



The Private-Sector Cost of \$1 in Government Tax Revenue

Tax Notes

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Have you ever wondered how much it costs the private-sector economy to provide the government with an additional \$1 in tax revenue? The rather shocking answer can readily be derived by the type of work now starting to be done by Treasury's fledgling Dynamic Analysis Division.

The cost to the private sector of providing the government an additional \$1 in tax revenue is about \$2.50 and in some circumstances much more. Even academics on the left now acknowledge that taxes adversely affect economic performance and, therefore, when taxes go up, it is not just the private sector's after-tax income that goes down; its pretax income suffers as well.

Thus, when the question is how much does it cost the private sector to provide the government with another \$1 in tax revenue, the answer is \$1 plus the amount by which people's incomes in the future are smaller than they otherwise would be, but for the negative effects the tax increase has on economic growth.

The amount of future pretax income that the private sector loses when government raises taxes varies, depending partly on whether the extra tax is on labor income or capital. Both respond to tax changes, declining when taxes go up and rebounding when taxes are reduced -- but capital is particularly sensitive to taxes.

Table 1 is based on our model and illustrates a range of results when the government attempts to raise an additional \$1.

The mainstream story is told by line (c) of Table 1, where the government undertakes to raise \$1 in additional tax revenue by an across-the-board rate increase calculated on a static basis to produce that result. It indeed does collect an additional \$1 -- in a mindless bookkeeping sense -- but the economy responds negatively to higher taxes, and, as a result, pretax incomes (and tax collections) are less than they otherwise would be -- and the government ends up on net having collected only \$0.68, as shown in column (1). The government lost \$0.32 because taxpayers lost \$1.07 of pretax income that otherwise would have been produced and that would have been taxed at an assumed average marginal rate of 30 percent ($\$1.07 \times 0.30 = \0.32).

Up to this point in the story, the total cost to the private sector is \$1.75 ($\$0.68 + 1.07$), but the government has on net collected only \$0.68 in tax. The government can continue to raise tax rates and ultimately net an additional \$0.32 as shown in column (5) -- but that will cost the private sector another \$0.50 in lost income, thereby bringing the total cost up to \$2.57 per \$1 of tax revenue.

The story in line (c) of Table 1 about an across-the-board tax increase on both labor and capital is consistent with recent work by Martin Feldstein at Harvard as well as a recent paper by Gregory Mankiw, also at Harvard. Mankiw has also recently done groundbreaking analysis about the economic response to a change in taxes solely on capital. His results are consistent with the story illustrated in line (d), where the total cost is \$4.33 for \$1 of additional tax revenue from capital. Mankiw also estimated the economic response from a tax change solely on labor income. Line (a) illustrates the result in the case of a \$1 tax increase. The total cost is \$1.68.

Line (b) of Table 1 is consistent with the Congressional Budget Office's estimate of the short-term economic response to an across-the-board tax change, and line (c) is consistent with the CBO's estimate of the long-term response.

By anybody's reasonable estimate, the bottom-line results are clear. The cost of an additional \$1 in taxes and spending is much more than \$1 -- most probably \$2 to \$3 -- and the real burden of taxes on the American people (counting lost income) is much greater than the government admits.

If taxes were both reduced and reformed (so that the drag on economic performance per \$1 of tax would be less), the economy would be larger, government would be smaller, and everyone would be better off.

Notes

1) Martin Feldstein, *The Effect of Taxes on Efficiency and Growth* (Cambridge, Mass.: National Bureau of Economic Research, 2006).

2) N. Gregory Mankiw and Matthew Weinzierl, *Dynamic Scoring: A Back-of-the-Envelope Guide* (Cambridge, Mass.: NBER, 2006).

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