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## **Do Taxes Matter?: The Impact of the Tax Reform Act of 1986**

by

**Joel Slemrod**  
University of Michigan

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**LEADING IN THOUGHT AND ACTION**

**Do Taxes Matter?: The Economic Impact of the Tax  
Reform Act of 1986**

**Joel Slemrod**

**Working Paper No. 90-1**

**DO TAXES MATTER?:  
THE ECONOMIC IMPACT OF THE TAX REFORM ACT OF 1986**

**Joel Slemrod  
The University of Michigan  
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**This paper is based on the proceedings of the Conference on the Economic Impact of Tax Reform, sponsored by the Office of Tax Policy Research of the University of Michigan, held in Ann Arbor on November 10-11, 1989. Helpful comments on an earlier draft were provided by Gerard Brannon and Fritz Scheuren.**



## **DO TAXES MATTER?: THE ECONOMIC IMPACT OF THE TAX REFORM ACT OF 1986**

**Joel Slemrod**

The Tax Reform Act of 1986 was signed into law by Ronald Reagan on October 22, 1986. All agreed at the time that it represented the most significant change in the U.S. income tax since its conversion to a broad-based tax during World War II. All did not, however, agree on its likely economic impact. Critics linked it to the "deindustrialization of America"<sup>1</sup> or, less extremely and more specifically, to a reduction in the capital stock of 10 to 15%, a GNP of 5% less than otherwise, and a reduction in the rate of technical progress as well as the competitiveness of U.S. business.<sup>2</sup> For the most part, supporters stated its expected achievements in more abstract terms, for example that it would "greatly improve the fairness of the tax system and remove major distortions from the economy."<sup>3</sup>

With three years of hindsight at least one thing is clear--the sky has not fallen. Contrary to the doomsayers, there are no signs yet of the deindustrialization of America. On the contrary, the last three years have seen a continuation of the country's longest peacetime economic expansion in history. The ratio of real nonresidential fixed investment to real GNP is steady (and was up strongly in 1988), the saving rate in 1989 is at its highest level since 1984, and the unemployment rate has continued its downward trend begun in 1984 and now stands at its lowest rate of the decade.

Despite the encouraging economic performance since 1986, as of this writing the spirit of tax reform is under legislative attack. The Bush administration has proposed to restore a preferential tax rate for long-term capital gains. The Democratic Congressional leadership has replied with a proposal to expand eligibility for IRA's and to pay for that by increasing the marginal tax rate for high-income taxpayers from 28% to 33%. Either change would move the tax system away from the principle of as broad a base as possible with as low rates as possible.

Before any such changes are enacted, it behooves us to carefully examine what the economic impact of tax reform has been. Three years of the post-reform period, and less than three years of data about the post-reform years, are hardly enough to tell a convincing story about

its impact. We cannot say for sure how the economy would have evolved in the absence of tax reform, so that isolating its effect is an imprecise exercise. But the policy process will not wait for our considered judgment on these issues. Moreover, it is valuable to set out the methodological and conceptual issues that must be grappled with in order to assess the impact of tax reform, a task that should be revisited as more data becomes available.

To make an initial assessment of the economic impact of tax reform, the Office of Tax Policy Research of the University of Michigan commissioned nine studies. Each of the first eight studies reviewed the expected impact of tax reform on an important aspect of the U.S. economy, carefully considered what the actual impact has been and, where the unexpected has happened, tried to reconcile theory and reality. The ninth study attempted to bring together the results and draw out the lessons for the future of tax reform.

These papers, presented at a conference held in Ann Arbor on November 10 and 11 of this year, together comprise the first systematic look at what the detailed impact of the Tax Reform Act of 1986 has been. This volume contains those papers, plus the comments of the discussants assigned to each paper and a summary of the general discussion that followed the presentation of each paper.

