



Policy Brief

Stanford Institute for Economic Policy Research

The Rise of Income Inequality in the United States, 1979-2001

by Victor R. Fuchs

Income inequality is one of the most analytically complex, value-laden, contentious subjects of economic policy. How should income be measured? How should inequality be measured? How much has inequality changed in recent decades, and what explains the changes? What effect did changes in tax policy have on after-tax inequality? This brief analyzes Congressional Budget Office (CBO) data on income and taxes for 1979 through 2001 to provide an overview of trends in income inequality.*

The CBO definitions of income received and taxes paid are very comprehensive. Despite some problems, they probably come closer to measuring real economic well-being than do more widely used definitions that do not, for example, take account of employer- and government-sponsored health insurance or the effect on households of taxes on business. I measure inequality in two ways: the “Duncan” index shows the percentage of total income that would have to be redistributed to achieve equal shares for each quintile. The “Fifth/First” index shows the ratio of average income in the highest quintile to average income in the lowest quintile. According to the Duncan index, after-tax inequality rose from 24.9 percent in 1979-81 to 30.4 percent in 1999-01. The change in the Fifth/First index was from 6.7 to 9.8.

*Note: All the measures presented in this brief are calculated from tables published by the Congressional Budget Office (CBO) under the title, *Effective Federal Tax Rates: 1979-2001* <http://www.cbo.gov/showdoc.cfm?index=5324&sequence=0#table1A>. The CBO defines pre-tax income to include all cash income, taxes paid by businesses (which are imputed to individuals), employee contributions to 401K retirement plans, and the value of income received-in-kind from employer-paid insurance premiums, Medicare and Medicaid benefits, food stamps, and other sources. Income is adjusted for size of household. The CBO estimates taxes to include not only taxes paid directly such as individual income and payroll taxes but also estimates of excise taxes paid and imputations of taxes paid by business, including the employer share of payroll taxes. Corporate income taxes were assumed to be borne by owners of capital, allocated according to proportion of a household's income received from interest, dividends, rent, and capital gains. Some public finance experts believe that payroll taxes should not be considered as similar to other taxes because they create credits for individuals that will be collected upon retirement. The imputation of corporate taxes may also be problematic because there is considerable disagreement among public finance experts regarding the incidence of the tax. Nevertheless, measures of inequality limited to actual cash income received and taxes paid are probably even more problematic.

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Patterns of Change

Inspection of Figure 1 reveals three important conclusions about changes in income inequality from 1979 to 2001. First, the direction, timing, and pace of change are very similar for an index based on the entire distribution (Duncan) and one that focuses exclusively on the highest and lowest quintiles (Fifth/First). Second, inequality did not increase steadily throughout the period: a sharp increase from 1979-1986 was followed by almost a decade of no increase; then starting around 1995, inequality increased rapidly for the rest of the decade. The third important pattern is the close correspondence between changes in pre-tax and after-tax inequality. Despite numerous large, controversial shifts in tax policy during

the 23 years, after-tax inequality appears to depend primarily upon pre-tax inequality, not changes in taxes.

Economists have offered many explanations for the rise in income inequality: the information technology (IT) revolution, which widened the wage gap between skilled and unskilled workers; the shift in employment from high-wage manufacturing jobs to lower-wage service employment; globalization; the decline of unions; and others. However, given the patterns revealed in Figure 1, the question arises: Did these transformations stop abruptly in 1986, remain dormant until 1995, then resume? Probably not. Figure 2, shows the relative income shares for different segments of the income distribution (smoothed with a three-year moving average). During the first period of increase, there was a substantial decline in the income share of the first quintile (and also declines in shares for the second and third quintiles). This is consistent with the weakening market position of less skilled labor. We also see a very sharp rise in the share of the top 1 percent, but only modest or no increases for the rest of the top quintile.

The top 1 percent (a little over 1 million households) played an even more important role in the rise of

Figure 1.

Indexes of Income Inequality, Pre-Tax and After-Tax, Duncan and Fifth/First. 1979-2001.

