

**2002 ERWIN N. GRISWOLD LECTURE BEFORE
THE AMERICAN COLLEGE OF TAX COUNSEL:
“THE DYNAMIC TAX ECONOMIST”**

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I. INTRODUCTION

It's really a pleasure to be here before this august group to deliver the 11th Annual Erwin N. Griswold Lecture. I am especially honored to be the first economist to deliver the lecture, after ten lawyers.

When Jerry Cohen informed me that the text of my lecture would come out in a publication called *The Tax Lawyer*, it occurred to me that the perfect title and topic for my speech would simply be “The Tax Economist,” allowing me to identify what I think the contribution of economics to the tax policy debate can be, what distinctive perspectives we bring to bear, and what distinctive toolkit we use to evaluate tax systems.

And then a better, even perfect, title occurred to me: “The Dynamic Tax Economist.” What do I mean by adding the word dynamic to the title? Those of you who know me, and probably by now those of you who have never met me before, understand that I couldn't be implying that I myself am particularly dynamic, in the sense of the dictionary definition of “having a forceful personality.”

No, my title refers to another of the dictionary definitions of dynamic: “related to the pattern of change or growth of an object or phenomenon.” These days the word dynamic figures in a prominent and important debate about how the Congress ought to do the scoring of the revenue implications of proposed changes in the tax system. It refers to dynamic as in “dynamic scoring,” the idea that, for budgeting purposes, the estimated revenue costs should reflect taxpayer response to tax policy, the effect of these responses on national income and its growth, and the feedback to the size of the tax base.

But, beyond this current debate about how to do revenue estimation, the behavioral response to taxation is at the core of the modern economics of taxation. The focus of the modern, which I date as starting about 1970, is its turning away from debates about equity, toward debates about the response of taxpayers to tax regimes, and the implications of these responses for the efficient functioning of the economy. This is really what dynamic means when dynamic scoring is mentioned. Dynamic is about the response of taxpayers. The time frame over which this response occurs is not central to the debate. It applies as much to firms immediately moving up their investment plans in response to a limited-time-only offer of partial expensing, as much as it applies to the gradual turnover of gas guzzling cars and SUVs due to the imposition of a higher gasoline tax.

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This will be the focus of my talk today: taxpayer response to a tax system. Close attention to this topic, I believe, is a distinctive characteristic of the economist's approach to taxation in contrast to all other perspectives. It underlies how we economists evaluate tax systems in terms of two of the criteria we tend to use: equity, meaning how the tax burden is assigned among citizens, and efficiency, meaning how the tax system affects the level and growth of the economy.

I'll speak tonight about three aspects of this issue. First, what do we know about taxpayer response and how do we know it? Second, how does this knowledge enter into our evaluation of alternative tax policies? Finally, how does taxpayer response relate to some of the important tax policy issues that face us today, such as should we have another tax cut, and how should we evaluate such a proposal—with dynamic scoring or not, with distributional tables or not?

As background, keep in mind that all tax systems have three aspects. By changing relative prices, they influence and can distort the allocation of resources in the economy. Second, they are instrumental in assigning the cost of government among the citizenry. Finally, a tax system involves a vast administrative bureaucracy and billions of taxpayer hours involved in collecting and enforcing the remittance of tax monies. These three aspects loosely correspond to the three classic criteria for evaluating tax systems: efficiency, equity, and simplicity. Although I am greatly interested in the tax collection and enforcement process, as well as in tax simplicity and how to achieve it, I will this evening put that topic to one side, and focus on efficiency and equity.

II. HOW DO TAXES AFFECT BEHAVIOR? HOW DO WE KNOW?

In order to understand both the efficiency and the equity implications of a tax system—and indeed to evaluate whether one tax system is better than another—one must assess how individuals and businesses respond to taxation. This is because, in most situations, the changes that taxes induce are symptoms of economic waste or, using economics jargon, inefficiency. In the absence of taxes, people and businesses react to prices that approximately reflect the true social costs and benefits of what they buy and sell, and taxes can turn prices from being pretty good signals of social cost and benefit into very bad ones. Just because in 1984 the after-tax reward to some real estate investments was high didn't mean that the social return was high for putting up these buildings with 60 percent occupancy—the so-called see-through buildings. The more such behavior taxes cause, the greater the misallocation of resources and waste they cause.