Before proceeding to a more detailed look at the results, it is worthwhile to recount the basic outlines of the tax reform. Its theme was to lower the statutory rates of tax and to recover the revenue thereby lost by broadening the tax base. By broadening the tax base in the direction of a more accurate measurement of income it was hoped that the differentials in taxation of different activities would be lessened--the playing field would be levelled--and the efficiency of the economy improved. The basic rate of corporate tax was reduced from 46% to 34%, accompanied by the elimination of the investment tax credit, a slight slowing of depreciation schedules, and the scrapping of several tax provisions that benefited certain specific sectors. On net these provisions were projected to raise an additional \$120 billion of corporate tax revenues in the five years after passage. On the individual side, the standard deduction and personal exemption allowance both increased significantly and tax rates were reduced, most dramatically at the top of the income

distribution, where the marginal rate fell from 50% to 28%. Some base broadening accompanied the decline in rates, including the full taxation of realized long-term capital gains, the elimination of the sales tax deduction, limits on passive losses, the abolition of the two-earner deduction, and limits on the deductibility of IRA contributions. All in all, the changes in the individual income tax were projected to reduce revenues by 7%. Taken together, the changes in the corporate and individual taxes were designed to be approximately revenue neutral.

During the debate about tax reform, its predicted impact on investment perhaps received the most attention. Most observers reasoned that the corporate rate cut did not offset the elimination of the investment tax credit and the longer depreciation lifetimes, leading to a higher effective tax rate on new investment. A declining rate of nonresidential investment was widely predicted. As the paper by Alan Auerbach and Kevin Hassett documents, it has not turned out that way. Real investment in equipment, the category affected by the loss of the investment tax credit, has been strong since 1986. While office, computing, and accounting machinery dominated the growth in 1986 and 1987, equipment investment generally was strong in 1988. Investment in structures has been weaker than expected in 1986-8, although total real nonresidential fixed investment as a fraction of real GNP has been about the same as in the 1980-5 period. Auerbach and Hassett conclude from the post-TRA86 performance of investment that tax policy may have been given too much prominence in past discussions of investment behavior.

If for domestic investment a large predicted impact of tax reform has not materialized, the reverse is true in the case of foreign direct investment (FDI). Although tax reform did not set out to materially change the tax incentives for FDI, the post-TRA86 period has seen dramatic changes in FDI. Inward FDI to the U.S. reached an all-time high of \$58.4 billion in 1988, continuing a secular increase that began in the late 1970's. Outward FDI also hit an all-time high of \$44.2 billion in 1987, a sharp turnaround from the early 1980's, but fell back to \$17.5 billion in 1988. However, the paper by Joel Slemrod argues that it is impossible to link conclusively the boom in FDI to changes in the tax system, both because the a priori net impact of the myriad changes is not clear and because one cannot, with less than three years of post-TRA86 data, sort out any tax effect

from other influences on FDI. Nevertheless, several aspects of recent FDI performance are consistent with the expected effect of TRA86 on incentives, including the strength of outward FDI to low-tax countries, and the increase in net transfers of debt abroad. For inward FDI, the predominance of Japanese and U.K. investment, the relative decline of debt transfers and the increased reported rate of return on investment are consistent with the changed incentives of the new tax provisions.

TRA86 had significant implications not only for the real decisions of firms, but also for their financial behavior and choice of legal status. The paper by Roger Gordon and Jeffrey MacKie-Mason argues that because TRA86 increased the tax cost of equity finance more than that of debt finance, debt-to-value ratios should have risen. This has in fact occurred, although to a lesser extent than they expected. Dividend payouts have increased as predicted, but surprisingly stock repurchases increased even more rapidly.

Because post-TRA86 the top individual tax rate lies below the corporate tax rate, there is a greater incentive for closely-held firms to organize as Subchapter S corporations and thereby avoid corporate-level taxation. In fact there was a massive surge in S corporation elections immediately following TRA86--about 375,000 filings in the first half of 1987, compared to an average six-month rate of 150,000 during the four previous years. Furthermore, preliminary data suggests that there may have been some movement of loss operations toward the more highly-taxed corporate sector, while more gain operations are being taxed at the lower personal rates.

