Dynamic Analysis of Tax Reform

Testimony to the U.S. House of Representatives
Committee on Ways and Means,
Subcommittee on Select Revenue Measures

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Introduction

Chairman Tiberi, Ranking Member Neal and members of the Committee, I am pleased to have the opportunity to appear today. In this testimony, I wish to make three major points:

- The economic impacts of tax reforms are extremely important. The principle of dynamic scoring is a good one that would potentially bring into the process greater information regarding beneficial tax policies,

- Dynamic scoring is especially important for comprehensive tax reform proposals that have the potential to significantly alter the growth outlook for the U.S. economy, and

- The American Action Forum's analysis of the Ways and Means Committee ("the Committee") tax reform proposals indicated it would translate into roughly a 0.5 percentage point increase in trend growth or about 500,000 jobs annually in the near term. In addition, it could contribute up to $1.5 trillion in deficit reduction.

I will pursue each in additional detail.

Dynamic Scoring is Good Science

Budget "scores" are estimates of the change in the federal unified budget that would result from the passage of specific statutory language. Under current practice, the budgetary effects of all proposals are measured relative to a single, fixed baseline outlook for the budget, which is, in turn, built upon a projection for the United States economy. A key feature of scoring is that in evaluating legislation, the aggregate amount of economic activity – total production and income – is assumed to be unchanged from its baseline values. That is, the proposed legislation is assumed to have no effect on the macro economy and hence there is no accounting for potential feedback from changes in the macro economy to the budget.

It is this feature that has led some observers to refer to current scoring procedures as "static." Unfortunately, this label has caused certain critics to mistakenly conclude that current procedures do not recognize any of the incentive effects of legislation; i.e., that firms, workers, investors, and households continue their economic lives as if nothing had changed. Nothing could be further from the truth.

For example, during my tenure at the Congressional Budget Office (CBO) the CBO scored the impact of the Medicare Modernization Act (MMA). To do so, the staff necessarily had to incorporate the decision of firms to offer insurance contracts for the cost of outpatient pharmaceuticals and bid for customers, the willingness of seniors to purchase such insurance, changes in the amount of drugs prescribed and purchased, take-up of low-income subsidies, and myriad other decisions by households, firms, and governments. However, in keeping with current practice, the overall level of gross domestic product and national income was assumed to be unchanged.

Dynamic scoring for tax reform proposals by the Committee would expand the range of economic impacts to include the pace of economic growth – that is, it would involve explicitly estimating the change in the aggregate level of economic output and income, and incorporating estimates of any second-round effects of these changes on budget aggregates. This has some desirable features. In estimating the impact of the legislation, analysts would (a) consider the direct impacts on program costs and tax receipts; (b) evaluate the effects on incentives to work, save, invest, legally or illegally avoid paying taxes, and generally conduct economic affairs; (c) estimate the resulting change in the overall level of economic activity; (d) compute the impact of this higher or lower level of economic activity on program costs and tax receipts; and (e) calculate the net impact of the legislation on the unified budget. The key difference is step (d), which is in turn built upon (c).

A virtue of dynamic scoring is that it extends analysis of tax policy to include economic policy dimensions. Specifically, dynamic scoring requires that analysts incorporate into their evaluation of legislation all of the economic feedbacks at the individual, household, firm, and national level. For this reason, it has the potential to distinguish between those policies that are equal in their budget cost, but very different in their overall economic incentives. Indeed, one of the most attractive aspects of dynamic scoring is its promise of allowing policymakers to distinguish between economically efficient tax policies that promote growth, and those that work to reduce the living standards of future generations.

The federal government has only dipped its toe into the waters of dynamic scoring. The CBO has undertaken dynamic scoring as part of its analysis of the President's annual budget submission since 2003, and the Joint Committee on Taxation did a study of the dividend and capital gains tax reduction in 2003. Nevertheless, for many years private research groups and think tanks have performed such analyses. However, those analyses typically focused more on the economic effects than the budgetary implications. In this sense we have seen dynamic scoring of major policy proposals already, but on a somewhat *ad hoc* basis.

For purposes of the Committee, a more systematic approach is desirable. While dynamic scoring is better suited to evaluate pro-growth tax reforms, it is still *scoring*. That is, the basic mission remains to rank competing proposals in a systematic fashion so that policymakers can identify which proposals are better or

worse from a growth and budget perspective. Accordingly, it would be useful for the Committee to make the decisions necessary to implement dynamic scoring as a regular part of its deliberations.

To be consistent and effective, the Committee will have to address four important areas.

Time. The scale of the analysis involved in preparing baseline budget projections points to the first problem with wholesale adoption of dynamic scoring: time. It is inevitable that statutory language continues to evolve throughout the legislative process: committee deliberation and reporting, floor amendments and votes, and conference committee negotiations. Often there is a need for very quick and timely scoring information. The scale of a dynamic scoring effort may be in conflict with this need.