Moreover, the greater the behavioral response to taxes, the higher is the true cost of government use of resources. The true social cost of raising a dollar to build a bridge is almost certainly higher than one dollar because of the distortions that raising taxes imparts to the economy. But *how much* higher than one dollar depends on just how much socially wasteful behavior the extra dollar of taxes causes. Some argue that the true marginal cost—and therefore the appropriate hurdle against which to measure the benefits of a new bridge or a new tank—is as high as two dollars or more, and others say it is more like a dollar

thirty cents or less. Which it is makes a huge difference as to what level of infrastructure and other government consumption is appropriate, and the right answer depends on measuring the behavioral responses to taxation. The bigger the response, the larger is the true social cost of raising funds, and the smaller government should be.

The same is true for the social cost of redistribution. A more progressive tax system will ameliorate the inequality of after-tax income, but more progressivity requires higher marginal tax rates that provide bigger disincentives to earn more income. How big the economic cost of these disincentives is depends on the behavioral response to taxation. The bigger the response, the more costly is progressivity, and the less progressive our tax system should be.

How do we learn the answers to these questions? The two major and very different tax changes in the 1980s and assorted changes in the 1990s helped us learn (it's tough to assess the impact of a tax system that never changes!). So did the improved availability of tax return data, including panel data that follow the same taxpayers over many years, and powerful computers for data analysis.

What have we learned? My interpretation of the lessons from the 1980s and 1990s is that there is a clear hierarchy of categories of behavioral responses. At the top, the most responsive, is the timing of taxable activity. In the second tier, often quite responsive but not as much so as timing, are responses sometimes called avoidance—including income shifting, financial restructuring, change in the form of legal entity, “renaming” what you're already doing to obtain a more favorable tax treatment—as well as flat out evasion. At the bottom of the hierarchy, the least responsive in general, is the responsiveness of critical real economic variables such as labor supply, saving, and investment. There is no convincing evidence that either aggregate labor supply or saving responds in a significant way to taxes, and the evidence regarding business investment is mixed.

Although none of the key real variables responded markedly to these tax changes, there was clearly some kind of response. Perhaps most remarkably, after the Tax Reform Act of 1986 (TRA86) there was a strikingly large increase in the reported taxable income of those high-income taxpayers who were subject to the biggest drop in their marginal tax rate—from 50% in 1986 to 28% in 1988 when the act was fully phased in. This surge in reported taxable income was probably not a coincidence, even though income inequality had already been growing for 15 years or so. Other demand-side factors affecting inequality throughout the income distribution can explain much of the increase in high-income concentration until 1985, but they cannot adequately explain the post-TRA86 surge. The controversial questions about the post-1986 high-income surge are what aspects of TRA86 induced behavioral response—was it the rate cuts or the base broadening, including the anti-shelter rules?—and what kinds of behavioral response they induced. Evidence from the top tax rate increases of 1990 and 1993 have resulted in a lowering of estimates of the response of taxable income to tax rates—because no sustained *drop* in reported taxable income occurred—as has the enormous surge in income inequality since the mid-1990s that is

clearly unrelated to any tax structure change.

It turns out that much of the post-1986 increases in the reported taxable income of high-income households consisted of re-timing of income and particularly shifting of income—for example, from the corporate tax base to the individual tax base—and not income creation due to, for example, additional labor supply.

A. *Timing*

At the top of the hierarchy of behavioral responses is the effect of taxes on the timing of taxable activity. The classic example is the realization of capital gains. In the late 1970s econometric analysis of a single year of data obtained from individual tax returns suggested that corporate stock sales are quite sensitive to capital gains tax rates, and that their effect on the realization of capital gains is even stronger. But this research left open to what extent this was revealing that sales would just respond to a *temporarily* high or low capital gains tax rate, or whether it was revealing that in the long run the level of realized gains was sensitive to a high or low, but unchanging, tax rate. More recent studies using data following the same taxpayers over many years has clarified that the response to temporary changes in rates is much larger than the permanent response. Further evidence comes from analyses of the seasonal pattern in stock sales, which confirms the unusually heavy realization of capital losses in most Decembers, and the stunningly high amount of capital gain realizations in December of 1986 right before the effective tax rate was about to rise due to the elimination of the 60% exclusion rule.

