The views expressed herein are those of the author and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2011 by Martin S. Feldstein. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.
The Tax Reform Act of 1986: Comment on the 25th Anniversary
Martin S. Feldstein
NBER Working Paper No. 17531
October 2011
JEL No. H0,H2,H21,H3,H31

ABSTRACT

The Tax Reform Act of 1986 was a powerful pro-growth force for the American economy. Equally important, as we look back on it after 25 years, we also see that it taught us two important lessons. First, it showed that politicians with very different political philosophies on the right and on the left could agree on a major program of tax rate reduction and tax reform. Second, it showed that the amount of taxable income is very sensitive to marginal tax rates.

More specifically, the evidence based on the 1986 tax rate reductions shows that the response of taxpayers to reductions in marginal tax rates offsets a substantial portion of the revenue that would otherwise be lost. This implies that combining a broadening of the tax base that raises revenue equal to 10 percent of existing personal income tax revenue with a 10 percent across the board cut in all marginal tax rates would raise revenue equal to about four percent of existing tax revenue. With personal income tax revenue in 2011 of about $1 trillion, that four percent increase in net revenue would be $40 billion at the current level of taxable income or more than $500 billion over the next ten years.

Martin S. Feldstein
President Emeritus
NBER
1050 Massachusetts Avenue
Cambridge, MA 02138-5398
and NBER
msfeldst@nber.org
The Tax Reform Act of 1986: Comments on the 25th Anniversary

Martin Feldstein*

The Tax Reform Act of 1986 was a powerful pro-growth force for the American economy. Equally important, as we look back on it after 25 years, we also see that it taught us two important lessons. First, it showed that politicians with very different political philosophies on the right and on the left could agree on a major program of tax rate reductions and tax reform. Second, it showed that the amount of taxable income is very sensitive to marginal tax rates.

This sensitivity of taxable income to marginal tax rates implies that a reduction of marginal tax rates causes much less revenue loss than traditional “static” estimates (that assume no behavioral response of taxpayers) imply. Although that lesson is still not fully incorporated into official estimates of the effects of major tax proposals, the 1986 estimates have caused the Congressional Budget Office and the Joint Tax Committee to reflect taxpayer behavior more completely in their revenue estimates.

* Professor of Economics, Harvard University.
I will use this 25th anniversary of TRA86 to comment on these two important lessons.

**Political Compromise**

President Ronald Reagan and House Speaker Thomas P. “Tip” O’Neill were philosophical as well as political opponents. Ronald Reagan was a conservative Republican. He also remembered the distortionary effects of the very high marginal tax rates that prevailed when he was a successful movie actor, rates that reached 92 percent at the federal level alone. Although the top federal rate had been reduced by the beginning of his presidency, the top tax rate in 1986 was still 50 percent. The tax code was also riddled with a wide range of special provisions that reduced revenue and distorted the economic choices of taxpayers in ways that decreased the value of what was produced and consumed in the American economy. President Reagan understood this and wanted it changed.

Speaker O'Neill was a liberal Democrat from Massachusetts who was less concerned about the high tax rates of wealthy taxpayers than about the employment and incomes of the middle and lower income constituents of the Democratic party. But the Speaker was convinced
that many of the “tax expenditure” provisions of the tax code were unfair and harmful to the economy and that lowering high tax rates would strengthen the economy and therefore improve conditions for the broader electorate.

The willingness to trade the elimination of various tax expenditures for lower tax rates made TRA86 possible. The specific legislation was the result of secret meetings between the President, the Speaker, and their top staffs. The key feature of TRA86 is that it reduced the top tax rate to just 28 percent, thus lowering tax rates for millions of taxpayers. For those who had been paying the 50 percent rate, TRA86 meant that every extra dollar of pretax earnings produced 72 cents of net income instead of 50 cents, an increase of 44 percent.

The key to achieving bipartisan support for this dramatic rate reduction was that TRA86 also eliminated a large number of special tax provisions in a way that produced enough revenue at each level of adjusted gross income to make the overall TRA86 both revenue neutral and distributionally neutral. Put differently, the negotiations agreed to eliminate tax expenditures that raised significant revenue and then reduced tax rates at each level of adjusted gross income to offset fully the revenue increases that the base broadening would produce at that
income level.\textsuperscript{1} This balancing of increased revenue from base broadening and decreased revenue from rate reduction was done using the “static” analysis that assumed no taxpayer response. This meant that the actual revenue effect would be a substantial revenue increase.

The Behavioral Respose to Lower Marginal Tax Rates

The reduction in tax rates had three favorable effects on taxpayer behavior. The analysis of tax return data that I did a few years later\textsuperscript{2} shows that the cumulative revenue effect of these three behavioral changes was quite large.

The most obvious effect is that the reduction in the high marginal tax rates increased the reward for extra effort and extra risk taking, leading to increases in earnings, in entrepreneurial activity, in the expansion of small businesses, etc..

