

**HOW BUDGETARY CHOICES AFFECT
WORK, SAVING, AND GROWTH: THE
REAL PURPOSE OF DYNAMIC ESTIMATING**

HEARING

BEFORE THE

**COMMITTEE ON THE BUDGET
HOUSE OF REPRESENTATIVES**

ONE HUNDRED NINTH CONGRESS

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CONTENTS

	Page
Hearing held in Washington, DC, September 13, 2006	1
Statement of:	
Hon. Ander Crenshaw, acting chairman, Committee on the Budget	1
Douglas J. Holtz-Eakin, director, Maurice R. Greenberg Center for Geoeconomic Studies, Council on Foreign Relations	5
John W. Diamond, fellow in tax policy, James A. Baker III Institute for Public Policy	12
Leonard E. Burman, senior fellow, Urban Institute	17
Prepared statement of:	
Mr. Crenshaw	3
Mr. Holtz-Eakin	9
Mr. Diamond	15
Mr. Burman	19

HOW BUDGETARY CHOICES AFFECT WORK, SAVING, AND GROWTH: THE REAL PURPOSE OF DYNAMIC ESTIMATING

WEDNESDAY, SEPTEMBER 13, 2006

HOUSE OF REPRESENTATIVES,
COMMITTEE ON THE BUDGET,
Washington, DC.

The committee met, pursuant to call, at 10:07 a.m. in room 210, Cannon House Office Building, Hon. Ander Crenshaw (acting chairman of the committee) presiding.

Present: Representatives Crenshaw, Barrett, Chocola, Diaz-Balaret, Wicker, Ryun, Putnam Neal, Baird, Cuellar, and Moore.

Mr. CRENSHAW. The meeting will come to order. This is a hearing on how budgetary choices affect work, savings, and growth. I want to say welcome to our witnesses, and I will make an opening statement, and then ask Mr. Neal to do the same.

When Congress writes the Federal budget each year, we rely on a range of technical rules and conventions called budget concepts that were designed to give us a stable and consistent playing field for the policy decisions that we make. Because these budget concepts set the rules not only for how we write budgets, but also how we enforce them, I believe that it is critical for this body to engage in a comprehensive review of those rules to ensure that they are not only accurate but current, relevant, and truly helpful for our legislative work.

While we have done some tweaking here and there over the years, a comprehensive formal review has not been undertaken in nearly 4 decades. Clearly, 40-year old concepts cannot possibly account for the real world economic precepts that drive our 21st century economy.

So last week I introduced legislation establishing a commission of experts to review the technical underpinnings of our budget and accounting practices to report the findings back to Congress. This Commission will provide needed oversight and make recommendations on ways to modernize our basic budgetary principles as Congress brings more accountability and transparency to the budget process while dealing with 21-century issues.

This brings me to the subject of today's hearing, what is known as dynamic analysis of budget policies, which is one of the most important concepts to be studied under the bill that I have proposed.

Dynamic estimating has been discussed and analyzed, and even attempted, to some degree, since the Reagan administration, and along the way it has attracted its share of confusion, so let me take

a moment to dispel two of the most common misconceptions on the subject.

First of all, I think everyone understands that dynamic analysis is not a means of showing that tax cuts pay for themselves. Dynamic analysis does show how various pro-growth policies, especially tax policies, affect people's incentives to work, save and invest; and thus affect the economy's performance. When these incentives are taken into account, they can alter the pace of economic growth and, in turn, produce additional revenue that might not have been expected without the implemented policies.

The impact of our legislative actions must be analyzed to produce a fair, accurate picture of the costs and benefits associated with various tax policies. For instance, several recent tax measures have had an impact on our overall tax revenues, however, the true impact of these measures were not captured, so to speak, in our original analysis of the proposals. One example that comes to mind is the tax cuts that were adopted by Congress in 1997. At that time, Congress cut taxes by about \$89 billion over 5 years, and yet tax revenues the next year increased from 19.3 percent of GDP to 20 percent of GDP and the budget was balanced.

Another example is that over the past 2 years, we have seen double digit growth in revenues, and declining budget deficits, even though we have stuck with the tax relief of 2001 and 2003. These are historical facts demonstrating that cutting taxes and increasing revenue are not necessarily contradictory if you can reduce taxes in ways that enhance incentives for growth. So dynamic analysis is a way of incorporating these economic effects in our budget estimates.

The second point I want to make is that dynamic analysis does not guarantee perfect accuracy in estimating budget outcomes. First, budget estimating always involves making assumptions about what will happen in the future, so there will always be some level of uncertainty involved. Add that to the fact that you are dealing with a \$2.8 trillion budget in the midst of a highly diverse \$13 trillion market economy, and the chances of getting absolute perfection in the budget estimates are pretty slim.

The important benefit of dynamic analysis is that it helps us see more clearly the real effects of our policy choices and the ramifications they can have. It systematically examines how policy affect incentives to work and invest, which directly affect how people live their lives. For example, we might find that two different policies with the same budget outcome actually have very different incentive effects and therefore, different effects on people's lives. Dynamic analysis can, so call, feedback this information to see how the policy will affect our economy overall.

I believe this is helpful information to have when we are making important decisions, often expensive policy choices.

So now, budget analysts have already been looking into these incentive effects for some time, but we have not pulled together all the pieces of this comprehensive dynamic analysis approach. How to go about doing that is one of the things our witnesses will discuss today.

On a final note, today's hearing will focus mainly on dynamic analysis. While we often hear the terms dynamic analysis and dy-

dynamic scoring used interchangeably, they are not necessarily the same. Dynamic scoring deals with a particular application of dynamic analysis. The analysis is the broader overarching concept and, again, what we will be focusing on today.

To help us in this discussion, we have with us Dr. Douglas J. Holtz-Eakin, former director of our Congressional Budget Office (CBO), John W. Diamond, a tax policy expert at Rice University who has worked directly on dynamic analysis for the Treasury Department, and Leonard Burman, a senior fellow at the Urban Institute.

Dynamic analysis is a particularly complicated subject and employs a lot of specialized technical principles and language, and we are fortunate to have these witnesses here today, not only knowledgeable on the subject, but they are also very well skilled at describing complicated issues to non economists such as Members of Congress and other policymakers and the public. So again, we welcome all three of you here today. Thank you for being here.

And with that I will turn to Mr. Neal for any opening statement that he may have.

[The prepared statement of Mr. Crenshaw follows:]

PREPARED STATEMENT OF HON. ANDER CRENSHAW, A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF FLORIDA

When Congress writes the Federal budget each year, we rely on a range of technical rules and conventions—called budget “concepts”—that were designed to give us a stable and consistent playing field for the policy decisions we make.

Because these budget concepts set the rules not only for how we write budgets, but also how we enforce them, I believe that it is critical for this body to engage in a comprehensive review of those rules to ensure that they’re not only accurate, but current, relevant, and truly helpful for our legislative work. While we have done some tweaking here and there over the years, a comprehensive, formal review of our technical rules has not been undertaken in nearly four decades. Clearly, forty year old concepts cannot possibly account for some of the real-world economic precepts that drive our 21st Century economy.