Adopting a Single Approach for Estimates. A practical difficulty with dynamic scoring has been the absence of a single, consensus approach to the estimates. The attraction of dynamic scoring is its ability to reveal the impact of legislation on economic growth. However, this impact depends crucially on the overall foresightedness of U.S. households and firms. To take an extreme case, imagine legislation that cuts all marginal tax rates by five percentage points, with the cut to take effect five years from now, but sunset ten years in the future. If people are extremely myopic, this policy has no impact on incentives to work, save or invest and there is no dynamic feedback. If they are moderately forward-looking, they may anticipate lower taxes and respond to these incentives. If they are even more forward-looking, they will recognize both the tax reduction and the subsequent rise. As a result, they will work especially hard during the intervening years – yielding a larger increase in output, incomes, and taxes – with a sharper decline when taxes rise again.

One approach to this problem, exemplified by the CBO's macroeconomic analysis of the president's budget proposals, is to provide a variety of estimates, each corresponding to a different degree of foresight. However, the Committee scoring process requires a single set of estimates. Thus, at the outset of its work it is necessary that agreement be reached on the approach to be employed regarding foresightedness, the pace of international capital flows, saving responses of households and firms, and so forth. Choosing a single approach would require resolution of some very knotty technical and philosophical issues.

Balancing the Budget. The example sketched above highlights another issue in the conduct of dynamic scoring: the need for an "offsetting policy." Over the long-term, if individuals have foresight, then government debt (relative to the economy) must stabilize. Legislative proposals that upset this requirement by increasing spending or reducing taxes (at least relative to their impact on economic growth) will produce debt that will grow explosively. Similarly, spending cuts or tax increases (relative to their impact on the economy) will cause debt to spiral down. Since the government

can neither borrow nor save unboundedly large amounts, it is necessary to put a stop to either spiral by introducing an offsetting budget policy at some point in the future.

The choice of offsetting policy – spending increases or decreases and the pace at which they take place, tax reductions or increases and their timing, or some combination of these – will have differential effects on the behavior of individuals and firms and influence the score. Since a primary objective of scoring is to treat all legislative proposals equally, it will be necessary to pick a single type of offsetting policy and use it for all proposals.

An equally important – but often overlooked – aspect of this problem is ***getting the debt stabilized to begin the analysis***. Some approaches to dynamic scoring, particularly forward-looking growth approaches, simply will not work (i.e., the computer algorithms will not function) when the government budget is on an explosive debt trajectory. The federal budget ***is*** on such a trajectory. Thus, even to begin the work of analyzing tax reform it would be necessary to assume an answer to the basic task facing the Committee: how can the debt be stabilized?

Supply-side versus Demand-side Dynamics. Another challenge in implementing dynamic scoring is the degree to which the score reflects only supply-side growth, or also includes demand-side cyclical influences. Broadly speaking, economies grow in one of two ways. Supply-side growth occurs when there is an increase in the capacity to produce goods and services though the addition of greater labor supply (labor force participation, hours worked, higher effort per hour, greater skills per worker, better efficiency in the use of labor effort and skills, and so forth), greater physical capital (more or better equipment, software, buildings, and so forth) and improved technical prowess (new technologies or superior organization and management). These responses are at the heart of pro-growth tax policies.

Demand-side growth (or contraction) reflects business cycle fluctuations and the extent to which existing labor supply, capital, and technical prowess are utilized. Obviously, these are also at the center of attention for the Committee in the current economic setting. The attention paid to monetary and other stabilization policies is clear tribute to the fact that recessions are costly and faster recoveries are desirable.

As noted above, the Committee will need to settle on a single way of conducting its dynamic scoring. In light of the need for growth of both types to be incorporated into the analysis, it will require adding business-cycle considerations to growth-style modeling approaches. Conventional approaches to these problems have kept these responses separate, so the staffs will be forced to develop a feasible, if *ad hoc*, manner of merging the two approaches. This work should begin immediately.

Finally, the ultimate size, direction, and character of demand-side effects of fiscal policy changes depend as well upon the assumed path of monetary policy. In a

manner similar to offsetting budget policies, it would be necessary to make assumptions regarding the response of monetary policy to the legislative changes.

Dynamic Scoring Is Especially Important for Comprehensive Tax Reform

Tax reform is the simultaneous reduction in marginal tax rates and broadening of the tax base, with the policy objective of having decisions to work, save, innovate, invest, and other economic choices less influenced by tax considerations. In the process, economic resources – labor, skills, capital, technologies, etc. – are put to more productive uses. Put differently, a tax reform is *only* a success if it generates growth.

A successful tax reform might achieve a one-time growth dividend by improving the sectoral allocation of capital, or other static gains in efficiency. A really good tax reform will increase the pace of investment and otherwise incentivize good long-run growth. Only though dynamic scoring will the budgetary and economy objectives be analyzed simultaneously.

It is important to get the magnitudes associated with success in perspective. Most legislative proposals don't have enough overall "bang" to generate much dynamics. Of course, some have superior incentive effects – a big "bang for the buck." However, even the dynamics of these proposals are not likely to look very large. Over the period from 1820 to 1998, output per capita in the United States grew an average of 0.4 percentage points faster than in the United Kingdom (1.74 versus 1.35 percent per year). Thus, 0.4 percentage points per year if maintained long enough is a big supply-side growth-effect. Big enough to transform the global economic order! But a superior tax policy that generates such a permanent increase in growth will have only modest impacts over the first 10 years.

