The Dynamics of Tax Cuts

Lawrence B. Lindsey

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Evidence that the 1981 tax cut succeeded in getting more money from the rich at lower rates has been trickling down for a few years. But Harvard economist Lawrence B. Lindsey's presentation to a recent Manhattan Institute session seems destined to wash away most legitimate doubts.

Professor Lindsey, one of the nation's leading scholars in taxation, substantiates not only that top-income Americans are carrying a bigger share of the 1040 burden, but also that this happened as the 1981 act encouraged an infusion of the newly wealthy into the uppermost bracket. The Wall Street Journal *found the makings of this phenomenon, which are spelled out in this paper, a positive indicator of social mobility.*

Yet the supply-side triumph is in jeopardy, warns Lindsey, because of backtracking on the capital gains rate in the 1986 tax revision. Here he describes the curious political contradiction that led to that setback, and he joins the call for cutting the capital gains rate to 15 percent. He concludes with an appraisal of the international context for more rational tax policies.

Cover: Carlyle Hotel.
Bien & Prince, 1929-30.

The Dynamics of Tax Cuts

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The Dynamics of Tax Cuts

Twenty-five years ago, the top income tax rate in America was 91 percent. As recently as 1980 it was 70 percent. In 1986 it was 50 percent, in 1987 38.5 percent, and for 1988 it will be 33 percent. This dramatic reduction in marginal tax rates is a product of a new development in the economics of taxation, a development that has begun to affect the politics of taxation. It represents a new consensus among students of public finance that high rates are counterproductive, both in terms of revenue and of general economic vitality.

The 1980s will be remembered as the decade of great experimentation in personal taxes. Our experience has provided answers to questions that perplexed economists in earlier years. And the policy implications are dramatic.

We now know that people respond to changes in tax rates. A notion that used to be considered revolutionary—the "Laffer Curve" idea that tax cuts can actually yield higher tax revenues—has come to be more widely accepted by professional economists. The recognition that very high tax rates equal poor fiscal policy is spreading throughout the world.

This "supply-side" idea is not original to Arthur Laffer, nor is it even new. The classical economists knew that people respond to tax rates. In 1776, Adam

Smith pointed out in *The Wealth of Nations* that high tax rates (specifically, higher import duties) can actually produce less revenue than lower rates.

A look at the numbers

The decade began with the enactment of the Economic Recovery Tax Act of 1981 (ERTA). Rates were cut for all taxpayers. The deepest cut came for top-bracket taxpayers whose marginal tax rate was cut from 70 to 50 percent. These were generally people with adjusted gross incomes (AGI) in excess of $200,000. Critics denounced the top rate cut, and the contemporaneous cut in the capital gains rate, as a "windfall for the rich." Economic models employed by both the Congressional Budget Office and the Congressional Joint Committee on Taxation assumed that high-income taxpayers would not change their economic behavior in response to the lower rates, and thus predicted a substantial decline in Federal tax revenues from these high-income groups.

Supply-side advocates of the bill argued that lowering tax rates would cause taxpayers to report more income, thus offsetting the revenue effect of the rate reduction. In particular, they argued that the government would collect more revenue from high-income taxpayers through a reduction of the 70 percent rate.

High-income taxpayers, it turns out, did respond to the top rate cut by changing their economic behavior. As a result, they paid billions of dollars in additional taxes. My own findings in this area are buttressed by the Congressional Budget Office. It notes:

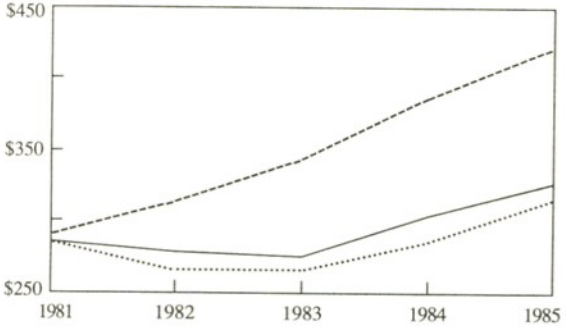
> The data show considerable evidence of a very significant revenue response among taxpayers at the very highest income levels. This finding of a strong revenue response in the top income group holds true for both projection methods and all target years.

