Poverty, Not Inequality: Federal Taxes and Redistribution
David Kamin
Draft: May 2013

Abstract
The federal tax system, and the income tax in particular, is often held out as a key—perhaps the key tool—for combating income inequality. Especially given the rapid rise in inequality seen over the last 30 years, it is natural to look to the tax code and ask what can be done in response. However, this article’s answer to that question is “not much,” because of the practical constraints on policymaking. Put simply, the effect of the federal tax system on income inequality is—and is likely to continue to be—decidedly limited. When it comes to the distribution of the tax burden, this suggests that other concerns, beyond overall inequality, should take precedence. This article offers an alternative—that of poverty. For even as the tax system can do relatively little to change the overall income distribution within the practical bounds of policymaking, it can do more, sometimes much more, when it comes to the welfare of those toward the bottom of the income spectrum. To sum up, this is a practical argument with the following practical conclusion: when it comes to the distribution of the tax burden, what matters most are metrics like poverty, not inequality and, when it comes to reducing inequality, we should be looking for tools beyond the tax system.

Introduction .................................................. 2
I. A “Bare Bones” Normative Framework: Poverty v. Inequality ........................................ 5
   A. Why A Normative Framework—and Why Bare Bones .................................................. 5
   B. The Framework: Inequality and Poverty Are Undesirable ............................................. 6
      1. Inequality .............................................................................................................. 6
      2. Poverty .............................................................................................................. 9
      3. We Live in a World of Limited Policy-Making Resources ......................................... 11
   C. If You Disagree with This Framework, Should You Stop Reading? ............................... 12
   D. Taxes Versus Spending ......................................................................................... 13
II. Inequality: Tax System’s Limited Effect ......................................................................... 14
   A. “The Great Divergence” ......................................................................................... 14
   B. Fundamental Limit on Effect of the Tax System: Size of the System .......................... 16
      1. Poll Tax .............................................................................................................. 17
      2. Highest Income Americans Pay Everything ......................................................... 19
      3. The Range of Outcomes for the Tax System ......................................................... 22
   C. The System in Practice: Experience of the Last 30 Years ......................................... 22
   D. The 2013 Tax Deal ............................................................................................... 25
III. Poverty: Tax System’s Substantial Effect .................................................................... 27
   A. The Stubborn “Official” Poverty Rate ....................................................................... 27
   B. Tax System’s Size and Poverty .............................................................................. 29
   C. A Transformation Over the Last 30 Years .................................................................. 32
   D. 2013 Tax Deal ...................................................................................................... 36
Conclusion .................................................................................................................. 37

* Assistant Professor of Law, New York University School of Law. With thanks to….
Introduction

It is the 100th Anniversary of the federal income tax, and it is not surprising at all that, to mark the occasion, this conference has organized a panel on inequality and tax code. The federal tax system, and the income tax in particular, are often held out as a key—and perhaps the key—tool for combatting income inequality. Especially given the rapid rise in inequality seen over the last 30 years, it is natural to look to the tax code and ask what can or should be done in response.

However, this article argues that we, in an important sense, are focused on the wrong issue in this session. The better topic—the topic that does deserve real attention in deciding how to distribute the tax burden—is poverty, not inequality. Or, perhaps somewhat less stridently, and in a statement that makes for a less provocative headline, it is not inequality in itself that matters so much in evaluating changes in the tax system, but rather something else like the welfare of those toward the middle and lower end of the income spectrum, which can be roughly proxied by a measure like the number of those in poverty.

The concept of poverty is of course related to that of income inequality, but these two are not the same concerns. Economic inequality is focused on the differences between classes and shares of total income, while the poverty, at least as employed in this paper, is gauging the absolute material well-being of those toward the bottom of the income spectrum. To say this somewhat differently, the concept of inequality looks to the shares of income earned by different income classes and the extent to which those shares earned by the higher income classes are

---

1 In fact, at the founding of the income tax a century ago, the Democratic Party offered a denunciation of the extensive tariff system in place at the time based on that system’s effect on inequality. Democratic Party Platform of 1912 (1912), available at http://www.presidency.ucsb.edu/ws/index.php?pid=29590 (“The high Republican tariff is the principal cause of the unequal distribution of wealth; it is a system of taxation which makes the rich richer and the poor poorer.”) Some forty years later, in their classic article parsing the arguments for progressive taxation, Walter Blum and Harry Kalven conclude by claiming that the most powerful case for a progressive tax system rests on the system’s central role in addressing inequality. See Walter J. Blum & Harry Kalven, Jr., The Uneasy Case for Progressive Taxation, 19 U. Chi. L. Rev. 417, 519 (1952) (“The case [for progressive taxation] has stronger appeal when progressive taxation is viewed as a means of reducing economic inequalities…. Ultimately, a serious interest in progression stems from the fact that a progressive tax is perhaps the cardinal instance of the democratic community struggling with its hardest problem [of economic inequality].”) The idea that the federal tax system plays an important role in addressing inequality continues in modern scholarship and analysis. See, e.g., David Grusky, Taxing Away Inequality: A Conversation with Emanuel Saez, BOSTON REV., Feb. 28, 2013, available at http://www.bostonreview.net/BR38.1/emanuel_saez_david_grusky_income_inequality_taxes_rent_seeking.php (detailing Saez’s view that the tax system can and should be used to ameliorate inequality); White House, National Economic Council, The Buffett Rule: A Basic Principle of Tax Fairness 4 (2012) (justifying a new minimum tax on high-income Americans by citing an array of statistics that suggests growing income inequality).

2 See infra notes 49-55 and accompanying text.

3 See, e.g., Martin Ravallion, The Debate on Globalization, Poverty, and Inequality: Why Measurement Matters, 79 Int’l Aff. 739, 740 (2003) (“Most observers have a reasonably clear idea about the difference between ‘poverty’ and ‘inequality’. As these terms are normally defined, poverty is about absolute levels of living—how many people cannot attain certain predetermined consumption needs. Inequality is about the disparities in levels of living—for example, how much more is held by rich people than poor people.”).
disproportionate, while the concept of poverty looks to the extent to which Americans experience “economic deprivation.”

I am not claiming that poverty is more important than inequality as a matter of principle, though there are those who would. Rather, my argument is rooted in practicality. The distinction is key. This paper’s claim may most immediately remind readers of what is often called the “maximin” equity criterion—a principle of justice that judges the welfare of society by looking to the well-being of the worst off. However, this paper is not a philosophical argument for the maximin principle, or any other one that would reject broad economic inequality as an important social concern. Instead, this paper makes its argument in terms of what the federal tax system can accomplish within the bounds of reasonable policy constraints.

Because of these constraints, the effect of the federal tax system on income inequality is—and is likely to continue to be—decidedly limited. According to the Congressional Budget Office (CBO), which publishes among the most comprehensive data on income and tax burdens, the federal tax system reduced overall income inequality (as measured by what is known as the Gini coefficient) by about 8.5 percent as of 2009. The CBO data begin in 1979 and, looking back then, the tax system had roughly the same effect as it does today, reducing inequality by just under 10 percent (and with the effect being larger back then in percentage terms simply because inequality was smaller). Moreover, the effect on inequality has been relatively stable, especially over the last two decades, and despite a number of significant changes in the tax law over that period. Finally, if the 2013 tax deal is any evidence, plausible changes in the tax code are unlikely to change this pattern significantly.

To give a sense for relative magnitudes, it is worth gauging these changes in comparison to the increase in inequality seen over the last 30 years. Some thirty years ago, after-tax inequality was 15 percent lower than as of 2009 (the latest year of CBO data). This probably understates the long-term shift in inequality because 2009 was the bottom of the economic cycle (and the stock market)—which most dramatically affects capital gains receipts for those at the top. Compared

---

4 See, e.g., NATIONAL ACADEMY OF SCIENCES, MEASURING POVERTY: A NEW APPROACH 21 (1995) (“Poverty is a circumstance, defined by a set of specific conditions that are considered to reflect economic deprivation.”)

5 For a conservative argument for a focus on poverty rather than inequality as a matter of principle, see Martin Feldstein, Reducing Poverty, Not Inequality, PUB. INT. (Fall 1999) (describing how Pareto improvements could increase inequality whereas that is not the case with increases in poverty). There are also more liberal arguments for a focus on poverty rather than inequality—or more of a focus on that, with Rawls’s “difference principle” being a key example. For further discussion of this, see infra notes 16-17 and accompanying text.

6 See JOHN RAWLS, A THEORY OF JUSTICE 133 (rev. ed. 1999) (“The maximin criterion tells us to rank alternatives by their worst possible outcomes: we are to adopt the alternative the worst outcome of which is superior to the worst outcome of the others.”) For further discussion of the maximin principle, see infra notes 16-17 and accompanying text.

7 For a description of the Gini coefficient, see infra notes 22-27 and accompanying text.


9 See infra notes Part II.D.

10 CONG. BUDGET OFFICE, supra note 8, supplemental data tbl.9.
to 2007, inequality as of 1979 was more than 20 percent lower. The point of citing these statistics is to show that the effects of changes in the tax system on inequality are not just small relative to the level of inequality; they are also small relative to the changes in inequality being driven by broader economic trends.

This is in sharp contrast to the tax system’s effect on poverty. Over the last 30 years, federal taxes system has gone from significantly adding to poverty to no longer doing so. As of the mid-1980s, the federal income and payroll tax systems—which account for most federal revenues—were increasing the number of those in poverty in this country by roughly 13 percent. As of 2010, these same systems were reducing the number in poverty by around 7 percent—or a 20 percent swing from the effect as of less than three decades before. Notably, taking the federal tax system account also substantially changes the apparent historical trend of poverty rates in the United States. Putting to the side the tax system, poverty now looks like it is at a relative high point, as Americans suffer the after-effects of the Great Recession; with the tax system accounted for, poverty is, in fact, below the average of the last 30 years, which is rather remarkable given current economic conditions. Similarly, the 2013 tax deal—the various outcomes of which would have barely budged overall inequality—would (and will) have a substantially larger effect on poverty.

What to take away from these descriptive points?

First, for those of us concerned with trends in broader inequality, the tax system is unlikely to be all that helpful a tool in reversing the trend. Policy choices over the last 30 years have had a relatively small effect and that seems likely to continue to be the case.

Second, even as that is true, this does not mean that it is time to give up on the tax distributional tables. That is because, even as adjusting the tax burden may not do much in terms of broader inequality, it does have significant effects on the welfare of many Americans. The basic intuition here is that shifting, say, $1 billion (or any other such number) from the top of the income spectrum toward the bottom (or vice versa) looks very small relative to the whole size of the economy and would barely shift income shares; however, the effect on the welfare of those at the bottom could be much more significant—$1 billion is real money to them. To repeat my thesis in somewhat different words—we spend too much time and energy, both in academic and political circles, studying and debating the tax system’s impact on the overall income distribution in this country. Rather, to a much greater degree, the focus should be turned to how the tax system affects measures of welfare like poverty. In these terms, the effects of plausible changes in the system are likely to be much more profound.

11 Id.
12 See infra 114-116 and accompanying text.
13 See infra notes Part III.C.
14 Id.
15 Id.
Finally, for those of us who care about overall inequality (as I do), we should be looking beyond the tax system. Changing tax policies is unlikely to prove a fruitful way to address the broader trends toward greater inequality.