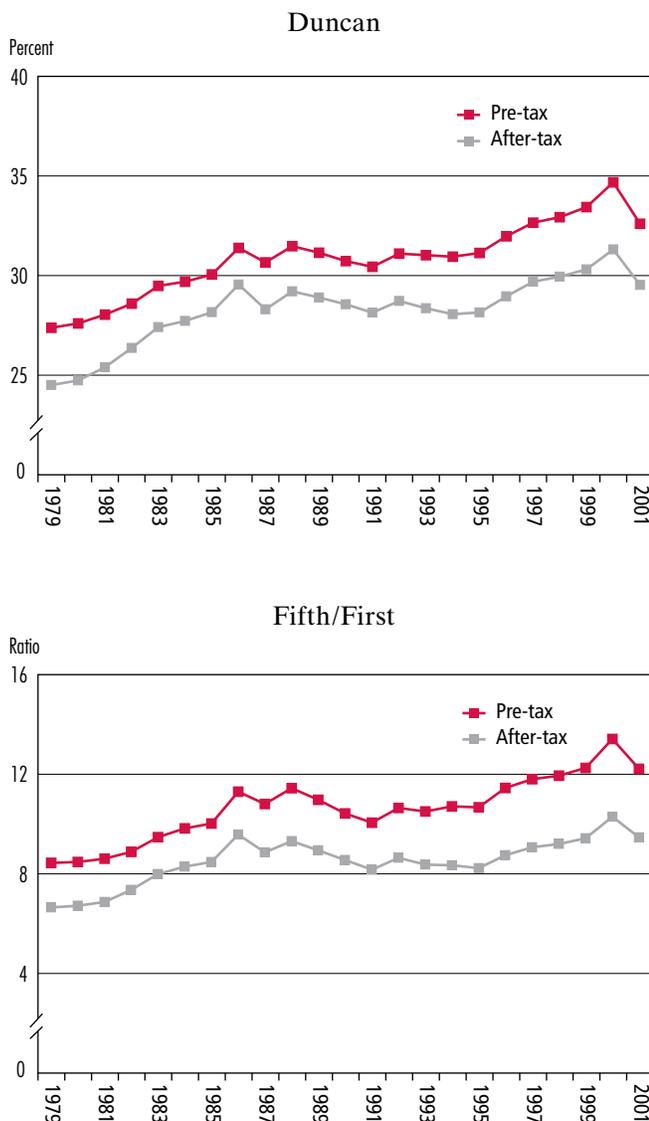
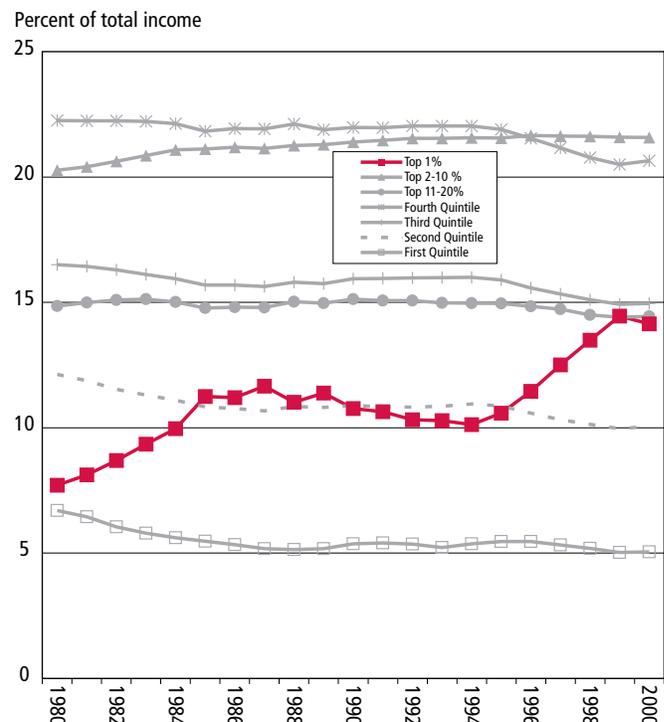


Figure 2.

Share of After-tax Income of Different Segments of the Income Distribution. 1980-2000.