A high timing elasticity has also been detected with respect to the exercise of stock options, foreign direct investment, and even marriages and births. More babies are born at the end of December than at the beginning of January, and the asymmetry is higher for those parents who would benefit most from another dependent exemption! At the possible final frontier of timing responses, examination of data from U.S. federal estate tax returns suggests that the timing of *death* is responsive to its tax consequences. This conclusion emerges from studying the temporal pattern of deaths of people wealthy enough to have taxable estates around the time of changes in the estate tax system—periods when living longer, or dying sooner, could significantly affect estate tax liability. There is evidence of a small death elasticity, although this may to some degree be an elasticity of the *reported* date of death. If the 2001 tax law changes endure, this hypothesis will be tested with the ideal natural experiment, due to the abolition of the estate tax for 2010, but for neither 2009 nor 2011. In one sense, such evidence is confirming what we already know: that some people will do anything for money.

B. *Renaming and Income Shifting*

We have also learned much about the behavioral response that takes the form of shifting income across tax bases and jurisdictions in search of a lower tax rate. Analysis of the patterns of corporate rates of return and labor income

receipts reveals income shifting between the corporation and personal income tax bases in response to their relative rates of tax. This behavior affects the interpretation of both reported corporate rates of return and changes in the concentration of personal income. If, after 1986, S corporations look more attractive from a tax standpoint, then the shift to S corporations can partly explain the decline in corporate tax collections and the increased reported personal income of affluent business owners; as before 1986 such income would appear in the data as corporate retained earnings and after 1986 it appears as income on Schedule E.

Other things equal, a multinational corporation would like its income to appear as income under the taxing jurisdiction of a low-tax country. Cross-border income shifting, like tax evasion, is not directly observable, but it can leave empirical tracks. Puerto Rico is a natural place to look because for many years the income of Puerto Rican affiliates of U.S. corporations was essentially untaxed by either Puerto Rico or the United States. This reduced the tax penalty on investment there, but it also made it attractive to shift reported taxable income from the U.S. parent corporation to the Puerto Rican affiliate. An econometric analysis of the joint decisions regarding investment and income shifting, estimated using firm-level data, indeed suggests that the income shifting advantages were the predominant reason for U.S. investment in Puerto Rico.

Income shifting is by no means limited to Puerto Rico. For large U.S. manufacturing firms, U.S. tax liability, as a fraction either of U.S. sales or U.S. assets, is related to the location of foreign subsidiaries in a way that is consistent with tax-motivated income shifting. Having a subsidiary in a tax haven, Ireland, or one of the "four dragon" Asian countries—all characterized by low tax rates—is associated with lower U.S. tax ratios. Having a subsidiary in a high tax region is associated with higher U.S. tax ratios. These results suggest that U.S. manufacturing companies shift income out of high tax countries into the U.S., and from the U.S. to low tax countries.

C. *Evasion*

Evasion is another response to the attempt to tax. The IRS has estimated that the income tax gap is about 15% of what should be paid. Evasion impacts the efficiency, equity, and simplicity of the tax system.

However, ascertaining the determinants of evasion and how it depends on the level and enforcement of taxes is hampered by the difficulty of measuring evasion, as well as the difficulty of identifying exactly why there is variation in policy parameters. If, for example, the probability of audit is higher in one region of the United States, might that just be because the IRS suspects that taxpayers there are more non-compliant? If so, it is very difficult to ascribe causation to the cross-state correlation between rates of evasion and enforcement levels.

One way around this problem is to design an experiment where the researcher controls the source of variation. Several years ago I participated in a field experiment done with the cooperation of the Minnesota Department of Revenue

that was designed to clarify the source of tax enforcement policy variation and study the effectiveness of alternative enforcement strategies. One group of randomly selected Minnesota taxpayers was informed by letter in January that the returns they were about to file would be "closely examined." Compared to a control group that did not receive this letter, low and middle-income taxpayers in the treatment group on average increased tax payments compared to the previous year, indicating the presence of noncompliance. The effect was much stronger for those with more opportunity to evade, *i.e.*, those with self-employment or farm income and who paid estimated tax. Surprisingly, however, the reported tax liability of the high-income treatment group who got the letter fell sharply relative to the control group, possibly because the letter signaled to them the beginning of a prolonged negotiation, of which the tax return was just the opening bid. By the way, two letters containing different normative appeals (*i.e.*, appeals to conscience and duty) had no significant impact on compliance behavior!

