

The Federal Tax Code and Income Inequality

How Federal Tax Policy Changes Have Affected and Will Affect Income Inequality

Michael Linden April 2012

Introduction

Over the past 30 years, our nation's income has grown increasingly unequal. In 1979 the average income for a household in the richest 1 percent was about 10 times higher than the average income for a household in the middle 20 percent. By 2007 that ratio had almost tripled. The average household in the richest 1 percent was now earning nearly 30 times as much as those in the middle. Yet even as income inequality increased dramatically, the effect of the federal tax code on income distribution declined substantially.

Because, on average, richer households pay more of their income in federal taxes than do middle- and low-income households, the "after-tax" distribution of income is always somewhat more equitable than it was before federal taxes are taken into account. But the magnitude of this effect can vary quite a lot because policy changes make the tax code less or more progressive.

From 1979 to 2007 there were a number of major tax changes, but the cumulative effect was to render the federal tax code less progressive and therefore less able to dampen income inequality. By one measure of inequality, the federal tax code in 2007 was about one-third less effective at reducing income inequality than it had been in 1979.

This issue brief will examine the consequences of these changes to the federal tax code on the income distribution. It will begin with a review of several measures of income inequality. The second section will briefly explain why federal taxation has the effect of reducing income inequality. Next up is a close look at how changes in the tax code since 1979 have affected its impact on the after-tax income distribution. The final section will compare how some proposed changes to today's tax code would affect income inequality in the future.

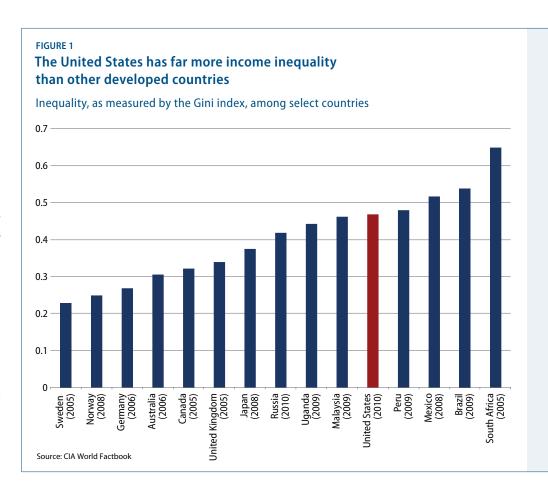
Measuring income inequality

In order to measure the impact of the tax code on income inequality, it is important to understand how income inequality itself is measured. There are a variety of different ways to measure income inequality, each with its own strengths and weaknesses. Each metric, however, tells essentially the same story about income equality in the United States: We have relatively high levels of income inequality, income inequality has gotten worse over time, and the federal tax code can make a significant difference in income inequality. So let's look briefly at three different metrics for measuring income inequality.

The Gini index

The most comprehensive and widely used measure of income inequality is the Gini index. This index (also known as the Gini coefficient, Gini ratio, or Gini score) essentially measures the difference between actual income distribution and a perfectly equitable distribution in which everyone makes the same amount. A perfectly equitable distribution of income scores a 0 on the Gini index, whereas the most unequal distribution, in which a single person makes all the income, scores a 1.

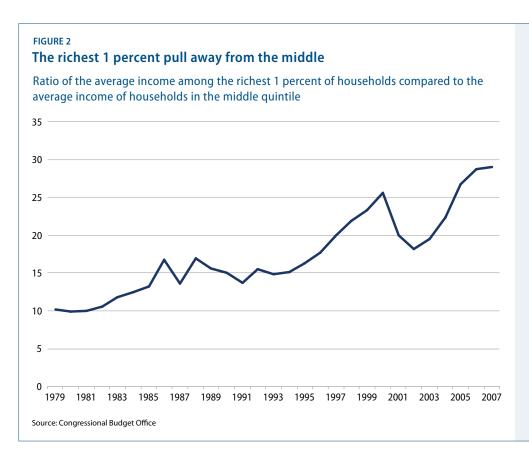
According to the U.S. Census Bureau, the Gini index for the United States in 2010 was 0.469—a score that high indicates we have a far more unequal society than most other advanced, developed countries.2 The Scandinavian countries are the most equal with Gini scores of around 0.25. But even compared to countries that are far more similar to us than Sweden or Norway, the United States is still an outlier. Canada, for example, has a Gini index of 0.321, and the United Kingdom's Gini index is 0.34. In fact, our Gini index is much closer to countries like Malaysia (0.462) and Uganda (0.443).3 (see Figure 1)