So, last week I introduced legislation establishing a commission of experts to review the technical underpinnings of our budget and accounting practices and report its findings back to Congress. This commission will provide needed oversight and make recommendations on ways to modernize our basic budgetary principles as Congress brings more accountability and transparency to the budget process while dealing with 21st Century issues.

This brings me to the subject of today’s hearing—what’s known as “dynamic” analysis of budget policies—which is one of the most important concepts to be studied under the bill I’ve proposed. Dynamic estimating has been discussed and analyzed—and even attempted, to some degree—since the Reagan administration. And along the way, it has attracted its share of confusion. So let me take a moment to dispel two of the most common misconceptions on the subject.

First, I think everyone understands that dynamic analysis is not a means of showing that “tax cuts pay for themselves.” Dynamic analysis does show how various pro-growth policies—especially tax policies—affect people’s incentives to work, save, and invest—and thus, affect the economy’s performance. When these incentives are taken into account, they can alter the pace of economic growth, and in turn produce additional tax revenue that might not have been expected without the implemented policies. The impact of our legislative actions must be analyzed to produce a fair, accurate picture of the costs or benefits associated with various tax policies.

For instance, several recent tax measures have had an impact on our overall tax revenues; however, the true impacts of those measures were not “captured” in our original analysis of the proposals. One example that comes to mind is the 1997 tax cuts adopted by Congress. At that time, Congress cut taxes by about \$89 billion over five years—and yet tax revenue the next year increased from 19.3% of GDP to 20%, and the budget was balanced.

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lief of 2001 and 2003. These are historical facts, demonstrating that cutting taxes and increasing revenue are not contradictory—if you can reduce taxes in ways that enhance incentives for growth.

Dynamic analysis is a way of incorporating these economic effects in our budget estimates.

Second, dynamic analysis does not guarantee perfect accuracy in estimating budget outcomes. But nothing could. First, budget estimating always involves making assumptions about what will happen in the future—so there will always be some level of uncertainty involved. Add to that the fact that you're dealing with a \$2.8-trillion budget in the midst of a highly diverse, \$13-trillion market economy, and the chances of getting absolute precision in budget estimates are slim.

The important benefit of dynamic analysis is that it helps us see more clearly the real effects of our policy choices, and the ramifications they can have. It systematically examines how policies affect incentives to work and invest—which directly affect how real people live.

For example, we might find that two different policies with the same budget outcomes actually have very different incentive effects—and therefore different effects on people's lives. Dynamic analysis can “feed back” this information to see how the policy will affect the economy overall. I believe that's helpful information to have when we're making important and often expensive policy choices.

Now, budget analysts have already been looking into these incentive effects for some time. But we've not pulled together all the pieces for a comprehensive dynamic analysis approach. How to go about doing this is one of the things our witnesses will discuss today.

On a final note—today's hearing will focus mainly on dynamic analysis. And while we often hear the terms “dynamic analysis” and “dynamic scoring” used interchangeably—they are not the same. “Dynamic scoring” deals with a particular application of “dynamic analysis.” The analysis is the broader, overarching concept, and again, what we'll be focusing on today.

To help us in this discussion, we have with us Dr. Douglas J. Holtz-Eakin, former director of our Congressional Budget Office; John W. Diamond, a tax policy expert at Rice University who has worked directly on dynamic analysis for the Treasury Department; and Leonard E. Burman, a senior fellow at the Urban Institute.

Dynamic analysis is a particularly complicated subject, and employs a lot of specialized, technical principles and language. We are fortunate to have witnesses today who are not only very knowledgeable about the subject, but who are also skillful at describing complicated issues to non-economists—such as Members of Congress, other policy makers, and the public.

So again, welcome to all three of you, and thank you for being with us today.

With that, I'll turn to Mr. Spratt for any opening statement he may have. Mr. Spratt?

Mr. NEAL. Thank you very much, Mr. Chairman. I am sitting in for Mr. Spratt this morning, and I want to say a word of welcome to our witnesses as well.

This really should be called the dynamic deficits hearing. I think that is a more accurate portrayal of why we are here. The subject of how best to accurately estimate the budgetary impact of various policy proposals is certainly important, especially at a time when the Federal budget faces enormous and persistent deficits. There is a natural tendency to hope that the tax cuts cost less than they might first seem to. There are still a number of unanswered questions about dynamic analysis, and the hearing today should provide us with additional insight into those questions.

However, it is worth noting that there is a strong consensus among mainstream economists on a few key points. First, dynamic estimation is dependent on the economic assumptions in different models. So whether a particular policies macroeconomic impact is estimated to be positive or negative often hinges on the underlying assumptions of the model.

Second, whether a policy's economic effects are estimated to be positive or negative, these effects are generally estimated to be relatively small. For example, a recent Treasury Department analysis

shows a range of possible economic effects for making permanent the President's tax cuts. But the most optimistic outcome included in the analysis shows the economy growing by only a few hundredths of a percentage point in extra economic growth per year.

Third, though we all wish for policies that magically pay for themselves, the economic effects estimated by dynamic analysis are sufficiently modest that they are relatively close to the current estimates produced by the Joint Committee on Taxation (JCT). Claims that tax cuts produce more revenue and therefore, improve the budget's bottom line are not supported by economic research or by a stream of revenues collected by the Treasury.

Fourth, all long-term dynamic estimates assume that there is some sort of offset to compensate for the cost of tax cuts. But the current administration has not proposed offsets for its policies, choosing instead to finance them with new borrowing and new debt, including fighting two wars with seven tax cuts.

There are a lot of technical issues that I think are worth reviewing as they surround this process, and I hope that today's hearing can be a worthwhile part of a larger discussion of the benefits and pitfalls of dynamic scoring.

We all want a scoring process that provides as much information as possible about the economic effects of fiscal policy. But we also want a policy that is accurate, unbiased and timely. I hope that as we begin this discussion, we are not going to start from the premise that deficits are not really deficits. I hope that as we proceed with earmark reform here, and yesterday's news accounts indicated where many of our colleagues are on earmark reform, they are for it, but they want help in stopping them before they spend again.

And some of the loudest voices for fiscal responsibility around here, I noted, with news accounts over the last couple of days, really are among the bigger spenders in Congress as it relates to the whole notion of loading up the appropriations bills. All we need in that instance is the line-item veto to stop them from spending again.

So I have great regard for our witnesses, and I hope that those shed some light on a very timely topic. But I hope that we will not find our way into a situation whereby the simple argument is that if we change the way we talk about these issues, somehow the issues will resolve themselves.

Thank you, Mr. Chairman.

STATEMENTS OF DOUGLAS J. HOLTZ-EAKIN, DIRECTOR, MAURICE R. GREENBERG CENTER FOR GEOECONOMIC STUDIES, COUNCIL ON FOREIGN RELATIONS; JOHN W. DIAMOND, FELLOW IN TAX POLICY JAMES A BAKER III INSTITUTE FOR PUBLIC POLICY; AND LEONARD E. BURMAN, SENIOR FELLOW, URBAN INSTITUTE

Mr. CRENSHAW. Thank you very much. We will start with our witnesses now, and first I will call on Dr. Holtz-Eakin.