In the last couple of years I have been studying the estate tax (and not only to estimate the death elasticity!), which poses the classic tradeoff between equity and efficiency in its most extreme form. It is the most progressive by far of the major taxes the federal government levies, because the \$1,000,000 exemption means that only the largest 2% or so of estates are subject to any tax at all. But the base of the tax is, in effect, wealth accumulation, indisputably a key element in economic growth. If the estate tax deters wealth accumulation, this is a serious detriment. If it encourages avoidance, that is also a symptom of waste caused by the tax. But does it? Using estate tax return data from 1916 to 1996, one can investigate the impact of the estate tax on reported estates, which reflects the impact of the tax on both wealth accumulation and avoidance. The total amount of reported estates in a given year is generally negatively correlated with summary measures of the level of estate taxation, holding constant other influences. The analysis suggests that at the current rate of tax, the richest 0.5% of the population reports estates about 10% lower than otherwise, due to decreased wealth accumulation and increased avoidance.

D. *Does It Matter Whether the Response Is Real, Avoidance, or Timing?*

At first blush you may be tempted to conclude that "real" behavioral responses to taxation—like labor supply, saving, and investment—are more important than the others, and so we can rest easy that these behavioral responses do not seem to be so large. But this reasoning is faulty. On all the margins of choice, taxpayers will undertake behavior that reduces tax liability up to the point that the marginal cost equals the marginal tax saving. In the real behavior case, the cost is that peoples' consumption patterns or business investment plans are not what they would prefer, absent taxes. With avoidance, the cost may be expenditures on professional assistance. With evasion, the cost may be exposure to the uncertainty of an audit and any attendant penalties for detected evasion. With all due respect to those of you in the audience who make a living off of some of this avoidance, all of these costs represent a deadweight loss to the

economy. What you do is undoubtedly *privately* productive, but it is not *socially* productive.

The modern view is that it is responsiveness of *taxable income* as a whole to the income tax rate that captures all of the responses to taxation, and so it holds the promise of more accurately summarizing the marginal efficiency cost of taxation than any narrower measure of taxpayer response such as the labor supply elasticity. The promise, though, does come with problems and caveats. It must account for shifts across tax bases and time periods. For example, if we find that high corporation taxes induce shifting from the corporation to the individual income base, we cannot conclude from the high elasticity of corporate taxable income that the economic cost of taxing corporations is high, without taking account the increased individual tax revenues. Also, we need to keep in mind that in some cases the opportunities for tax avoidance and evasion may mitigate the real substitution response to taxation. For example, if the estate tax is so easily avoided, why would anyone bother to reduce saving in response, as well?

III. INCIDENCE AND DISTRIBUTION: WHY BEHAVIOR MATTERS

Recall that the second aspect of any tax system is how the burden of government is assigned among the country's citizens, or the equity criterion. Nearly a century ago, the then dean of American public finance, Edwin R. A. Seligman of Columbia University, remarked that "the history of modern taxation is the history of . . . class antagonisms." These days, class is a four (distinct) letter word, used only derisively to attack another political party's concern about the distributional implications of tax policy, as in "that's class warfare!" In less inflammatory language, the *distribution* of national income, and not just its total, matters. We may disagree about how to trade off total income against the distribution of total income—and in the end this involves values as well as economics—but because policy implicitly makes this tradeoff, we must face up to it, and not only by name calling and allusions to Karl Marx.

That the distribution of national income matters is important because collecting taxes need not cause any damage to incentives or have any efficiency cost—after all, lump-sum taxes such as poll taxes (whose amount does not depend on any action of the taxpayer) do not. Taxes have efficiency costs if and only if tax liability depends on some indicator of affluence; that is, if they feature positive marginal tax rates. And marginal tax rates must be higher when the degree of progressivity, or redistribution, that the tax system tries to achieve is higher. This means that there is an inescapable tradeoff between the progressivity of the tax burden and the economic costs a tax system engenders.

The question of progressivity brings up the point that, although both the real behavioral responses and avoidance or evasion are symptoms of inefficiency, there is one important difference between the real response component and the avoidance/evasion component—and that is that the latter can be influenced by policy. For example, the amount of additional evasion precipitated by a tax increase depends on the enforcement regime in place. Ignoring the fact that

avoidance or evasion can be controlled—albeit at some cost—can lead to unwarranted conclusions about the appropriate degree of tax rate progressivity. In particular, one might be tempted into thinking that progressivity is too high, when in fact the truth is that enforcement is too low.