This article proceeds as follows: Part I lays out what I describe as “bare bones” normative framework. This article’s practical judgments, which make up the bulk of this article, are motivated by the basic concepts of fairness described in this section (that inequality and poverty are undesirable). Part II then details the tax system’s effect on inequality. This starts with a more theoretical exploration of the possible effects holding the size of the system constant and using extreme systems to illustrate the (relatively narrow) range of outcomes. This section then moves onto the actual effects in recent years and under tax reform plans, where there are an even narrower range of outcomes. Part III repeats much of the same analysis in terms of the effect of different tax regimes but using measures of poverty rather than overall income inequality. Finally, the article ends with some concluding thoughts on the tax system’s capabilities when it comes to redistribution.

I. A “Bare Bones” Normative Framework: Poverty v. Inequality

A. Why A Normative Framework—and Why Bare Bones

In arriving at the conclusion that we should worry more about the tax system’s effect on the welfare of those toward the bottom of the income distribution rather than broader questions of inequality, this article does not commit to a single, fully articulated theory of fairness. Instead, it lays out a “bare bones” framework—what is something close to the minimum necessary to motivate this analysis. By keeping it “bare bones,” the purpose is, in part, to maximize “buy in” to my argument. Many (though certainly not all) will find their theories of tax fairness to be consistent in some way with the basic tenets set out here. If so, then the empirical observations of this article—and conclusions about what the tax system can practically accomplish when it comes to distribution of resources—should be meaningful.

Even if the framework may be bare bones, a framework is needed still. While the crux of this paper focuses on practical limits of the tax system, the argument is motivated by underlying theories of fairness. In particular, this paper asks how we should approach distributional questions in the tax system in light of (1) what we consider to be fair and (2) what the tax system can actually do within the bounds of reasonable policy constraints. Most of this article is focused on the latter point of practicality, but it is only given meaning by the first point.

Some may wonder why I need to reference practicality at all to arrive at this article’s conclusion—that tax policy should be focused most on alleviating poverty (or otherwise improving the welfare of those toward the bottom of the income distribution), rather than broader income inequality. In fact, as noted, this claim sounds very much like the “maximin” fairness principle. According to the maximin criterion, all that matters to social welfare—and, thus, in judging the effects of tax policy—is how policies affect the worst off in society. Other effects, including on broader inequality, are irrelevant under this theory. However, this paper is not an argument for the maximin criterion in principle—a principle which few, I think, would

---

16 See RAWLS, supra note 6, at 133 (defining maximin).
find entirely attractive, since few would agree that nothing matters beyond welfare of the worst off.17

So, instead of being an argument based purely on principle, this is an argument that starts from two basic principles of fairness described more fully in the next section—that inequality is undesirable and that poverty is too. It then argues that, between these two principles, tax policy in practice has far greater leverage over the latter than the former—which has implications for where policymakers and analysts should focus their attentions.

B. The Framework: Inequality and Poverty Are Undesirable

The title of this section—that “inequality and poverty are undesirable”—may seem like a truism to many. To the extent it does, then the “bare bones” normative foundation of this article is largely laid, and the practical arguments that this article makes should hold at least some relevance. Still, even for those who immediately embrace the concepts, it is worth better defining how I employ them here.

1. Inequality

The first basic tenet underlying this paper is that inequality in itself is undesirable. This view is widely, though certainly not universally, held. For some, it may be a question of basic fairness—inequality often being a product of “brute luck,” as Ronald Dworkin once termed it.18 Others argue that inequality is undesirable by connecting it to other negative attributes (from their point of view). This includes inequality undermining democracy by concentrating economic and, thus, political power in the hands of only a few; inequality slowing economic growth by reducing the buying power of the middle class; and growing inequality cutting economic mobility.19

---

17 While the maximin criterion is widely considered to have been developed and supported by John Rawls, see, e.g., JOSEPH E. STIGLITZ, ECONOMICS OF THE PUBLIC SECTOR 102 (3d ed. 2000) (“Rawls argues that the welfare of society only depends on the welfare of the worst-off individual . . . .”), even Rawls agreed that welfare of those at the bottom is not all that mattered. Rather, his theory of distributive justice—what he termed the “difference principle”—also gave weight to inequality more broadly and viewed such inequality as something to be addressed. In particular, he concluded that social institutions should be arranged so that “inequalities are no greater than necessary to produce corresponding advantages for the less fortunate.” John Rawls, Some Reasons for the Maximin Criterion, 64 AM. ECON. REV. (PAPERS & PROCS.) 141, 145 (1974). In other words, Rawls valued reductions in inequality, even if priority must be given to the welfare of the least fortunate.


19 For example, Joseph Stiglitz details all three of these possible negative consequences of inequality—as well as other detriments—in a new book on the subject. See JOSEPH E. STIGLITZ, THE PRICE OF INEQUALITY (2012). This joins a number of other recent works on the topic describing the consequences of growing inequality. See, e.g., LARRY M. BARTELS, UNEQUAL DEMOCRACY: THE POLITICAL ECONOMY OF THE NEW GUILTED AGE (2010) (describing the consequences for democracy of growing inequality and associating that growing inequality with policies pursued by policymakers); TIMOTHY NOAH, THE GREAT DIVERGENCE: AMERICA’S GROWING INEQUALITY CRISIS AND WHAT WE CAN DO ABOUT IT (2012) (addressing broadly the consequences of inequality).
In the face of the rapid rise in inequality over the last 30 years and recent economic turmoil, discussions of inequality have reached a high pitch. President Obama and his economic advisers have given speeches decrying the rise in inequality. Meanwhile, the “occupy” movement has taken to the streets to attack growing inequality here in the United States and other advanced countries, with a focus on the gap between the top 1 percent and everyone else.

For purposes of this paper, it is not necessary to decide why overall inequality is undesirable. The paper simply proceeds under the assumption (with which I broadly agree) that it is—and that, for one reason or another, analysts and policymakers are (and should be) seeking ways to address it. Taking this as the starting point, the article then proceeds to challenge what many take as the next logical step—that, as a result, a key goal of U.S. tax policymakers should be to address inequality and to help offset its rapid rise over the last thirty years.

Before proceeding, though, it is necessary to define what I mean by inequality—and how I will measure it throughout this paper. There are any number of ways to gauge inequality. In this paper, I employ the “Gini coefficient,” which is the dominant measure of inequality used throughout the academic literature. The Gini coefficient has received considerable attention, and this is not the place to explore it in detail and its alternatives. Nevertheless, given that I rely on it heavily in the next section, it deserves some explication here, and the requisite drawing of the “Lorenz curve.”

Using a Lorenz curve, Figure 1 illustrates the distribution of after-tax and transfer income in the United States based on data from CBO. The line shows the cumulative income earned up to a given percentile of income earners. For example, it shows that the bottom quintile earns a total of 6 percent of U.S. income; the bottom two quintiles earn 17 percent of U.S. income; and so on. The curve is compared to the line of “perfect equality” (labeled as such in Figure 1). If there were perfect equality (so that the “bottom” quintile earned exactly 20 percent of income; the

20 See President Barack Obama, Remarks by the President on the Economy in Osawatomie, Kansas (Dec. 6, 2011), available at http://www.whitehouse.gov/the-press-office/2011/12/06/remarks-president-economy-osawatomie-kansas (describing how “inequality—a level that we haven’t seen since the Great Depression—hurts us all” and going on to argue that inequality undermines democracy, slows growth, and reduces mobility).


23 See M.O. Lorenz, Methods of Measuring Concentration of Wealth, 9 PUBLICATIONS OF THE AM. STAT. ASS'N 209 (1905) (introducing the Lorenz curve as a measure of inequality).

24 CONG. BUDGET OFFICE, supra note 8, supplemental data tbl.3.
bottom two quintiles earned 40 percent of income; and so on), the Lorenz curve would exactly follow that line.

This brings me to the Gini coefficient. Repeating the oft-used definition: The Gini coefficient is an attempt to summarize the disparity of an income distribution in a single index. It is equal to the ratio of: (1) the area between the line of perfect equality and the Lorenz curve; and (2) the total area under the line of perfect equality. In Figure 1, this is area “A” divided by the sum of areas “A” and “B.” A completely equal society would feature a Gini coefficient of zero (since the Lorenz curve would exactly follow the line of equality). And, completely unequal society (where the highest income person earned all income) would feature a Gini coefficient equal to one. According to CBO, the U.S. after-tax and after-transfer Gini coefficient is 0.43 as of 2009.

To be clear—the Gini coefficient is simply a statistical measure. It is a number that lacks any meaning unless it aligns with a normative theory of equality, and there are reasons to question whether it does. Specific theories of equality may weigh changes in the income distribution

---

25 See, e.g., RAY, supra note 22, at 189; SEN, supra note 22, at 30.
26 CONG. BUDGET OFFICE, supra note 8, supplemental data tbl.9.
27 See SEN, supra note 22, at 32 (describing how the Gini coefficient implies a welfare function in “which is just a weighted sum of different people’s income levels with the weights determined by the rank-order position of the person in the ranking by income level”). See also Michael J. Graetz, “Paint-by-Numbers Lawmaking,” 95 COLUM.
differently than implied by the Gini—for example, those most concerned with the effects of inequality on democracy and undue concentrations of political power may give special weight to the concentration at the very top of the income distribution. Others may be concerned with the inequality of something other than income—such as opportunity—but for which income provides a proxy. Or, some may give particular weight to the well-being of those at the bottom of the income distribution, in which case the concern with inequality may more approach one with poverty.

This article is not meant to litigate the issue of exactly why inequality matters—and how that should best be captured. I adopt the Gini coefficient as a rough-and-ready (and widely used) measure of inequality. So, the results of this paper are, to some degree, bounded by the metric of inequality which it adopts. With that said, it is a widely used measure, and I believe that the point this paper makes will relate to many people’s concepts of inequality even if not everyone’s.

2. Poverty

The second tenet underlying this paper is that it is undesirable for people to be in poverty. More so than inequality perhaps, the very concept of poverty can engender difficult definitional questions. For purposes of this paper (and to borrow a definition offered by the National Academy of Sciences), in referring to poverty, I mean a state of “economic deprivation” such that it is not possible to maintain a “minimally adequate standard of living.”

There are probably few who would dispute this tenet on its face—that having people in or near a state of economic deprivation is undesirable. Like with inequality, some may see poverty as a violation of fundamental fairness. President Franklin Roosevelt famously described one of the four fundamental freedoms being “freedom from want.” As noted before, Rawls went even further, arguing that the welfare of society should be largely (though not necessarily entirely) defined by the well-being of the worst off in society. And, for others, poverty may be seen as undesirable because of what it may produce—among other effects being higher crime

---

L. REV. 609, 623 (1995) (“[T]he ethical and normative force of the Gini coefficient has been question…. Nevertheless, economic treatments of income distribution issues continue to accord Gini a prominent place.” Graetz then goes on to use the Gini coefficient in his own analysis.)

28 NATIONAL ACADEMY OF SCIENCES, supra note 4, at 65.

29 President Franklin Roosevelt, Annual Address to Congress: The Four Freedoms (Jan. 6, 1941), available at http://docs.fdrlibrary.marist.edu/od4frees.html (“The third is freedom from want--which, translated into world terms, means economic understandings which will secure to every nation a healthy peacetime life for its inhabitants-everywhere in the world.”)