Ratio of average incomes

Though the Gini index is the broadest and most widely used measure of income inequality, it does have the disadvantage of being rather technical. Saying that a country's Gini index is 0.469 does not have an intuitive meaning for most people. Saying that the average household among the richest 1 percent of households takes home nearly 30 times as much as the average household among the middle 20 percent, however, may be a clearer way of expressing the same thought.

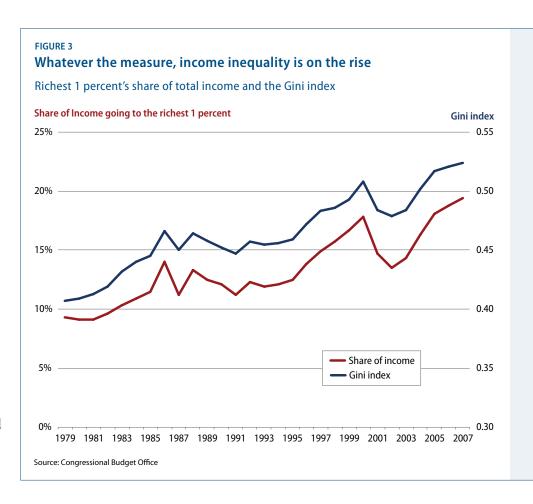
In 1979 the average income for a household in the richest 1 percent of households was \$550,000 (in 2007 dollars) before federal taxes, according to the nonpartisan Congressional Budget Office. That same year, the average household in the middle 20 percent of all households made \$54,100. So three decades ago the average household in the top 1 percent made more than 10 times as much as the average household in the middle. In 2007 that ratio was all the way up to almost 30. The average household in the top 1 percent made almost \$1.9 million in 2007, compared to the \$64,000 made by the average household in the middle 20 percent. (see Figure 2)



Share of income going to the richest 1 percent

Fundamentally, income inequality is all about the relative concentration of income. If a rich few claim more and more of the total income then the distribution of income is necessarily very unequal. Indeed, the Gini index is calculated by looking at income concentration across the entire income spectrum. In a very equal society, the richest 1 percent of households would make close to 1 percent of the income, as would the poorest 1 percent of households, as would any other percentile. The Gini score is essentially a combination of all the differences all along the income scale between an income distribution that has no disproportionate concentration and reality.

But we can take a shortcut by looking just at the top 1 percent. Synonymous with rising inequality is a growing concentration of income at the top. Therefore, we could also measure inequality by simply looking at the share of total income flowing to the top 1 percent. This is obviously a cruder measurement than the Gini index since the distribution of income among the bottom 99 percent doesn't factor in at all. But it turns out that looking just at the share of income flowing to the richest 1 percent will tell the same basic story as looking at the Gini index. In 1979 the top 1 percent claimed 9.3 percent of all the income. In 2007 they enjoyed 19.4 percent. (see Figure 3)



How the federal tax system reduces income inequality

If every household in the United States paid exactly the same share of their income in federal taxes—if everyone's effective tax rate was the same—then the distribution of income after federal taxes would be precisely identical to the distribution of income before taxes. The tax code only makes a difference to income inequality if households at different points on the income spectrum pay different effective tax rates. If the tax code asks higher-income households to pay, on average, higher taxes than middle- and low-income households then the post-tax incomes of rich households will be reduced by a greater amount than the post-tax incomes of those in the middle and at the bottom. This would result in an after-tax distribution of income that is more evenly spread than the pre-tax distribution.

This means that the more progressive the tax code is, the more it will reduce inequality. The converse is also true. The closer the federal tax code comes to a pure "flat tax" with everyone paying the same effective rates, the less it will do to reduce income inequality. And of course it is also possible that the tax code could turn regressive, with higher-income households paying average effective tax rates below those of middle-and low-income households. In that case, the federal tax code would actually exacerbate income inequality. It is worth mentioning that this is precisely the effect of state and local taxes, which, as a whole, are regressive.

