

Sensational, But Wrong: How Piketty & Co. Overstate Inequality in America

BY STEPHEN J. ROSE | MARCH 2018

If inequality is growing at a massive rate, then policies aimed at simply "growing the pie" are unlikely to be successful. But if the growth of inequality is slowing, then a combination of growth and "opportunity" policies is what's needed.

Many pundits argue the biggest problem facing America today is income inequality. But the important question is, how much is this disparity growing? If inequality is growing at a massive rate—with the wealthy getting virtually all the gains of a growing economy—policies aimed at simply "growing the pie" are unlikely to be successful. But if the growth of inequality is actually slowing—and this study will show to be the case—then a combination of growth and "opportunity" policies is what's needed. Without turning around America's anemic productivity growth—labor productivity growth since the end of the Great Recession has been the slowest since the federal government started measuring it in the late 1940s—it will be impossible to restore robust and consistent wage growth for most American workers.¹

Much of the current narrative about massive increases in inequality stems from the work of economists Thomas Piketty and Emmanuel Saez. Over the last 15 years, they have claimed that the richest 10 percent of Americans have reaped up to 90 percent of the benefits of growth, with the bottom 90 percent's living standards improving only marginally since 1973. In fact, Piketty and Saez's updated data show the median U.S. income in 2014 (\$29,200) was lower than in 1967 (\$30,012).

However, much of their analysis has been called into question as both being flawed because of faulty methodology—such as cherry-picking data in ways that maximize the jarring effect of their findings—and vastly overestimating the true rate of inequality growth. In response to these criticisms, Piketty, Saez, and new collaborator Gabriel Zucman released a

new series of findings based on an expanded definition of income. But that approach also overstated inequality, again because of the trio's questionable methodological choices.

An example of their cherry-picking methodology is Saez's solo paper of 2013, "Striking It Richer," in which he argued all income growth since 2009 had gone to the top 1 percent.² But this finding was skewed by the years he chose to compare. Because incomes tend to show common traits over the course of regular business cycles—growing from the low point (or "trough") of a recession until economic expansion stops (the "peak") and the economy starts sliding into another recession—researchers usually try to show changes in income by comparing similar points within the business cycle, usually peak to peak.

But Saez defied convention by using a trough-to-peak approach, measuring from the depth of a recession to the height of a recovery.³ Had he instead used 2007 as the starting point (the more common peak-to-peak approach), the result would have been the exact opposite, with the rich ending up the biggest losers. His data show the top 1 percent had big losses from 2007 to 2009, from which they hadn't fully recovered by 2012. By starting in 2009, he was tracking the incomplete bounce-back effect. As figure 1 shows, incomes of the top 1 percent in Saez's data hadn't yet reached their 2007 level by 2015.

\$1,600,000 \$1,400,000 Peak-to-Peak \$1,200,000 Trough-to-Peak \$1,000,000 \$800,000 \$600,000 \$400,000 \$200,000 \$0 2008 2011 2012 2013 2014 2007 2009 2010 2015 CBO ——Saez

Figure 1: "Peak-to-Peak" vs. "Trough-to-Peak" Incomes for the Top 1 Percent, 2007–2012

Using some of the same data (tax records), but with 2009 as the base, a study by the Congressional Budget Office (CBO) found the level of after-tax inequality actually went down from 2009 to 2012—and the top 1 percent had the largest income loss of any income group.⁴

Returning to Piketty and Saez's coauthored work on the top 1 percent (and fractions of the top 1 percent), their major mistake was including too many individuals with exceptionally

low incomes. Two of their methodological choices also had particularly big consequences. First, while the CBO used 2013 data on 123 million households (people living in the same private house or apartment), Piketty and Saez looked at 160 million "tax filers" (total number of people who filed tax returns plus an estimate of those who didn't file because of low income). Much of this difference came from children living at home but filing their own taxes. For example, if a 20-year-old college student made \$6,000 and filed separately from her parents, who had a combined income of \$70,000, the CBO would have shown a single case of a family with an income of \$76,000. Piketty and Saez, on the other hand, would have treated this situation as one tax filer with an income of \$6,000 and one family tax filer with an income of \$70,000.