STATEMENT OF DOUGLAS J. HOLTZ-EAKIN

Mr. HOLTZ-EAKIN. Thank you, Chairman Crenshaw and Ranking Member Neal, members of the committee, it is a pleasure to be

here today. This is, in fact, a very important issue, the nature by which the scoring is done for proposals presented to the Congress, and I would want to applaud the chairman's efforts to lay out the language clearly at the beginning, but in order to make sure that I am clear about the things that I say, let me provide my own definitions as I see them.

You can put several words after dynamic. One, you could say dynamic analysis, and I think of a dynamic analysis as one-time efforts to look at the impact of, in particular, fiscal policies on the overall macroeconomic performance of the economy.

You could also put after it dynamic estimating, which I think of as one time efforts to extend a dynamic analysis to include the specific feedbacks on tax and spending in the Federal budget, and thereby alter the estimates of the budgetary future.

Or you could use the word dynamic scoring, and that, I think, is a bigger step yet, one which involves the regular and systematic estimating of the impact of the legislation on the unified budget by including macroeconomic feedbacks. And in going to that step, I would emphasize the regular part of it, and the fact that it would be incorporated into the official scoring process used by the Congress. And I want to focus my remarks today on the kinds of issues that arise if one thinks of doing this in a more regular fashion.

It is quite straightforward for many analysts to do one-time analyses of different fiscal policies, and the academic think tank and larger community has done many such things over time. I think the important issue for this committee is regularizing the process and providing information on a comparative basis for many different proposals, and I want to focus on that.

Before doing that, I want to really emphasize that the notion of dynamic versus static has really led to an unfortunate misperception of what static scoring or the current conventions really means. It has led some people to believe that the current scoring process essentially envisions that every U.S. household and every U.S. firm and every U.S. economic actor is frozen in some sort of ice freeze and doesn't react to fiscal policy. That is just not true. If you think of the Medicare Modernization Act, for example, this was the creation of an entity that did not exist in nature, a privately provided insurance benefit for the cost of outpatient prescription drugs.

In doing that estimate, analysts had to imagine what firms would enter such a market, what beneficiaries would take up such coverage, what bids firms would make to cover those particular retirees, what firms would drop their current retiree coverage, and how individuals would react to the loss of their Medigap coverage and, in the end, how much the Federal Government would have to pick up in terms of the cost of that.

There is an extraordinary range of economic behaviors and responses included in that estimate which is labeled static under the conventional language, and so I want to really disabuse everyone of the notion that somehow the current process does not include economic behavior and responses to incentive. There is a lot in there. It is true at the CBO, and it is true at JCT.

What dynamic scoring would do would be to extend the boundary of those behaviors to allow the current practice of fixing the total

economic activity as it is in the baseline provided and allow it to be extended to let fiscal policy raise the level of economic growth or lower the level of economic growth, and thereby change total incomes and total output in the economy. That is the essential step taken by dynamic scoring, and I think it would be desirable to do that in principle.

Certainly, when one evaluates policies, you like to look at the world without the policy, look at the world with the policy and compare all the feedbacks in between, including those which raise and lower economic growth. And in the current environment, understanding policies which are superior for long-term economic growth is very important. There are tremendous demands that will face this economy as the baby boomer retires and as we deal with the costs of Social Security, Medicare, Medicaid and a litany of other demands, with which you are very familiar.

So a premium should be placed on policies which actually support long-term economic growth because that is the economic pie out of which all of these demands will be met. And in doing that, it will be important to recognize that not all spending programs are created the same. Not all tax cuts are created the same, and that doing a dynamic scoring exercise can differentiate between them.

The difficulty, of course, is turning this into a regular practice, and in my testimony, I laid out some of the issues, and I want to touch briefly on them in sort of highlighting what it would take to turn this into a regular part of the process. The first is just the fact that it is a larger enterprise. To undertake a full dynamic analysis is essentially to undertake two baseline forecasting exercises. The production of the baseline budget outlook is a very large enterprise at the CBO, the JCT and the Budget Committees. To do it on a more regular basis would involve a greater scale of activity. And sadly, most of that activity would happen at very bad times from the point of view of analysts. It is often the case that in legislative deliberations important changes are made at night, on weekends, as the Congress comes to terms with exactly the final form of a proposal, and those legislative changes often matter. The language does matter. We have all been through experiences like that. So having that interact with the need for a lot of time to do the dynamics, I think, highlights a potential problem with doing this too frequently, that it will be hard to get it done.

The second issue that comes up all the time is that currently, lots of dynamic estimating, dynamic analyses use different models, and it would be necessary in a formal budget process, to come up with a single set of numbers. The Budget Committee would have the responsibility for blessing the budget estimates, and there would be a single set of such estimates attached to each legislation. And so that raises the question of just how that acceptance will take place. I don't think that is insurmountable, but it is work that needs to be done. There has to be some agreement about the nature of the modeling.

In similar spirit, there will have to be some agreement on what to do with the issue of offsetting policies outside the budget window. As the Treasury report has made quite clear, if you imagine having a tax cut now which requires some offsetting policy in the future, you get a very different answer if you assume that we are

going to raise taxes in the future, versus if we are going to cut government consumption in the future.

Now, scoring is the art of ranking alternative proposals. And if you think of scoring as just a ranking issue, better proposals will look better on either offsetting policy, they will look better even if you raise taxes in the future, they will look especially better if you cut spending in the future. The key is to have an agreed upon policy outside the budget window that will apply to all proposals so that the rankings are not altered by what policies are assumed at the outset. So you have to have some assumption about the nature of the offsetting policy.

I think it is also important to reach agreements in doing this on what kinds of growth will be incorporated into dynamic scoring. In the midst of a recession, if the Federal Government chooses to cut taxes, increase spending or, in other ways, throw money at the private sector, it is quite likely to produce the kind of growth that comes from using existing labor and capital that is currently unused. That is not the recipe for long run growth. That is actually typically at odds with the recipe for long run growth.

So I think it would be important to focus the kinds of growth rewarded in dynamic scoring on long run growth, not on cyclical recoveries, and that would be an agreement that would have to be reached, and those who use the dynamic scoring, which kinds of feedbacks would be agreed upon.

And then finally, at the moment, two different entities are involved in the scoring process. The Joint Committee has primary responsibility for taxes. The CBO has primary responsibility for spending. The essence of a dynamic analysis is that, regardless of where the impetus begins, on the spending side or the tax side, you want to keep track of the ultimate impact on both sides of the Federal budget, feedbacks on tax receipts, feedbacks on spending, net impact on the unified budget. That will require greater coordination between those two bodies in doing this kind of work, and that is an issue that the Budget Committee should be quite focused on in thinking about moving forward.