Since at least 1979 the federal tax system has been progressive, with overall effective tax rates generally going up with household income. Some parts of the tax code are more progressive than others. The federal individual and corporate income taxes are progressive, whereas payroll taxes and excise taxes are not. But with all the pieces together, the federal system is progressive.

In 2007, the most recent year for which we have historically comparable data, the richest 1 percent of households paid 29.5 percent of their income in federal taxes. The middle 20 percent of income earners paid 14.3 percent, and the poorest 20 percent paid 4 percent. As a result of this progressive structure, the after-tax income distribution was substantially more equal than the pre-tax distribution. Before federal taxes our Gini index for 2007 was 0.524. After taxes it was 0.489, a 7.2 percent reduction. The tax code has reduced income inequality, to varying degrees, every year since at least 1979.

Before turning to how changes in tax policy over the past 30 years altered the magnitude of the code's impact on inequality, it should be noted that taxation is not the only way the federal government directly effects income inequality. Benefits such as Social Security or unemployment insurance help reduce income inequality. So too do programs that supply "in-kind" substitutes for income such as supplemental nutrition assistance or rental housing assistance to those in the middle and the bottom of the income spectrum. Together, these programs are known as "transfers." In fact, the entire suite of federal programs that "transfer" income does significantly more to reduce income inequality than the tax code does. In 2007 the Gini index for U.S. household income distribution before this assistance was 0.59. Government assistance reduced it to 0.524, an 11.2 percent reduction.⁴

Though it is outside the scope of this analysis to discuss these government transfers in detail, suffice it to say that their impact on income inequality <u>has declined over time</u>.⁵

Major tax policy changes since 1979 and their impact on inequality

Since the late 1970s there have been many changes to the federal tax code. Some of those changes have been progressive, asking those at the top of the income pyramid to pay more or those in the middle and bottom to pay less. And some have been regressive changes, mostly in the form of large tax cuts that disproportionately benefit the rich. Not surprisingly, fluctuations in the effect of the federal tax system on income inequality track very closely to major policy changes in the federal tax code.

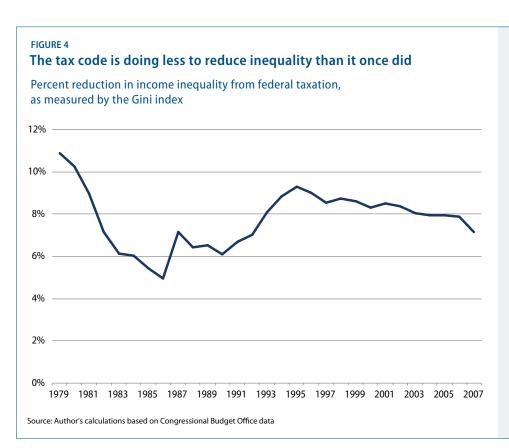
1979 to 1986

In 1979 the Gini index for before-tax income inequality was 0.407. Before federal taxes the richest 1 percent claimed 9.3 percent of all pre-tax income. That year federal taxation

reduced the Gini index by 11 percent to 0.367 and reduced the share of income flowing to the richest percentile by nearly a quarter to 7.5 percent. 1979 is both the first year of reliable data and the high-water mark for income-inequality reduction through the federal tax code.

In the early 1980s President Ronald Reagan spearheaded major tax cuts that primarily benefited those with higher incomes. The total federal effective tax rate for a household in the richest 1 percent declined from 37 percent in 1979 to less than 26 percent by 1986. Tax rates for everyone else barely moved at all. For those in the middle 20 percent of income, the effective federal tax rate in 1979 was 18.6 percent. Seven years later it was 18 percent. And taxes actually went up for households in the bottom 40 percent of income earners. The result was a tax code that asked far less from the rich—even as it asked the same or more from everyone else.