To economists, there is a question that must precede discussions of equity, which is how to determine how any tax system actually makes that assignment. The basic issue is that one can't just read the Code to discover how the burden of a tax is distributed. This is because, in the long run, which side of a market the tax is imposed on will be irrelevant—this is perhaps most obvious when we consider the superficially equal but irrelevant sharing of the tax burden suggested by the equal payroll tax on employers and employees.

You also can't just read the Code because the burden of a tax might be shifted through its effect on relative prices. It turns out that understanding how taxpayers react to tax systems is also essential to getting the answer to this critical question right, because the right answer to this question depends on the relative behavioral responsiveness of the affected parties. The principle is that the more scope—that is, the more attractive options there are—one has for behavioral responses that reduce one's tax liability, the less likely one is to bear the burden of the tax. So, to determine the how the burden of a tax is actually distributed, a dynamic tax economist is required.

IV. HOW DO TAX CHANGES IMPROVE THE ECONOMY?

Now I want to turn to the policy implications of what we've learned over the last two or three decades about the behavioral response to taxation and ask the question: how can tax changes improve the economy? There are really only three ways.

The first way is by reducing structural inefficiencies—minimizing the ways the tax system misallocates resources by channeling resources to activities that are tax-favored but not socially more productive. Some such initiatives, correctly called tax reform, are fairly non-controversial among economists, such as leveling the playing field on investments, a primary focus of TRA86. Another slightly more controversial example is eliminating double (and, I might add, zero!) taxation of corporate investments. Perhaps the most controversial of all is moving from an income tax to a consumption tax.

The second way for a tax change to improve the economy is by moving along the equity-efficiency tradeoff. Distortions are caused by high marginal tax rates. Recall that revenue raised with lump-sum taxes—taxes such as poll taxes that are not tied to any measure of economic activity—causes no distortion to the economy. But having Bill Gates owe the same tax as a single mother earning \$15,000 a year would strike most—maybe even all—Americans as fundamentally inequitable. The problem is that progressivity of the assignment of tax burden is achieved by having tax burden rise with affluence, which requires high marginal tax rates. As Paul Krugman put it so succinctly in his book *Fuzzy Math*, “when your goal is to increase the incentive to *become* rich, it's very hard to avoid also giving benefits to those who already *are* rich.” By reducing

progressivity, we could reduce the economic drag imposed by taxation.

You may have noticed that I haven't yet put tax cuts on my list of tax changes that can help the economy. Why not? One reason is that, in my far-from-the-Beltway ivory tower there is a clear conceptual distinction between how we raise a given amount of taxes, and what that level of taxes ought to be.

However, in the political inside-the-Beltway world, these and other aspects of tax and economic policy are inextricably linked. Probably the most important example of this is the use of tax cuts as a tactical weapon in the battle over the size of government. The idea is to lower taxes and hope that politicians' (and voters') fear of deficits, and dislike of tax increases, will force expenditures down. Because the ultimate objective of this tactic is to limit spending, this is a good idea only if the benefits of this spending fall short of the cost. So the real issue here is not the tax system *per se*, but the proper size of government. If tax cuts are just a way of putting pressure on expenditure cuts, they are certainly politically clever because they allow proponents to not have to specify *exactly what* cuts in spending they prefer, and in a later (or immediate) fiscal crisis to call for across-the-board (or across-the-board exempting the military and entitlements) cuts. The appropriate political response to this tactic is to oppose tax cuts because of what spending cuts they will inevitably imply: cuts in health research and benefits, education, transportation, job training and support for low-income households. This is the tradeoff.

V. DEFICITS

To the extent that the tax-cut-as-Trojan-Horse-for-spending cuts tactic is not successful, tax cuts result in bigger deficits. What's wrong with deficits? For one thing, they probably reduce national saving, which most economists believe to be crucial for long-term prosperity. I believe that the effect of deficits on interest rates, a focus now called Rubinomics, is a red herring. First of all, any interest rate effect may be difficult to identify amid all the other reasons interest rates go up and down. Second, even if deficits have no effect on interest rates, as they certainly would not in a small open economy, deficits are certainly not inconsequential.