So I think this is a sensible piece of science. I think it is the kind of information that you would want to have in the scoring process. I think there are some important logistical and essentially scoring conventions that need to be established in order to move forward. And if that were to be accomplished, it is important to recognize that this will not be a panacea in many ways. It will not, in fact, improve the accuracy, as was noted at the outset.

Scoring is not about accurate projection. It is about accurate ranking of alternative proposals, which ones have bigger and smaller effects on the Federal deficit, not what will the actual number be. And for that reason, we do scoring now off a fixed baseline and using a unified set of rules.

Dynamic scoring should be done off a fixed baseline using a unified set of rules. It isn't about forecasting the future, about ranking alternative proposals. It won't relieve analysts of judgment calls.

Dynamic scoring is not a box into which you drop a proposal and out comes the magic answer. It will have more judgment calls than were true in the past, but I don't think that should be a disqualifying factor. It is simply a fact of life that there are many things

about which we know a lot, and there are many things about which we know very little. And that is not a dynamic scoring issue. That is a scoring issue. In the current setting there are lots of proposals that come through about which we know very little, and judgment calls are necessary. The same will be true in dynamic scoring as well.

And finally, I don't think it would change the world very much. There aren't many proposals that the Congress considers which have such profound impact that it will alter the course of the economy in a substantial way. And so the idea that somehow moving to dynamic scoring would change budgets estimates in a big way on a regular basis, I think, is overblown.

I include in my testimony the observation that if you went back to 1820, the world's economic power was the United Kingdom. And from that point to the present the United States grew about four-tenths of a percent faster than Great Britain on average over that period, four-tenths of a percent. That completely revolutionized the economic standing of both countries in the world, which is a big impact.

To make the United States the world's economic super power, but it was four-tenths of a percent. So four-tenths is big, and I doubt there are many proposals as big as changing the standing of those two countries in the world economic order. So I don't think you will get big impacts out of this.

But I look forward to the chance to answer your questions, and I thank you for the opportunity to be here today.

Mr. CRENSHAW. Thank you very much.

[The prepared statement of Douglas Holtz-Eakin follows:]

PREPARED STATEMENT OF DOUGLAS J. HOLTZ-EAKIN, DIRECTOR, MAURICE R. GREENBERG CENTER FOR GEOECONOMIC STUDIES, COUNCIL ON FOREIGN RELATIONS

Chairman Nussle, Ranking Member Spratt and members of the Committee, I am pleased to have the opportunity to discuss the topic of dynamic scoring in the federal budget process. In my remarks, I wish to make observations that fall into three broad areas:

- The principle of dynamic scoring is good science that would potentially bring into the budget process greater information regarding beneficial economic policies,
 - Dynamic scoring faces difficulties of implementation in the budget process, and
 - Dynamic scoring is not a panacea for either policymaking or the budget process.
- Let me cover each in turn before taking your questions.

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. 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 current 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.

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 the incentive effects of legislation—that firms, workers, investors, and households continue their economic lives as if nothing had changed. Nothing could be further from the truth. For example, in scoring the impact of the Medicare Modernization Act (MMA), congressional analysts 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 a myriad other decisions by households, firms, and governments. However, in keeping with current practice, the over-

all level of gross domestic product and national income was assumed to be unchanged.

Dynamic scoring would expand the range of economic impacts to include the pace of economic growth—that is, estimating the change in the aggregate level of economic output and income. 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 and 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 budget policy to include economic policy dimensions. Specifically, dynamic scoring requires that analysts incorporate into their evaluation of legislation all the economic feedbacks at the individual, household, firm, and national level. For this reason, it has the potential to distinguish between those policies which are equal in their budget cost, but very different in their economic incentives. Indeed, one of the most attractive aspects of dynamic scoring is its promise of allowing policymakers to distinguish between economically efficient tax and spending policies that promote growth, and those that work to reduce the living standards of future generations.

DIFFICULTIES IN THE PRACTICE OF DYNAMIC SCORING

The mechanics of doing dynamic scoring are not new. Indeed, a dynamic score can be thought of as the difference between two full-blown baseline budget projections: one in the absence of the legislation, and one in the presence of the proposed legislation. But the scale of the analysis involved in preparing baseline budget projections points to the first problem with wholesale adoption of dynamic scoring: time. In many, if not most, instances 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.

A second practical difficulty with dynamic scoring is the need for a single, consensus estimate. 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 Congressional Budget Offices 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 budget scoring process would require a single set of estimates, implying that a consensus be reached on a wide variety of issues of this type: foresightedness, the pace of international capital flows, saving responses of households and firms, and so forth.

The example sketched above highlights another issue in the conduct of dynamic scoring: the need for a standard "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 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 affect 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.

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 through 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).

Demand-side growth (or contraction) reflects business cycle fluctuations in the extent to which existing labor supply, capital, and technical prowess are utilized. The attention paid to monetary and other stabilization policies is clear tribute to the fact that recessions are costly and faster recoveries are desirable. But these changes are transitory and it may not be desirable to include transitory components in the budgetary evaluation of legislative changes.

If these effects are included, they will depend crucially on whether the budget baseline projection begins in a period of recession or boom. If it is the former, then positive demand effects will augment growth. If it is the latter, growth is limited and the result will be faster onset of return to supply-side potential and greater inflationary pressures.

Finally, the ultimate size, direction, and character of demand-side effects 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.

A final issue that arises in full-blown use of dynamic scoring is the interaction between taxes and spending. At present, the Congressional Budget Office scores spending proposals and the Joint Committee on Taxation scores the bulk of tax legislation. By its nature, dynamic scoring seeks to identify the indirect spending consequences of tax legislation and vice versa. Accordingly, it will be necessary for these groups to coordinate extensively their respective efforts.

DYNAMIC SCORING IS NOT A PANACEA

One occasionally hears that dynamic scoring is desirable because it will be more accurate. While dynamic scoring will more fully incorporate a wider range of behavioral responses, it is not likely to improve accuracy. First, the mechanical nature of scoring—evaluating different policy proposals using a baseline fixed at the beginning of the legislative calendar—is necessary for even-handed evaluation of alternative proposals, but hardly a recipe for improved accuracy in an ever-changing economy. Further, as noted earlier, the same level, legislative playing field necessarily entails identical and “unrealistic” assumptions regarding offsetting budget policies and monetary policy. Finally, to the extent that the pursuit of good policy leads to a decision to focus on long-run, supply-side growth then the elimination of cycles moves scoring even further away from “accurate” predictions.

Similarly, any move to dynamic scoring would not eliminate the need for analysts making judgment decisions. Quite the contrary, as noted above, in addition to the plethora of issues that already exist (e.g., how fast will legislation become law; how quickly will administrative rule-making be completed; what will implementing regulation look like; how fast will awareness spread and program participation rise?) additional decisions will be needed on the nature of economic growth policies’ ability to influence it.

Neither of these outcomes is bad. The combination of baseline projections and budget scores is intended to support the legislative process, not forecast the economy. There are far more parsimonious and accurate forecasting procedures available. Evaluating innovative legislative proposals necessarily requires analytic judgment because there is literally no policy track record on which to rely. Dynamic scoring may reflect a change in the desired content of the budget process; it does not change the fact that scoring supports that process.

