Center for Research On the Wisconsin Economy
University of Wisconsin- Madison

CROWE Policy Brief

Does it Pay to Tax the Rich?*

Zhigang Ge
Department of Economics
University of Wisconsin-Madison
January 6, 2020

Abstract
The recent tax policy debate has largely focused on increasing taxes on top earners. Many policies have been proposed with the clear goal of raising tax revenues, such as increasing top income tax rates or imposing wealth taxes. My research shows that the revenue gains from these policies are likely to be limited in an environment where most top earners are private business owners, as is the case in the contemporary United States. Increasing taxes on such entrepreneurs reduces the growth of entrepreneurial capital and business earnings, and thus limits the amount of revenue that such a tax can raise in the long run. Moreover, the decline in capital reduces the productivity of the workers that are hired by entrepreneurs, which leads to lower wages for these workers. Introducing a wealth tax on top earners, as has been recently proposed, would lead to a reduction in the income tax base that would largely offset any revenue gains. Overall, my results suggest that there is relatively little revenue to be gained from increasing taxes on top earners.

* The views expressed herein are those of the author and not necessarily those of the Center for Research on the Wisconsin Economy, the Department of Economics, or the University of Wisconsin.

1 Introduction

There has recently been a renewal of interest in economic policies aimed at increasing taxes on the rich. The past forty years have seen a reduction in both average and marginal income tax rates in the United States, which has been accompanied by an increase in many measures of income and wealth inequality. To attempt to reverse both these trends, there have been many policies proposed to tax earnings or wealth at the top end of distribution, not only to reduce inequality but also to raise tax revenues. For example, representative Alexandria Ocasio-Cortez of New York City has proposed a 70 percent tax rate on earnings over $10 million hoping to raise up to $382 billion over 10 years. In another tax proposal which has been adopted by several Democratic presidential candidates, a wealth tax has been advocated to bring in even more tax revenues and directly reduce wealth inequality (Saez and Zucman, 2019).

While these policies might help mitigate the rising earnings and wealth inequality, their expected contribution to gains of tax revenue is in question. This is particularly true because the income makeup of top earners and wealth holders differs from much of the rest of the income distribution, where labor earnings are the prime source of income. Recent studies find that in the US most of today's top income comes in the form of private business income (Smith et al., 2019). This business income passes through to the owners and is taxed according to the Federal individual income tax. Although there are tax deductions for this pass-through income, the individual income tax on it is still partially a tax on the capital of pass-through businesses, and would likely result in lower investment and capital accumulation of business owners. This reduction in capital may lead to large negative income responses that are not considered in previous evaluations of those policy proposals.

While short-run economic outcomes are largely determined in the labor market, investment and capital largely govern long-run outcomes. Therefore the negative effects of lower capital accumulation due to higher top tax rates are only seen in the long run. To quantify these long-run effects, we need an economic model. In my paper, Ge (2019), I study the revenue-maximizing top marginal tax rate in a quantitative model with business owners, financing constraints, and capital accumulation. In the model economy, individuals choose to be either workers or business owners depending on their ability and wealth level. Business owners employ their own effort, hire workers, and use capital to generate profits. They can borrow to finance business investment up to a constraint that depends positively on the amount of their own assets in the firm. Because of the financing constraint, the business earnings distribution is dependent on the owners' wealth distribution, which means a decrease in wealth will translate into a decrease in business income. Furthermore, capital and labor are complementary in producing outputs, and wage rates are endogenously determined in equilibrium depending on aggregate labor supply and capital stock. The model is then calibrated to match key data moments and is able to generate empirically plausible earnings and wealth distributions — an important feature for quantitative models to study tax rates for the top end of the distribution. In the following sections, I discuss the main findings of my study.

2 Raising Income Tax Rates

In Figure 1 below, I plot changes in tax revenue against top marginal income tax rates — the Laffer curve. Increases in the top tax rate have two effects: they directly raise more revenue on the income that is earned, and they shrink the tax base by lowering the incentive to earn additional income. At low tax rates the positive revenue effect dominates and tax revenue increases with the tax rate, but at very high rates the tax base shrinks so much that the revenue falls with higher tax rates.

