

APRIL 4, 2018 | NUMBER 107

Do Taxes Increase Economic Inequality?

A Comparative Study Based on the State Personal Income Tax

BY UGO TROIANO, UNIVERSITY OF MICHIGAN

The conventional wisdom is that taxes can help in reducing inequality and in redistributing income. However, tax reforms are typically not randomly assigned in time and space, and little is known about whether and how taxes reduce inequality. My research aims to provide new quasi-experimental evidence about the relationship between taxes and inequality. My findings go against the conventional wisdom. I analyze three case studies in the 20th-century United States, and in all three of them I find that taxes significantly increase pretax economic inequality.

One of the main rationales for taxes is to correct market failures, which might include an unequal distribution of income. Economist Leonard Burman argues that the creation of the individual and corporate income taxes was largely motivated politically by “concerns about equity.” Despite this, little is known about whether tax policies have a causal effect in reducing economic inequality.

The question is a hard one for at least three reasons. First, people may migrate from jurisdictions with increasing taxes to places with less taxation—and this is indeed what happened when U.S. states introduced the income tax. Second,

places that decide to increase taxes may be different from places with lower taxes. For instance, voters in tax-increasing locations may care more about economic inequality, or may be more prone to fiscal discipline. Third, the timing of the tax policy reforms may not be random because the jurisdictions may decide to increase taxes when there are revenue needs. Additionally, reforming tax systems in order to reduce inequality may be related to political considerations and not be randomly assigned.

I consider three case studies involving state personal income taxes in the United States. The personal income tax has steadily increased as a revenue source for states despite the fact that taxes are losing their importance as revenue sources compared to other revenues.

The three major reforms that I analyze are: (1) the introduction of the state income tax; (2) the introduction of withholding, bundled with the introduction of third-party reporting; and (3) the intergovernmental agreement between the federal and the state governments for coordinating auditing practices. The fiscal consequences of these reforms have been analyzed by three recent studies, which find that state revenues from personal income tax increased as a result of the policies.

However, the studies have different findings for different outcomes. For instance, while there has been economic migration following the introduction of the income tax, there have not been population responses following the other two policy events. The introduction of the income tax was also accompanied by changes in other parts of state budgets, such as education expenditures and increases in educational outcomes (the number of public colleges in a given state).

I focus on the distributional aspect of these tax reforms. In order to alleviate the aforementioned statistical concerns, I adopt a difference-in-differences strategy. The main idea is to compare economic inequality in the states that underwent the tax policy reforms and those that did not, before and after the policy change of interest.

The methodology has two main assumptions. First, both treatment and control groups must have been on parallel trends before the policy change. Absent this, one would not be able to ascribe the change in the series to the policy of interest because of the confounding preexisting difference. Second, there should not be other contemporaneous policy events affecting the treatment and control groups.

My main finding is that the major tax reforms analyzed increased the states' economic inequality, regardless of the inequality measure used. For instance, introducing the income tax raised the fraction of income held by the top 1 percent of filers by 1 percentage point (about 7.6 percent of the baseline mean of the variable); introducing third-party reporting and tax withholding raised the same fraction by 0.8 percentage points (about 6 percent of the baseline mean of the variable); and the audit information exchange agreement between the federal and state governments raised the same fraction by 0.65 percentage points (about 5 percent of the variable).

While I am not able to identify with certainty the mechanisms, the set of my results, the timing of the responses, and my reading of the literature suggest that the increase in income inequality after the introduction of the income tax is consistent with the regressive role of government expenditures, while the increase in income inequality after the introduction of withholding, third-party reporting, and the audit exchange agreements may be linked to the fact that the additional tax compliance came from the richest contributors. Other explanations receive less support from the data.

An important caveat is that the inequality measures I use derive from the IRS administrative data. While this has obvious advantages of data reliability, it comes with the cost that the data derive just from income tax filers, of which there were relatively few before 1944. Therefore, the results of the introduction of the income tax, which is the only policy reform for which data before 1944 are relevant, should be interpreted while keeping this important caveat in mind. It is, however, reassuring that the results for the introduction of the income tax are qualitatively similar to those of the other two reforms.

Another important caveat to note is that the data on inequality, like previous studies on inequality in the United States using administrative data, refer to pretax economic inequality.

NOTE:

This research brief is based on Ugo Troiano, "Do Taxes Increase Economic Inequality? A Comparative Study Based on the State Personal Income Tax," NBER Working Paper no. 24175, December 2017, <http://www.nber.org/papers/w24175>.