
Case Study #8: Education Credits

By

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These results are part of an eleven-part series, *The Economics of the Blank Slate*, created to discuss the economic effects of repealing various individual tax expenditures. In these reports, Tax Foundation economists use our macroeconomic model to answer two questions lawmakers are considering:

1. What effect does eliminating these expenditures have on GDP, jobs, and federal revenue?
2. What would be the effect on GDP, jobs, and federal revenue if the static savings were used to finance tax cuts on a revenue neutral basis?

Key Points:

Eliminating the various education credits would:

- Increase tax revenues by \$9 billion on a static basis;
- Increase GDP by \$5 billion; and
- Produce slightly more revenues (\$10 billion) on a dynamic basis.
- Increase employment by the equivalent of approximately 41,000 full-time workers; and
- Produce little change in hourly wages.

Eliminating the various education credits and trading the static revenue gains for individual rate cuts would:

- Allow for an across-the-board rate cut of 0.9%;
- Boost GDP by \$19 billion per year; and
- Boost federal revenues by \$4.5 billion on a dynamic basis.
- Increase employment by the equivalent of approximately 121,000 full-time workers; and
- Produce little change in hourly wages.

The federal government provides many types of higher education assistance through the tax code. Two education tax credits are the Hope Scholarship Tax Credit (renamed and expanded as the American Opportunity Tax Credit) and the Lifetime Learning Credit. The Joint Committee on Taxation considers these education credits to be tax expenditures because it sees them as aid programs that encourage a particular activity by reducing its cost.

Under current law, the Hope Credit can reach \$2,500 (and be up to 40 percent refundable) and the Lifetime Learning Credit can reach \$2,000. The credits phase out as adjusted gross income (AGI) rises. The phase-out ranges are short, which reduces the number of taxpayers within them but creates huge marginal tax rate spikes for those who are. For instance, the Lifetime Learning credit is phased out over the AGI range \$53,000-\$63,000 (\$107,000-\$127,000 for joint filers), which generates a marginal rate bump of up to 20 percent (10 percent for joint filers) on top of other taxes.

It can be argued that higher education is an investment in human capital and should be deductible like investments in physical capital. Education is a cost of earning higher future income, which is subject to tax. The higher earnings would be captured by the student, and a deduction would be adequate compensation for the cost. That is the treatment it would receive in a saving-consumption neutral tax system. Any tax credit that exceeds the value of a tax deduction would have to be justified on “spillover” or social grounds. Therefore, the government's main justifications for supporting higher education are that it produces spillover benefits for society and extends opportunities for advancement to more of the population, creating a social benefit.

Recently, there have been concerns that the assistance provided by the tax credits may have gone too far. Are educational institutions capturing the subsidies through inflated tuition and other charges, with little benefit to students? Is the aid persuading some people to take courses that are of little economic benefit? Is government largesse creating an education bubble similar to the housing bubble?

These are legitimate concerns, but the question asked here is more modest. What would be the growth effect of removing the two education credits if, at the margin, higher education is neither more nor less desirable than other goods and services?

The IRS's 2008 Public Use File does not contain information needed to estimate the utilization and incentive effect of the recently expanded American Opportunity Credit. Accordingly, the estimates below are based on the credits available in 2008. If the estimates could be carried out for current law, the dollar amounts would be larger, but the pattern of results would be similar.

Chart 1 shows a conventional static revenue estimate, which holds the size of the economy constant. The Tax Foundation’s model estimated that eliminating the two education credits would increase federal income tax collections by \$9 billion.

The static assumption was then dropped and our model run again. In a dynamic setting, the model estimated that GDP

would be \$5 billion higher without the credits than with them. The reason is that the abrupt phase-out discourages incremental work and investment by taxpayers within the phase-out zone. Removing the credits would eliminate that deterrent. The dynamic estimate of the revenue increase, \$10 billion, would be slightly higher than the static estimate due to the higher GDP.