30 See supra notes 16-17 and accompanying text.

31 See, e.g., Sarah B. Heller et al, Family Income, Neighborhood Poverty, and Crime, in CONTROLLING CRIME: STRATEGIES AND TRADE-OFFS 419-459 (Philip J. Cook et al eds., 2011) (describing a long-standing debate on the relationship between crime and poverty and concluding that “[t]he best available empirical evidence suggests that government efforts to increase resource transfers to poor families, or to help poor families move out of the highest-poverty urban neighborhoods, can reduce criminal involvement.”)
children in poverty today who, as a result, are more likely to grow up to be low-educated, poor adults.  

Inequality and poverty are distinct, but related, concepts. A concern with inequality is fundamentally focused on the differences between classes and shares of total income, while poverty (at least as defined here) is focused most on the absolute material well-being of those toward the bottom of the income spectrum.

Like with inequality, it is not necessary for this paper to define exactly why poverty is undesirable. It is simply from this starting point that this paper then asks what the tax system can practically accomplish, and the answer is that the effects on poverty can be substantial—and in contrast to the very limited effects on overall inequality.

Of course, saying that poverty is defined as a “state of economic deprivation” is not sufficient for empirical work. Economic deprivation must be quantified. In doing so, this paper uses the Census Bureau’s official poverty thresholds. These official poverty thresholds have been (rightly) subject to considerable criticism over the years. Among other things, the critiques focus on how the threshold is defined (without reference to housing or medical costs, for instance) and what is included in income (not taking into account taxes or important federal benefits, like food stamps). This analysis corrects the measure in one important way—taking into account changes in federal taxes. However, it does not in other ways, in large part because of data limitations in some of the historical poverty data. With that said, the basic result—that the tax system has had a large and changing effect on poverty—appears to hold whether using the official measure of poverty or supplemental ones developed to correct deficiencies in the official approach.

However poverty is measured, it can be criticized as giving too much weight to arbitrary lines in the sand. A critic can ask: Why should a dollar that lifts someone from poverty be given great weight, while the measures give no weight to any improvement in income for those above the threshold? There is of course something to the criticism. However, many (including myself) can agree that there is something specifically unfair or concerning about people living in or near economic destitution. And, yes, defining where “economic destitution” begins and ends involves somewhat arbitrary judgments, and perhaps the idea could be better captured by a more gradual

---

32 See CAROLINE RATCLIFFE & SIGNED-MARY MCKERNAN, URBAN INSTITUTE, CHILDHOOD POVERTY PERSISTENCE: FACTS AND CONSEQUENCES 6-9 (2010) (quantifying how “[i]n general, the longer a child is poor, the worse his or her adult outcomes.”)

33 See infra note 3.


35 For a discussion of the limitations of the official poverty measure, see generally NATIONAL ACADEMY OF SCIENCES, supra note 4.

36 See infra note 118.
weighting of incomes towards the bottom of the income spectrum. Nonetheless, the arbitrariness involved does not deny the poverty concept of any meaning—I think many can agree that, despite the judgment calls, there is something important to the idea of how many are in poverty, as now defined by the Census Bureau.

3. We Live in a World of Limited Policy-Making Resources

I set these two basic tenets—that inequality is undesirable and that poverty is undesirable—in tension with another. In the sections that follow, I argue that tax policymakers and analysts should be much more concerned with the latter than the former because of the practical limitations of the tax system. Or, framed somewhat differently, I maintain that, despite the fact that the tax system is likely to have only a limited effect on overall inequality, distributional concerns still matter—but in terms of measures like changes in poverty rather than overall inequality.

To put a fine point on it: the tension that I draw between the two concepts is not one based on principle. Very often policies that would reduce poverty also reduce overall inequality (though not necessarily by much). Instead, my argument again comes down to limited resources.

In particular, my argument makes the reasonable assumption that there are limited policymaking and analytical resources. In other words, there is only so much that policymakers and analysts can pay attention to at any one time when it comes to distributional policy (or any policy for that matter). Because of this, focusing on tax policy’s effect on inequality comes at a cost, and the cost may not be worth it if the system’s practical effect on inequality is, in fact, very limited.

This very conference session exemplifies my point. We are supposed to be talking about the effects of the income tax on inequality, and that has been the topic of many tax symposia and papers before this. Would policy be better if we—policymakers, analysts, and the public alike—actually focused on the distributional effects that matter most? That is perhaps a matter of some faith, but I think that it is one as academics that we must all adopt, or else find a better and more fulfilling discipline.

Or, to put this in other concrete terms, the country’s policymakers recently resolved a debate around the large 2001 and 2003 tax cuts. Much of the debate was framed around the issue of inequality—37—and this is despite the fact that the effects on the overall income distribution were not particularly large relative to broader economic trends. 38 Based on that public discourse, it would now be easy to mistake allowing the upper-income tax cuts to expire for a significant

---


38 See infra Part III.D.
change in inequality. But, it is not. If inequality were a problem before, it remains nearly as large now with the expiration of the tax cuts. At the same time, the distribution of the tax changes did matter. Allowing the tax cuts to entirely expire would have had a large effect on poverty, and, in fact, certain tax cuts that significantly reduce poverty were extended for only five years—and their future remains uncertain. This, rather than the effect on the overall distribution of the country’s resources, is worthy of attention.

This is not just a question of improving the discourse around tax policy and its distributional effects, but also that around inequality generally. If it turns out that the practical effect of the tax system on overall inequality is limited (and inequality is a concept that we indeed care about), then this suggests that we—policymakers, academics, and the public—should focus our attention on alternative policy tools for reducing inequality. Tax policy is not only insufficient but, possibly, a distraction.

In addition to working under the assumption that there are limited policymaking resources, this analysis also assumes that, in making this trade-off, the concern for inequality does not dominate that for poverty. Put differently, this assumes that if, in practice, the tax system can have only small effects on overall inequality but can have large effects on the welfare of people lower on the income distribution (proxied by poverty for purposes of this paper)—it is the latter that should receive the bulk of our attention.

C. If You Disagree with This Framework, Should You Stop Reading?

While I believe that many should find this bare bones framework to be attractive, certainly some will not agree with its two basic tenets—that inequality and poverty are undesirable. To the extent one believes that neither inequality nor poverty are undesirable, then this article will probably have little to recommend it. The same is true for those (almost certainly very few) that find inequality unattractive, but do not have any independent objection to poverty. Finally, for those that see poverty as undesirable but do not believe inequality to be undesirable (and this is a more widely held belief), then this article is unnecessary—it reaches a conclusion based on practicality that they have already reached based on principle. However, for these readers, this article might provide one more arrow in the quiver in debating tax policy; when others want to discuss the tax system’s effect on inequality, this lends them a new response—focusing on this may not just be silly from the perspective of principle but also from the perspective of practicality.

There may be others that do not know whether to agree or disagree with this framework—and, instead, simply have their brows knitted in puzzlement. Perhaps there are many readers like these (though I hope not), but here I am specifically referring to the welfarists. In tax policy circles and especially among public finance economists, welfarism is a widely employed

39 See infra Part III.D.

40 See, e.g., LOUIS KAPLOW & STEVEN SHAVELL, FAIRNESS VERSUS WELFARE 15-16 (2006) (describing how the essence of welfare economics is, first, assessing the effects of policies on the well-being of individuals and then aggregating the information about individuals’ wellbeing into “an overall social judgment”)
normative framework; there has been many a paper evaluating tax policy from the perspective of maximizing total social welfare—which is the welfarist’s sine qua non. 41

For many welfarists, this framework may seem confused because, in their eyes, the two tenets I put in tension with each other are not so easily distinguished. Many welfarists do believe in redistribution. However, they do so not because either inequality or poverty are in themselves undesirable or unfair, but rather because maximizing total social welfare would tend to involve reducing both. This result is driven by the assumption that the marginal utility of income falls as income rises, and, as a result (and assuming no other changes), total welfare can be increased by redistributing income from those at the top toward those at the bottom. Most welfarist models then weigh this against the economic distortions generated by redistributional policies. In other words, welfarists may be confused by this framework because neither inequality nor poverty are independent, motivating concerns for the welfarist—rather the only motivating concern is total social welfare.

Still, this paper should have some relevance for the welfarist. In particular, from a welfarist’s perspective, it can be seen as describing the practical limits of the tax system in increasing total social welfare. The system can have very significant effects on the welfare of those toward the bottom or middle of the income distribution—and increase (or decrease) social welfare in that way. However, the system is unlikely to undertake major redistributions of income, where large shares of concentrated income at the top are passed down to those toward the middle and bottom—if that is a goal, other policy tools must be employed. Practically speaking, the tax system can matter in increasing total social welfare through redistribution, but this is within limits.

D. Taxes Versus Spending

This article focuses almost exclusively on the effect of the federal “tax” system on inequality and poverty. 42 Some may complain that this ignores the “spending” side of the budget, which, of course, can (and does) have significant effects on the distribution of income. Furthermore, this complaint is given even greater force by the fact that the distinctions between “spending” and “taxes” are largely formalisms. 43 Transfers can be delivered through either the spending or tax system, with the same or very similar substantive effect. (And, there is of course a highly developed literature exploring what it means to have “tax expenditures” in the tax code.) In short, this article can be accused of telling only a very partial story—and not the story of the overall tax and transfer system.

41 Welfarism is the basis for the considerable economic literature on optimal tax analysis—a field with its modern foundation in the work of James Mirrlees, which has since been expanded on by an array of economists. See generally James A. Mirrlees, An Exploration in the Theory of Optimal Income Taxation, 38 REV. OF ECON. STUDIES 175 (1971).

42 By the tax system, I mean provisions generally operating through the Internal Revenue Code—and grouped by analysts, such as CBO, as “taxes.” This includes refundable income tax credits.

43 See Daniel N. Shaviro, Rethinking Tax Expenditures and Fiscal Language, 57 Tax L. Rev. 187, 191 (2003) (“The distinction between taxes and spending thus depends on pure form. For example, ‘spending increases’ can be converted into ‘tax cuts’ if they are netted against tax payments before being made in a manner that looks sufficiently as if the tax system is the responsible agent.”)
The article is “guilty as charged.” However, not surprisingly, I believe that the analysis here still carries significance. As a first defense, I offer precedence. The distribution of the tax system has frequently been discussed separately from that of the overall transfer system. There is a long and storied literature quantifying and debating the distributional effects of the tax system—a literature to which this article contributes. 44 This conference session itself is yet another entry. We are here to discuss the 100-year anniversary of the federal income tax. Perhaps the session could alternatively have been titled the effects of all government transfers on inequality, but, like many discussions before this, it is meant to focus on one part of that system—the federal tax system (and perhaps even more narrowly the income tax system).

However, precedence alone is unsatisfying. As a second defense, I offer practicality. For better or worse, tax and spending policies tend to be debated and analyzed separately from one another. Distributional tables are most often produced looking at only the distributional effects of tax policies. 45 And, whereas such tables are often employed in tax debates, they are far less frequently used when it comes to spending policy. 46 In the coming year or two, it is very possible that policymakers will be engaged in the process of trying to reform the tax system, and, in that process, the question will be asked—“what matters for distributional purposes”? In other words, policymakers and analysts will be staring at distributional analysis of various tax reforms—separate and apart from “spending” policies—and asking what really matters.