My work has focused on determining the magnitude of this revenue response, and the reasons for it. I first tried to determine how much of the actual tax collections could be accounted for by non-supply-side factors. Using the National Bureau of Economic Research TAXSIM model, which like the Treasury Department's Tax Calculator is specifically designed to estimate income tax revenues, I estimated what revenues would have been had there been no 1981 ERTA tax cut and what revenues should have been

after that tax cut. Both projections assumed no change from the actual economic conditions of the period and no behavioral response from taxpayers—assumptions used by the CBO and the Joint Committee on Taxation throughout the 1960s and 1970s.

Figure 1

Actual and Predicted Tax Revenue: All Taxpayers



--- Predicted tax revenues with old (pre-ERTA) law in effect
····· Predicted tax revenues under new tax law
— Actual tax collections
Dollar amounts in billions.

As shown in *Figure 1*, this model predicted that the ERTA tax cuts would cause tax revenues to fall. They did, yet over four years $47 billion more was collected than was predicted by the model.

Table 1

Amount By Which Tax Revenues Exceeded Projections For All Taxpayers

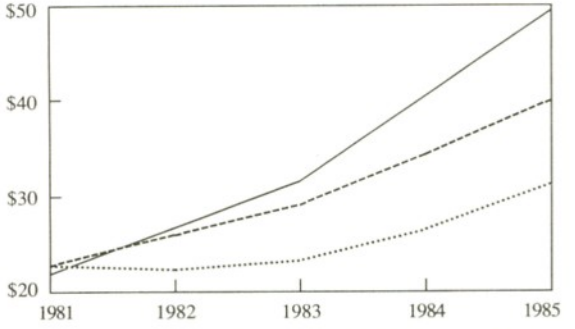
1982	$ 11 billion
1983	8 billion
1984	15 billion
1985	13 billion

Consider the case of high-income taxpayers, those with taxable incomes of $200,000 or more per year. As shown in *Figure 2*, the conventional model again

predicted that a tax cut would produce revenue shortfalls. But in fact, revenues not only soared above the prediction, they greatly exceeded what the model predicted would have been collected if no tax cut had taken place. In short, the conventional model—which assumes no behavioral response—predicted a revenue decline from high-income taxpayers when the actual outcome was a significant revenue increase.

Figure 2

Actual and Predicted Tax Revenues: High-Income Taxpayers



--- Predicted tax revenues with old (pre-ERTA) law in effect
····· Predicted tax revenues under new tax law
— Actual tax collections
Dollar amounts in billions.

High-income taxpayers paid more taxes at the 50 percent rate than would have been collected with unchanged taxpayer behavior at a 70 percent rate. From 1982 through 1985, the taxes they paid exceeded the predictions by more than $43 billion.

As a result, the tax burden after the 1981 tax cut moved up the income curve, with high-income taxpayers paying an increased share of total income taxes. A recent CBO study comparing 1977 tax receipts with 1988 estimates determined that the share of 1988 income taxes paid by taxpayers in the top 5 percent of the income distribution should rise by 11 percent, relative to 1977. For the top 1 percent of income earners, the share should rise by 22 percent—from 20 to nearly 24 cents of each income tax dollar paid. Meanwhile, the proportion of 1988 taxes paid by taxpayers in the bottom half of the distribution should be 8 percent less, relative to 1977.