Consequently, the effect of the federal tax system on income inequality dropped sharply. Whereas in 1979 the after-tax income distribution was 11 percent more equitable than the pre-tax income distribution, in 1986 after-tax income was just 5 percent more equitable than pre-tax income. And whereas in 1979 the after-tax share of income claimed by the richest percentile was 24 percent below its pre-tax share, in 1986 the richest percentile's share of post-tax income was just 6 percent lower than its share of pre-tax income. If 1979 was the high-water mark for the tax code's effect on income inequality, 1986 was the low point. (see Figure 4)



1986 Tax Reform

In 1986 Congress passed and President Reagan signed a comprehensive tax reform package that temporarily boosted the power of the federal tax system to reduce income inequality. The 1986 reforms lowered the top marginal tax rate but also removed or reformed a host of provisions that allowed rich households to reduce their tax bills, and raised the tax rate on investment income. The combined effect was an increase in the effective tax rate for the richest 1 percent from 25.5 percent in 1986 to 31.2 percent in 1987, and small tax cuts for the bottom 60 percent of households.

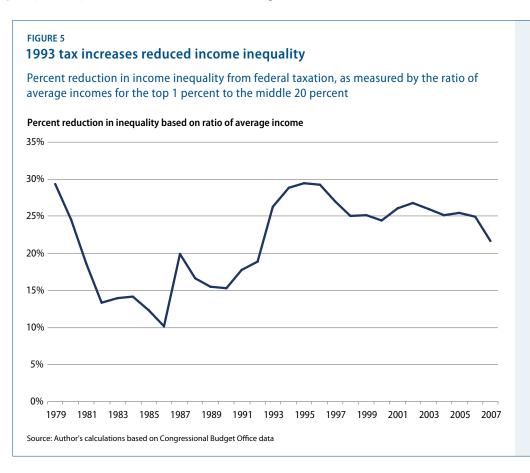
With the rich paying more and the middle and poor paying less, the after-tax distribution of income was substantially more equitable than it had been before the tax reform. In 1986, before the reform was implemented, federal taxes reduced the Gini index by 5 percent. In 1987, after reform, federal taxes reduced the Gini score by 7 percent. The following years saw a slow erosion of the tax code's impact on inequality and by 1990 the tax code was bringing down the Gini index by about 6 percent—lower than the 7 percent reduction in 1987 but still higher than the 5 percent reduction in 1986.

Tax hikes of the early 1990s

In the first years of the 1990s, President George H.W. Bush and then President Bill Clinton signed major federal deficit-reduction packages into law. Both packages included tax increases, and one important component of each was an increase in the top marginal income tax rate. The Clinton tax increase also included additional Medicare taxes for higher-income individuals. Both packages served to boost the impact of the tax code on inequality. From 1990 to 1995 the reduction in inequality, as measured by the Gini index, grew from 6 percent to 8.5 percent.

The other measures of income inequality actually show an even more marked change,

especially after the 1993 tax increases. In 1992 the average before-tax income for someone in the top 1 percent was nearly 15.5 times greater than the average before-tax income for someone in the middle 20 percent, but was 13 times greater after federal taxation. In other words, using this measure, the 1992 tax code reduced inequality relative to the pre-tax distribution by about 19 percent. Two years later the tax code reduced inequality, using the same measure, by almost 29 percent. In fact if we measure inequality based on average income of the top 1 percent versus the middle, then federal taxes in 1995 and 1996 actually reduced income inequality just as much as the taxes of 1979. (see Figure 5)



Tax cuts return

In 1997 President Clinton signed another budget package, but this one included a tax cut, not a tax hike. The major component of this tax cut was a reduction in rates for capital gains, or the income earned from investments as opposed to salaries. Though it also included some tax cuts for people in the middle and at the bottom of the income spectrum, the overall tax cut was regressive, meaning richer households benefited more than those poorer than them. Four years later, President George W. Bush enacted a much larger package of regressive tax cuts, and then did so again in 2003.

The combined effect of all these tax cuts was a steady reduction in taxes paid by the richest households. In 1996 the richest 1 percent of households paid an average effective federal tax rate of 36 percent. By 2001 that rate was down to 32.8 percent, and by 2007 it was down to 29.5 percent.

Predictably, as the tax rate for the rich dwindled, so too did the impact of the federal tax system on after-tax income inequality. Whereas in 1996, federal taxes reduced the Gini index by 9 percent, by 2007 that reduction was down to just more than 7 percent. The other measures of income inequality show a similar decline in effectiveness.