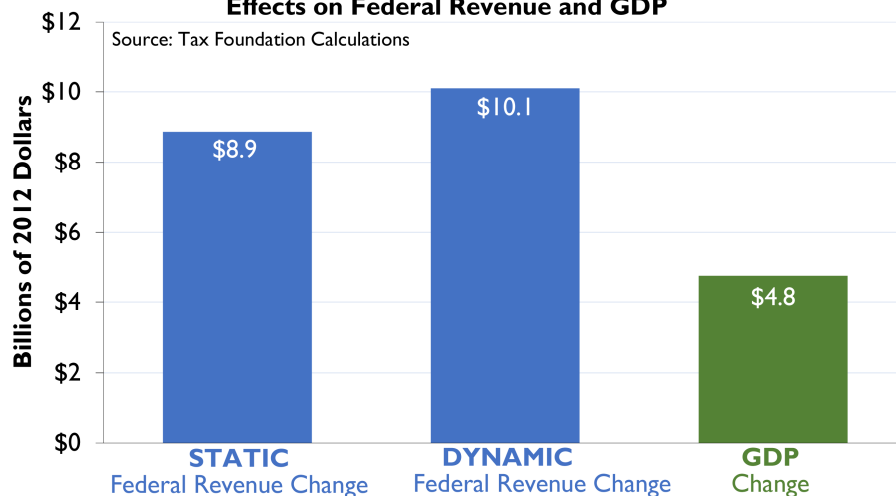
The model next estimated that GDP growth would climb to \$19 billion if the static revenue gain were applied to an across-the-board rate reduction.¹ (See Chart 2.) The reduction would further lower marginal tax rates, accounting for the extra growth.

We emphasize again that this model looks only at the incentive effects relating to the income tax rate consequences of the credit.

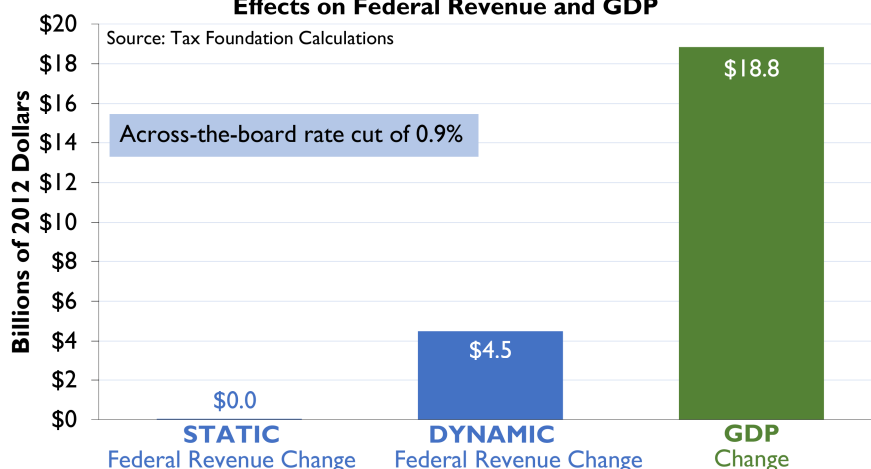
The model does not yet include the

economic benefits of a larger stock of college graduates and people with advanced degrees. Nonetheless, if encouraging more college attendance is a worthwhile social or economic objective, alternative methods of supporting such attendance, without the negative effects of the phase-outs on marginal tax rates, should be considered.

**Chart 1. Eliminating Education Credits
Effects on Federal Revenue and GDP**



**Chart 2. Using the Static Revenue Gain from
Eliminating Education Credits to Pay for an
Across-the-Board Rate Cut
Effects on Federal Revenue and GDP**



¹ We assume proportional cuts in all of the ordinary income tax bracket rates but no cuts in the lower tax rates on capital gains and qualified dividends.

Finally, we determined the impact of these scenarios on employment and wages. We found that eliminating the education credits would increase employment by the equivalent of about 41,000 full-time workers with little change in the hourly wage. With the rate cut offset, employment would increase by the equivalent of about 121,000 full-time workers with little change in the hourly wage.

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