The left panel gives the Laffer curve without considering private businesses owners. That is, this panel considers a traditional economy where everyone is a worker and the income tax mainly affects labor earnings. The Laffer curve peaks at a top tax rate around 80 percent. Relative to the current top tax rate (denoted by the bold cross), increasing the top tax rate to 80 percent would increase tax revenue by 1.4 percent of total output in the model economy. That is, if total output is $19.4 trillion (U.S. GDP in 2017), the revenue gain would be $272 billion — comparable to the revenue gains mentioned in the above proposal. Calculations similar to these underlie much of the push for increasing top income tax rates.

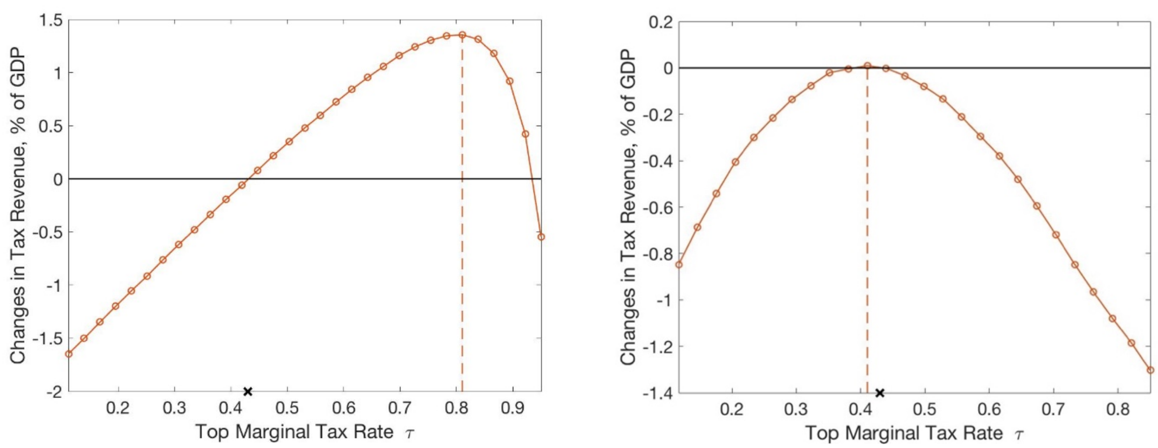

Figure 1: Tax revenue vs. top marginal tax rate for an economy without private business owners (left panel) and where top earners are private business owners (right panel).

However, if we consider the case where instead of earning a wage working for others, top earners are business owners, we see that raising top tax rates loses tax revenue (right panel). The peak of the Laffer curve, which gives the revenue-maximizing tax rate, is very close to the current top tax rate (but slightly below it), so increasing the top tax rate from its current level reduces tax revenue.

Why is the revenue-maximizing top tax rate so much lower when top earners are private business owners? In my paper, I show that two channels are quantitatively important. First, increasing the top tax rate decreases the rate of return to capital in businesses, which lowers the incentive to save and accumulate wealth. In the long run, the wealth distribution becomes less skewed to the right, meaning that there are fewer top entrepreneurs with relatively high wealth and more top entrepreneurs with relatively low wealth. This change in the wealth distribution translates into a similar change in the distribution of business earnings, because business earnings depend positively on the wealth level of owners in the presence of financing constraints. As a result, average business earnings decrease, and therefore so do the government tax receipts from top entrepreneurs. In other words, increasing top tax rates reduces the incentive to save and invest, and so in the long run there will be fewer top earners to tax.

While the first channel focuses on the reduction of the tax base, as the tax on top earners leads to a reduction in earnings by top earners, the second channel considers spillovers to workers who are not top earners. In particular, increasing the top marginal income tax rate decreases the capital stock much more than the labor supply in the model economy with private businesses. This leads to a fall in the capital-labor ratio and equilibrium wage rate in the economy. For example, increasing the top marginal tax rate from its current level up to 80% would lead to a 7% reduction in wages. As the labor earnings of workers become lower, so do government taxes from them. In other words, as described above, the higher tax rate leads to less accumulation of capital by entrepreneurs. This means that the workers employed by the entrepreneurs are less productive, and therefore they command lower wages. Thus increasing taxes on top earners lowers overall labor earnings for workers, and therefore the amount of revenue raised from taxing these non-top workers. This general equilibrium channel is important and has not been previously analyzed.