Finally, the greatest reason that dynamic scoring is not a panacea is that it is unlikely to change the bottom line very much. The entire federal budget is only one-fifth the U.S. economy, and few legislative proposals affect even a fraction of the outlay or receipts stream. That is, 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.” But 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—which transformed the global economic order—is a big supply-side growth-effect.

For this reason, some have proposed restricting dynamic scoring to particularly comprehensive tax or spending proposals such as tax or social security reform. While sensible in itself, taken at face value it would produce an asymmetry between proposals evaluated with traditional scoring and those that were evaluated using dynamic scoring.

CONCLUSION

Mr. Chairman and members of the Committee, dynamic scoring is an important and potentially valuable tool for Congress to use in evaluating legislative proposals. I am grateful to have the opportunity to discuss my views on the issue, and look forward to answering your questions.

Mr. CRENSHAW. Mr. Diamond.

STATEMENT OF JOHN W. DIAMOND

Mr. DIAMOND. Let me start by saying that my testimony is a reflection of my views alone and should not be attributed to any institution or agency that I am affiliated with in other ways.

Chairman Crenshaw, Ranking Member Neal, and members of the committee, it is an honor to testify before you on the potential usefulness of including estimates of the macroeconomic effects of tax and expenditure policies in the budget process.

Dynamic scoring is theoretically preferred to the current budget scoring process. However, many questions remain about how best to implement a practical and timely framework for such a method. In my testimony, I propose that it is more reasonable to begin by focusing on consistent and timely use of dynamic analysis in the budget process, rather than adopting dynamic scoring initially for the following reasons: Dynamic analysis, if used appropriately, can provide useful information about the efficiencies and distributional effects of alternative tax proposals.

Dynamic analysis is far less controversial than dynamic scoring. And dynamic analysis is a necessary component in any budget process that includes dynamic scoring because it would be used to analyze and relay information about the macroeconomic effects of tax proposals, which are not currently included in conventional revenue estimates.

Implementing a budget process that encourages the adoption of efficient, fair and simple tax and spending policies is critical, given the fiscal gap facing our Nation. It is important to note that dynamic analysis is already used on a limited scale. For example, CBO and JCT have produced dynamic analyses of several significant tax proposals.

More recently, the Department of the Treasury's Office of Tax Analysis has published a dynamic analyses of the reform proposals made by the President's advisory panel on Federal tax reform, and the proposal to permanently extend the President's tax relief.

A useful example is this latest Office of Technical Assistance (OTA) report in July of 2006 that examines dynamic effects of the President's proposal to permanently extend a variety of tax provisions enacted in 2001 and 2003. The report provides information on the macroeconomic effects of various provisions as well as the aggregate effects of all of the provisions. This information allows for a comparison of the macroeconomic effects of various policies and,

if used appropriately, could prove useful in structuring an efficient tax policy.

For example, the OTA report showed that lowering capital gains and dividend taxes, coupled with a decrease in government consumption after 10 years, increased gross national product by 0.4 percent in the long run. By comparison, if revenue losses were offset by an across-the-board tax increase after 10 years, the report predicts a 0.3 percent increase in real GNP in the long run.

In fact, permanently extending the dividend and capital gains tax cuts increased real GNP in the long run all of the options considered in the OTA analysis. However, as noted by OTA, changes in a variety of simplifying assumptions about the underlying economic model or things that were excluded from the model could strengthen or weaken these results.

For the base case parameter values in the report, the report showed that permanently extending the cuts in the top four ordinary income tax brackets, plus the repeal of the phaseout of personal deductions and itemized deductions, increases real GNP by 0.7 percent in the long run if the tax cuts are offset by a decrease in government consumption after 10 years.

If the tax cuts are financed by an across-the-board tax increase after 10 years, the policy has a negligible impact on real GNP, so there is basically no growth effect. By comparison, permanently extending the increase in the child credit, the increase in the marriage penalty relief, and the 10 percent rate bracket reduces real GNP by 0.4 percent if financed with government consumption after 10 years, and by 1.2 percent if financed by an increase in taxes.

Purely from an efficiency perspective, a permanent reduction in dividend and capital gains tax rates is preferred to lowering the four highest ordinary income tax rates, coupled with the repeal of PEP and PEASE. Similarly, a permanent reduction in dividend and capital gains tax rates, or the changes to the top four income brackets, are preferred to an increase in the child credit, the marriage tax relief, and the 10 percent rate bracket, as the latter are inframarginal changes for most individuals.

However, efficiency is not the only important factor in determining fiscal policy, and I think it is important to recognize that fairness and simplicity in administration and compliance must also be considered.

House rule 13 is a good starting point for implementing dynamic analysis. But it could be improved. In particular, I offer the following guidelines for implementing dynamic analysis into the policy process. While examining the macroeconomic effects of various proposals is of interest, this approach ignores much of the additional information that could be gleaned from dynamic analyses. Thus, dynamic analysis should focus on comparing the macroeconomic effects of competing provisions within a larger proposal and present the effect of the total proposal as well.

Obviously, analyzing every provision separately would be impossible and counterproductive as this would consume far too many staff resources. However, it is important to insure that the choice of provisions to be analyzed is not politically driven as this would undermine the integrity of the process. A balance must be struck on this issue.

Dynamic analysis should also be applied to spending proposals, as the dynamic implications of expenditure policies may be as important as those of tax policies, whether they be positive or negative. Debt service costs are generally included in dynamic analysis, but are not included in conventional cost or revenue estimates. To be consistent, the debt servicing cost of conventionally estimated policies should also be considered, but not necessarily included in the official estimate, in the policymaking decision. Otherwise, the budget process may be biased toward proposals with negligible or negative long run effects relative to proposals that increase long run growth.

Macroeconomics are not the only source of information that should be provided to policymakers. Some measure of economic well-being should also be provided in addition to macroeconomic aggregates. This is important because positive macroeconomic effects are not always associated with welfare gains.

Distributional analysis should also be conducted both within income groups and across generational groups. For example, the President's advisory panel on Federal tax reform in the United States decided against recommending a true consumption-based tax and instead proposed a consumption based system supplemented with an add-on capital income tax at the individual level. Given that the report showed that the economic gains were larger under the consumption based tax relative to the growth and investment tax, which was the consumption based tax with the add on capital income tax, and that the transitional effects of the two proposals were different, it would be interesting to compare how the plans differed from a distributional perspective, both during the transition and in the long run and both across income groups as well as across generations.

The extent of uncertainty contained in the dynamic analysis should be well noted. We have gone over these issues many times. But this includes issues like the sensitivity of the results to various parameter values, the assumptions underlying the economic model, whether the policy was financed by changes in government spending, taxes, or government debt, and assumptions about the reactions of other entities such as the Federal Reserve, State governments and foreign countries.

Dynamic analysis should be timely so that it can be used effectively in the policymaking process. If it is done too late in the process, then it is not going to have an effect on policymaking. But it is important to note, as Dr. Holtz-Eakin has pointed out, that there are logistical constraints on this issue that have to be considered.

