

April 23, 2008

TAX FOUNDATION FIGURES DO NOT REPRESENT TYPICAL HOUSEHOLDS' TAX BURDENS

Figures May Mislead Policymakers, Journalists, and the Public

By Aviva Aron-Dine and Robert Greenstein

Each year, the Tax Foundation releases a report projecting “Tax Freedom Day,” which it describes as the day when Americans will have “earned enough money to pay this year’s tax obligations at the federal, state, and local levels.”¹

The Tax Foundation’s “Tax Freedom Day” report is plagued by two major problems. First, its estimates of state and local tax burdens suffer from a number of serious methodological flaws (see the box on page 4). Second, over the years, many journalists and policymakers have misinterpreted the Tax Foundation’s report as reflecting the tax burdens faced by typical middle-income workers.

In fact, the Tax Foundation’s calculation of the “average” tax burden merely measures tax revenues as a share of the economy; it is similar to estimates of total revenues as a share of Gross Domestic Product (GDP). In a progressive tax system like that of the United States, only upper-income households pay tax at rates equal to or exceeding the overall level of revenues as a share of the economy. Authoritative figures from the non-partisan Congressional Budget Office

KEY FINDINGS

- The Tax Foundation bases its “Tax Freedom Day” calculation on the share of total national income paid in taxes.
- While this figure can be useful for assessing overall revenue levels, it does not represent the share of income that the typical American pays in taxes.
- Because the federal tax system is progressive, the share of income that most Americans pay in federal taxes is considerably lower than the overall level of revenues as a share of total national income.
- Estimates from the Congressional Budget Office (CBO) show that middle- and even upper-middle-income Americans pay less of their income in federal taxes than the “average” tax burden reported in the Tax Foundation’s “Tax Freedom Day” report.
- In fact, the CBO estimates indicate that some 80 percent of U.S. households pay federal tax at rates lower than the Tax Foundation’s reported average.
- Journalists and others who report on “Tax Freedom Day” as if it represented the day until which the typical or average American must work to pay his or her taxes are misusing these figures and fostering serious misimpressions about the level of taxes most Americans pay.

¹ Gerald Prante and Scott Hodge, “America Celebrates Tax Freedom Day,” Tax Foundation Special Report No. 160, April 2008.

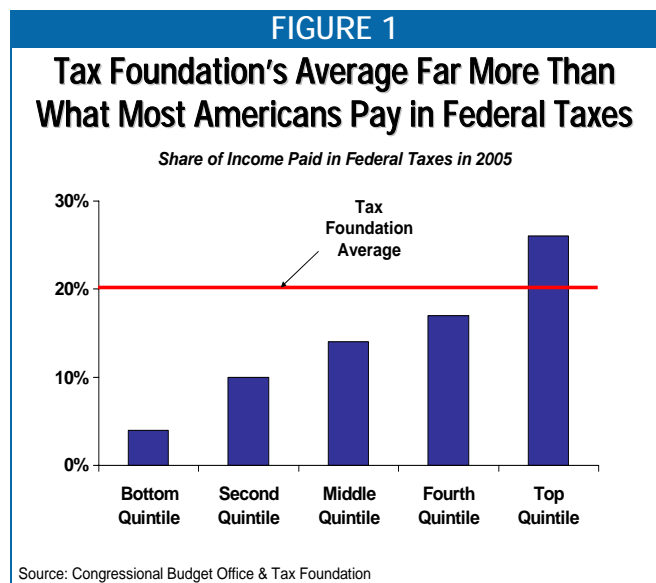
show that middle- and even upper-middle-income Americans pay a considerably smaller share of their income in taxes than the Tax Foundation report implies. The CBO data suggest that 80 percent of U.S. households pay federal tax at a lower rate than the Tax Foundation’s estimated “average” federal tax burden.

The Tax Foundation itself acknowledges this issue in a methodology paper accompanying its report, pointing out that its estimates reflect the “average tax burden for the economy as a whole, rather than for specific subgroups of taxpayers.”² Journalists and others who report on “Tax Freedom Day” as if it represented the day until which the typical or average American must work to pay his or her taxes are misusing these figures and fostering serious misimpressions about the level of taxes most Americans pay.

Tax Foundation’s Federal Tax Rate Estimates Are Driven By High-Income Taxpayers

The Tax Foundation’s Tax Freedom Day calculation relies on an estimate of what it labels the total effective tax rate: total tax receipts as a share of total national income.³ Included in that estimate is an estimate of the total *federal* effective tax rate.