3 Implementing a Wealth Tax

Given the fact that the top percentile holds almost 40 percent of total wealth in the US economy, imposing a wealth tax on top wealth seems to be a promising way to bring in large tax revenues. However, the argument may not stand because imposing a wealth tax can reduce tax revenue from other tax bases in an inter-connected world. For example, imposing a wealth tax decreases wealth holding and thus capital stock, similar to the top income tax as discussed above. Since capital is complementary to labor, it leads to a fall in equilibrium wages and thus labor earnings. Therefore the increased revenue from the wealth tax would be at least partly offset by lower revenue from income taxes, and the overall effect on tax revenue is unknown.

In Figure 2 below, I plot the results of a counterfactual exercise in my study. In the left panel, I show the revenue gains from taxing the top percentile of wealth. In the right panel, we see decreases of income tax revenue when the wealth tax rate increases. Note that the scales of the figures are the same, so the increased revenue from the wealth tax is roughly matched by the lower revenue from the income tax. Take a wealth tax rate of 2 percent as an example: it brings in tax revenue slightly higher than 1 percent of GDP directly (left panel), while at the same time decreases income tax revenue by about 1 percent of GDP (right panel). Thus there is minimal change in overall tax revenue from introducing such a wealth tax. Of course, this is just a simple illustration of how taxing wealth could create a negative spillover on other tax revenues. Empirical studies are needed to further check the significance of negative impact of wealth taxes on capital accumulation (e.g. Jacobsen et al., 2018) and how this could affect the revenue from other taxes.

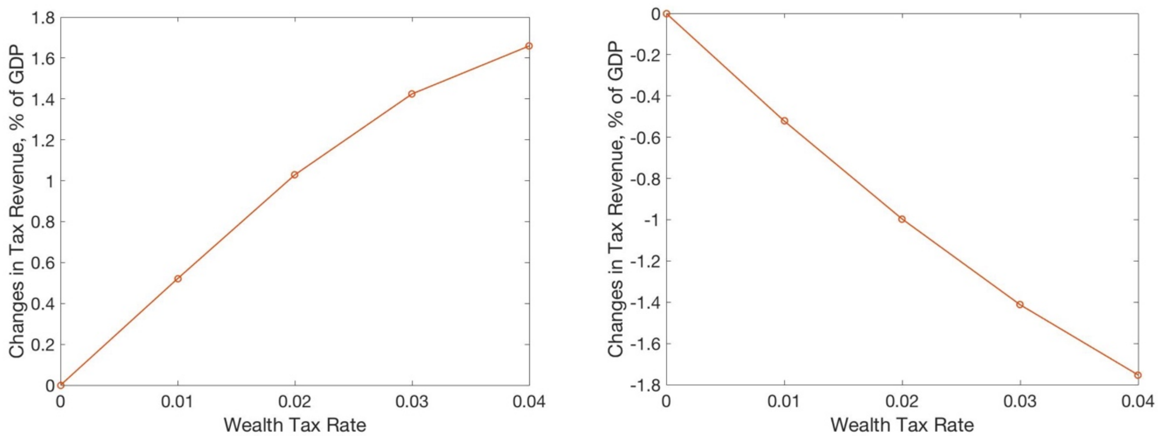

Figure 2: Tax revenue vs. top wealth tax rate for two different tax bases: the wealth tax (left panel) and the income tax (right panel).

4 Conclusion

While raising top income tax rates or creating a wealth tax might be effective in reducing economic inequality, they are unlikely to bring in a large amount of tax revenue. This is especially the case when considering the fact that in the US economy today most of top income is actually private business income. Such entrepreneurs do not exist in a vacuum – policies which reduce their wealth have negative impacts on entrepreneurship, business capital, and the workers that entrepreneurs employ. We need to carefully study the long-run effects of these taxes, and empirically assess their significance. My research suggests that the negative consequences through lower capital accumulation and wages largely offset any direct gains from taxing the rich.

References

Ge, Zhigang, 2019. “Taxing Top Earners: The Role of Entrepreneurs.” Working paper, University of Wisconsin-Madison.

Jakobsen, Katrine, Kristian Jakobsen, Henrik Kleven, and Gabriel Zucman, 2018. “Wealth Taxation and Wealth Accumulation: Theory and Evidence from Denmark.” National Bureau of Economic Research Working Paper 24371.

Saez, Emmanuel, and Gabriel Zucman, 2019. “The Triumph of Injustice: How the Rich Dodge Taxes and How to Make Them Pay.” WW Norton & Co, New York.

Smith, Matthew, Danny Yagan, Owen Zidar, and Eric Zwick, 2019. “Capitalists in the Twenty-First Century,” National Bureau of Economic Research Working Paper 25442.