increased sharply since 1982. But this measure ignores a number of critical factors that temper inequality and its growth over time. Specifically, fewer families (and individuals) have earnings than was the case 30 years ago, many more people (students, seniors, welfare recipients) are receiving government transfers now, and families have gotten smaller. Accounting for these important changes—and choosing a broader definition of income—provides a very different view of inequality.

After-tax income includes government transfers and income taxes. Adjusted for family size to take account of the number of people supported by the family's income, it is therefore a much better reflection of the family's actual living standard. Using this measure, we find that family income inequality between 1982 and 2010 has risen between 6.5 and 12.9 percent, depending on the inequality indicator used. This is a far more modest increase than many other studies show.

Moreover, the results using after-tax incomes of individuals show that income inequality is essentially the same or perhaps even slightly less than in 1982. This important result stands in contrast to the simplistic view that income inequality is unambiguously rising.

In 2010, the top 10 percent of families received between 25.3 and 36.8 percent of income, depending on its definition. Changing the definition from adult-equivalent after-tax income to earnings increases the level of family income inequality by 45.5 percent.

Similarly large variances are observed when the change in family income inequality over time is measured. Increases in income inequality range from a low of 12.9 percent (for adult equivalent after-tax income) to a high of 34.2 percent (for earnings). In other words, the measured growth in inequality can be increased by 165.6 percent simply by changing the definition of income.

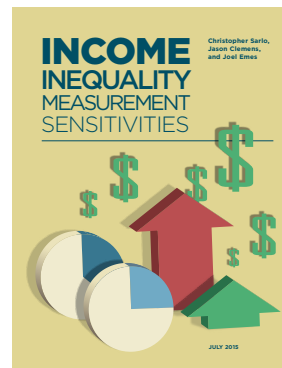
Looking at individuals rather than families, the level of income inequality again varies depending on the definition of

income. The income shares for the top 10 percent of individuals in 2010 vary from a low of 30.0 percent (for after-tax income) to a high of 41.7 percent (for earnings)—a 39.0 percent increase in the level of income inequality entirely due to the choice of definition.

The Gini coefficient, an alternative to the recently popular top-decile share measure of inequality, also shows large differences in both the level of income inequality and its change over time depending on the definition of income—and it shows smaller inequality increases for all income measures and family types. **Indeed, individual total and after-tax incomes actually show inequality declines between 1982 and 2010 when Gini coefficients are used.**

Choices about income definition, family size, and the inequality indicator itself are clearly important. A simplistic approach shows a relatively high level of inequality, and one that is considerably higher than three decades ago. How-

ever, caution needs to be employed given the sensitivities of the results to the underlying definitions. Unlike individual earnings, adult-equivalent after-tax family income shows less inequality, increasing only modestly over time.



Income Inequality Measurement Sensitivities

by
Christopher Sarlo,
Jason Clemens, and
Joel Emes

[Click here to
read the full
report](#)