The critical importance of the effective tax rate for rich households

Examining three decades' worth of tax law changes and the attendant consequences for the tax system's relationship to income inequality reveals something striking: The one thing that matters most in determining how effective the tax code will be at reducing income inequality is the effective tax rate for the richest 1 percent of households.

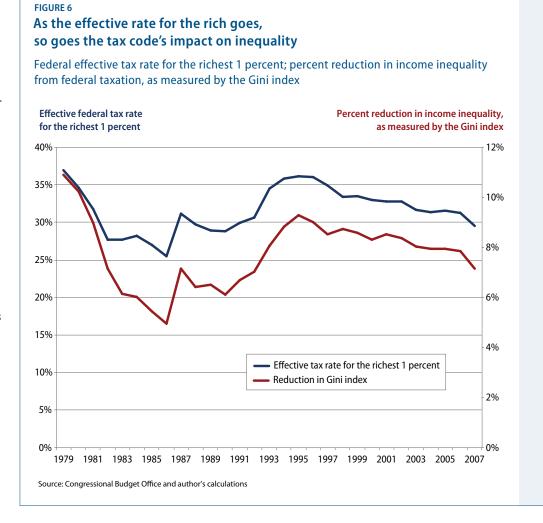
Figure 6 compares the effective tax rate for the richest 1 percent of households since 1979 and the tax system's impact on inequality, as measured by the reduction in Gini scores, over the same time period. Mathematically, the two lines have a 92 percent correlation. In other words, when the effective tax rate for the rich goes up, so does the impact the tax code has on inequality, and vice versa. Looking at Figure 6, this relationship is immediately obvious.

By contrast, another supposed metric of "progressivity," the share of taxes paid by the rich, has no relationship whatsoever to the tax code's impact on income inequality. Over the past three decades, the share of federal taxes paid by the richest 1 percent has consistently risen, while the impact of the federal tax code on inequality has fluctuated up and down. Some have suggested that this rise in the share of taxes paid by the rich proves the tax code has become more progressive. But of course the rise in share of taxes paid by the rich precisely mirrors the rise share of income going to the rich.⁶ Far from being

a measure of progressivity, the share of taxes paid by the rich is actually an indirect measure of income inequality.

Looking ahead

On January 1, 2013, the Bush tax cuts are scheduled to expire. So too are a smaller package of tax cuts passed originally as part of the American Recovery and Reinvestment Act in 2009. If all of these tax cuts are allowed to expire as scheduled, the entire tax code would all but reset to its state before President Bush took office. Given the impending "reset," Congress will certainly be forced to, at the very least, consider making some changes to the tax code. And though the menu of possible changes is infinite, there are two basic options for Congress to consider:



 Allow the tax cuts to expire, and therefore return to the tax code as it was at the end of President Clinton's term.

Or:

• Permanently extend all of the expiring tax cuts, thereby maintaining the tax code in its current form (with the exception of the payroll tax cut).

Using distributional estimates from the Tax Policy Center, we can calculate what each of these options would do to post-tax income inequality. Based on the Tax Policy Center's projections, the pre-tax income distribution in 2013 will have a Gini index of 0.494 (note that this Gini score is not comparable to the historical Gini scores because the Congressional Budget Office, which produced the historical data, uses a different definition of income than the Tax Policy Center does, and the Tax Policy Center data are categorized by tax unit rather than by household). The average income for the richest 1 percent will be nearly 35 times greater than the average income for someone in the middle 20 percent, and the richest 1 percent will claim 17.8 percent of all income.

Based solely on the single criterion of reduction in after-tax income inequality, returning to the "Clinton tax code" is clearly the superior of the two basic options. The Clinton tax code would reduce the Gini index by 9.4 percent, compared to an 8.6 percent reduction under the current tax code. The Clinton tax code would reduce the ratio of average incomes by 19.4 percent, compared to a 17 percent reduction under the current code. And the Clinton code would reduce the share of total income flowing to the richest 1 percent by about 13.5 percent, compared to an 11.8 percent reduction under current tax policies.