Finally, I will just say that public disclosure is imperative. As much information as possible should be released to the public so that others can replicate the work of these institutions.

Mr. Chairman and members of the committee, I am grateful for the opportunity to discuss my views on this important issue, and I look forward to answering your questions.

Mr. CRENSHAW. Thank you very much.

[The prepared statement of John Diamond follows:]

PREPARED STATEMENT OF JOHN W. DIAMOND, FELLOW IN TAX POLICY, JAMES A.
BAKER III INSTITUTE FOR PUBLIC POLICY

INTRODUCTION

Chairman Nussle, Ranking Member Spratt, and Members of the Committee, it is an honor to testify before you on the potential usefulness of including estimates of the macroeconomic effects of tax and expenditure policies in the budget process. Dynamic scoring is theoretically preferred to the current budget scoring process; however, many questions remain about how best to implement a consistent and practical framework that allows macroeconomic effects to be included in the budget process. In my testimony, I propose that it is more reasonable to begin by focusing on consistent and timely use of dynamic analysis in the budget process, rather than adopting dynamic scoring initially, for the following reasons:

- Dynamic analysis, if used appropriately, can provide useful information about the efficiency and distributional effects (within and across generations) of alternative tax proposals under either the current budget process or a process based on dynamic scoring,
- Dynamic analysis is far less controversial because it can highlight the inherent uncertainty involved in estimating the macroeconomic effects of various policy initiatives, and
- Dynamic analysis is a necessary component in any budget process that includes dynamic scoring because it would be used to analyze and relay information about the macroeconomic effects of tax proposals, which are not currently included in conventional revenue estimates.

Implementing a budget process that encourages the adoption of efficient, fair, and simple tax and spending policies is critical given the fiscal gap facing the nation, which has been estimated to be as high as \$98 trillion in present value terms (Auerbach et al 2006). This is equivalent to 10.8 percent of the present value of the sum of projected Gross Domestic Product (GDP).

It is important to note that dynamic analysis is already used on a limited scale. For example, CBO and JCT have produced dynamic analyses of several significant tax proposals. More recently, the Department of the Treasury's Office of Tax Analysis (OTA) has published dynamic analyses of the reform proposals made by the President's Advisory Panel on Federal Tax Reform and the proposal to permanently extend the President's tax relief.

COMPARING ALTERNATIVE POLICY OPTIONS

A useful example is the OTA report (July 2006) that examines the dynamic effects of the President's proposal to permanently extend a variety of tax provisions enacted in 2001 and 2003. The report provides information on the macroeconomic effects of the various tax provisions as well as the aggregate macroeconomic effect of all the provisions. This information allows for a comparison of the macroeconomic effects of various policies and, if used appropriately, could prove useful in structuring efficient tax policy. For example, the OTA report analyzes the following three groups of provisions:

- Extension of lower capital gain and dividend tax rates;
- Extension of lower ordinary income bracket rates for the 25, 28, 33, and 35 percent brackets and an extension of the repeal of the phase-out of personal exemptions and itemized deductions; and,
- Extension of the increase in the child credit from \$500 to \$1,000 per child, the increased standard deduction and bracket width for joint filers, and the 10 percent rate bracket.

The OTA report showed that lowering capital gains and dividend taxes, coupled with a decrease in government consumption after 10 years, increased gross national product (GNP) by 0.4 percent in the long run as lower effective tax rates on capital income increased saving and investment. By comparison, if the revenue losses were offset by an across-the-board tax increase after 10 years the report predicts a 0.3 percent increase in real GDP in the long run. In fact, permanently extending the dividend and capital gains tax cuts increased real GNP in the long run for all of the options considered in the OTA analysis. However, as noted by OTA, changes in a variety of simplifying assumptions underlying the economic model used in this report could strengthen or weaken these results. This includes assumptions about the economic effects of dividend taxes and a variety of other economic distortions that are not included in the model.

For the base case parameter values, the report showed that permanently extending the cuts in the top four ordinary income tax brackets and the repeal of the phase-out of personal exemptions and itemized deductions increases real GDP by 0.7

percent in the long run if the tax cuts are financed by reductions in government consumption. However, if the tax cuts are financed by an across-the-board tax rate increase after 10 years the policy has a negligible impact on real GDP. By comparison, permanently extending the increase in the child credit, the increase in the standard deduction and bracket width for joint filers, and the 10 percent rate bracket reduces real GNP by 0.4 percent if financed with government consumption after 10 years and by 1.2 percent if financed by an across-the-board tax rate increase after 10 years.

Purely from an efficiency perspective, a permanent reduction in dividend and capital gains tax rates is preferred to lowering the four highest ordinary income tax rates coupled with the repeal of the phase-out of personal exemptions and itemized deductions in most cases presented in the report. Similarly, a permanent reduction in dividend and capital gains tax rates or the changes to the top four brackets are preferred to an increase in the child credit, the marriage tax relief, and the 10 percent bracket, as the latter are inframarginal changes for most individuals. However, efficiency is not the only important factor in determining fiscal policy—fairness and simplicity in administration and compliance are also factors that should be considered.

POLICY GUIDELINES FOR IMPLEMENTING DYNAMIC ANALYSIS

House Rule XIII.3(h)(2) of the Rules of the House of Representatives, adopted January 4, 2005, in the 109th Congress, includes the following requirement:

(2)(A) It shall not be in order to consider a bill or joint resolution reported by the Committee on Ways and Means that proposes to amend the Internal Revenue Code of 1986 unless—

- (i) the report includes a macroeconomic impact analysis;
- (ii) the report includes a statement from the Joint Committee on Internal Revenue Taxation explaining why a macroeconomic impact analysis is not calculable; or
- (iii) the chairman of the Committee on Ways and Means causes a macroeconomic impact analysis to be printed in the Congressional Record before consideration of the bill or joint resolution.

(B) In subdivision (A), the term ‘macroeconomic impact analysis’ means—

- (i) an estimate prepared by the Joint Committee on Internal Revenue Taxation of the changes in economic output, employment, capital stock, and tax revenues expected to result from enactment of the proposal; and
- (ii) a statement from the Joint Committee on Internal Revenue Taxation identifying the critical assumptions and the source of data underlying that estimate.

This rule is a good starting point for implementing dynamic analysis but it could be improved. In particular, I offer the following guidelines for implementing dynamic analysis into the policy process.

- While examining the aggregate macroeconomic effects of various proposals is of interest, this approach ignores much of the additional information that could be gleaned from dynamic analyses. Thus, dynamic analysis should focus on comparing the macroeconomic effects of competing provisions as well as presenting information on the aggregate effects of all the provisions. Obviously, analyzing every provision separately would be impossible and counterproductive, as this would consume far too many staff resources. However, it is important to ensure that the choice of provisions to be analyzed is not politically driven, as this would undermine the integrity of the process. A balance must be struck on this issue.

- Dynamic analysis should also be applied to spending proposals, as the dynamic implications of expenditure policies may be as important as those of tax policies.