II. Inequality: Tax System’s Limited Effect

A. “The Great Divergence”

The last 30 years have been characterized by a remarkable (and much remarked upon) increase in economic inequality in the United States. Paul Krugman has famously labeled the trend as “the great divergence.” 47 In broad strokes, the United States saw a significant reduction in income inequality—and, specifically, the share of income flowing to the very top of the income

44 For an early and influential article analyzing the progressivity of the federal income tax system and its effect on inequality (ignoring the transfer system), see generally R.A. Musgrave and Tun Thin, Income Tax Progression, 56 J. Pol. Econ. 498 (1948). This tradition was continued as distributional analysis developed over time. See, e.g., JOSEPH A. PECHMAN, FEDERAL TAX POLICY 378 tbl.D-4 (5th ed., 1987) (showing progression of effective tax rates under the federal income tax); Daniel B. Suits, Measurement of Tax Progressivity, 67 AM. ECON. REV. 747 (1977) (proposing a new approach for measuring the progressivity of the tax system).


46 There is quite simply no TPC-equivalent when it comes to spending programs, producing readily available and understandable distributional estimates for changes in spending programs.

47 Paul Krugman, Introducing This Blog, CONSCIENCE OF A LIBERAL (Sept. 18, 2007, 11:45 PM), http://krugman.blogs.nytimes.com/2007/09/18/introducing-this-blog/ (“The great divergence: Since the late 1970s the America I knew has unraveled. We’re no longer a middle-class society, in which the benefits of economic growth are widely shared: between 1979 and 2005 the real income of the median household rose only 13 percent, but the income of the richest 0.1% of Americans rose 296 percent.”)
distribution—in the midst of World War II. That drop in inequality was maintained through the late 1970s. However, income inequality then began widening in the decades that followed—until reaching levels only last seen in the 1920s and 30s.

To give a sense for the magnitude of the increase in inequality over the last thirty years, I here use data from CBO, which supplies one of the most comprehensive views of income and inequality in the United States over the last 30 years. Whereas in 1979 (near the low point for inequality in the United States and also the start of the availability of income data from the CBO), the top quintile earned 42 percent of national income on an after-tax and transfer basis, that had increased to 47 percent by 2009. For the top 1 percent, the share increased from just over 7 percent to over 11 percent. Or, to put this in terms of the Gini coefficient, the Gini

---


50 CONG. BUDGET OFFICE, supra note 8.

51 *Id.* at supplemental data tbl.3.

52 *Id.*
increased from 0.36 to 0.43—an increase of about one-fifth over 30 years. This trend in the Gini coefficient is shown in Figure 2.

To be clear, and as also shown in Figure 2, this is a drop in inequality relative the peak in 2007, prior to the start of the Great Recession. The Great Recession especially affected the capital gains receipts of those toward the top of the income spectrum. From 2007 to 2009, the after-tax Gini coefficient fell from 0.47 to 0.43 (as incomes of the top 1 percent fell by 37 percent in a period of just two years). It seems likely that inequality has increased once more as the economy rose out of the doldrums and the stock market has recovered and, in fact, some data suggest that this is the case. 54

This is not the place to delve into the details of these trends nor the possible sources of them. That has been covered in great detail in other sources. 55 Instead, this is meant to set out the basic context for the current debate over inequality, and why it has generated such considerable attention in recent years—namely, a significant trend (interrupted only by the effects of recessions) toward greater income inequality in the United States.

B. Fundamental Limit on Effect of the Tax System: Size of the System

In the face of this trend toward greater inequality and with many believing that income inequality is undesirable, there has been a high-profile debate in the United States as to how to address it. As noted, the tax system frequently comes up as a key, if not the key, tool. 56

However, in practical terms, the effects of the system are limited. I explore the practical limits through a number of different lenses, including the experience of the last 30 years and the recent tax deal that Republicans and Democrats struck to continue most—but not all—of the 2001 and 2003 tax cuts. Before arriving at those two perspectives, I begin with one fundamental limit on the effect of the tax system on overall economic income inequality—the limit defined by the size of the tax system.

This is a simple point, but one that is underappreciated and with important practical consequences. To start off with an extreme example—say that the tax system raised $1 of revenue. That system could be entirely concentrated on the highest income household or the lowest income household, but it would have very little effect on overall inequality in the United States.

Of course, the federal tax system raises more than $1. As of fiscal year 2013, the federal tax system is expected to raise revenue equal to about 17 percent of GDP. 57 With the economy

53 Id. at supplemental data tbl.9
54 Piketty & Saez, Updated Data, supra note 48, at tbl.A2 (showing that, while the share of income including capital gains earned by the top fractiles fell from 2007 to 2009, that had largely returned to its pre-recession level by 2011).
55 See generally NOAH, supra note 19, at 1-163 (analyzing the trends in and sources of equality); STIGLITZ, supra note 19, at chapters 1-3 (also exploring these themes).
56 See supra note 1.
recovering and temporary tax breaks expiring (including certain high-income 2001 and 2003 tax cuts), that amount is expected to rise to a number in the neighborhood of 19 percent of GDP for much of this decade. 58 Looking back historically, revenues in the United States have never been higher than just under 21 percent of GDP (the peak as of 2000). 59

This symposium is specifically focused on the income tax and its 100 year anniversary. The individual income tax raises considerably less than the tax system as a whole. In 2013, the income tax is expected to raise about 8 percent of GDP (or just under half of total revenues)—with that projected to increase up to between 9 and 10 percent of GDP as the decade progresses. 60 And, historically, the income tax has never raised more than just over 10 percent of GDP. 61

Assuming the federal tax system stays somewhere close to these historical bounds in terms of size, this represents a significant practical limit on the system’s effect on overall inequality in the country. To put this in context, the entire amount raised by the federal tax system—roughly 20 percent of total income—is equivalent to less than half of the income earned by the top quintile. 62 The income tax is equivalent to only about one-fifth. 63 There is only so much that the decision about how to distribute a tax system of this size will do to either increase or decrease income inequality.

To clarify the degree to which the size of the tax system represents a limit on its effect on overall inequality, I take two extreme examples—one of a poll tax and one of a system in which those at the top of the income spectrum pay the entire tax. Both of these examples assume a tax system that is roughly the same size as we will have in the United States over the coming decade—with the total tax system equal to about one-fifth of income and the income tax equal to about half that.

1. Poll Tax

A poll tax is one in which each person contributes the same amount to finance the tax system. It is the textbook example of a tax system that would produce no economic distortions, even if it would generate significant economic inequity. That is because no one could change their behavior in such a way as to reduce their tax liability—each person would owe the same amount irrespective of their decisions. In sum, this is an extreme system in which concerns about distribution are entirely put to the side and the tax system is designed to optimize “economic efficiency” in this very limited sense.

58 Id.
60 CONG. BUDGET OFFICE, supra note 8, at 9 tbl.1-1.
61 OFFICE OF MGMT. & BUDGET, supra note 59, at 34-35 tbl.2.3.
62 See CONG. BUDGET OFFICE, supra note 50, supplemental data tbl.3 (showing that the top quintile makes about 50 percent of pre-tax income).
63 See id.
Not surprisingly, a poll tax like this would significantly increase income inequality. The before-tax (after-transfer) income distribution has a Gini coefficient of 0.47, according to CBO.\(^{64}\) A poll tax would raise this Gini Coefficient to about 0.57 — or nearly one-quarter higher than before the imposition of a poll tax.\(^{65}\) Or, to put this in other terms, the top quintile would go from earning about 51 percent of pre-tax income\(^{66}\) to about 59 percent of after-tax income.\(^{67}\) This is roughly the same magnitude as the size of the shift in inequality between 1979 and 2007 (and somewhat larger than that through 2009, after the start of the Great Recession).

The smaller the tax system, the smaller is this effect. If the income tax alone were imposed as a poll tax, the Gini coefficient would rise from just over 0.46 to about 0.51 as a result of this tax, with the top quintile going from earning 51 percent of total income to earning 54 percent of total income.\(^{68}\)

As an extreme example of a regressive tax system (a system that I think almost all would agree is far from fair), the effect of the poll tax on inequality seems somewhat underwhelming. With that said, a poll tax would have a major effect on welfare, especially for those at the bottom of the income distribution. Income for the bottom quintile would be nearly entirely eliminated (of course, it seems likely that means many would refuse to pay the tax at all, but this puts that to the side). The bottom quintile would go from earning 5 percent of pre-tax income to roughly 1 percent—a move from destitution to utter destitution. The size of this effect is explored in greater detail in Part II, with the point being that a poll tax would have a very large effect on poverty but a significantly smaller one on overall income shares.

\(^{64}\) Id. at supplemental data tbl.9.

\(^{65}\) This is a rough estimate and is the author’s calculation using two sources: (1) The Congressional Budget Office for data on income and taxes. See CONG. BUDGET OFFICE, supra note 50. (2) A World Bank program (named “POVCAL”) to calculate the Gini coefficient. See a description of the World Bank program here: http://iresearch.worldbank.org/PovcalNet/index.htm?0,5.

Specifically, I start with the CBO after-transfer income distribution which they supply based on quintiles for the bottom 80 percent of the income distribution and with greater detail for the top quintile (81\(^{st}\) to 90\(^{th}\) percentile, 91\(^{st}\) to 95\(^{th}\) percentile, 96\(^{th}\) to 99\(^{th}\) percentile, and top 1 percent). Note that households are ranked adjusting for household size.

I then assume imposition of a head tax that generates tax liabilities equal to 20 percent of post-transfer income. Note that, according to CBO’s figures, federal taxes over the last thirty years have averaged just a bit over 20 percent of post-transfer income (as measured by CBO). In applying the head tax, I simply divide the tax equally across the various percentiles – so the bottom 20 percent of the population pays 20 percent of the tax and so on.

I then calculate the change in the Gini coefficient with a head tax imposed. I do so based on the grouped data (grouped by the percentiles described above). Based on grouped data, though, it is not possible to exactly estimate the Gini coefficient, since that would require access the underlying individual-level data. As a best guess at the change in the Gini coefficient, I use the POVCAL computer program from the World Bank, which employs a parametric equation to estimate the Lorenz curve and Gini coefficient based on grouped data.

\(^{66}\) Cong. Budget Office, supra note 8, supplemental data tbl.3.

\(^{67}\) Author’s calculations. See supra note 65 for a description of the methodology.

\(^{68}\) Id.
Note that these estimates of the poll tax— and all other calculations in this paper on the effects of tax changes— do not take into account the behavioral effects from imposition of taxes. These are “static estimates,” as they are often called. This is a significant simplifying assumption, but a defensible one. In fact, dynamic estimates—that account for the expected change in behavior— do not necessarily produce more accurate figures for purposes of distributional analysis.