The story for personal saving sounds much like the story for investment. Many expected that tax reform would reduce saving, arguing that the reduction in individual tax rates would be outweighed by the increase in capital gains taxation and the tightening of restrictions on IRA's. In fact, although the personal saving rate fell from 4.1 percent in 1986 to 1.8 percent in the second quarter of 1987, it has since rebounded to 5.6 percent in the first quarter of 1989. This is the highest rate of personal saving since 1984, though it still lies well below the U.S. rates of the 1970's and the rate of saving in most other developed countries.



The paper by Jonathan Skinner and Daniel Feenberg concludes that the marginal tax rate on saving was definitely reduced by TRA86, so that to the extent that saving is responsive to after-tax rates of return, it should have increased. The relatively high rate of saving since 1988 is thus consistent with this story. However, no clear empirical relationship between saving and after-tax rates of return has been apparent in recent decades, although the decade of the 1980's by itself supports such a relationship. The impact of TRA86 on the composition of saving is more clearly apparent, with taxpayers shifting a large fraction of their (no longer deductible) personal loans into (still deductible) home mortgage loans. There is little evidence, though, that the extraordinarily large volume of capital gains realizations in 1986 lead to increased spending. Most gains were apparently reinvested, and largely shifted to interest-earning accounts, at least for the time being.

Not all sectors have fared well in the post-TRA86 economy. Multifamily housing starts fell sharply from 669,500 in 1985 to 406,800 in 1988, following the lengthening of tax depreciation lifetimes for real estate, the elimination of preferential capital gains tax rates, and the restrictions on tax shelter investments. But recall that one of the objectives of tax reform was to reduce the role of the tax system and restore the role of the market in the allocation of resources. Rental housing was clearly tax favored before TRA86, and any move toward a more level playing field was bound to adversely affect this sector. As the paper by James Poterba points out, TRA86's reductions in marginal tax rates also increased the net cost of homeownership, holding nominal interest rates and inflation constant. But, because this cost rose relatively less than the equilibrium cost of rental housing, the incentives toward homeownership probably increased. However, no pronounced shift toward homeownership is yet discernible, although both single family housing starts and real house prices started to decline, albeit in a much smaller way than for multifamily starts, in 1987.

Of all the many sectors that opposed the tax reform movement, the nonprofit sector was one of the most vocal. Many of the prominent reform proposals limited or even eliminated the deductibility of charitable contributions, and the move toward lower marginal rates reduced the tax incentive to make donations even if those donations remained deductible. Ultimately TRA86 did reduce marginal rates but retained the deductibility of contributions, although it abandoned the

nonitemizer deduction which had been fully in place only for one year. Moreover, the value of untaxed appreciation of donated gifts was added to the base of the alternative minimum tax.

As the paper by Charles Clotfelter demonstrates, these changes dramatically increased the net-of-tax cost of making contributions, especially for high-income taxpayers, for whom it doubled. Economic models cited at the time forecast declines in giving on the order of 14 to 16 percent. In fact, aggregate giving has apparently increased each year since 1986, although contributions of appreciated assets to art museums and higher education, which traditionally rely on gifts from the wealthy, have declined since 1986. The distribution of contributions since 1986 has changed as expected, with a relative decline in gifts from those upper-income individuals that experienced the largest increases in the net-of-tax cost of making donations.

State and local governments were faced with a much changed environment after TRA86. For those states that based their definition of taxable income on the federal concept, the base broadening provided a windfall of extra revenues. However, the net cost to residents of state and local spending rose, because the deductibility of sales tax was eliminated and the federal tax rates against which other taxes could be deducted fell, and the number of itemizing taxpayers declined. The relative cost of revenue sources also changed, with the net cost of sales taxes rising relative to other revenue sources and the relative net cost of non-deductible revenue sources such as user fees decreasing.