\textsuperscript{1} TRA86 also changed tax rules that affected corporations. Although the resulting increases in taxable income at the corporate level were largely offset by reducing the corporate tax rate, the offset was incomplete, allowing TRA86 to provide a small net reduction in taxes for taxpayers at each income level while being revenue neutral overall based on static (i.e., no behavioral response) calculations. The increase in GDP that resulted from the lower tax rates therefore caused TRA86 to raise revenue.

\textsuperscript{2} A full description of this research is presented in Martin Feldstein, “The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the Tax Reform Act of 1986” Journal of Political Economy, June 1995 (103:3) pp. 551-72
A second effect was to cause individuals to shift some of their compensation from untaxed fringe benefits to taxable earnings. When cash income was taxed at 50 percent, executives and small business owners preferred expensive offices, company cars, first class travel, high cost health insurance, health club memberships, and other tax-free compensation to taxable cash wages and salaries. These fringe benefits might have been worth less to the individuals than they cost the firm to provide, but they were preferred to taxable cash as long as they were worth more than 50 cents per dollar of cost. When TRA86 allowed individuals to keep 72 cents of every cash dollar of compensation, payment in the form of fringe benefits and other perquisites became less attractive and taxable cash compensation jumped.

A third important effect on tax revenue was to reduce the forms of consumption that are favored by being tax deductible. The cost of a dollar of mortgage interest, local property taxes (that are often in effect payments for local services), charitable contributions, etc. rose from 50 cents per dollar paid to 72 cents, reducing the incentive to spend in these tax favored ways.
To assess the magnitude of these responses, I used a set of data provided to researchers by the Treasury Department. These data provided individual tax returns (stripped of any identifying information) for more than 4,000 taxpayers. The important feature of these data is that they provided the tax returns of each individual in the sample for the years 1985 through 1988. I could therefore compare the taxable income of individuals is 1985 with the taxable income in 1988 to see how the reduction in marginal tax rates caused taxable incomes to change.

The data provided on a tax return do not distinguish between the rise in taxable earnings that results from increased work effort or risk taking and the rise in taxable income that results from changes in the form of compensation. Moreover, since what matters from the perspective of tax revenue (as well as for the economic efficiency of the tax system) is the effect of marginal tax rates on total taxable income,

---

3 These data and the study are described in the paper cited in footnote 2 of the current paper.
4 High marginal tax rates cause losses of real incomes by inducing individuals to spend money on less valuable forms of consumption as well as causing reductions in pretax earnings and changes in the form of compensation. A dollar of revenue lost in any of these ways causes the same loss of “economic efficiency”. For more on this, see Martin Feldstein, “Tax Avoidance and the Deadweight Loss of the Income Tax,” Review of Economics and Statistics, November 1999, 81(4) pp. 674-80.
my analysis focused on the response of total taxable income to the TRA86 tax rate changes.

Since there is much year to year variation in individual economic earnings and taxable income, especially among high income taxpayers, I grouped the taxpayers by their taxable income level in 1985 and compared their average taxable income in 1985 with the average taxable income of those same taxpayers in 1988. Since there was no hint of TRA86 rate reductions in 1985, this comparison provides a clean look at the effect of TRA86.5

Here are the basic results. The taxable incomes of taxpayers with the marginal tax rates of 49 percent and 50 percent in 1985 rose by 44.8 percent between 1985 and 1988.6 Between these same years the average marginal tax rate of this group fell from 49.5 percent to 28 percent, implying a rise in the net-of-tax share from 50.5 percent to 72 percent, or a rise of 42 percent. Comparing the rise in taxable incomes with the rise in the net-of-tax shares implies that the elasticity of taxable income with respect to the marginal net of tax share is slightly

5 It will of course understate the effect of TRA86 because some of the important effects of lower marginal tax rates only occur over a number of years. This includes such things as the choice of occupation or the size of the individuals home.

6 Taxable incomes were adjusted for this comparison for capital gains and partnership losses and the sample was restricted to individuals who did not form subchapter S corporations during these years.
more than one, i.e., a revenue increase of 44.8 percent in response to a rate reduction of 42 percent.

There is a risk, however, that this type of comparison could be misleading because many things that affect taxable incomes changed between those years in addition to the reduction of the marginal tax rates. To deal with that problem, I compared the taxable income change of the highest marginal tax rate groups in 1985 with the taxable income change of the next highest group (with 1985 marginal tax rates of 42 percent to 45 percent) as well as the taxable income change in the group with pre-1986 marginal tax rates of 22 to 38 percent. In this way, general economic conditions that affected all relatively high income taxpayers (like the state of the business cycle) would be eliminated from the comparison. This method of comparing the difference in response of two different groups is referred to as a “difference in difference” estimate of the effect of a policy change.