The poll tax illustrates how static results can, in some cases, better capture distributional changes than dynamic estimates. In the face of a lump sum tax, it is very possible that some— especially those with lower incomes— would work more to help pay the tax and purchase necessities. (In economics parlance, this would be an “income effect” — with these people consuming less leisure and working more as a result of a reduction in resources.) However, it is not clear that one would want to count this additional monetary income among those at the bottom as decreasing income inequality— for even as they increase their monetary incomes, they are decreasing the amount of leisure they consume. In other words, while pre-tax monetary income might go up as a result of the tax, total pre-tax income— including the consumption value of leisure— might not rise at all. In this case, the static estimate is the more accurate measure in terms of the tax’s effect on relative incomes (including the value of leisure).

Static estimates will not always be better than dynamic ones. Whether to use static or dynamic estimates for purposes of distributional analysis has long been a point of contention among tax experts.69 The point is that the simpler approach adopted by this paper— of using static estimates— is a reasonable one and one used by others in doing distributional analysis.70

2. Highest Income Americans Pay Everything

The poll tax can be contrasted with another extreme— that of the highest income Americans paying all federal taxes. This hypothetical assumes that the top 20 percent pays this entire

69 For a description of this debate, see Michael J. Graetz, “Paint-by-Numbers Lawmaking,” 95 Yale L.J. 609, 624-634 (1995). When tax changes involve not just “income effects” but also “substitution effects,” the story becomes more complicated than described in my example of the lump sum tax— and a static estimate is not necessarily superior. For instance, take a tax on labor income. That, too, would tend to have an income effect— causing people to work more because of the reduction in resources, and the analysis above would apply (the static approach should produce the better distributional estimate). But, it would also produce a substitution effect. In particular, this would make leisure less expensive relative to working (and the goods consumed from labor income) and so lead people to work less for that reason. A dynamic analysis would take the reduction in monetary income from the substitution effect into account in distributional analysis, while a static analysis would not. Neither is entirely right though. The dynamic analysis overstates the tax burden because even as monetary income falls, the amount of leisure enjoyed increases— which has a real value. However, static analysis understates the burden because, while leisure has value, it has less value to the individuals than the goods they are giving up by substituting leisure for labor in the face of taxes. This is a “deadweight” loss— and the static analysis does not properly account for this. The bottom line is that dynamic analysis is not clearly superior to static analysis in distributional analysis— and, in some cases (the lump sum tax), the opposite is true.

70 For instance, the Urban-Brookings Tax Policy Center uses static estimates when it comes to its distributional estimates, but semi-dynamic estimates (taking account behavioral changes except those affecting larger macroeconomic variables) when it comes to revenue estimates. See, e.g., ROBERTON WILLIAMS ET AL., TOPPLING OFF THE FISCAL CLIFF: WHOSE TAXES RISE AND HOW MUCH?, at 7 n.9 (2012) (noting that the distributional estimates are static and that the revenue estimates take into account short-run behavioral changes).
burden and with the effective tax rate phasing up from about 20 percent for the 81st to 90th percentiles of income to a high of 65 percent for the top 1 percent. 71  It is, of course, possible that the system could be made even more progressive—with the top 10 percent or less paying the entire tax burden (and effectively wiping out their incomes). However, this hypothetical certainly represents a highly progressive tax system.

This hypothetical tax system—equal to about 20 percent of total income and in which the highest income Americans paid everything—would reduce the Gini coefficient from the pre-tax level of about 0.47 to about 0.35 on an after-tax basis, or a reduction of about one-quarter. 72  The top quintile would go from earning 51 percent of pre-tax income to 39 percent of after-tax income. 73  (And, like with the poll tax, the effect would be about half that if focused on the income tax alone since the income tax represents just about half of total U.S. taxes. In that case, the Gini coefficient falls from over 0.46 to about 0.41. 74)

No doubt—this represents a significant move in inequality and income shares. However, to put this in context, entirely concentrating the full tax system’s burdens on the top 20 percent would roughly offset the increase in income inequality experienced over the last thirty years—producing an after-tax Gini coefficient about equal to that in 1979. (The share of income earned by the top quintile would be somewhat lower than in 1979—though that too would be about the same if we returned to the inequality levels seen last in 2007.)

Note that this hypothetical constrains the progressivity of the tax system as a whole in an important way. It sets the lowest possible tax rate as zero. That is—it has the highest-income taxpayers pay the entire tax burden to finance an as-yet unidentified set of services and transfers provided by the federal government on the spending side of the budget. A more progressive tax system could have a negative tax rate (such as a demogrant) for those toward the bottom of the income distribution. As a practical matter, though, the federal tax system tends not to deliver net benefits to people—consistent with the assumption in this hypothetical. For the average low-income family, the federal tax rate was close to zero in recent years, and that was a record low within the last thirty years—and should rise with the expiration of temporary tax measures like Making Work Pay and the payroll tax cut. 75  Some people within that quintile certainly had

---

71  Like with the poll tax example, the numbers in this hypothetical are the author’s calculations using CBO data on the income distribution and the World Bank’s Povcal program to calculate the Gini coefficient. This assumes federal taxes equal to 20 percent of total income and then generates this through a tax imposed solely on the top quintile. Based on the income breaks provided by CBO for the top quintile (81st to 90th percentile, 91st to 95th percentile, 96th to 99th percentile, and top 1 percent), I assume a progressive structure at the top—an effective tax rate of approximately 20 percent for the 81st to 90th percentile; approximately 30 percent for the 91st to 95th percentile; approximately 45 percent for the 96th to 99th percentile; and approximately 65 percent for the top 1 percent. For additional description of the methodology, see supra note 65.

72  Id.

73  Id.

74  Id.

75  CBO reports that, as of 2009, the bottom quintile paid an average federal tax rate of 1.0 percent, the lowest rate in 30 years. CONG. BUDGET OFFICE, supra note 50, supplemental data tbl.1. The Urban-Brookings Tax Policy Center (TPC) finds the average tax rate for the lowest quintile in 2009 to be -1.6 percent, though this does not take into account federal excise taxes (like the gas tax). TPC finds that, from that low, the average tax rate for the bottom
negative average tax rates, but the point is that is the exception rather than the rule—even the lowest income Americans tend not to get back a lot from the federal government on net through the tax system.

As a practical matter, the federal tax system tends not to deliver net benefits to people—consistent with the assumption in this hypothetical. For the average low-income family, the federal tax rate was close to zero in recent years, and that was a record low within the last thirty years—and should rise with the expiration of temporary tax measures like Making Work Pay and the payroll tax cut. Some people within that quintile certainly had negative average tax rates, but the point is that is the exception rather than the rule—even the lowest income Americans tend not to get back a lot from the federal government on net through the tax system.


CBO reports that, as of 2009, the bottom quintile paid an average federal tax rate of 1.0 percent, the lowest rate in 30 years. CONG. BUDGET OFFICE, supra note 50, supplemental data tbl.1. The Urban-Brookings Tax Policy Center (TPC) finds the average tax rate for the lowest quintile in 2009 to be -1.6 percent, though this does not take into account federal excise taxes (like the gas tax). TPC finds that, from that low, the average tax rate for the bottom quintile rose to 0.9 percent by 2012—and is expected to rise still further to 1.8 percent in 2013 and 2.5 percent by 2015. Urban-Brookings Tax Policy Center, Table T13-0035: Baseline Distribution of Cash Income and Federal Taxes Under Current Law (Jan. 17, 2013), http://www.taxpolicycenter.org/numbers/displayatab.cfm?DocID=3792.
3. The Range of Outcomes for the Tax System

The two examples essentially define the range of possible outcomes when it comes to the tax system’s effect on inequality—and assuming we have a tax system that generates revenue equal to about 20 percent of GDP (and does not provide much in the way of funds back to individuals). The decision as to how to distribute that tax burden could shift the Gini coefficient from the pre-tax level of just over 0.46 to a level as high as about 0.59 and as low as about 0.35. Note that the current tax system generates an after-tax Gini coefficient of 0.43—or about 8 percent below the pre-tax Gini of 0.46. The range of Lorenz curves is shown in Figure 3.

On the one hand, this demonstrates that the tax system can have a significant effect on inequality. At the same time, it shows that, if the system is limited to about 20 percent of total U.S. income, that decision as to how to distribute the tax burden is of limited impact. Furthermore, as the next section describes, the range of outcomes is in practice much more limited than that. We are very unlikely to ever have a tax system that is either a poll tax or one in which the very richest Americans pay all taxes (and where the effective tax rate on the top 1 percent reaches 65 percent). As a result, in practice, the effect of the tax system on inequality has been held to a relatively narrow band.

C. The System in Practice: Experience of the Last 30 Years

Figure 4 captures the effect of the tax system on inequality over the last 30 years from the CBO data. It shows a tax system whose effect on inequality in this country has varied little over time. In 1979, the tax system as a whole reduced the Gini coefficient by 0.039 (or nearly 10 percent compared to the pre-tax Gini coefficient). In 2009, it reduced the Gini coefficient by, again, 0.039 (or, about 8 percent—with the percent change in the Gini coefficient being somewhat smaller than in 1979 because of the increase in pre-tax income inequality).  

In that period, the reduction in the Gini coefficient due to the effects of the tax system varied from a high of about 0.041 in 1996 to a low of 0.023 in 1986, according to the CBO data. In other words, over the last 30 years, the effect of the tax system has ranged by 0.018 in terms of change of the Gini coefficient. Note, though, that the effect on inequality has been relatively constant at the current level since the mid-1990s. This is at the same time as the before-tax Gini has varied by a total of 0.103—with the low in 1979 of 0.397 and a peak in 2007 of 0.500.

77 CONG. BUDGET OFFICE, supra note 8, supplemental data tbl.9. Note that these CBO calculations take into account federal individual income taxes, corporate income taxes, social insurance taxes, and excise taxes. This represents about 95 percent of total federal receipts. OFFICE OF MGMT. & BUDGET, supra note 59, at 34-35 tbl.2.3. Importantly, though, this does not take into account the estate and gift tax. Over the last two decades, the estate and gift tax composed about 1 percent of total federal receipts. Id. at 34-35 tbl.2.3, 45-46 tbl.2.5. While that is a small share of the whole, the estate and gift tax is focused almost entirely on the very top of the income spectrum and has now been phased down. If that were included in CBO’s calculations, the pattern may differ somewhat from what is shown here.

78 CONG. BUDGET OFFICE, supra note 8, supplemental data tbl.9.

79 Id.
Looking at the individual income tax specifically, the effects are not all that different than the federal tax system as a whole—that is because, while the individual income tax represents only half the total tax system, it is also among the elements that concentrates payments most at the top of the income distribution. The income tax reduced the Gini coefficient by 0.031 (or 9 percent) in 1979 and 0.038 (or 9 percent again) as of 2009. And, like the tax system as a whole, the effect of the individual income tax on the Gini coefficient ranged by about 0.015—from a low in the mid-1980s to a high in the late 1990s and 2000.

There are a few takeaways from this spate of numbers:

First, the tax system as a whole and the individual income tax specifically are progressive, though only mildly so. To put the system in perspective: Compared to the “extreme” example of a tax system in which the entire burden is borne by the top 20 percent, the system reduces inequality by about one-third as much.

Second, changes in the tax system’s progressivity are small relative to broader economic trends. As noted, the tax system’s effect on the Gini coefficient has varied within a relatively tight band—of about 0.015 (and is now at about the same level as in 1979, even if a bit lower in

---

80 Id.
81 Id.
percentage terms). This is at the same time that before-tax inequality has varied by 0.1, or roughly 20 percent (and increased over the period from 1979 to 2007 by 0.07).