Whether or not interest rates go up in response to current or anticipated deficits, if there is little change in the path of planned spending, a tax cut *now* must then imply tax increases *later*. This inescapable "pay-me-now-or-pay-me-later" logic undercuts one common argument for a tax cut: that it will increase incentives to work, save, invest, and innovate. This is just loose language unless other aspects of the fiscal policy are specified. If lower taxes now imply there will be higher taxes later, then any increase in incentives now will be offset, and probably outweighed, by an increase in *disincentives* later—when the tax increases materialize. One test for the cogency of this kind of argument for tax cuts is whether it applies equally well to cutting taxes to *zero*. Collecting no taxes at all would, according to the argument's logic, in the short run be a great boon to incentives—and would even save the IRS budget! But the need to ultimately pay for what government does would certainly mean that the long-

term cost would exceed any short-term benefit.

VI. BUSINESS CYCLES

Earlier I said there were three ways that tax changes could increase national income. One way is to rationalize the tax structure, and another way is to reduce progressivity. The third way is tax cuts as counter-cyclical fiscal policy. Tax policy can help the economy in the short term if it can increase demand and thereby reduce excess capacity. Somehow lost in the current debate is the fact that in theory, though, tax cuts and spending increases are about as effective as one another in stimulating the economy.

I imagine that the blurring of tax policy issues must be frustrating not only to tax economists but also to the macroeconomists who study business cycles, because debates about counter-cyclical policy also reflect extraneous issues. For example, it is not a coincidence that liberal economists tend to think that the best counter-cyclical policy is either tax cuts for low-income households or social spending directed to the same folks. The support for this notion has, by the way, been undercut by evidence from the 2001 tax rebate program showing that the self-reported propensity to spend the rebate was no larger for low-income households than for any others. Nor is it a coincidence that conservative economists generally think that the best stimulus is a tax cut designed to stimulate saving and investment, and maybe just investment in the stock market. It is a troubling fact for the aspiration of economics to be a hard science that our values about equity end up being so correlated with our beliefs about what kind of fiscal, or tax, policy works best for the economy. The underlying and generally unspoken concern is that these alternative stimulus plans benefit different people and have different implications for the long-term level of government spending. These things matter, to be sure, but they have nothing to do with which is the best short-term economic stimulus. After all, tax cuts are not just policy instruments to stimulate an abstraction called the U.S. economy; they are also real money in the hands of the real people that constitute the economy, and right now some of these people could use a few hundred dollars a lot more than others.

The truth is that these days most economists are not very enamored of any kind of short-term fiscal policy—be it tax credits targeted to the poor, tax cuts aimed at the affluent, or expenditure increases. In spite of this, the ubiquity of such policies continues. I suspect that there are at least two reasons for this. When the economy is going well, governments are quick to claim credit, whether their policies had anything to do with the good times or not. Then, when bad times roll around, voters naturally look to government for another dose of the apparently effective fiscal medicine, and no administration, and especially this one, wants to be seen as uninterested in the economy. Whether the doctor has effective medicine or not, something must be prescribed.

VII. DYNAMIC SCORING

I want to close by talking a bit about dynamic scoring. The idea is that, in doing budget projections, the revenue estimators at the Congressional Budget

Office and the Joint Committee on Taxation should be allowed to account for the behavioral response to taxations. The Budget Act of 1974 assigns to CBO the task of making baseline projections of revenues and outlays, and of estimating the budget effects of the spending proposals reported by committees. It assigns to the JCT the task of preparing estimates for most revenue legislation. The two groups coordinate their efforts on estimates of complex pieces of legislation that affect both revenues and outlays. This process is designed to provide Congress with the information it needs to evaluate budgetary proposals independently. Since 1975, these estimates have also been used to assess whether a bill will breach the limits in the budget resolution. Since the Budget Act of 1990, Congress has also used these estimates to monitor compliance with discretionary spending caps and with pay-as-you-go requirements for legislation that affects revenues of mandatory spending.

Under current practice both the CBO and the JCT already incorporate into their revenue estimates a wide variety of behavioral changes in response to economic incentives. In his May, 2002 testimony to the House Budget Committee about dynamic scoring, outgoing CBO Director Dan Crippen cited two examples of the CBO methodology. He first said that, in doing a revenue estimate of an increase in the capital gains tax, the CBO accounts for the fact that this will accelerate the realization of gains to avoid the higher tax rate. Note that this is a timing response. He then said that, in doing cost estimates of a change in marginal income tax rates, CBO includes the effect on the tax base that comes from re-characterizing compensation from taxable wages and salaries to nontaxable fringe benefits. Note that this is a renaming effect.