Table 2

Amount By Which Tax Revenues Exceeded Projections: High-Income Taxpayers

1982	$ 4.2 billion
1983	8 billion
1984	13 billion
1985	18 billion

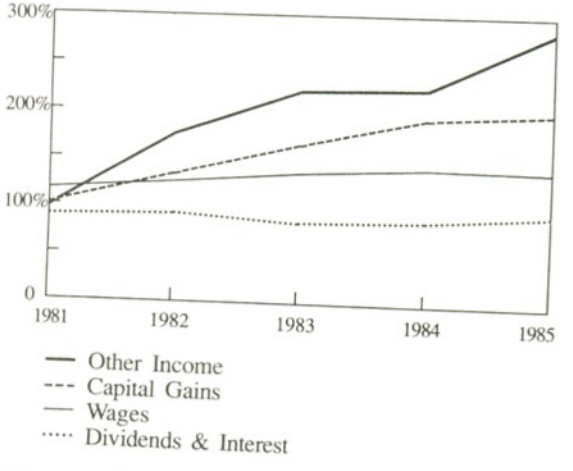
Did the rich get richer?

The source of the additional revenue is not hard to find. From 1982 through 1985, high-income taxpayers reported $86.8 billion more income than expected. That income can be broken down into four categories: dividends and interest; wages; capital gains; and "other income." *Figure 3* shows (in percentage terms) how actual income compares to predicted income in each category.

Overall, high-income taxpayers reported slightly less dividend and interest income than would have

Figure 3

Actual as a Percent of Predicted Income: High-Income Taxpayers (over $200,000)



been expected—in 1983, 7 percent less than the predicted level. That is an important point because some have claimed that in the 1980s "the rich got richer" relative to the rest of the population. When we speak of "the rich," we commonly mean people with substantial assets—assets which produce income primarily in the form of dividends and interest. If the rich got richer, then we would expect them to report more dividend and interest income proportionally, not less.

In the other three categories, income greatly exceeded predicted levels. High-income taxpayers have substantial control over their compensation packages and can rearrange them to take more of their income in the form of wages and less in the form of fringe benefits. Thus it is not surprising that wage income exceeded the prediction by as much as 30 percent. Capital gains income also exceeded predictions, by more than 100 percent. And remember, all these calculations take into account changing economic conditions—the enormous rise in personal wealth caused by the stock market boom was included in the "predicted level" for the purposes of our analysis.

The "other income" category represents mostly business and proprietary income—earnings chiefly of lawyers and doctors, but also including that of other kinds of entrepreneurs. These people have enormous discretion with regard to how they can pay themselves, and by 1985 they paid themselves almost three times as much as we would have expected.

One might think that this startling increase in other income represents a surfacing of monies found in the "underground economy," but this is an unlikely explanation. Roughly one third of the estimated $90 billion underground economy consists of criminal activity. Criminals are certainly not tax-sensitive in their reporting of income. The remaining $60 billion goes mostly to lower-income wage earners who face a Social Security tax in addition to the personal income tax. Since the self-employment Social Security tax rate alone is 14 percent, it is unlikely that a small cut in the personal income tax would spur many of these underground wage earners to come out into the open where they would face a combined state and Federal marginal tax rate in the 30 to 40 percent range.

Where did the extra "other income" come from? A self-employed person exercises a good deal of discretion in paying himself. At high tax rates, he is more likely to treat himself to business lunches, for

example. (A recent study estimates that the elasticity of business entertainment deductions with regard to the tax rate could be in excess of 2, meaning that every 1 percent fall in the after-tax cost of business entertainment reduces such expenditures by as much as 2 percent.) Then there is the company car for the self-employed person. One can buy a new luxury car and have the company depreciate it, saving a lot of money when the tax rate is 70 percent. When the tax rate is 50 percent, paying oneself cash might make more sense.

The great disparity between predicted and actual tax revenue in the "other income" category, then, represents people optimizing their after-tax income. Facing high tax rates, people are not as likely to pay themselves cash. They will take as many tax-free perks as they possibly can. When tax rates are lowered, perks appear less attractive relative to cash wages. In addition, with lower rates the economy as a whole has fewer tax-bred distortions: Resources are more likely to be allocated in a way that, as economists like to put it, "maximizes utility" and thus enhances the collective wealth of our society.