The effect of the tax system on inequality has been held to this relatively tight band despite significant changes in the tax system over that time. These changes include Reagan’s major tax cuts in the beginning of the 1980s (which helped bring the progressivity of the tax system to its modern low point); the rewriting of the tax code in the 1986 tax reform, which is often described as distributionally neutral but, in fact, increased progressivity according due to its corporate tax increase; the tax increases of the 1990s that increased taxes on the highest income Americans, while cutting taxes at the bottom with the expansion of the Earned Income Tax Credit; and, finally, the significant tax cuts enacted over the last decade and that cut taxes across the board—but with those at the top seeing the largest gains in after-tax income.82 Or to put this in terms of marginal tax rates: there was little change in the system’s effect on overall inequality even as he top ordinary income tax rate varied from 70 percent (in 1979) to 28 percent (from 1988 to 1990)83 and the top capital gains rate varied from 35 percent (in 1979) to 15 percent from 2003-2012.84

Note that, unlike in the hypotheticals explored earlier, the size of the tax system is not held constant over time with all of these changes. So, it is not only relative shares of the tax burden by income class that are varying but also the size of the tax system itself. The smaller the tax system, the less effect that system will have on income inequality in any given year—all else being held equal. And, as of 2009, the federal tax system had fallen to its lowest level as a share of the economy since the 1950s85—though the level is expected to recover as the economy recovers, stimulus measures expire, and rates rise on the highest income Americans.

The changes in the size of the tax system lead again to the question of whether these distributional estimates are incomplete. A smaller tax system means either that spending must be commensurately smaller or deficits larger (and, at the moment, the result appears to be larger deficits). In turn, larger deficits will translate into some combination of higher future taxes or lower spending. In short, the changes in size must have distributional effects that are not captured here.

There is something to this objection, but it is also not one that can readily be resolved. Including the spending side of the budget in the distributional estimates does not address this—since the changes in the size of the tax system have, for the moment, appeared to largely translate into larger deficits rather than lower spending. This means that the deficits will affect future spending and taxes, and with an unknown distribution. In short, the changes in the progressivity

85 OFFICE OF MGMT. & BUDGET, supra note 59, at 34-35 tbl.2.3.
of the tax system in a given year is telling only a partial story, but it is the part of the story that we know.

The bottom line is that, even as the tax system has been changed numerous times and, often, significantly (or certainly what commentators and policymakers considered to be significant changes), the tax system’s effect on overall inequality has varied little. This is to say that, within the bounds of what Americans or the political system have been willing to accept, changes in the tax system have had a relatively small effect on overall inequality—certainly relative to broader economic forces. That is the lesson from history, and, as the next section explores, the much-debated 2013 tax deal only gives this more credence.

D. The 2013 Tax Deal

Changes in the tax system continue, and, in January 2013, Republicans and Democrats reached agreement on major tax legislation that allowed taxes to increase on the highest income Americans, while continuing most of the tax cuts for those with lower incomes. This resolved what was perhaps the leading tax debate over the last decade—what should be the fate of the 2001 and 2003 tax cuts. And, yet despite all of the headlines and the considerable debate about how these tax cuts have widened inequality, the effects of the deal on inequality were, in fact, decidedly limited, just like the other tax changes in recent decades.

Among other things, the 2001 and 2003 tax cuts broadly cut tax rates, reduced taxes on capital gains and dividends, gave tax relief to married couples, and expanded both the child tax credit (CTC) and earned income tax credit (EITC). The tax cuts were first scheduled to expire entirely at the end of 2010 but were temporarily extended in a bipartisan deal in December 2010 through the end of 2012. At the time these tax cuts were enacted, progressives described them as over-sized and disproportionately skewed toward helping the highest income Americans; conservatives defended them by arguing the tax cuts were fair since they benefited most those who paid the most into the tax system. And, many voices in this discussion (especially on the progressive side) have invoked the issue of broader inequality—and how these tax cuts may have widened the gap.

In recent years, the Obama Administration defined one side of this debate. It called for the expiration of the tax cuts for families with adjusted gross income in excess of $250,000 ($200,000 for a single individual)—as well as additional tax increases on high-income Americans. By contrast, Republicans called for extension of all of the tax cuts (except for later

89 See supra note 37.
expansions in the CTC and the EITC that were proposed by President Obama and enacted in 2009).\footnote{See, e.g., H.R. 8, 112th Cong. (as passed by the House, Aug. 1, 2012) (continuing all of the 2001 and 2003 tax cuts for another year, but not the refundable tax credits expanded in President Obama’s stimulus package).}

The January 2013 tax deal represented something of a compromise. Democrats and Republicans agreed to make permanent most of the 2001 and 2003 tax cuts, but to allow rates to rise for families making over $450,000 in taxable income (or $400,000 for single individuals) and to allow some tax increases (such as a limitation on itemized deductions) to extend down to the threshold of adjusted gross income of $250,000 for a family (and $200,000 for a single individual). They also continued the later expansions of CTC and EITC that the Republicans had opposed, but only for a period of five years.\footnote{For an explanation of the provisions in the January deal, see STAFF OF J. COMM. ON TAXATION, 112th CONG., GENERAL EXPLANATION OF TAX LEGISLATION ENACTED IN THE 112TH CONG. 86-228 (Comm. Print 2013).} To be clear, the tax debate still continues—the Administration is seeking further tax increases on high-income Americans, while Republicans are calling for rate-reducing tax reform. But, the January 2013 deal still represents a major move.

So, how did this move affect overall inequality? The answer is not by much, based on Urban-Brookings Tax Policy data (TPC).\footnote{These are the author’s calculations, similar to the ones described \textit{supra} note 65. Unlike the previous calculations, these use TPC data on the income distribution and the effects of the tax system under different scenarios, rather than data from CBO. (CBO’s data are purely historical; TPC, by contrast, estimates the distributional effects of various tax changes.) TPC calculated the effects of the 2013 deal relative to various baselines, including 2012 tax law and current law and also separately estimated the effects of continuing the 2009 expansions of the CTC and EITC. Specifically, I use TPC tables T12-0429, T12-0425, T12-0248, and T12-0246. These tables can be found here: http://www.taxpolicycenter.org/numbers/index.cfm. These TPC tables split tax units among quintiles for the bottom 80 percent of the population and finer groups at the top: 80\textsuperscript{th} – 90\textsuperscript{th} percentiles, 90\textsuperscript{th} – 95\textsuperscript{th} percentiles, 95\textsuperscript{th} – 99\textsuperscript{th} percentiles, 99\textsuperscript{th} – 99.9\textsuperscript{th} percentiles, and the top 0.1 percent. I then use the World Bank’s POVCAL program to estimate the Gini coefficient from this grouped data. For more details, see \textit{supra} note 65.} Figure 5 illustrates this comparing the following: (1) 2012 tax policy. This features the 2001 and 2003 tax cuts fully in effect, as well as the payroll tax cut in place then. (2) Current law before the deal. This includes full expiration of the 2001 and 2003 tax cuts as was scheduled to occur. (3) The deal that was struck, with expiration of the high-income tax cuts and the payroll tax cut (but continuation of the 2009 expansions in the CTC and EITC). (4) The deal that was struck with expiration of the 2009 expansions in the CTC and EITC (scheduled to occur after five years).

In terms of the effect on the Gini coefficient, the variation between these outcomes is less than 0.01.\footnote{Id.} Or, put differently, the federal tax system in 2012 reduced the Gini coefficient by about 0.05. If the tax cuts had entirely expired, that effect would have approached about 0.06. The actual deal is then (and perhaps not surprisingly) between these two points. To put this in yet other terms, the top quintile would have earned 47.4 percent of income based on 2012 law; if the
tax cuts had entirely expired, they would have earned 46.7 percent of income; and, under the actual deal, they will earn around 47.0 percent of income.\textsuperscript{95}

There are a few takeaways from this. First, the 2013 tax deal kept the tax system in the same range in terms of its effect on income inequality as we’ve seen over recent decades. Second, even at the extremes, these are relatively small changes relative to overall inequality. The less than 0.01 difference in the Gini coefficient between the most extreme outcomes in this debate is equal to less than 2 percent of overall inequality—and is significantly smaller than the change in inequality over the last 30 years. In short, the 2013 tax deal reinforces the idea that even hotly debated progressive tax changes are unlikely to significantly affect overall income inequality. As explored in the next section, this is in contrast to the effect on poverty.

\textbf{III. Poverty: Tax System’s Substantial Effect}

\textbf{A. The Stubborn \textquotedblleft Official\textquotedblright\ Poverty Rate}

In 2011, the official poverty rate in the United States stood at 15.0 percent, with more than 46 million Americans living in poverty.\textsuperscript{96} (For children—a group that tends to be of particular

\textsuperscript{95} Id.

\textsuperscript{96} \textsc{Census Bureau, Income, Poverty, and Health}, supra note 34, at 50 tbl.B-1.
concern to those worried about poverty—that rate stood at about 22 percent.\textsuperscript{97} Looking at the pattern of poverty rate over time, there are at least two striking patterns: First, the official poverty rate has been stubborn. After falling from a rate in the low twenties in the early 1960s, the poverty rate has varied between about 11 and 15 percent—with it standing now at the high end of that range, according to the official poverty data.\textsuperscript{98} Second, poverty tends to increase significantly in times of broader economic distress. The jump in the poverty rate in the wake of the Great Recession repeats the pattern seen in the midst of other economic slowdowns.

These trends in poverty have elicited significant commentary. The fact that the poverty rate has varied little over a 30 year period (and now stands at the high end of the range) leads some to declare that the “war on poverty” has failed—and that it is time to move on to other approaches to reducing poverty.\textsuperscript{99} Still others see it as reason for further strengthening the safety net.\textsuperscript{100}

This is not the place to delve deeply into the history of poverty and efforts to combat it. Instead, this is to say that poverty remains a significant problem in the United States and that, according to the official poverty measure, poverty today stands at one of the highest levels seen in recent decades.

And, here, we come to an important issue of measurement—the official poverty measure does \textit{not} take into account most of the effects of the tax system.\textsuperscript{101} As described below, those effects are significant and have been changing over time. When they are taken into account (that is, accounted for in the poverty measure), the federal tax system—or at least the income and payroll tax systems, which are the parts that most affect low-income Americans—is shown to have gone from adding significantly to poverty to not doing so any more. So, even as the tax system’s effect on overall inequality has been relatively constant, its effect on poverty has differed substantially.

\textsuperscript{97} Id. at 56 tbl.B-2.

\textsuperscript{98} Id. at 50 tbl.B-1.

\textsuperscript{99} See, e.g., MICHAEL TANNER, CATO INSTITUTE, THE AMERICAN WELFARE STATE: HOW WE SPEND NEARLY $1 TRILLION A YEAR FIGHTING POVERTY—AND FAIL (2012) (“News that the poverty rate has risen to 15.1 percent of Americans, the highest level in nearly a decade, has set off a predictable round of calls for increased government spending…. Clearly we are doing something wrong. Throwing money at the problem has neither reduced poverty nor made the poor self-sufficient.”)