The second methodological problem was their sole focus on "market incomes" and failure to include government cash benefits. Thus, a retired couple earning \$30,000 from Social Security and \$10,000 from other retirement income would have been treated as having received \$40,000 of income according to the CBO's approach, but only \$10,000 of income using Piketty and Saez's methodology. Never mind that this couple would have planned ahead to receive the Social Security benefits they believed they'd paid for through the contributions they'd made to the program when they were working. Indeed, if these payments had been put into a dedicated account, then the income they would have earned when they were retired would have been considered market income. In any event, the practical effect of Piketty and Saez's decision to exclude transfer payments was to "create" many more low-income people than actually existed.

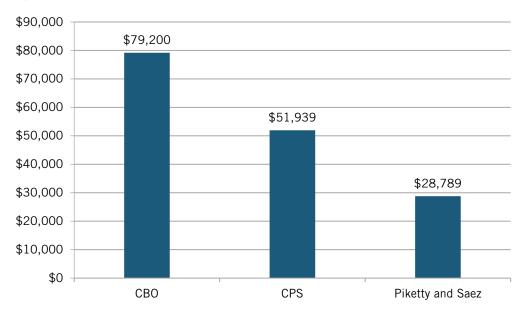


Figure 2: Three Models for Median U.S. Incomes, 2013

The most commonly cited figure representing the 2013 U.S. median household income, from the March supplement to the U.S. Census's Current Population Survey (CPS), was almost \$52,000, while Piketty and Saez pegged it at just under \$29,000. The CBO used a broader definition of income than the Census, including employer-provided benefits, taxes

paid on behalf of workers, noncash government benefits, and more capital income. As a result, the 2013 median before-tax income according to the CBO was over \$79,000.⁵ In Figure 2, the incomes of the top 1 percent per the CBO and Piketty and Saez were virtually identical. But, Piketty and Saez's decision to include an extra 40 million tax filers, while excluding Social Security income, led to vastly different incomes for the bottom 50 percent.

Finally, Gerald Auten and David Splinter, economists with the Treasury Department's Office of Tax Analysis and the congressional Joint Committee on Taxation, found the tax data the Piketty team had used was inconsistent in how income was reported. Not surprisingly, high earners changed how they received their compensation in response to marginal tax rates, which declined dramatically in the postwar era. (The highest tax rate was over 90 percent from 1950 to 1961. In 1964, it was reduced to 70 percent, and then it bounced between 70 and 77 percent until 1982, when it was further reduced to 50 percent. The Tax Reform Act of 1986 then cut it again to 28 percent. Auten and Splinter's unique contribution was to develop a yearly estimate of "consistent market income" that used better measures for calculating profits—such as adjusting for changes from the Tax Reform Act of 1986—included employer paid payroll taxes and insurance, and adjusted for falling marriage rates.

Auten and Splinter's procedures led to profoundly different results from Piketty and Saez's analyses. They found that after taking into account pre-tax income that included government transfers, the top 1 percent of earners had 83 percent (or 85 percent after taxes) less income growth than was calculated by Piketty and Saez. Whereas Piketty and Saez found the share of after-tax incomes, including capital gains, going to the top 1 percent had nearly doubled from 10.7 percent in 1979 to 20.3 percent in 2014, Auten and Splinter found the top share rose only marginally from 8.6 percent to 10.0 percent.

In response to criticisms of their approach, Piketty, Saez, and Zucman expanded their definition of income to include all elements of national income. This was an impressive feat that brought together various data sources to report pre- and posttax incomes for all individuals aged 20 years and older. They expanded on the income coverage of the CBO by including the value of "housing services" to home owners (which are valued on the basis of what the rent on a comparable house would be) and the value of public services delivered by government (e.g., defense, police, fire, courts, education, and other public services and administration).