AAF's Analysis of the Ways and Means Tax Reform Proposal

The AAF analysis begins by examining the major elements of the current tax code and how those elements interact with economy. We then identify how the Tax Reform Act would change those tax elements and by extension those economic interactions. The AAF analysis assesses those interactions on the basis of the tax literature, rather than a model, but the conclusions remain consistent, both directionally and in terms of magnitudes, with many other extant analyses.

Essential to AAF's assessment of the macroeconomic effects of the Tax Reform Act is evaluating the distortions income taxes create by decreasing the effective returns from labor, thus disincentivizing work. As people work less, the economy grows more slowly than it otherwise would. Income taxes have other secondary effects as well, such as decreasing consumption, reducing investment, and incentivizing

movement of compensation into tax-free benefits. Much of the academic literature on the effect of income taxes tends to take a broad approach that focuses on how income taxes affect overall economic growth and output. Other literature focuses on the effect taxes have on a specific aspect of the economy. The body of this research details the significant impact that the income tax system can have on the economy generally, and the channels through which those impacts are made.[1] The AAF analysis reflects the conclusion that clearly high tax rates offer disincentives to supply labor, discourage entrepreneurialism, and harm the economy broadly. Any tax reform effort that minimizes these effects would offer a pro-growth alternative to the current code.

While there is a vast body of economic literature, indeed far beyond that cited here, that addresses how key elements of the tax system interact with aspects of the economy such as rates and investment incentives, few offer credible simulations of fundamental tax reform.

An important step in this area was made by highly respected economists David Altig, Alan Auerbach, Laurence Kotlikoff, Kent A. Smetters, and Jan Walliser, who simulated multiple tax reforms. They found that GDP could increase by as much as 11 percent as a result of tax reform.[2]

The highest growth rate was associated with a consumption-based tax system that avoided double-taxing the return to saving and investment, which while contemplated in past reform efforts, is not currently under consideration by the Congress.

The study also simulated a "clean," revenue-neutral income tax that would eliminate all deductions, loopholes, *etc.*; and lower the rate to a single low rate. According to their study, this reform raised GDP by 5.1 percent over ten years. While this stylistic reform is likely more biased towards growth than the Committee proposal, it does provide an upper bound for growth assumptions associated with any revenue

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[1] See: Fuchs, Victor R., Alan B. Krueger, and James M. Poterba, "Economists' Views about Parameters, Values, and Policy: Survey Results in Labor and Public Finance." Journal of Economic Literature 36(3) (1995): 1387-1425. Feldstein, Martin, "The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the 1986 Tax Reform Act." Journal of Political Economy, June 1995, (103:3), pp 551-72. Carroll, Robert, Douglas Holtz-Eakin, Mark Rider and Harvey S. Rosen, "Income taxes and entrepreneurs' use of labor." Journal of Labor Economics 18(2) (2000):324-351. Prescott, Edward C., "Why do Americans Work So Much More Than Europeans." Federal Reserve Bank of Minneapolis July 2004. Skinner, Jonathan , and Eric Engen. "Taxation and Economic Growth." National Tax Journal 49.4 (1996): 617-42. Romer, Christina D., and David H. Romer, "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks." National Bureau of Economic Research NBER Working Paper No. 13264 July 2007 Web. http://www.nber.org/papers/w13264.

[2] Altig, David, Alan J. Auerbach, Laurence J. Kotlikoff, Kent A. Smetters and Jan Walliser, "Simulating Fundamental Tax Reform in the United States." *American Economic Review, Vol. 91, No. 3* (2001), pp. 574-595

neutral, comprehensive tax reform. It is this analysis that provides the fundamental underpinnings of AAF's estimate of the macroeconomic effects of the Tax Reform Act.

A 5.1 percent long term increase — say 10 years in the future — in GDP would roughly translate into a 0.5 percentage point increase in trend growth. This increase would amount to about 500,000 jobs annually in the near term, based on estimates previously utilized by the Administration.[3] A growth effect that mimicked that observed after the Tax Reform Act of 1986 would see a corresponding increase of 100,000 jobs in the near term. Of course, the size of the employment effects would diminish over time as the economy approaches full employment.

Such an improvement in trend growth would also improve the budget outlook. Deficit savings could be used to pay down the debt, contribute to further rate reduction or some combination of the two. According to the CBO, a 0.1 percentage point annual increase in GDP growth would improve the 10-year deficit by $311 billion.[4] Accordingly, a 5-fold improvement would provide $1.5 trillion in deficit savings.

Thank you for the opportunity to appear today. I look forward to answering any questions the Committee may have.

[3] Romer, Christina, Jared Bernstein, "The Job Impact of the American Recovery and Reinvestment Plan." Politico Council of Economic Advisers and Office of the Vice President-Elect January 2009 Web. http://www.politico.com/static/PPM116_obamadoc.html

[4] Congressional Budget Office, "The Budget and Economic Outlook: 2014 to 2024." Congressional Budget Office, February 2014, Web. http://www.cbo.gov/publication/45010