What is *not* now part of revenue scoring is any macroeconomic effect of proposed legislation and the budgetary implications of those effects. In other words, gross domestic product is not allowed to be affected by tax policy in calculating a revenue estimate. The main macroeconomic effects that current procedures leave out of revenue estimates are those that affect the level of production through labor supply and saving. So what is left out are those responses on the lowest rung of the hierarchy of behavioral responses, the ones that I believe are likely to be the least responsive to taxes, and therefore will cause the least error in revenue estimates if ignored.

There are two main arguments for dynamic scoring. Argument one is that it is better to have an imprecisely right answer that recognizes behavioral responses than a precisely wrong answer; the precisely wrong answer being that tax cuts or changes have absolutely *no* effect on the macro economy. Argument number two is that non-dynamic, or static, scoring, biases decision-making toward big, indeed bloated, government because it overestimates the revenue cost of tax cuts and underestimates the revenue gain from tax increases.

The principal arguments against dynamic scoring are that (1) because of the uncertainty about the true impact, it would politicize the revenue scoring process and threaten its integrity, (2) it would bias the process toward fiscally irresponsible outcomes, and (3) because it is infeasible to do for all proposals, it would force proposals to be big if only big proposals are dynamically scored, and force

proposals to be tax expenditure programs rather than regular expenditure programs, if only tax proposals are dynamically scored.

Let me speak only to the economics of this issue, and put the politics aside. The plain economics is that cutting taxes without cutting expenditures is not a free ride. A plan to cut taxes is not a plan to spend less of the taxpayers' money; instead, it is a plan to put off assigning to our citizens the burden of that spending. One dynamic effect that is indisputable is that large, persistent budget deficits are unsustainable. Thus, a proper dynamic scoring of a tax cut that is not offset elsewhere in the budget should show it eventually having a negative effect on the economy. If it does not recognize this, dynamic scoring can obfuscate the nature of the choices we face, rather than improve the accuracy of the tradeoffs we face.

Thus, my view on dynamic scoring depends on what kind of tax change is being scored. For a base-broadening, rate-reducing tax reform like TRA86, or a restructuring of corporation taxation, I am not alarmed that the CBO and the JCT think hard about the behavioral response and the potential economic benefits to the macro economy, and incorporate their conclusions in the revenue estimate. For a plain vanilla tax cut, I *am* alarmed, because of the possibility of offering a free lunch that is only an illusion.

We also need to keep in mind the connection between the debate on dynamic scoring and the debate about whether the government should produce distributional tables that estimate how, for example, the benefits of a tax cut accrue to people of different income classes. Distributional analysis faces the same kind of daunting conceptual and data problems that apply to estimating behavioral response and, as I suggested earlier, the two issues are in fact intimately related. Some observers, such as Michael Graetz, have suggested that the JCT and other agencies ought to get out of the business of producing distributional tables because they, in his words, produce an "illusion of precision." So, of course, does any single revenue estimate, dynamic or not. The two issues are not, though, entirely analogous. For one thing, the JCT *has* to do revenue estimates, but it doesn't have to do distributional analyses.

There is another reason to produce careful distributional analysis. The reason is that reducing progressivity is one way to increase national income, and if *that* is what makes a tax proposal good for the economy, the political process will be well served if that tradeoff is made transparent. Only with carefully done distributional tables can the essential tradeoff between equity and efficiency enter the public debate.

VIII. CONCLUSION

At the beginning of the Reagan administration, one of its prominent economists proclaimed that "from now on, tax policy *is* economic policy." This has proven to be a very prescient remark, because over the last two decades tax policy has probably been the most important instrument for expressing our national economic priorities. Right now the administration has proposed further income tax cuts in the face of an impending war, and is talking about reining in

or freezing non-entitlement, non-homeland-security domestic expenditures. When I was learning economics, this kind of choice was called guns versus butter. But that characterization is too simple. With a better, more efficient, tax system, we can have more guns *and* butter. But there are real choices expressed by tax policy, as well. By putting off assigning the tax burden, we are choosing between three things: guns, butter today, and butter for our children and grandchildren. By granting affluent Americans tax cuts and freezing domestic spending, we are choosing between guns, butter and cappuccino.

If economists do their job well, they can contribute to this debate about national priorities by accurately quantifying the tradeoffs among these objectives. Economics cannot, though, identify the right choice. An important part of the toolkit of the modern tax economist, the dynamic tax economist, is the means to measure the behavioral response to taxation, which is critical to getting these tradeoffs right. The responsible dynamic tax economist also recognizes that there is no such thing as a free lunch.