Paul Courant and Edward Gramlich's investigation of the post-TRA86 fiscal behavior of state and local governments uncovers little evidence of a change in the mix of tax revenues responding to changes in the net costs. Reliance on user fees has declined and no clear shift away from sales taxes can be discerned in fiscal data. In fact, since 1987 twelve states have significantly increased their sales taxes, and a number had less significant increases. The authors conclude that the state and local response to price incentives has been smaller, and in some cases of an unexpected direction, than predicted. Many states did, though, increase the conformity between the state and federal income tax systems.

The movement toward broad-based low-rate systems became a worldwide phenomenon in the last half of the 1980's. Was TRA86 the catalyst for this rush to reform, or was it merely part of a trend inspired by a common intellectual spirit? After studying the tax reform movements of seven countries, John Whalley concludes that the picture of TRA86 as catalyst is too simplistic. The United Kingdom initiated its corporate tax reform, and Canada was seriously considering reform, before the debate over TRA86 began. Moreover, reform in some of the other countries had a quite different emphasis. For example, the Japanese reform emphasized a shift in the tax burden from income to sales tax, motivated in part by the perception that certain groups were unfairly evading their share of income tax. Nevertheless, the fear that lower tax rates in the U.S. would, if unimitated, lead to adverse economic consequences was clearly a motivating factor behind the Canadian and, to a lesser degree, the Japanese reduction in statutory corporation tax rates. However, in many other countries the direct economic impact of the U.S. tax system was apparently not a critical factor in the reforms. Whalley concludes that common intellectual influences were more important in the worldwide tax reform movement than the imperatives of an integrated world economy.

It is too early to discern the impact of tax reform in some important dimensions. Tax reform was designed to preserve the distribution of the tax burden across income groups (not considering the incidence of the increased corporation income tax). Whether this has been achieved, or whether unexpected behavioral responses of individuals have shifted the burden, must await the release of detailed tax data concerning the post-TRA86 years. One critical issue concerns capital gains. TRA86 could claim distributional neutrality at the top of the income distribution while sharply reducing the marginal tax rate from 50% to 28% only by at the same time eliminating the 60% exclusion of long-term capital gains, thus increasing their effective tax rate from 20% to 28%. Assuming a particular tax elasticity of capital gains realizations, these changes imply that the amount of revenue raised from the highest income classes would be only slightly reduced. If, however, the elasticity assumption turns out to be incorrect, the observed distribution of tax burden

may look quite different than was anticipated. In any event, one has to be particularly careful about assessing the incidence of a tax which is levied on a voluntary financial transaction.

Another widely trumpeted goal of tax reform was simplification of the tax system. The most talked-about aspect of simplification--going from fourteen to three tax brackets--was probably the least significant. After all, once taxable income is calculated it is a trivial exercise to use the tax tables to calculate tax liability, and one that doesn't much depend on the number of brackets. Other aspects of tax reform had a potentially larger impact on the complexity of the tax system. On the positive side, the increased standard deduction and limitations on itemized deductions implied that several million taxpayers no longer had to itemize deductions and millions more no longer had any tax liability, although many in this latter category continued to file returns in order to obtain the liberalized earned income credit. Lowered marginal tax rates reduced the incentive to seek out ways to reduce taxable income. The outright elimination of income averaging and the two-earner credit reduced the complexity of filing. Perhaps most importantly, taxing capital gains at the same rate as other income reduced the incentive to repackage income as capital gain and the reduced importance of the statutory dividing line between capital gain and ordinary income. More generally, less pronounced differences in the tax treatment of investments and flattened rate structure should reduce the need for, and incentive to, engage in complicated tax avoidance schemes. On the negative side, several aspects of the reform further complicated the tax system, including the employee benefit nondiscrimination rules, the limitations on passive losses, the expanded filing requirements for children and modifications in both the alternative minimum tax and the foreign tax credit. The net effect of these many changes is unclear because quantifying the resource cost of collecting taxes at a given point of time is a tricky business, and accurately measuring any change in that cost is even more difficult.<sup>4</sup> Furthermore, any time the tax law changes the complexity of the system increases until the changes are digested.