Once again, Piketty, Saez, and Zucman did not use the CPS and CBO approach of using 122 million households as the basis for their analyses. Instead, their unit of analysis was almost twice as large—they allocated income to 234 million individual Americans aged 20 and older. The added cases vis-à-vis the CBO included 59 million spouses (the incomes of married filers were divided equally for all categories of income); 20 million dependent children 20 years and older; and 38 million other related and unrelated adults in the household—e.g., roommates, relatives of the head or spouse, cohabiters, and other

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nonrelatives. Most of the last two categories of 58 million people (over a quarter of the total population) had low incomes.

To note the difference between an individual versus a family approach, one need only look at incomes (excluding employer benefits, government services, Medicare, and imputed rent) for a family of four wherein the husband earns \$60,000, his wife earns \$36,000, their 21-year-old son earns \$4,000, and the wife's mother has \$15,000 of Social Security income. For the CPS and CBO, this would be reported as one household with an income of \$115,000. For Piketty, Saez, and Zucman, this example would represent four cases: a husband with an income of \$48,000, a wife with an income of \$48,000, a son with an income of \$4,000, and an elderly person with zero market income and \$15,000 of government transfers. In the old Piketty and Saez approach, there would be one household with an income of \$96,000, the son with an income of \$4,000, and the wife's mother with zero income.

Piketty, Saez, and Zucman made another important methodological choice in how they distributed the 16 percent of national income that was the value of government services (determined by their costs). While transfers like Social Security payments and the value of Medicare insurance were allocated to those who received them, Piketty, Saez, and Zucman allocated national defense, education, and other public goods based on disposable income.

Left unreported was the distribution of disposable income being much less equal than the distribution of market income, total income before taxes, and total income after taxes. The reason was disposable income did not include employer-paid benefits and government programs with eligibility criteria (e.g., Medicare and food stamps). These income sources accounted for a much higher percentage of income for the bottom 90 percent of Piketty, Saez, and Zucman's population grouping than it did for the top 10 percent. Their justification for this was to claim government benefits were allocated in proportion to people's share of the economic pie.

This approach has led to the perverse result of people in the bottom 50 percent getting just under \$4,000 worth of government benefits each, while people in the top 1 percent get \$190,000 (48 times more). The largest beneficiaries of public services in this model are people in the top one-hundredth of one percent, who get 19 percent of their posttax income in the form of government services (more than \$4 million each). In terms of the value of national defense, people in the bottom 50 percent get \$1,000 worth of benefits each while the super-rich get \$1 million each in benefits. The same unequal division applies to the value of public education, although the super-rich rarely send their children to public schools.

Piketty, Saez, and Zucman's income levels were much lower than those calculated by the CPS and CBO. Their bottom 50 percent was an *average* market income of just \$6,636 each (including employer benefits). When they included Social Security benefits, the Earned Income Tax Credit (EITC), the value of Medicare and government transfers (e.g., food stamps and Temporary Assistance for Needy Families), and the value of home

ownership and government services, the average total income of their bottom 50 percent grew to \$18,311. Since nearly \$11,000 of this total came from government transfers and government services, there was no room in the bottom 50 percent for workers with annual earnings over \$30,000.

The data regarding the bottom 50 percent would be very different if Piketty, Saez, and Zucman had chosen to allocate government services more realistically. In their approach, government actions redistributed 6 percent of incomes from the top 10 percent to the bottom 50 percent. This increased the income share of the bottom 50 percent from 13 to 19 percent. But their share would have been 25 to 27 percent if public services had been distributed on a per capita basis, or 90 percent per capita and 10 percent based on disposable income. With this approach, inequality would appear lower because the equalizing effect of government actions would move 10 to 12 percent of national income from the top 10 percent to the bottom 50 percent. Further, if they had used a household approach, they would have had fewer low-income cases and the share of the bottom 50 percent would have been even higher.

