

## Dynamic Analysis

By ROBERT CARROLL and N. GREGORY MANKIW  
*Wall Street Journal, July 26, 2006*

Does tax relief mean more economic growth? Many people believe the answer is yes, and now they get strong support from the staff of the U.S. Treasury.

Most press reports on the Mid-Session Review of the federal budget, released by the Bush administration a couple of weeks ago, focused on the good news about expanding tax revenues and the shrinking budget deficit. But for tax-policy geeks, the most intriguing part of the report was an easily overlooked box on page 3: "A Dynamic Analysis of Permanent Extension of the President's Tax Relief." Over the past six months, the Treasury Department staff has been studying the dynamic effects of tax cuts on the economy. The results of this analysis, previewed in this box, were released yesterday in more complete form (available at <http://www.treas.gov/offices/tax-policy/><sup>1</sup>).

A bit of background: Most official analysis of tax policy is based on what economists call "static assumptions." While many microeconomic behavioral responses are included, the future path of macroeconomic variables such as the capital stock and GNP are assumed to stay the same, regardless of tax policy. This approach is not realistic, but it has been the tradition in tax analysis mainly because it is simple and convenient.

In his 2007 budget, President Bush directed the Treasury staff to develop a dynamic analysis of tax policy, and we are now reaping the fruits of those efforts. The staff uses a model that does not consider the short-run effects of tax policy on the business cycle, but instead focuses on its longer run effects on economic growth through the incentives to work, save and invest, and to allocate capital among competing uses.

The Treasury report describes what will happen to the economy if the tax relief of the past few years is made permanent, compared to the alternative scenario of reverting back to the tax code as it was in 2000. Specifically, the report analyzes the effects of lower taxes on dividends and capital gains, the effects of lower taxes on ordinary income, and the extension of other tax cuts, including the new 10% bracket, the expanded child credit and marriage-penalty relief. Here are three main lessons.

### *Lesson No. 1: Lower tax rates lead to a more prosperous economy.*

According to the Treasury analysis, a permanent extension of the recent tax cuts leads to a long-run increase in the capital stock of 2.3%, and a long-run increase in GNP of 0.7%. In today's economy, such a GNP expansion would mean an extra \$90 billion a year that the nation can spend on consumer goods to raise living standards, or capital goods to maintain prosperity. More than two-thirds of this expansion occurs within 10 years.

### *Lesson No 2: Not all taxes are created equal for purposes of promoting growth.*

Some tax rate reductions have a profound impact on incentives and economic growth, while others have minimal or even adverse effects. The Treasury staff reports particularly large bang-for-the-buck from the reductions in dividends and capital-gains taxes. Even though these tax cuts account for less than 20% of the static revenue loss from permanent tax relief, they produce more than half of the long-run growth.

At the opposite end of the spectrum are the tax reductions from the 10% bracket, child credit and marriage-penalty relief. These tax cuts put money in people's pockets when, during the recent recession, the economy needed a short-run boost to aggregate demand. They also fulfill other objectives, such as making the tax system more progressive. But they illustrate that not all tax cuts promote long-run growth. Treasury estimates that without the tax reductions from the 10% bracket, child credit and marriage-penalty relief, the long-run increase in GNP would be larger -- 1.1% rather than 0.7%.

*Lesson No 3: How tax relief is financed is crucial for its economic impact.*

Like all of us, the government eventually has to pay its bills. In technical terms, the government faces an intertemporal budget constraint that ties the present value of government spending to the present value of tax revenue. This means that when taxes are cut, other offsetting adjustments are required to make the numbers add up.

The Treasury's main analysis assumes that lower tax revenue will over time be accompanied by reduced spending on government consumption. But the report also shows what happens if spending cuts are not forthcoming. In this alternative scenario, a permanent extension of recent tax relief is assumed to lead to an eventual increase in income taxes.

The results are strikingly different. Instead of increasing by 0.7% in the long run, GNP now falls by 0.9%. Tax relief is good for growth, but only if the tax reductions are financed by spending restraint. One exception: Lower taxes on dividends and capital gains promote growth, even if they require higher income taxes.

These Treasury results are sure to spark debate and further research. While the Treasury report is not the last word on dynamic analysis, it is a big step toward a more realistic view of tax policy.

***Mr. Carroll is the Treasury Department's deputy assistant secretary for tax analysis. Mr. Mankiw, a Harvard professor, was chairman of the Council of Economic Advisers from 2003 to 2005.***