The Tax Foundation estimates that in 2005, the federal effective tax rate was 20.2 percent. But as Figure 1 shows, the Congressional Budget Office (CBO) estimates that households in each of the bottom *four* quintiles of the income scale paid *less* than 20.2 percent of their income in federal taxes in 2005.⁴ (2005 is the most recent year for which the CBO data are available.) Only households in the top quintile paid a higher amount: 25.5 percent.⁵ The CBO estimates suggest that some 80 percent of U.S. households pay a smaller share of their incomes in federal taxes than the overall federal effective tax rate.⁶



² See Tax Foundation Staff, “Tax Freedom Day: A Description of Its Calculation and Answers to Some Methodological Questions,” Tax Foundation Working Paper No. 3, March 2008.

³ As its measure of national income, the Tax Foundation uses Net National Product (NNP). In prior years, the Tax Foundation reported its estimates of the federal effective tax rate, but its 2008 report includes only its estimates of total effective tax rates (including state and local taxes). However, its estimate of the federal effective tax rate can be derived from its estimates of the total effective tax rate and the share of total tax receipts flowing to the federal government. Specifically, the Tax Foundation reports on page 4 of its analysis that the total effective tax rate for 2008 will be 30.8 percent. On page 1 it asserts Americans will have to work 74 days to pay federal taxes and 113 days to pay all taxes. Multiplying that ratio (74/113) by the total effective tax rate (30.8 percent) yields a federal effective tax rate of 20.2 percent. Estimates for prior-year federal tax burdens are taken from the April 2006 Tax Freedom Day report, the most recent to include federal effective tax rates.

⁴ The Tax Foundation’s estimates also differ from CBO’s in that the income measure the Tax Foundation uses (NNP) is different than CBO’s measure. However, CBO’s estimate of total federal taxes divided by total income is quite similar to the Tax Foundation’s: in 2005, 20.5 percent as compared with the Tax Foundation’s 20.2 percent.

⁵ In 2005, a family of four needed income of more than \$135,000 to be in the top income quintile.

The following example shows how the Tax Foundation's methodology can overstate the tax burdens of the typical family. Suppose four families with incomes of \$50,000 each pay \$2,500 in taxes — 5 percent of their income — while one wealthy family with income of \$300,000 pays \$90,000 in taxes — 30 percent of its income. Total income among these five families is \$500,000, and the total amount paid in taxes is \$100,000. Thus, 20 percent of the total income of the five families goes to pay taxes. But the 20 percent figure is highly misleading as an indicator of the typical tax burden for families in this group.

Changes in Overall Tax Levels Can Be Driven By Changes in the Distribution of Income

In this year's report, the Tax Foundation calls attention to the fact that from 2003 through 2007, its estimate of the total effective tax rate rose each year. The implication is that, over this period, most Americans saw their tax burdens increase significantly as a share of income. In fact, a more likely explanation is growing income inequality.

As noted above, high-income households pay tax at higher rates. When the share of the nation's income flowing to high-income households increases, a larger share of total income is taxed at these higher rates, and the share of total income paid in taxes consequently increases. This can occur even if each income group's tax rate remains constant or falls.

For example, between 2004 and 2005, the Tax Foundation estimates that the federal effective tax rate increased from 18.6 percent to 20.2 percent. But the CBO data show that effective tax rates for most income groups were virtually unchanged. A key part of the explanation for the jump in revenues as a share of total income appears to be the large increase in the share of income flowing to high-income households. The share of pre-tax income held by the top 1 percent of households increased from 16.3 percent in 2004 to 18.1 percent in 2005, according to CBO.

Tax Foundation's Average Figures Mislead Policymakers and the Press

To be sure, an average figure like the one calculated by the Tax Foundation can yield useful information. Revenues measured as a share of the economy or as a share of national income is the most reliable metric for comparing revenue levels over time or across countries. The fundamental problem occurs when the tax burden figure that the Tax Foundation calculates is taken to represent the tax burden of the typical American worker.

For example, in 2006, the *Wall Street Journal* wrote, "The Tax Foundation reports that the *average* American works 116 days of the year to pay their tax bill (emphasis added)."⁷ Similarly, Senators Charles Grassley and Judd Gregg, drawing on the Tax Foundation's report, wrote in 2007 op-ed, "Americans must work *an average* of 77 days per year to pay their federal taxes..."⁸ Senators Grassley and Gregg were not discussing tax revenues as a share of the economy. They were discussing the tax burdens of typical American families.

⁶ Of course, the figure for each quintile is an average for that segment of the population. Thus, some households, mostly in the fourth quintile, probably pay a larger share of their income in federal taxes than the Tax Foundation's reported average. But many households in the top quintile likely pay less, since the top quintile average is pulled up by households at the very top of the income scale.

⁷ Tara Siegel Bernard, "Taxing Thought: All Pay to April 26 Goes to Uncle Sam," *Wall Street Journal*, April 19, 2006.

⁸ Charles Grassley and Judd Gregg, "Don't Mess with Success," *Wall Street Journal*, March 15, 2007.