What lessons can we draw from these studies of the impact of tax reform? In his paper Henry Aaron offers several. First, TRA86 has had little apparent effect on the broad aggregates in which most economists are interested, and certainly less effect than had been previously expected.

This does not necessarily imply that tax effects are unimportant because in some cases TRA86's many provisions had offsetting incentive effects. Also taxpayers could expect the changes to be short-lived or simply take a while to adjust their behavior to the changed environment. Nevertheless, there is a strong sense that behavioral elasticities are weaker than previously believed, and thus the efficiency cost of taxation is smaller than had been thought. As the relative importance of efficiency costs fades, Aaron believes that more attention should be given to the distributional effects of the tax system. Moreover, current attempts to alter tax reform by restoring preferential treatment of capital gains or expanding eligibility for IRA's are likely to be largely ineffective in boosting saving and investment, and their strong distributional implications ought to be considered.

My own reading of the evidence about the economic response to tax reform suggests a hierarchy of responses. Standing at the top of the hierarchy, the most clearly responsive to tax incentives, is the timing of economic transactions.<sup>5</sup> In anticipation of the increase in the taxation of capital gains, realizations of long-term gains in excess of short-term losses jumped from \$165 billion in 1985 to \$325 billion in 1986, only to fall back to \$135 billion in 1987. Foreign direct investment into the U.S. was \$16.3 billion in the fourth quarter of 1986, more than double the rate of adjacent quarters, as investors raced to beat the expiration of tax rules favoring mergers and acquisitions. Donations of appreciated assets showed a large increase in 1986, followed by declines in 1987 and 1988, in response to the inclusion of otherwise untaxed appreciation in the alternative minimum tax base beginning in 1987. Firms accelerated the payment of dividends to shareholders, and decelerated the payment of dividends from foreign subsidiaries. In these and other instances, the opportunity to realize temporarily available tax savings obviously dominated the cost of accelerating transactions.

In the second tier of the hierarchy are financial and accounting responses. There is substantial evidence of the reshuffling of individuals' portfolios and the repackaging of firms' financial claims. Individuals were quick to change the form of much of their debt away from

personal loans once it lost its deductibility into still-deductible mortgage debt. Firms moved toward greater reliance on debt finance (although perhaps not as much as expected).

On the bottom of the hierarchy, where the least response is evident, are the real decisions of individuals and firms. Although its effective tax rate increased, nonresidential fixed investment has not declined relative to its trend and its strongest component in the post-TRA86 years, equipment, was the most penalized by the tax reform. Personal saving has exhibited no clear trend since 1986. One apparently clear real economic response is the decline in multifamily housing starts, although much of this drop may be related to the overbuilding of the early 1980's. This initial impression of little real response should be re-evaluated as further evidence becomes available. But the short-term response has in most cases been less dramatic than many economists had expected.

Henry Aaron counsels us to look beyond the efficiency costs of taxation to its impact on the distribution of welfare. The hierarchy of responses to tax systems suggests that we pay closer attention to aspects of the tax code which induce rewards to taxpayers for changing the timing of transactions or to repackaging their financial claims. Such opportunities are likely to be quickly exploited by taxpayers, costing the Treasury revenues and encouraging socially unproductive behavior. In this category I put preferential rates on income in the form of capital gains (and even more so temporarily low rates on capital gains) and IRA's.

Attention ought to be refocused on reducing the complexity of the tax system, an objective of tax reform that was honored more by its press than by its reality. The resource cost of collecting taxes is large<sup>6</sup> and may, if our estimates of the efficiency cost of taxation are to be revised downward, be the area where the most progress can be made.