The incomes of the bottom 50 percent were so low that Piketty, Saez, and Zucman didn't put anyone in that half of the population in the middle class. Instead, they defined the middle class as those in the 51st to 90th percentiles—while the rich were defined as the top 1 percent. People in the 91st to 99th percentiles weren't given a specific category name, but calling them the "upper middle class" seems appropriate. Similarly, those in the bottom 50 percent were also left uncategorized. Given their low income, they could be called the "poor and near poor."

This contrasts sharply with people's perceptions of their own living standards, as approximately 90 percent of Americans in Pew Research Center surveys over the last 10 years have self-identified as middle class (with about 20 percent identifying as lower middle class, and another 20 percent being upper middle class). Of the remaining 10 percent, only 1 percent identified as upper class, leaving 9 percent referring to themselves as lower class.

Using CPS data, it is possible to develop more realistic 2014 class divisions based on household incomes adjusted to reflect the living standards of a family of three. The poor or near poor would include the 20 percent of independent adults living in families (this excludes older children living at home, includes single people as a family of one, and counts two roommates as two families of one) with incomes less than \$30,000 (which is 150 percent of the poverty line for a family of three). This covers the bottom 20 percent of households. Lower middle class would be the 17 percent of adults with family incomes between \$30,000 and \$50,000. The middle class would include the 23 percent of families with incomes between \$50,000 and \$100,000. The upper middle class would be those earning \$100,000 to \$350,000 (29 percent of households). And the rich would be those making more than \$350,000 (just over 1 percent). 9

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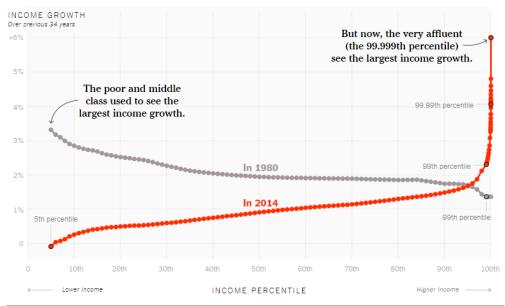
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meager income gains. For example, *The New York Times* reporter David Leonhardt highlighted a chart by Piketty, Saez, and Zucman as "captur[ing] the rise in inequality better than any other chart or simple summary that I've seen."

Figure 3: New York Times Depiction of Data From Piketty, Saez, and Zucman¹⁰

Our Broken Economy, in One Simple Chart

By DAVID LEONHARDT AUG. 7, 2017



Note: Inflation-adjusted annual average growth using income after taxes, transfers and non-cash benefits

The chart compares income gains in two 34-year periods: 1946 to 1980 and 1980 to 2014. The income growth for each period is plotted according to percentiles on the income ladder, from the first percentile to the 99.999th. The graph shows that in the period from 1946 to 1980, there were strong income gains across all income levels, with the strongest growth accruing to those with the lowest incomes. and slightly slower growth for those with middle and higher incomes. The poorest people had income gains of 3 percent per year; those with incomes around the median saw gains of 2 percent; those with incomes at the 90th percentile got 1.7 percent; and the very richest (the 99th percentile and above) enjoyed gains of just 1.5 percent per year. The second period, covering 1980 to 2014, looks dramatically different. The poorest people saw virtually no income growth, and the growth rate for everyone else increased steadily the further they moved up the income ladder. The growth rate for those in the 10th percentile was just 0.3 percent per year; in the 50th percentile, it was 0.9 percent; in the 90th percentile, it was 1.5 percent; and at the 99th percentile, it was 2.3 percent. Meanwhile, the super-rich—those at the 99.999th percentile—saw massive gains of 6 percent per year.