(3 year moving average centered on middle year)



inequality from 1994-96 to 1999-01. Figure 1 shows that during that period the Fifth/First index of after-tax inequality increased from 8.4 to 9.8, a jump of 16.7 percent. However, if the top 1 percent is excluded from the fifth quintile, the modified ratio of the fifth to the first quintile is 7.2 in 1994-96 and 7.5 in 1999-01, an increase of only 4.2 percent. The bullish stock market and the high-tech boom, with their associated options, bonuses, and capital gains, highly concentrated among the top 1 percent of households, are probably the most important explanations for rising income inequality in the second half of the 1990s. Additional support for this view comes from the fact that from 1985-87 to 1994-96, when the share of the top 1 percent was relatively constant, there was no increase in inequality in either the Duncan or Fifth/First indexes.

A remarkable feature of the changes in inequality is the stability of the ratio of after-tax to pre-tax inequality. The stability of the ratio is paralleled by stability of the total effective federal tax rate over the same period. Despite several bouts of tax cutting and tax raising, the effective average rate calculated from the CBO data (total federal taxes as a percentage of total income) hovered at a mean of 21.86 with a standard deviation of only 0.77 percent. As might be expected, the effective tax rate varied considerably across the quintiles from a mean of 7.72 percent for the first quintile to 26.22 percent for the fifth, but within each quintile the rate was remarkably constant over the 23 years. The only segment of the distribution that experienced significant changes in the effective rate was the top 1 percent: the mean rate was 31.70 percent with a standard deviation 3.36 percent. The highest rate for the top 1 percent was 37.0 percent (1979) and the lowest was 25.5 percent (1986). Whether or not the tax cuts put through by George W. Bush had a significant effect on the after-tax/pre-tax inequality ratio cannot be determined until comparable CBO data for recent years become available.

Inequality in Households With Children

The CBO data make it possible to examine changes in inequality for three types of households: those with children, elderly childless, and non-elderly childless. Levels of inequality and changes in inequality varied by type of household, but space limitations preclude reporting these results. It is worth noting, however, that households with children experienced the most rapid rate of increase in inequality over the 23 years. The Duncan index rose by one-third; the Fifth/First index by almost one-half.

Americans have never set equality of outcomes as a major goal of economic policy, but have endorsed a principle of equality of opportunity. Thus, rising inequality among households with children poses a particularly vexing problem for economic policy. Some of the increase may result from an increase in one-parent households (usually the mother) but, whatever the source, it is difficult to contend that children growing up in hugely disparate circumstances are enjoying anything close to equality of opportunity. Moreover, deprivations of health care, schooling, and other opportunities to build human capital early in life probably have significant implications for the children in low-income households and for the country as a whole.

The focus on inequality and relative shares may be questioned by some. Why should economic policy be concerned with such measures as long as households at the low end of the distribution have sufficient income to purchase the necessities of life? Adam Smith explained why in *The Wealth of Nations* by pointing out that the adequacy of income of the poor depends on the standard of living of the rest of society. “By necessities,” he wrote, “I understand not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without.”

Summary

- Income inequality rose rapidly from 1979 to 1985, was relatively unchanged until 1995, and then again rose rapidly until 2000.
- The increase in the first period was driven by declines in the shares of the three lowest quintiles and by an increase in the share of income of the top 1 percent of the distribution.
- The increase in inequality in the second half of the 1990s was driven almost entirely by a steep rise in the income share of the top 1 percent.
- After-tax inequality depended primarily on pre-tax inequality. Changes in tax policy apparently played a very small role.
- The increase in inequality was particularly rapid for households with children. This poses a daunting challenge to a society committed to equality of opportunity.

About the Author

Victor R. Fuchs is the Henry J. Kaiser Jr. Professor Emeritus at Stanford University, where he applies economic analysis to social problems of national concern. He was Professor of Economics in the Economics Department and the School of Medicine's Department of Health Research and Policy from 1974 to 1995. He is author of nine books, the editor of six others, and about two hundred papers and shorter pieces. Professor Fuchs was elected president of the American Economic Association in 1995. His contributions have also been recognized by his election to the American Philosophical Society, the American Academy of Arts and Sciences, and the Institute of Medicine of the National Academy of Sciences. He has received the John R. Commons Award, Emily Mumford Medal for Distinguished Contributions to Social Science in Medicine, Distinguished Investigator Award (Association for Health Services Research), Baxter Foundation Health Services Research Prize, and Madden Distinguished Alumni Award (New York University).



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