\textsuperscript{100} See, e.g., SHELDON DANZIGER ET AL., POVERTY AND THE GREAT RECESSION (2012) (“The last time poverty was as high as it is now was in the early 1980s…. It follows that poverty will remain a major social problem of our time unless either (a) economic growth is far stronger and more widely distributed than one would currently expect, or (b) public policies that have been shown to reduce poverty are expanded.”)

\textsuperscript{101} The poverty measure does implicitly take into account some of the effects of the federal tax system. In particular, it accounts for the effect of the amounts paid by employers in federal payroll taxes. (Half of these payroll taxes are paid by the employee and half by the employer.) While the statutory incidence of employer-paid payroll taxes falls on the employer, the actual economic incidence of these taxes is widely thought to fall on the employees, reducing their wages. See, e.g., CONG. BUDGET OFFICE, supra note X, at 23 (“CBO further assumed—as do most economists—that employers pass on their share of payroll taxes to employees by paying lower wages than they would otherwise pay.”) As a result, the effects of the employer-paid payroll taxes is taken into account in the current poverty measures, since this shows up as lower reported wages.
B. Tax System’s Size and Poverty

In the prior section, I explored the practical limits of the tax system’s effects on income inequality—beginning with two extreme examples (a poll tax and the tax entirely concentrated at the top of the income spectrum) and the size of the tax system held constant. When it comes to poverty, these same examples produce greater effects. That is because the tax system is quite large relative to the incomes of those at the bottom, and so decisions about how to distribute the tax burden can have profound effects on the number of Americans in poverty.

To repeat the numbers cited earlier: The total federal tax system generates revenue equal to about 20 percent of U.S. GDP, and the income tax system, in particular, raises in the range of 10 percent of total income. By contrast, the bottom quintile earns about 5 percent of total income, according to CBO data. The intuition is that the decision about how to distribute taxes, given the size of the system, can be much more consequential for the welfare of those at the bottom than it is in terms of overall income distribution.

This brings us back to some hypotheticals. Imagine that the tax system raised this same amount of revenue via: (1) a poll tax, requiring each person to pay the same amount of tax; (2) a proportional tax; and (3) a tax entirely concentrated on the highest income Americans. The first and the third are the same two hypotheticals introduced earlier in the context of income inequality. The second is a new one. It was not used earlier since a proportional tax would not have had any effect on income inequality as traditionally measured, but it does have an effect on poverty.

This calculation layers these tax regimes on top of the current official poverty metric for the year 2011 (the latest year available). In particular, it subtracts tax liability from cash income and then compares this adjusted measure of cash income to the official poverty threshold. An

\[ \text{\footnotesize 102 See supra notes 57-61 and accompanying text.} \]
\[ \text{\footnotesize 103 CONG. BUDGET OFFICE, supra note 8, supplemental data tbl.3.} \]
\[ \text{\footnotesize 104 For these calculations, I use the microdata from the Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS). Current Population Survey, March 2012, conducted by the Census Bureau for the Bureau of Labor Statistics. The microdata used for these calculations and all others in this paper based on the Current Population Survey were attained using CPS Utilities distributed by the Unicon Research Corporation.} \]
\[ \text{\footnotesize Note that, for the prior set of hypotheticals (on inequality), I employed CBO data from 2009—the last year available. However, the CBO data cannot provide information on poverty effects, since they do not release microdata. At the same time, while the CPS do provide information on the income-distribution as a whole, it is widely thought that the information it provides about the top of the spectrum is limited because of a small sample size at the top as well as topcoding of income data. By contrast, the CBO data is based on actual income tax filings. Because of the relative strengths of these two sources of data, I use CBO for the calculations on inequality, while the CPS for the calculations with regard to poverty.} \]
\[ \text{\footnotesize 105 Like with the calculations on the tax system’s effect on income inequality, these—and other calculations regarding the tax system’s effect on poverty—are “static” estimates in that they assume no change in behavior resulting from these different tax regimes. As with inequality measures, it is not clear in this context which measures are superior. For example, in reaction to a poll tax (and to the extent it was enforced), low income Americans might very well spend less time at home and work longer hours. The additional amounts they earn would, which would be reflected in dynamic estimates, would offset—to some degree—the monetary loss from the poll tax. However, by working longer hours would, in itself, leave them worse off (imagine having to take on} \]
alternative would be to use Census’s alternative poverty measure, which already takes into account tax liability and substitute in these hypotheticals. Doing that has little change on the broad results—that these create dramatic effects. I choose to use the official poverty measure simply as a matter of consistency with the other calculations in this paper, which also look back historically at years in which the alternative poverty metric is not yet available.

Figure 6 shows the results. To summarize:

If the entire federal tax system were a poll tax (the first hypothetical), this would increase the number of those in poverty by roughly 20 percentage points—more than doubling the poverty rate. Over 40 million Americans would see their family incomes entirely eliminated (of course, making it highly questionable whether such a tax could ever be implemented). The effect attributable to the “income tax” portion of this poll tax is, of course, smaller—with it responsible for about half the increase in poverty (as it is responsible for about half the revenues).

Under the second hypothetical—the entire federal tax system being replaced with a proportional tax (assumed here to be in proportion to adjusted gross income)—the effect on poverty is not as outsized but is still significant. In that case, the federal tax system causes the poverty rate to increase by roughly 4 percentage points, or a nearly 30 percent increase in the number of those below the poverty line. And, again, the income tax system would be responsible for about half of this.

multiple jobs to pay a poll tax). In that case, a static estimate would seem to better reflect the change in welfare. Static estimates are not always superior, since, as discussed earlier, the case becomes more complicated when changes involve not just “income effects” but also “substitution effects.” But, the point is that these static estimates are not clearly worse than dynamic ones. For further discussion see supra note 69 and accompanying text.


The Census’s Supplemental Poverty Measure was first released for 2010 poverty data. Id. at 1. Prior to that, the Census released measures that can be used to build certain “experimental” poverty metrics, though these too are limited in their historical reach. See U.S. CENSUS BUREAU, http://www.census.gov/hhes/povmeas/about/index.html (last visited March 12, 2013).

To do this calculation, I start with cash income as used by the Census Bureau in measuring the official poverty statistics. I then add to this the employer’s share of payroll tax liability to put these figures on a pre-tax basis. As explained earlier, the employer’s share of payroll taxes—while legally paid by employers—is thought to fall on employees through lower wages. See supra note 101. I then subtract out the poll tax—a per person tax—and compare the new family income level to the official poverty threshold. For the poll tax, I assume a tax of $7,500 per person. I arrive at this figure based on TPC estimates. In particular, I start with TPC’s calculation of federal tax liability in 2011—total liability of $1.9 trillion. See Urban-Brookings Tax Policy Center, supra note 76. However, tax liabilities in 2011 were unusually low. TPC calculates that this amounts to 18.6 percent of cash income. TPC estimates that the effective federal tax rate will rise to 22.7 percent by 2014 (and remain at that level in 2015, after which it would gradually rise). Id. So, to reflect a return to high levels of tax, I apply this 22.7 percent effective tax rate to 2011, arriving at total tax liability of about $2.3 trillion. I then divide this by the total population in 2011 (of just over 300 million) to arrive at the $7,500 per person poll tax.

Author’s calculations. See supra note 108.

Id.
Finally, under the last hypothetical—of the tax burden being entirely borne by those at the top of the income spectrum—there is no effect on poverty because of the tax system. After-tax income for those at the bottom would be the same as before-tax income.

Of course (and as was the case with the effect on inequality), this does not necessarily set the bounds of the tax system when it comes to poverty given its current size. A system could be more regressive than a poll tax (though that would certainly be perverse). More relevant to the world, low-income Americans could face negative tax rates, which would reduce poverty rather than simply not increasing it. And, of course, the federal tax system does now do that for some families—though note that, as a whole, lower-income Americans face a tax liability close to zero and so the “zero bound” still holds for the average lower-income family.  

With these caveats, these hypotheticals still demonstrate that, as the tax system moves from one extreme to another, the effect on poverty is far greater than the effect on overall income inequality. As a recap, under these same hypotheticals, the effect on the Gini coefficient ranged from a 25 percent increase (under the poll tax) to an 8 percent decrease under the system entirely focused on those with the highest incomes.  

The range of effects on poverty, by contrast, is far greater—ranging from more than doubling poverty to not increasing poverty at all.

---

111 See supra note 76.
112 See supra Part X.B.
C. A Transformation Over the Last 30 Years

And, what about the effect of the tax system in practice? Over the last 30 years, there has been a remarkable transformation in the system. The federal tax system overall has gone from adding significantly to poverty to no longer doing so. And, the income tax system has been at the core of this transformation.

Figure 7 shows the poverty rate from 1979 to 2010, taking into account most of the federal tax system based on calculations from the Current Population Survey (CPS).\textsuperscript{113} This includes the effect of federal income taxes and payroll taxes\textsuperscript{114}—the two taxes estimated by CPS. Income

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{poverty_rate_with_without_taxes.png}
\caption{Poverty Rate – With and Without Taxes}
\end{figure}

\textsuperscript{113} These estimates are calculated by the author from microdata of the Current Population Survey’s Annual Social and Economic Supplement. Current Population Survey, March 1980 - 2012, conducted by the Census Bureau for the Bureau of Labor Statistics. As part of the data released from this survey, the Census Bureau includes its own estimates of federal income and payroll tax liabilities of those surveyed back to 1979. These estimates of federal tax liabilities are used here to adjust the poverty rate from 1979 through 2011. In particular, I take total income tax liabilities plus the employee-side of the payroll tax, subtract this from cash income, and then compare this to the official poverty threshold. (Note that the employer-side of the payroll tax is already implicitly taken into account in CPS income calculations since this is thought to reduce employee wages. See supra note 101.)

\textsuperscript{114} By payroll taxes, I am here—and throughout this paper—referring to the employee- and employer-sides of Social Security and Medicare taxes (also known as FICA taxes).
and payroll taxes represent 80 percent of total federal revenues.\textsuperscript{115} So, while a fully comprehensive analysis would include the effects of all federal taxes (rather than just income and payroll taxes), doing so is likely to have a relatively small effect on the trend in poverty over time relative to what is shown here.\textsuperscript{116}

Note that Figure 7 includes two series. One series shows the official poverty rate over this period. (Note that the official poverty rate already implicitly takes into account the employer-side payroll taxes, but not other federal taxes.\textsuperscript{117}) The second series shows the poverty rate having subtracted out income and payroll taxes (both employee and employer).

The main takeaway from Figure 7 is that the federal tax system matters in evaluating the trend in poverty. Whereas the official poverty rate in 2011 was well above the historical level of recent decades, the rate taking into account federal taxes is in fact significantly below the average—and that is coming out of the worst recession since the Great Depression. (Figure 7 starts in 1979 since that is the first year for which the CPS includes estimates of federal income and payroll tax liabilities.)

To be clear—in evaluating these figures, what is important is the trend rather than the level. The level of poverty is much more sensitive to how poverty is measured, and, as mentioned, there is significant debate about where to put the threshold and what items of cost and income should be taken into account. However, the trend—and especially the relative effect of the tax system as of thirty years ago versus today—should be less sensitive to these issues of measurement. And, however one measures the income or welfare of those at the bottom of the income distribution, it seems clear that the tax system is doing much more to support their living standards (or less to undermine their living standards) than it was 30 years ago—with a significant effect on their economic well-being.\textsuperscript{118}

\textsuperscript{115} See OFFICE OF MGMT. & BUDGET, supra note 59, 30-31 tbl.2.1, 36-44 tbl.2.4 (2012).