Tax policy and social mobility

An examination of how the wealthy—defined here as the top 2 percent of American taxpayers—earn their income provides some insights into social mobility as it is affected by the tax code. Do lower tax rates encourage social mobility? *Table 3* compares the sources of income of the top 2 percent of taxpayers

Table 3

SOURCES OF INCOME
Adjusted for Macroeconomic Conditions:
High-Income Taxpayers—The Top 2%

Income Category	1960	1975	1983
Dividends and Interest	54.6 %	27.8 %	18.6 %
Capital Gains	14.7 %	23.9 %	26.3 %
Wages	30.7 %	48.3 %	55.1 %

for the representative years 1960, 1975, and 1983. Adjustments are made to make the macroeconomic conditions of the three years comparable.

In 1960 the top tax rate was 91 percent. Those one might call *rentiers*, who mostly received "unearned" income, predominated among the wealthy. Wages made up less than one third of the wealthy's total income.

But by 1975, with the top tax rate down to 70 percent and capital gains rates slightly lower than in 1960, wages had become the largest component of their income—almost half—while dividends and interest as a share of total income was cut by roughly half.

By 1983, with the top income tax rate down to 50 percent, wages comprised the majority of all income earned by the top 2 percent of taxpayers. Interest and dividends had declined to less than one fifth of the total.

This suggests that the composition of the "upper class" changed somewhat between 1960 and 1983. Rather than being primarily *rentiers*, the top 2 percent were now primarily wage earners. Although the explanations for this change may include many outside the field of tax policy, the importance of tax rates cannot be ruled out. The ability to keep a larger share of one's income after taxes is no small inducement to entrepreneurial activity. Ultimately, lower tax rates allow professionals and other entrepreneurs to build enterprises that allow them to displace the "old money" at the top of the income distribution.

The labor supply response

We have seen how the tax cuts redivided the revenue pie. But the size of the pie changed as well—it grew as Americans worked more. Up to this point, the analysis has included the artificial assumption that tax cuts do not affect the economy and that there are no supply-side effects on individuals' behavior in the form of extra labor supply, saving, or risk-taking. As we have seen, this static assumption is unable to explain the actual pattern of tax revenues. Therefore, we need to determine whether a "supply-side response" to the 1981 bill's tax cuts occurred.

Taking estimates of how labor supply responds to changing wage rates, I sought to determine how much of the change in income distribution was due to a

supply-side response. I discovered that most of the income change in the upper middle class, and well over half of the change at lower- and middle-income levels, could be accounted for by supply-side responses. The 1981 tax bill incorporated a particularly generous "second-earner deduction," and second earners responded through greater work effort. From 1982 through 1985, Americans earned about 2.5 percent more labor income—about $38 billion—due to the tax cuts' labor supply effect, and thus paid $8 billion in additional tax revenues.

In addition, existing estimates of the responsiveness of fringe benefits to taxes suggest that after the 1981 tax cuts people took $30 billion more in wages instead of untaxed compensation, yielding about $6 billion in additional taxes. That is hardly revolutionary, representing only about 1 percent of total compensation, but taken together the wage and fringe benefit responses added about $14 billion in revenues.

Ironically, in light of the often-quoted aphorism that "a rising tide lifts all boats," the increase in overall work effort accounts for much of the widened disparities among income groups observed during the 1980s. If taxes are cut mostly at the top—as happened under ERTA—incentives to earn are increased mostly at the top and people's taxable incomes at the top are likely to go up more than everyone else's. Thus, we would expect a less equal distribution of income after ERTA than before. This is exactly what happened.