- Debt service costs are generally included in dynamic analysis but are not included in conventional cost or revenue estimates. To be consistent, the debt servicing costs of conventionally scored policies should also be considered in the policy-making decision. Otherwise, the budget process may be biased towards proposals with negligible or negative long run effects relative to proposals that are associated with positive long run effects.

- Macroeconomic aggregates are not the only information that should be provided to policymakers. Some measure of economic well being should also be provided in addition to the macroeconomic aggregates. This is important because positive macroeconomic effects can be associated with negative welfare effects.

- Distributional analyses should also be conducted both within income groups and across generations for certain policies. For example, the President’s Advisory Panel on Federal Tax Reform in the United States decided against recommending a true consumption-based tax, and instead, proposed a consumption-based system supplemented with an “add-on” capital income tax at the individual level (the “Growth and Investment Tax” or GIT). Given that the report showed that the economic gains

were larger under the consumption-based tax relative to the GIT and that the transitional effects of the two proposals were different, it would be interesting to compare how the plans differed from a distributional perspective, both during the transition and in the long run.

- The extent of the uncertainty contained in a dynamic analysis should be well noted. For example, this would include discussing the sensitivity of the results to various assumptions about parameter values, the assumptions underlying the economic model, whether the policy was financed by changes in government spending (and the effects of such spending on welfare), taxes, or government debt, and assumptions about the reactions of other entities such as the Federal Reserve, state governments, and foreign countries.

- Dynamic analysis should be timely so that it can be used effectively in the formulation of policy. The current House rule (XIII.3.(h)(2)) requires an analysis of the macroeconomic effects before the bill can be considered on the floor. This is somewhat late in the political process, as many of the major details of a bill are typically established at this point. It is important to note that there are possible logistical constraints on this issue, given the current state of macroeconomic modeling.

- Public disclosure is imperative. As much information as possible should be released to the public. At a minimum, enough information should be released so that outside entities could replicate the work. This will ensure that the process is seen as fair and open and will serve as a check on those who provide the estimates.

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Mr. CRENSHAW. Mr. Burman.

STATEMENT OF LEONARD E. BURMAN

Mr. BURMAN. Chairman Crenshaw, Ranking Member Neal, and members of the committee, thank you very much for inviting me to present my views on dynamic analysis and scoring.

With three economists on the panel, it is safe to say that we would all like more attention paid to the economic effects of public policies. The big question is whether dynamic scoring or dynamic analysis is the best way to bring such analysis to bear on public programs. My conclusion is that, given the current state of economic knowledge, including macroeconomic feedback effects, dynamic scoring and revenue estimates is not feasible or desirable. However, dynamic analysis is a useful complement to policymaking and some of the suggestions made by Dr. Diamond and Dr. Holtz-Eakin would improve the process of dynamic analysis significantly.

Federal tax and spending policies have an effect on the economy and citizens well-being. Obviously, we should measure those effects

as accurately as we can, simply as a matter of responsible budgeting. What's more, the effects of policies on the economy clearly should be considered as a factor in assessing their desirability.

All else equal, pro growth policies are better, although there is often a tradeoff between economic efficiency and other goals, such as fairness. Growth is only one factor to consider. By long-standing practice, official revenue estimates are dynamic in a microeconomic sense. They account for all the measurable behavioral responses that can be anticipated consistent with an assumption that macroeconomic aggregates, including labor, supply, saving and gross domestic product, are held constant.

What about the macroeconomic effects? Most economists would agree that a major tax reform in which loopholes were eliminated and tax rates lowered, holding overall revenues constant, would increase economic growth, although there would be a wide range of estimates of how much. But most tax proposals considered by Congress would not fit in this no-brainer category of growth enhancers. Most recent tax bills contain a hodgepodge of good and bad provisions, at least in terms of their effects on growth, including targeted tax breaks that arguably weaken the economy and create new opportunities for tax sheltering.

The biggest problem, though, is that recent tax bills have produced significant revenue losses with no indication of how those losses will be offset. Without knowing that, it is impossible to assess the economic effects or even the measure of whether the economy will be stronger or weaker in the long run. Analysis by CBO, JCT, and Treasury have all concluded that the way current tax cuts are paid for can fundamentally alter the conclusions about their growth effects. It is impossible to predict whether the tax cuts will ultimately be good or bad for the economy unless you know how they will be paid for. Since it is impossible for official scorers to predict how the deficits will be closed, they can't produce a single point estimate or dynamic score for the long term of deficit financed tax cuts.

As a related issue in the short run, the effectiveness of tax cuts depends on whether and how the Federal Reserve responds. Economists can provide some useful insights about the potential range of economic effects of tax policies, especially in the long run, but it is important to understand that macroeconomic models are more valuable for demonstrating the channels through which policy can affect the economy than for providing numerical estimates.

Many fundamental parameters, including how people respond to incentives to work and save more, are highly uncertain. We do not understand well how people form expectations about the future in the context of uncertainty. Because of limitations of computational power, the models necessarily have to vastly simplify reality. Tens of thousands of products, goods and services are represented by, at most, a few representative sectors. The range of differences of individuals in terms of preferences, education, income, family structure and age is similarly condensed. The mind-numbing complexity of the Tax Code, which creates costs for businesses and individuals and opportunities for tax sheltering, disappears in the models. Nobody knows how important those simplifications are.

While careful researchers like Professor Diamond work tirelessly to calibrate their models to reality as well as they can, there is tremendous uncertainty about the statistical properties of the model's long-term predictions.

I also want to reiterate Doug's recommendation that specifying a finance mechanism is necessary for meaningful dynamic analysis. It is also necessary for meaningful distributional analysis, for measuring the benefit that distribution of benefits and costs of tax legislation. And it should be noted that the best financing mechanisms, from the point of view of economic growth, would raise serious distributional concerns.

For example, the recent tax cut package enacted by Congress, according to the estimates by the Tax Policy Center, would have provided an average tax cut of about \$20 for the people in the middle of the income distribution. But if you assume that every household bears an equal share of the long-term debt burden that goes with the tax cuts, a \$20 tax cut turns into a \$466 tax increase over time.

Despite the limitations, dynamic analysis is potentially a useful complement to policymaking. The models tell us that certain kinds of policies rank better than others. Similarly, microeconomic analysis of the efficiency effects of targeted taxes and subsidies would be a useful complement to the policy process.

That concludes my prepared remarks. I would be happy to answer any questions.

Mr. CRENSHAW. Thank you very much.

[The prepared statement of Leonard E. Burman follows:]

PREPARED STATEMENT OF LEONARD B. BURMAN, SENIOR FELLOW, URBAN INSTITUTE¹

Chairman Nussle, Ranking Member Spratt, and members of the committee. Thank you for inviting me to present my views on dynamic analysis and scoring.