\textsuperscript{116} Corporate income taxes are the largest other source of federal revenues, but the vast bulk of these taxes are thought to be paid by upper-income Americans. In particular, CBO estimates that, in terms of the economic incidence, the bottom quintile pays less than 2 percent of corporate income tax liabilities—compared to their pre-tax income share of 5 percent. See CONG. BUDGET OFFICE, supra note 50, supplemental data tbl.2 and tbl.3. After corporate income taxes, excise taxes are the next largest set of federal taxes. However, excise taxes represent only about 3 percent of total federal receipts, OFFICE OF MGMT. & BUDGET, supra note 59, at 30-31 tbl.2.1, and, as a share of Americans’ incomes, have varied relatively little over time. See CONG. BUDGET OFFICE, supra note 50, supplemental data tbl.1.

\textsuperscript{117} See supra note 101.

\textsuperscript{118} Even with the effect of federal taxes included, the poverty measure remains incomplete. Perhaps most importantly, it does not take into account non-cash (but cash-like) transfer payments from the federal government like food stamps and housing assistance. Also including these in the poverty calculation has a much smaller effect on the trend in poverty over time than the inclusion of the tax system; in other words, with these non-cash transfers taken into account, the trend in poverty (even if not the level) looks very similar to that shown here. See Arloc Sherman, A Timely Reminder: Improvements in the Safety Net Have Dampened the Rise in Poverty, CENTER ON BUDGET AND POLICY PRIORITIES: OFF THE CHARTS (September 11, 2012, 3:24 PM), http://www.offthechartsblog.org/a-timely-reminder-improvements-in-the-safety-net-have-dampened-the-rise-in-poverty/ (showing a historical trend in poverty similar to that shown in Figure 7, and taking into account food stamps and housing assistance in addition to federal taxes).
Figure 8 illustrates this in another way. It shows the effect of the federal tax system—in particular, the income taxes and payroll taxes (both the employee and employer sides)—and the income tax system separately on the poverty rate from 1979 through 2011. Note that most of the changes over time reflect differences in tax policy. However, some of the year-to-year differences also reflect changes in the economy—and the interaction between that and the tax system.

As the figure shows, the federal income and payroll tax systems of the 1980s added more than 1.5 percentage points to poverty. In recent years, these systems, by contrast, subtracted just under 1 percentage point from the poverty rate. To put this in other terms, at one point in the 1980s, the income and payroll tax systems increased the number of those in poverty by as much as 13 percent, while these same systems as of 2011 reduced it by 6 percent\textsuperscript{119}—or roughly speaking a 20 percent difference in the number of those in poverty.

It should be noted that this trend becomes even more dramatic if the figures are limited to the non-elderly and, especially, to children. In the case of children, the tax system has gone from increasing child poverty by roughly 15 percent in the 1980s (similar to the adult population) to cutting the child poverty rate by 15 percent as of 2010—a swing of 30 percent.

\textsuperscript{119} Id.
The dramatic shift in the effect of the tax system from the mid-1980s to 2011 can largely be traced to two policies—the expansion in the Earned Income Tax Credit (EITC) and creation of the Child Tax Credit (CTC) over this period. To roughly calculate the amount attributable to each, I apply the tax law from these earlier years to incomes of low-income Americans as of 2011. This calculation is meant to isolate the effects of changes in the tax law on poverty, as opposed to the interaction between those changes and other economic and social factors. This then allows me to roughly decompose what tax policy changes have driven the transformation of the tax system for low-income Americans over time. In other words, this plays a “what if” game—“what if” the tax law from 1979 were in place in 2011 and so on.

The expansion of the EITC is responsible for about 60 percent of the shift from the mid-1980s to 2011. The history of the EITC has been described in great detail elsewhere. Suffice it to say that, by the 1980s, something approaching a bipartisan consensus had developed to deliver support to working poor families through the tax code. This prompted major expansions of the EITC in the 1986 tax reform, the deficit reduction deals of the 1990s, the tax cut in 2001, and, finally, the American Recovery and Reinvestment Act (ARRA) in 2009.

The creation of the CTC is responsible for about 30 percent of the shift in the tax system’s effect on poverty between the mid-1980s and 2011. This is now a $1,000 credit per child. It was created in 1997 as a $500 credit that was largely non-refundable—focusing its benefit almost entirely on middle-income families. The credit was doubled and made partially refundable in 2001—and later legislation, including ARRA, further expanded refundability.

---

120 To do this, I use the microdata from the 2012 CPS March Supplement, adjust income items for inflation, and apply the National Bureau of Economic Research’s TAXSIM 9.0 model to calculate the tax liability under prior law. For a description of the NBER model, see generally Daniel Feenberg et al., An Introduction to the TAXSIM Model, 13 J. POL’Y ANALYSIS & MGMT. 189 (1993). Further information on the model can be found here: http://www.nber.org/taxsim/.

121 Others have used this type of “what if” analysis to decompose the effects of changes in tax policy versus other factors on income inequality broadly. See generally Olivier Bargain et al., Tax Policy and Income Inequality in the U.S., 1978-2009: A Decomposition Approach (Institute for the Study of Labor, Discussion Paper No. 5910, 2011) (using counterfactual simulations to analyze how changes in tax law versus other economic factors have affected income inequality). The “what if” game has the substantial benefit of isolating the effects of changes in the tax law; with that said, it is also somewhat artificial. The tax law of thirty years ago was in place then; it requires some imagination to ask what it means for that law to be in place today. Among other things, it requires adjusting 2011 income levels to make them comparable to the tax parameters of earlier years. There is some question what the appropriate adjustment factor should be. For the purposes of this calculation, I use inflation. See id. at 7 (justifying inflation as an adjustment for purposes of such calculations as consistent with general practice).

122 Author’s calculations based on the CPS March Supplement and NBER’s TAXSIM 9.0. See supra notes 120-121.


124 Author’s calculations based on the CPS March Supplement and NBER’s TAXSIM 9.0. See supra notes 120-121.

D. 2013 Tax Deal

Looking back over the last thirty years, changes in the tax system have translated into relatively significant effects on poverty, at the same time that they have generated relatively small effects on overall income inequality. The same holds true for the policies at issue in the tax negotiation just completed in January 2013.

Figure 9 illustrates the effects of various possible policy outcomes on poverty—the same outcomes that were explored with regard to income inequality. To review, this compares: (1) 2012 tax policy; (2) Current law for 2013 before the deal, with full expiration of all temporary tax cuts; (3) The deal that was struck, with expiration of the high-income tax cuts and the payroll tax cut (but continuation of the 2009 expansions in the CTC and EITC); (4) Same as (3) but with expiration of the 2009 expansions in the CTC and EITC (now scheduled to occur in five years).

As shown in Figure 9, under these different policies, the combined federal tax system (income and payroll taxes) varies from reducing poverty by 0.8 percentage points (under 2012 law) to increasing poverty by 0.5 percentage points if the temporary tax cuts had been allowed to

![Figure 9: Effect of Federal Tax System Under Different Plans](image)

Source: Author’s calculations based on Current Population Survey microdata, Taxsim 9.0, and own modeling.

These changes in poverty under different outcomes for the 2013 tax negotiation are the author’s calculations using microdata data from the 2012 CPS March Supplement and running these through different tax scenarios. To calculate the effect of complete expiration of the then-temporary tax cuts, I use the NBER TAXSIM model. See supra note 120. For the effect of other changes, I model these using my own program.
entirely expire—or a swing of about 10 percent in the number of Americans in poverty. The deal itself is close to 2012 law, allowing only expiration of the 2 percentage point payroll tax cut, and so, as initially in effect, the income and payroll tax systems would continue to reduce poverty by about 0.7 percentage points. However, if certain expansions in the CTC and EITC expire as they are scheduled to do after five years, the anti-poverty effect of the system would fall to 0.2 percentage points—or an increase in poverty of nearly 5 percent relative to 2012 law.  

To put this in perspective and to repeat from before, these same policies have very little effect on overall inequality as measured by the Gini coefficient. For instance, the expiration of the expansions in the CTC and EITC scheduled to occur after five years would barely increase the Gini coefficient. The change in the Gini coefficient resulting from this would be less than 0.002—or an increase of less than 0.4 percent. This does not seem like a meaningful change in inequality even as it does generate a significant increase in poverty.

**Conclusion**

The point of the spate of numbers offered by this article is to instill practicality into the debate over the distribution of the tax burden.

When it comes to overall income inequality, the tax system’s effect is limited by its size, and it is further limited by what policymakers will realistically consider. History suggests that the effects exist within a relatively narrow band, and current policy proposals indicate that is likely to continue to be the case going forward.

To the extent one thinks that overall economic inequality is indeed undesirable, this indicates that efforts should be focused on finding tools other than the tax system. It would certainly worth being concerned about the effects of any truly radical changes to the tax system on overall inequality (a switch from an income tax to a VAT, for instance), but, so long as the debate remains within historical bounds, the effects are unlikely to be very large. This means that other policy instruments—whether they be education or financial regulation or otherwise—may be more fruitful. In any case, we cannot realistically look to the tax system to do much to substantially arrest recent trends in inequality.

Furthermore, when it comes to the distribution of the tax burden, this suggests that other concerns, beyond overall inequality, should take precedence. This article has offered an alternative—that of poverty. For even as the tax system can do relatively little to change the overall income distribution within the bounds of current policymaking, it can do more—sometimes much more—when it comes to the welfare of those toward the bottom of the income spectrum.

In some ways, this offers words of both caution and encouragement when it comes to redistributing resources through the tax system. The caution is that we should not expect too

---

127 *Id.*

128 *See supra* notes 93-94 and accompanying text.
much from the tax system to correct overall income inequality. The encouragement is that distribution still matters; it matters because even if overall income shares may barely budge, tax policies that give additional resources to those at the bottom of the income distribution may make a real difference in terms of their welfare.

This concern for the welfare of those toward the bottom of the income spectrum is not necessarily limited to those in true economic destitution. While it is true that the choice about how to distribute the tax burden can have a particularly large effect on them, the same goes for those on just the other side of the poverty line, even if perhaps a little less so. Or, put differently, a 5 percent decrease in the incomes of middle class Americans (which is within the bounds of recent policymaking) may produce real changes in their welfare too—even if it does relatively little to draw their incomes closer to those of the top 1 percent. And, so it is possible that my argument here could be expanded into a practical argument for simply thinking about “welfare, not inequality.” But, there is no need to jump to that conclusion. Many will agree that both inequality and poverty are undesirable, and, for these many readers, this article should provide a practical assessment of what the tax system can do about both.

While concern for inequality and poverty is not necessarily mutually exclusive, we do live in a world of limited policymaking resources, where you have to choose what is most important and what is not. In doing so, it is not only the theory that matters; it is also what is achievable in practice. And, it is these practical concerns that this article has brought to the fore, in concluding that, in distributional debates, our primary concern should be with issues like poverty, not inequality.