The capital gains mistake

In 1986, the tax code was revised again. The top rates were lowered still more. But this time the capital gains rate was hiked back up to 28 percent—where it was until 1981—for the top earners, and 33 percent for the upper-middle-income bracket. According to calculations done at the National Bureau of Economic Research, the average tax rate on all capital gains will rise from 17 to 26 percent. For the vast majority of people who pay the capital gains tax, these new rates mark a historic high. What does the post-1981 experience suggest will happen in 1988?

If one assumes no supply-side response, then the government could expect to gather in $392.5 billion under the 1988 interim rules—$5.9 billion more than the predicted $386.6 billion of revenues, had the Tax Reform Act not been implemented.

In analyzing the 1981 tax cut, however, we now know that there should be a behavioral response on revenue collection. Indeed, the Joint Committee, in its own estimation of the revenue effects of the 1986 bill, assumed such a response—for the first time ever.

I took the revenue effects suggested by the 1981 tax cut and applied them to the 1986 Tax Reform Act. As *Table 4* indicates, we can expect an extra $13.9 billion in tax revenues due to higher wages, primarily from upper-income taxpayers. Business income adds another $1.6 billion. But the effect on capital gains tax revenues is most dramatic. If we assume that people will respond to the 1986 increase in the capital gains tax rate the same way they responded to the 1981 decrease in the rate, almost $31 billion in revenues will be lost, relative to the "no response" scenario. The Joint Committee estimates the loss at only $19 billion, but it is a significant loss in either case.

Adding these effects together, I calculate that as a result of the 1986 law, high-income taxpayers are actually going to be paying less taxes. The revenue losses in capital gains swamp revenue increases in other categories.

Table 4

PREDICTED REVENUE IMPACT OF BEHAVIORAL RESPONSES

Revenue Effect Due to Response of:

Income Class	Wages	Business Income	Capital Gains	All Responses
to $10,000	$-0.1	$0.0	$-0.1	$-0.2
10-20,000	-1.5	0.0	-0.2	-1.7
20-30,000	0.0	0.0	-0.5	-0.5
30-40,000	2.0	0.1	-0.6	1.5
40-50,000	0.8	0.1	-0.7	0.2
50-75,000	2.7	0.2	-2.7	0.2
75-100,000	2.6	0.2	-2.3	0.5
100-200,000	3.0	0.5	-5.3	-1.8
200,000 +	4.4	0.5	-18.4	-13.5
Total	**13.9**	**1.6**	**-30.8**	**-15.3**

Revenue effects in billions of dollars.
All numbers are for calendar 1988.

The capital gains rate was raised for political reasons. The top income tax rate on regular income was cut dramatically in the 1986 bill. Since upper-income taxpayers receive a disproportionately large share of their income from capital gains, Congress raised capital gains taxes in an attempt to make the bill distributionally neutral. Congress did not want the tax cuts to appear to be a "windfall for the rich." Unfortunately, the revenue tables produced by the Congressional Joint Committee on Taxation assume a behavioral response to the capital gains tax increase, when the distributional tables do not. This gives the appearance of a revenue-neutral and distributionally neutral tax bill—but in fact the bill is a revenue loser, producing a sharp drop in taxes paid by the top income group because of expected capital gains responses.

A basic rule of public finance is that government should tax activities that are price elastic at a lower rate than activities that are relatively inelastic. With regard to the income tax, the most price elastic activity is the realization of capital gains. The results of my studies show that the revenue-maximizing rate on capital gains is on the order of 18 percent. Separating capital gains rates out from income tax rates, the revenue-maximizing rate on the rest of the tax base is in the low 40s. If capital gains are included in the base, as they are in current practice, the net tax rate should be 33 to 35 percent. It should be emphasized that that is a "revenue-maximizing" and not an "optimal" rate. All taxes entail a deadweight loss to the economy, by creating disincentives to work, save, and invest. That means that an economically optimal rate of taxation will necessarily be lower than a "revenue-maximizing" one.

