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Moses, Leo R.; Truog, Trevor R.; Sommers, Paul M.

Is the gap between “haves” and “have-nots” really widening?

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From the introduction: The “Occupy Wall Street” protests and marches that began in the fall of 2011 against social and economic inequality in the United States have sparked similar demonstrations across the nation. The disparity between the richest 1% and everyone else has become part of the national discourse. Since the end of World War II the United States has collected detailed data on a variety of conceivable statistical measures of income inequality to empirically test the claim that the rich are getting richer (and the poor are getting poorer). The most familiar of these measures is the Gini coefficient of concentration. Evidently, the Gini coefficient, as a way of measuring the gap between rich and poor, is somewhat flawed. In this brief research note we propose to examine two alternative metrics of income inequality: (i) the ratio of the upper income limit of the fourth quintile of all families (all races) to the upper income limit of the lowest quintile and (ii) the ratio of the lower income limit of the top 5% of all families to the upper income limit of the lowest quintile. We are curious to see if, over the 64-year period from 1947 to 2010, the gap between the “haves” and the “have-nots” has increased, that is, whether the two aforementioned ratios have increased.

Classification: M30 M40 M70 K40

Keywords: mathematical applications; economics; income distributions; income gap; USA; statistical data; social sciences; mathematics and politics; mathematics and society; equality; money; financial mathematics; Gini index of inequality; Gini coefficients; concentration measures; Lorenz curve; exploratory data analysis; quintile ratio