In addition to these two basic options, there have been several proposals recently that would more dramatically alter the tax code. These include:

- President Barack Obama's proposal to allow the expiration of the Bush tax cuts for those making more than \$250,000, limit the value of certain tax benefits for highincome households, and eliminate a variety of tax subsidies and loopholes⁸
- House Budget Committee Chairman Paul Ryan's (R-WI) proposal to reduce the top income tax rate to 25 percent, eliminate the alternative minimum tax, and reduce the corporate income tax rate to 25 percent⁹
- The illustrative tax reform plan offered by the chairman of the president's fiscal commission chaired by Erskine Bowles and Alan Simpson¹⁰
- A tax reform plan put forth by the Bipartisan Policy Center as part of their recommendations to last fall's congressional "super committee" 11

The Center for American Progress also released a tax reform proposal as part of our comprehensive plan to balance the budget.¹² And although we commissioned an outside consultant to conduct distributional analyses of our income tax reform, the Tax Policy Center did not evaluate our plan. Therefore, its impact on income inequality cannot be included in this analysis.

Figure 7 shows the reduction in the after-tax Gini index achieved by each of the above tax proposals, along with the reduction achieved by the current tax code. Note that the Tax Policy Center's distributional analyses, on which these calculations are based, were conducted for different years depending on the plan. President Obama's proposals were evaluated for 2013. The proposals from Rep. Ryan and Bowles-Simpson were evaluated for 2015. The Bipartisan Policy Center's plan was evaluated for 2021. These differing years of evaluation make direct comparisons slightly more problematic. But because the key metric is percent reduction in income inequality from the pre-tax distribution of income—and not the relative levels of post-tax inequality under each tax plan—we can still draw conclusions about the relative magnitude of each plan's effect on inequality.

With that minor caveat in mind, it is nevertheless clear that the proposals from President Obama, Bowles-Simpson, and the Bipartisan Policy Center would improve the tax code's impact on income inequality compared to the current system, while the other two would dramatically reduce it. (see Figure 7)

Given the historical relationship between the average effective tax rate for the richest 1 percent and the tax code's impact on income inequality, these results should not be too surprising. The three plans that result in a more equitable distribution of post-tax income also share the characteristic of raising the effective rate for the richest 1 percent. The Bipartisan Policy Center's plan, President Obama's proposal, and Bowles-Simpson's illustrative plan all increase the effective tax rate for the top percentile by between 4.9 and 5.5 percentage points compared to today's tax policies (we estimated that the Center for American Progress plan, by comparison, would raise the effective rate for the top 1 percent by 6.4 percentage points).

President Obama accomplishes this increase by allowing the top tax rate to return to 39.6 percent, what it was under President Clinton, by limiting the value of tax benefits for highincome households, and by returning the capi-

FIGURE 7 The impact of various tax reform proposals on post-tax income inequality Percent reduction in the post-tax Gini index compared to the pre-tax Gini index Income inequality reduction under current tax policies 10% 2% Ryan **Bowles-Simpson** Obama Bipartisan Policy Center Source: Author's analysis based on Tax Policy Center projections

tal gains rate to 20 percent, also where it was at the end of President Clinton's term. The Bipartisan Policy Center and the Bowles-Simpson plans do not raise the ordinary income tax rate. In fact they both lower it. But they compensate by limiting the value of tax benefits even more than President Obama's proposal, by taxing capital gains as ordinary income, which effectively increases the capital gains rate to 28 percent.

Both the Bipartisan Policy Center and the Bowles-Simpson plans also increase the effective tax rate for rich people by preventing huge amounts of money from transferring to heirs and heiresses completely untaxed. Bowles-Simpson accomplishes this by taxing unrealized capital gains at death, while the Bipartisan Policy Center's plan eliminates the so-called "stepped-up" basis for capital gains. 13

In contrast to the two bipartisan plans and to the president's plan, the Ryan tax proposal would substantially cut the effective rate for the richest 1 percent. It does so by cutting the top income tax rate, without identifying any reforms that would offset the resulting massive tax cut for the rich. The predictable consequence is that the Ryan tax code would do far less to reduce income inequality than the current tax system does.

In short, post-tax income inequality would worsen under this proposal.