What is the long-term viability of tax reform? Undoubtedly the passage of TRA86 in the first place surprised many historians of the tax law. Careful study of the history of tax reform, completed before the passage of TRA86, certainly leaves the reader with great pessimism about the likelihood of fundamental tax reform ever occurring.<sup>7</sup> Yet the fortuitous combination of a President committed to lowering tax rates, legislators committed to reform, and academics in the

right place at the right time overcame the political system's historical resistance to fundamental change in the tax system.<sup>8</sup>

Of course when over \$500 billion is at stake every year, forces for change of the income tax system will never be at rest. It may be, though, that a low-rate, minimal-preference tax system is somewhat self-perpetuating. With lower tax rates, there is a lower tax saving for any new preference which reduces taxable income by a dollar. Furthermore, the intellectual defence against proposed special allowances is strengthened when it can reasonably be argued that the tax base has a coherent conceptual basis (in this case, income).<sup>9</sup>

As of this writing, two lines of attack against TRA86 have met with some success. The first line concerns the areas in which TRA86 complicated the law, and areas where it failed to simplify enough. There is wide agreement that the non-discrimination rules for employee benefit plans, treatment of passive losses, the alternative minimum tax and the foreign tax credit, to name a few aspects of the new law, impose a severe compliance burden on taxpayers, with potentially adverse effects on compliance with the tax law. The benefit rules have already been substantially modified, and attention to the other areas is likely to come soon.

The second line of attack has been that TRA86 failed to provide enough encouragement to saving and investment. Proponents of this view have supported restoring preferential treatment of capital gains and expanded IRA's. But the evidence of the past three years should caution us that these measures may be more effective at inducing taxpayers to alter the timing of their asset sales and to reshuffle their portfolios than to significantly change their saving and investment patterns. One certain result is added complexity in the tax system.

To paraphrase from a poster I enjoy, tax reform is not a station we arrive at, it is a way of travelling. My fond hope is that these early lessons learned about the impact of the 1986 version of tax reform can contribute to a better understanding of this reform and the tax reforms of years to come.

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## FOOTNOTES

- <sup>1</sup> Writing about the Treasury Department's tax proposal of November 1984, Paul Craig Roberts (1984) said that if it were implemented, "the U.S. would be deindustrialized within a decade." Although much changed about the tax reform between November 1984 and October 1986, the key aspects of the corporate tax reforms that Roberts criticized--the replacement of ACRS with slower depreciation schedules and the abolition of the investment tax credit--remained.
- <sup>2</sup> These forecasts are taken from Summers (1987). The large macroeconomic models generally concluded that the near-term impact of tax reform would be negative. For example, the Washington University macro model (Prakken, 1986) forecast a sharp slowdown in economic activity, with business fixed investment off ten percent by 1989, and in 1993 off by 17% and the unemployment rate three percentage points higher than otherwise. Data resources forecast that the Senate Finance Committee version of tax reform, which quite guide similar to the bill that eventually became law, would lower GNP by 0.7% in the short run and a few tenths of a percentage point in the long run. Fixed investment was predicted to fall by over five percent in 1990, before recovering. See Brinner and Abraham (1986).
- <sup>3</sup> This quote is from Pechman (1987), p. 17.
- <sup>4</sup> Swingen and Long (1988) report on survey evidence that indicates there was an eight percent increase in return preparation costs between tax year 1986 and 1987. Because any change in the tax law is likely to increase compliance cost in the short run, one cannot be confident about the change in costs once the new law has been fully digested.
- <sup>5</sup> Here I purposely use the term economic transactions rather than economic activity. Recent econometric work (e.g., Hall, 1988), as well as the evidence in the paper from this conference by Skinner and Feenberg, suggest that the timing of consumption is not very sensitive to its relative cost, the after-tax rate of interest. Consumer expenditures, which include spending on durable goods, is undoubtedly more sensitive than the flow of consumption.
- <sup>6</sup> Slemrod and Sorum (1984) estimated that the compliance cost of the individual income tax in 1983 amounted to between \$17 and \$27 billion, or from five to seven percent of revenue raised.
- <sup>7</sup> See Witte (1985).
- <sup>8</sup> See Pechman (1987) for one view of how and why tax reform came to be.
- <sup>9</sup> For an elaboration of this view see Hulten and Klayman (1988).

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