Piketty, Saez, and Zucman made an unusual choice in how they labelled the vertical axis. Instead of using the common procedure of cumulative change, they used yearly change. If they had chosen the more common method of tracking total growth from the beginning to the end of these 34-year periods, the median growth rate would have been a cumulative 36 percent, rather than 0.9 percent per year. So, at first glance, it appears people in the middle had negligible growth because it is so difficult to calculate what 0.9 percent per year comes to over 34 years. To be sure, 0.9 per year (36 percent cumulatively) is not as much as 2 percent per year (87 percent cumulatively), which occurred in the 97th percentile. But it is not zero or even near zero, which many pundits say is the rate of median income growth.

Nonetheless, the imagery is clear: Growth appears to have been strong and tilted to low-income people in the first period, while it was weaker and much more tilted toward the rich in the second period. Although there should be no doubt that very real and troubling disparities in the trend lines exist, Piketty, Saez, and Zucman did everything they could to exaggerate the picture.

The first period started in 1946—on the heels of the Great Depression and World War II. Because of pent-up demand and the explosion of household formations that led to the Baby Boom, the years that followed had unusually high growth. This growth persisted through the 1950s and 1960s as Europe and Japan rebounded, creating an international virtuous cycle of high consumer demand driving expanded production and higher wages, which funded yet more consumer demand. While growth tapered off after 1973, per capita GDP grew by 104 percent from 1946 to 1980, compared with 73 percent from 1980 to 2014. In other words, the income line in the first period was always going to be higher than the income line in the subsequent period.

While many people think of the 1950s as a period when factory workers lived well, the poverty rate in 1959 was 22 percent of the population, and 35 percent of those over 65. President Lyndon Johnson launched his War on Poverty as a multipronged effort to help the elderly and those with low incomes. It included increased federal spending on primary and secondary education, food stamps, and Community Action grants; led to the creation of Medicare and Medicaid; and expanded eligibility for Social Security. By 1980, the overall poverty rate had dropped to 13 percent, while the poverty rate among the elderly dropped more than 19 percentage points to less than 16 percent.

By contrast, there were tweaks, but no large expansions, of the social safety net between 1980 and 2014—e.g., Clinton's expansion of the EITC, the food-stamp program, and Medicaid. The overall poverty rate edged up to 15 percent in 2014, although poverty among seniors continued to decline to 10 percent. As many researchers have shown, inequality increased in part because of low earnings for the least educated workers. Thus, the income-growth line from 1980 to 2014 is upward sloping—i.e., the higher the income growth, the higher the place on the income ladder. But the tilt of the line from 1946 to 1980, which saw the highest income growth among the lowest rungs of the economic

Although there should be no doubt that very real and troubling disparities in the trend lines exist, Piketty, Saez, and Zucman did everything they could to exaggerate the picture. Getting economic policy right depends on getting the facts and analysis right. ladder, was a product of a very strong post-WWII economy and the many components of President Johnson's War on Poverty in the 1960s.

Piketty and Saez's data on middle-class stagnation—particularly their finding that the lion's share of growth had accrued to the richest 1 percent of households—has garnered a great deal of attention, almost becoming accepted wisdom. For progressives, these findings are grounds for massive changes in tax, spending, and regulatory policies. For President Trump, the trend is proof of the "American carnage" that has wreaked havoc among the middle class.

But getting economic policy right depends on getting the facts and analysis right as well. Progressives may very well be justified in advancing an economic policy agenda that's focused almost solely on ensuring a fairer distribution of national income and wealth if Piketty et al. were correct. But, as this paper has shown, their analysis was wrong. Productivity growth—even the relatively weak growth of the last 15 years—has benefited most households. Yet this analysis does not show, and should not justify, an Ayn Rand-like approach that leaves everyone susceptible to the vicissitudes of the marketplace. It is clear that inequality has grown, and stronger measures are needed to address it, including higher tax rates on the wealthy. But better analyses of what is really happening with income growth for U.S. households suggest we need more effective growth and opportunity policies.

ENDNOTES

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