Conclusion

The primary role of the federal tax code is to raise sufficient revenue to pay for government services, benefits, programs, and investments. But so long as the overall federal system is progressive, it also serves to dampen income inequality. Over the past three decades, income inequality has been rising rapidly, and by some measures is now at heights last seen before the Great Depression. University of California economist Emmanuel Saez recently <u>marveled that</u> "The United States is getting accustomed to a completely crazy level of inequality."14

But even as inequality has risen, the federal system has become less progressive and therefore less able to reduce that inequality. In 1979 the richest 1 percent of Americans paid 37 percent of their income in federal taxes. Nearly 30 years and numerous tax cuts later, the effective tax rate for the richest 1 percent of American households was down under 30 percent. As the amount of taxes paid by the super-rich fell and then temporarily rose, and then fell again, so too did the overall impact of the tax code on the post-tax distribution of income. By 2007 the federal tax system's impact on income inequality was at a 15-year low.

There are big decisions regarding federal taxation looming on the horizon. The Bush tax cuts are set to expire at the end of 2012 along with the payroll tax holiday and several other tax cuts passed under President Obama. Even beyond the basic question of what to do with all those expiring provisions, the air in the nation's capital is thick with talk of broader tax reform. And though those decisions should be primarily driven by the need for additional revenue to reduce the federal budget deficit, policymakers must take into account the important role that the federal tax code plays in reducing income inequality.

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Endnotes

- All data on historical income and effective tax rates comes from the Congressional Budget Office, unless otherwise specified. CBO data can be accessed here: http://cbo.gov/ publication/42870
- Bureau of the Census, Selected Measures of Household Income Dispersion: 1967 to 2010 (Department of Commerce,
- "CIA World Factbook," available at https://www.cia.gov/ $\underline{library/publications/the-world-factbook/fields/2172.html}$ (last accessed April 2012).
- Congressional Budget Office, "Trends in the Distribution of Household Income Between 1979 and 2007" (2011).
- Sarah Ayres and Michael Linden, "Rich Americans Are Not Overtaxed" (Washington: Center for American Progress,
- "Pretax and After-tax incomes; Multiple Baselines; Distribution by Cash Income Percentile, 2013," available at http://taxpolicycenter.org/numbers/displayatab. cfm?Docid=3210&DocTypeID=2 (last accessed April 2012)
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- 10 "Bowles-Simpson Deficit Commission: Tax Reform with Increased Standard Deduction, Lower Threshold for 22% Rate; Baseline: Current Policy; Distribution by Cash Income Percentile, 2020," available at http://www.taxpolicycenter. $\underline{org/numbers/displayatab.cfm?Docid=2857\&DocTypelD=2}$ (last accessed April 2012)
- 11 The Tax Policy Center's analysis of the Bipartisan Policy Center's tax plan is available in the document: Bipartisan Policy Center, "Bipartisan Policy Center Tax Reform Quick Summary" (2011). Unlike the other Tax Policy Center analyses, this one did not include data on the pre-tax distribution of income. Those data, however, can be found in: "Tax Parameters Indexed with Chained CPI: Baseline: Current Policy: Distribution by Cash Income Level, 2021," available at http://www.taxpolicycenter.org/numbers/displayatab.cfm? $\underline{DocID=3234\&topic2ID=150\&topic3ID=170\&DocTypeID=2}.$ Note that the model version is the same as the one used to evaluate the BPC tax plan.
- 12 Michael Ettlinger, Michael Linden, and Seth Hanlon, "Budgeting for Growth and Prosperity" (Washington: Center for American Progress: 2011).
- 13 Generally, when a capital asset, such as a share of stock. is sold, the tax is assessed on the increase above the asset's original "basis"—the value of the asset when it was purchased. If an asset is passed on to an heir, however, the basis is "stepped up" so that if the heir sells the asset, the tax is assessed on increase above the value when it was transferred. In other words, stepping up the basis allows enormous increases in value to go entirely untaxed. Since the vast majority of the such "untaxed" value is held by very high-income households, eliminating "step-up basis" ends up greatly increasing the effective rate for the rich.
- 14 Annie Lowry, "For Two Economists, the Buffett Rule is Just a Start," The New York Times, April 16, 2012, available at http:// www.nytimes.com/2012/04/17/business/for-economistssaez-and-piketty-the-buffett-rule-is-just-a-start.html? r=3&pagewanted=all.