Here is what that “difference in difference” comparison showed. The net of tax share of those who initially had marginal tax rates of 42 to 45 percent rose by 25.6 percent and their taxable incomes rose by 20.3 percent. The difference between this group and the highest tax rate group in the rise of taxable income percentages was therefore 24.5
percent (i.e., 44.8 percent for the highest group minus 20.3 percent for the next group) while the difference in the net-of-tax share was 16.6 percent (42.2 percent minus 25.6 percent). The implied elasticity of taxable income with respect to the net of tax share is therefore the ratio of 24.5 to 16.6 or 1.54, even higher than that based on either group alone.

My other comparisons with the medium income group produced lower elasticity estimates although always greater than one. Other researchers, using different methods, produced a variety of estimates but these generally were not based on panel date and are therefore difficult to interpret.

**Implications for the Revenue Effects of Tax Changes**

The substantial responsiveness of taxable incomes to changes in marginal tax rates has important implications for the effect of tax changes on tax revenue.

Consider an across the board 10 percent reduction of all tax rates. That reduction in all rates would take the 35 percent rate to 31.5 percent, the 15 percent rate to 13.5 percent, etc.. A traditional “static”
analysis that ignores taxpayer response would imply that the 10 percent reduction in all rates would cause tax revenue to decline by 10 percent.

The likely change in taxpayer behavior implies that the reduction in rates would reduce tax revenue by substantially less. More specifically, if marginal tax rates now range from 10 percent to 40 percent, the across the board rate reduction would cause the range of marginal tax rates to become 9 percent to 36 percent. That implies that the marginal net-of-tax shares rise from 90 percent to 91 percent in the lowest tax bracket and from 60 percent to 64 percent in the highest tax bracket.

A rise from 60 to 64 percent is a 6.7 percent increase in the net-of-tax share. An elasticity of taxable income with respect to the net of tax share equal to one would imply that taxable income would rise by 6.7 percent for taxpayers in this highest bracket. The combination of a 10 percent reduction in all marginal tax rates and a 6.7 percent rise in taxable income implies that revenue falls to 96 percent of what it had previously been instead of declining by the full 10 percent to 90 percent of what it had previously been. In short, the behavioral response of taxpayers in this highest bracket offsets 60 percent of the static revenue loss.
The effect of taxpayer behavior on revenue is smaller in lower tax brackets even if the elasticity of taxable income to the net-of-tax share is one in every tax bracket. That is because the 10 percent reduction in the marginal tax rate implies a smaller proportional increase in the net of tax share at lower income levels. For example, a taxpayer with an initial marginal tax rate of 20 percent would experience a rate reduction to 18 percent and therefore a rise in the net of tax share from 80 percent to 82 percent, an increase of just 2.5 percent. The combination of a 10 percent reduction in all marginal tax rates and a 2.5 percent rise in taxable income implies that revenue falls to 92.25 percent of what it had previously been instead of declining by the full 10 percent to 90 percent of what it had previously been. In short, the behavioral response of taxpayers in this bracket offsets 22.5 percent of the static revenue loss.

The overall revenue effect of an across the board rate reduction reflects a weighted average of these behavioral effects with relative weights that reflect the amount of revenue initially collected at each marginal tax rate. Calculations with the TAXSIM model of the NBER implies that a 10 percent across the board reduction in tax rates would reduce revenue by about 60 percent of what a static analysis would imply, i.e., that the behavioral response of taxable income to the lower
marginal tax rates would offset about 40 percent of the static revenue loss.

The effect of marginal tax rate changes is symmetric. Thus a 10 percent increase in all marginal tax rates would raise only about 60 percent of what a static analysis would show.

Implications for Today

The lessons taught by the Tax Reform Act of 1986 have important implications for the tax reform debates of today. Although Congressional Republicans and Democrats now disagree strongly about raising tax revenue, the experience of 1986 shows that it should be possible to agree on a program of rate reduction and reform in the same spirit that Ronald Reagan and Tip O'Neil did 25 years ago.

More specifically, the evidence based on the 1986 tax rate reductions shows that the response of taxpayers to reductions in marginal tax rates offsets a substantial portion of the revenue that would otherwise be lost. This implies that combining a broadening of the tax base that raises revenue equal to 10 percent of existing personal
income tax revenue\(^7\) with a 10 percent across the board cut in all marginal tax rates would raise revenue equal to about four percent of existing tax revenue. With personal income tax revenue in 2011 of about $1 trillion, that four percent increase in net revenue would be $40 billion at the current level of taxable income or more than $500 billion over the next ten years.

Cambridge, Massachusetts

October 2011

\(^7\) For a discussion of one way to limit existing tax expenditures that raises substantial revenue without eliminating any specific tax expenditures, see Martin Feldstein, Daniel Feenberg and Maya MacGuineas, “Capping Individual Tax Expenditures,” Tax Notes, May 2, 2011, pages 505-509.