The Tax Foundation's State-by-State Data Are Seriously Flawed

The Tax Foundation's report includes a list of dates described as representing "Tax Freedom Day" for each state. The Tax Foundation's state-by-state estimates suffer from various flaws.*

- About two-thirds of the tax burdens in the Tax Foundation calculations are federal tax burdens. The amount of *federal* taxes paid by the residents of a state thus has a large impact on *that state's* "Tax Freedom Day." Since, as this analysis explains, the Tax Foundation methodology substantially overstates the federal tax burden of middle-class families, the Tax-Freedom-Day figures for each state also substantially exaggerate the tax burdens of middle-class families in that state.
- Because the federal income tax system is progressive, states with relatively wealthy residents end up under the Tax Foundation's methodology with a higher federal tax burden than other states. The fact that one state has higher-income residents than another state has nothing to do with the level of *state and local* taxes in the state. Yet by trumpeting state-level Tax Freedom Days that differ across the states, the Tax Foundation presentation is likely to lead to the misimpression that differences in burdens imposed by state and local taxes account for the differences across states in the Tax Foundation's "average tax burden," when that often is not the case.
- The Tax Foundation uses a procedure to allocate state corporate, severance, and tourism taxes based on the residence of the consumers who purchase products that businesses sell (adjusted for taxes that tourists pay). This is likely to lead to further misimpressions about the role of a state's tax policies on the tax burdens its residents are said to face. For example, when Alaska collects taxes from oil companies based on the amount of oil they produce in the state, the Tax Foundation does not count those taxes as part of Alaska's revenue. Rather, it adds those taxes to the tax burden in the states where oil is consumed. Maine residents, for example, consume a significant amount of fuel and so get allocated a large share of these Alaska taxes. Yet state legislators in Maine cannot have much impact on the level of taxes that Alaska or other oil-producing states levy on oil.

Further, the Tax Foundation highlights the tax burden for the current calendar year, making its own estimates of the taxes that will be collected during the year in the thousands of state and local jurisdictions around the country. Despite presenting these estimates as definitive, they are, in fact, speculative projections that have often proven to be significantly off-target when the actual data on state and local taxes are subsequently collected and published by the Census Bureau. For example, the Tax Foundation's 2002 report claimed that tax burdens had risen since 2000 in 38 states, that five states had lower tax burdens, and seven had no change. By 2005, the Tax Foundation had found it necessary to revise its 2002 estimates to show that only eight states (rather than 38) had higher tax burdens in 2002 than in 2000, while 39 had *lower* tax burdens and three had no change. And when the Census Bureau released its data for 2002, it found that only four states' tax burdens had risen, while tax burdens in 43 states had fallen (burdens were unchanged in three states). In its reports, the Tax Foundation does not adequately acknowledge the possibility that its data may be erroneous. Nor does the Tax Foundation give prominent attention to the revisions it makes when its previous estimates prove to have been faulty.

As a result, the Tax Foundation's proclamations of state Tax Freedom Days are misleading and do little to inform legitimate debates over levels of state and local taxes and the services those taxes support.

* See Nicholas Johnson, Iris Lav, and Joseph Llobrera, "Tax Foundation Estimates of State and Local Tax Burdens Are Not Reliable," Center on Budget and Policy Priorities, March 27, 2007.

“Tax Freedom Day” Also Conceptually Flawed

The Tax Freedom Day concept also suffers from a deeper flaw. In its annual report, the Tax Foundation attempts to divide the year between days spent working to pay for “government” and days spent working to pay for other goods such as food, clothing, housing, transportation, and health and medical care.

As the Tax Foundation itself pointed out in last year’s report, however, government revenues fund health and medical care for elderly and low-income Americans, and they fund a significant fraction of the medical research that generates valuable health care innovations. Government revenues also fund Social Security payments that enable elderly households to pay for food, clothing, and housing.⁹ Moreover, government revenues fund roads and bridges needed for private transportation purchases (e.g. cars) to have value. And they fund the educational system, justice system, and other basic infrastructure without which Americans would not be able to earn the incomes they currently do at the jobs they currently hold.

Of course, there are important debates to be had about the appropriate size of government. But these debates are not furthered by the Tax Foundation’s suggestion that Americans spend part of the year working for “the government” and part of the year working for “themselves.” Rather, these debates require careful consideration of the merits of trading off public for private goods and services, recognizing that both generate value for American households.

⁹ Ignoring this issue actually gives rise to a significant technical problem in the Tax Foundation’s report. In the pie charts on page 1, which compare the total effective tax rate with the share of total national income spent on food, clothing, and other purchases, government transfers to households — such as Social Security and Medicare — appear both in the tax slice and in the various categories of private consumption.