Tax Reform Will Pay Growth Dividends

The effects will be even larger thanks to last-minute cuts in marginal individual rates.

By Robert J. Barro
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The recently enacted tax package promises to raise economic growth substantially over the short and long run. In a November letter to Treasury Secretary Steven Mnuchin, eight other economists and I argued that the bill’s corporate tax provisions would increase business investment and expand the economy. But what about the changes to the individual tax code?

During the congressional debate, many of the proposals for individual income taxes did not seem designed to promote growth, simply because they did not cut marginal tax rates. But the final legislation signed by President Trump does significantly reduce these marginal rates. That means the bill will boost the economy, particularly in the short run, more than originally predicted.

The Tax Policy Center estimates that the weighted-average marginal tax rate from individual income and payroll taxes will fall in 2018 by 3.2 percentage points. By comparison, the cuts were 4.5 points from 1986-88 in the Reagan reform, 3.6 points from 1963-65 in the Kennedy-Johnson tax reduction, and 2.1 points from 2002-03 in the George W. Bush reform.

Moreover, the Tax Policy Center finds that marginal tax rates in 2018 will drop for taxpayers across the income distribution. Most cuts are near 3 percentage points, with the smallest being zero for incomes below $10,000 and 0.6 point for incomes between $500,000 and $1,000,000.

My research with Charles Redlick, published in 2011 by the Quarterly Journal of Economics, suggests that cutting the average marginal tax rate for individuals by 1 percentage point increases gross domestic product by 0.5% over the next two years. This means the tax bill’s average cut of 3.2 points should expand the economy by 1.6% through 2019, or extra growth of 0.8% a year. This growth effect is temporary, but what it adds to the level of GDP is permanent.

Expansionary effects from cutting marginal income-tax rates also appear in a recent study, forthcoming in the Quarterly Journal of Economics, by Karel Mertens and Jose Montiel-Olea. But their estimated effects are roughly twice as large as those that Mr. Redlick and I calculated. They also find that incomes expand across the distribution, not primarily among the wealthy.

My evaluation of the tax bill’s corporate provisions relies on the “user cost of capital.” This is a concept economists employ to gauge how much it costs businesses to acquire and deploy capital. The calculation starts with the expected return companies need to undertake.
investments. This return is high—around 8% a year in real terms—because investing entails large risks.

The tax system is also included, in two ways. First is the tax rate on corporate profits. The recent legislation cuts the main rate on corporations from 35% to 21%. A second factor is the degree of expensing allowed on business investments. This gets a bit complicated because of the need to distinguish between equipment and structures.

On equipment, the generous depreciation allowances in the current system suggest that the effective expensing rate is already high, around 80%. The new law raises this rate to 100%. That change is scheduled to lapse after five years, but I treat it as permanent on the assumption that Congress will extend it. I estimate that this lowers the user cost for equipment by 10%.

On structures, the existing recovery period is long, depreciation allowances are heavily discounted, and the effective expensing rate is only 30%. The new tax law does not change depreciation schedules for most structures, such as factories and office buildings. But the lower corporate tax comes into effect here because whatever output is generated by the investment is taxed at the new rate of 21%. Overall, I estimate that the user cost for structures falls by 14%. Surprisingly, this is larger than the drop for equipment, mainly because equipment already is effectively expensed at a high rate.

Lowering the user cost of capital increases the long-run ratios of corporate capital to labor—that is, companies are willing to provide each worker with more equipment and structures to do their jobs. My estimate is that the capital-labor ratio will rise in the long run (after 20 or more years) by 14% for equipment and 20% for structures. These changes imply a 7% long-run increase in both corporate output per worker and real wages paid to workers. This is “trickle-down economics” at its best—raising wages by cutting corporate taxes.

The long-run increase in GDP per worker will be less than 7% because corporations represent only about half of national income. But the effect won’t be much less, because the new law applies full expensing of equipment to all businesses, while also lowering tax rates on pass-through enterprises. My rough estimate is that GDP per worker will rise by about 6% over the long run. If labor supply does not change, this 6% increase applies also to GDP per capita.

I project the short-run effect by using estimates of how fast the economy moves toward its long-run position. A convergence rate of 5% a year implies that the corporate changes will increase GDP growth by 0.29 percentage point in 2018, and then by an average of 0.24 percentage point a year over Congress’s 10-year horizon.

As a bottom line, I estimate that the total tax package will create extra GDP growth of 1.1% a year through 2019. The main effect (0.8%) comes from changing the individual tax code, with the remainder from the corporate reform. Over the following eight years, the projected growth rate rises by 0.2 to 0.3 percentage point a year because of the law’s expansionary effects on long-run capital and GDP per worker.

In other words, cutting income taxes on individuals will power economic growth in the short run, and reforming them for businesses will do the same over the long haul. Together they add up to more investment, increased output and higher wages for millions of Americans.

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