Recently, a proposal has emerged to lower the capital gains rate to 15 percent. Far from being a radical rate reduction, this would simply bring rates back to their historic levels. Another alternative would be to index capital gains to the rate of inflation. (Under current law, we tax capital gains even if, due to inflation, the taxpayer is no better off when the asset is sold than when it was purchased.) In any event, the risky course of action is not to cut rates to 15 percent but to leave things as they stand. Leaving capital gains rates at their new levels involves making a revenue gamble that may not yield extra revenues, at the price of a guaranteed reduction in economic efficiency, capital formation, and entrepreneurship.

The spending quandary

There is a lot of talk about raising taxes to solve the Federal budget deficit. However, the tax code cannot be the main mechanism for dealing with deficits. Unless spending is also controlled, deficits will never be reduced.

Under current tax law, if we assume 7 percent nominal growth in the economy—4 percent inflation and 3 percent real growth every year—an extra 9 percent in revenue will be collected each year. This comes to about $70 billion per year, with indexation.

If Federal spending (excluding interest payments) is held to the rate of inflation—4 percent per year—the government will spend an extra $35 billion per year. At these rates, in five years, with no change in taxes and with government spending held constant in real terms, the budget will be balanced.

Of course, no one is talking about keeping real spending constant. Nominal spending is going up at 8 or 9 percent per year. If this continues, the spending and revenue lines will never cross under any reasonable assumption about the kind of tax increase Congress might enact.

Unless there is some form of spending control, there will never be a balanced budget. By contrast, the simple yet effective solution of holding real spending constant and letting taxes grow with the economy will result in a balanced budget in five years—which is what Gramm-Rudman-Hollings requires.

In the absence of spending discipline, raising revenues should be done in a way that entails the smallest economic loss, the least burden to the economy. At current rates, the income tax is probably close to raising the maximum revenue possible from the rich. Raising top rates would not necessarily produce more revenue. Raising intermediate rates, which fall on the majority of voters, would be politically difficult.

Rather than tinkering with the personal income tax, we should examine the things government gives away for free—things that it can, and probably should, charge for. Landing rights at airports and the assignment of broadcast wavelengths are two examples. These kinds of taxes would be expected to increase economic efficiency rather than entail deadweight losses. There is not a lot of money to be gained, only $15 to $20 billion. But it would take a real bite out of the deficit, something which cannot be

guaranteed by potentially counterproductive attempts to "soak the rich."

An international trend

It now seems clear that the 1980s tax cuts have increased revenues from high-income taxpayers and benefited the economy. Other nations which have also reduced their tax rates have discovered the salutary effects. British Prime Minister Margaret Thatcher has cut the top tax rate significantly, and now the British are moving to lower their rates even further.

When Mrs. Thatcher took office, maximum tax rates were 83 percent on labor income and 98 percent on capital income. Of course, virtually no revenue was being collected at the 98 percent rate. She took the logical step and cut the top rates to 60 percent on labor income and 75 percent on capital income. Just this year, a further reduction in the top rate was enacted—to 40 percent. The basic rate of tax in England, which is paid by 95 percent of the taxpayers, was also cut this year from 27 to 25 percent. Britain is now one of the world's economic bright spots. Lower tax rates have helped make the United Kingdom one of the fastest-growing countries in the OECD.

Francois Mitterrand and Jacques Chirac have lowered the French rates, and in other European nations, the rates have also come down. It seems that the theory and practice of confiscatory taxation are on the wane worldwide. Certainly, in this country our 1980s experience shows that low and efficient forms of taxation may be essential to long-term economic growth.

The age of punitive taxation which began back in the Depression years of the 1930s, the age of steeply rising marginal tax rates, is dead. No serious student of tax policy thinks any longer that high tax rates are neutral in their impact on government revenues or the economy. Rather, the trends seem to indicate a greater acceptance of the idea that lowering tax rates, especially the high top rates, can actually produce more revenues, and enhance economic efficiency and well-being. □

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