With three economists on this panel, I think it is safe to say that we would all like more attention paid to the economic effects of public policies. The big question is whether dynamic scoring or dynamic analysis is the best way to bring such analysis to bear on public programs. (To define terms, dynamic scoring involves adding a point estimate of macroeconomic feedback effects into official revenue estimates. Dynamic analysis is a supplemental analysis of plausible macroeconomic responses under a range of models and parameter assumptions.)

A related question, which I will also touch on, is how the policy-making process itself could be made more conducive to meaningful economic analysis.

In short, my conclusions are these:

- Many behavioral responses are already included in official revenue estimates of tax changes; that is, they are not static. The estimates could be improved in several ways. However, given the current state of economic knowledge, including macroeconomic feedback effects (dynamic scoring) is not one of them.

- There are three key problems in analyzing the effects of tax policy proposals: for deficit-financed tax and budget proposals, the long-term economic effects depend critically on how the deficit is financed (that is, on who ultimately pays for the tax cuts or new spending), and that is inherently unknowable by any estimator; there is tremendous uncertainty about key parameters that reflect how people make decisions about working and saving that can have large effects on estimates; and the limits of data, computing power, and economists' ingenuity mean that our models have little relationship to the way real people make real decisions.

- That said, most economists would agree that certain kinds of tax and spending policies are better for economic growth than others, so we could produce a rough ranking regardless of the financing mechanism or long-term economic model. For that reason, economic analysis of specific provisions as well as entire packages is useful. While dynamic analysis typically has been equated with macroeconomic modeling, for many specific provisions, an analysis of the microeconomic effects is all that is feasible at present. Such analysis would be a useful complement to policy-making.

INTRODUCTION

Federal tax and spending policies have an effect on the economy and citizens' well-being. Obviously, we should measure those effects as accurately as we can simply as a matter of responsible budgeting. What's more, the effects of policies on the economy clearly should be considered as a factor in assessing their desirability. All else equal, pro-growth policies are better, although there is often a trade-off between economic efficiency and other goals, such as fairness; growth is only one factor to consider.

MICRO-DYNAMIC REVENUE ESTIMATES

By longstanding practice, official revenue estimates are dynamic in a micro-economic sense. They account for all the measurable behavioral responses that can be anticipated consistent with an assumption that macroeconomic aggregates—including labor supply, saving, and gross domestic product—are held constant. Thus, the official estimates of the income tax rate cuts enacted in 2001 assumed that at lower tax rates, taxpayers would report more taxable income because, for example, they would earn a smaller fraction of compensation in the form of untaxed fringe benefits and perhaps be less prone to cheating. However, the estimates accounted for neither a boost in hours worked or saving, which might have increased growth, nor a drop in investment or demand for homes and other consumer durables as a result of swelling public debt and higher interest rates, which would have retarded growth.

There are ways to improve revenue estimates, but dynamic scoring is not, at present, one of them. A problem that could be rectified is that estimators must provide a single point estimate that assumes that a host of unknown factors are known with certainty. This can cause the cost of particular types of tax proposals to be consistently underestimated. For example, in 2004, Congress effectively created a price support program for certain low-yielding oil wells. If prices fell below a certain trigger price, a tax credit would offset the difference between the actual price and the trigger price. Since the trigger was set below then-prevailing oil prices, the provision was scored as having no revenue effect, even though under some scenarios it could have been very costly to the Treasury. A better rule would be to estimate the expected revenue loss—that is, the average across all the plausible price scenarios—to get an idea of what the price guarantee would cost the government (and be worth to recipients).²

More fundamentally, the legislative process itself may introduce biases into revenue estimates in a subtle way. The reason is that revenue estimates are subject to error. Under the best of circumstances, the errors will average out to zero. However, if overall budget targets are binding, then tax cuts and spending programs that appear to cost less will be favored over those that appear to cost more. (Indeed, the principal argument for dynamic scoring is that advocates believe that tax cuts would be more feasible if official estimators predicted that they would cost less in terms of lost revenues.) That means that tax cuts that are underestimated (and tax increases that are overestimated) will be more likely to be enacted than those that err in the opposite direction. As a result, despite the best efforts of estimators, the errors in policies that are actually adopted will tend to go in the same direction—they will not average out to zero. Revenue estimates will be consistently over-optimistic and deficits larger than predicted (or surpluses smaller). This might argue for a deliberate offsetting conservative bias in revenue estimating to make estimates more accurate on average.

Berkeley economist, Alan Auerbach looked at the accuracy of baseline receipts forecasts over many years and did not find evidence of consistent bias one way or the other.³ However, Auerbach found that receipts projections tend to be inefficient in the sense that aggregate errors tend to repeat from year to year. Building on Auerbach's work to adjust baseline outlay and receipts forecasts could make budgets more accurate although, as he notes, that is easier said than done.

PITFALLS OF INCORPORATING MACROECONOMIC EFFECTS IN ESTIMATES

What about macroeconomic effects? Most economists would agree that a major tax reform in which loopholes were eliminated and tax rates lowered, holding overall revenues constant, would increase economic growth, although there would be a wide range of estimates of how much.

Unfortunately, the vast majority of tax proposals considered by Congress would not fit in this no-brainer category of growth enhancers. While everyone likes lower tax rates, base broadening is a lot more popular with economists than it is with the people who pay higher taxes as a result. Tax cuts enacted since 2001, for example,

have lowered marginal tax rates, but they also narrowed the tax base by creating a slew of new targeted tax breaks—including that one for unproductive oil wells I mentioned earlier—that are likely to hurt the economy rather than help it. This makes assessing the net effect problematic.

The biggest problem, though, is that recent tax bills have produced significant revenue losses with no indication of how those losses will be offset. Without knowing that, it is impossible to assess the economic effects, or even to measure whether the economy will be stronger or weaker in the long run.

Depending on how the deficits are closed, there could be dramatically different economic results. The best-case scenario for economic growth is for deficits to be financed by cuts in transfer programs or increases in lump-sum taxes (fixed per capita taxes not related to ability to pay). That deficits might force spending constraint appears to be the logic behind the “starve the beast” rationale for deficit-financed tax cuts, but there is no evidence that this tack actually works. It is not clear why spending cuts would be easier in the future than they are now. Will it be easier to cut Social Security and Medicare 20 years from now when all the baby boomers are retired (and AARP’s membership has exploded)?

The worst-case scenario for economic growth is this: years from now, our profligate budgetary policies lead to dramatically higher interest rates and a massive recession, if not a depression. Taxpayers blame this on the tax cuts for the rich and decide to deal with budget problems by raising tax rates on high-income folks. (And they leave in place all the middle-class tax cuts like the child credit, higher standard deduction, and 10-percent bracket.) I think it is safe to say that in JCT’s, CBO’s, and Treasury’s models, such a tax increase would prove most damaging to growth. The net effect would be a much smaller economy than would exist had the tax cuts not been enacted.

To be clear, this long-term risk also means that deficit-financed spending would also be more costly than would appear in either a balanced-budget scenario or one assuming less damaging deficit offsets in the future.

Since it is impossible for official scorers to predict how the deficits will be closed, you cannot expect them to produce a dynamic score for the long-term effect of deficit-financed tax cuts. For related reasons, it is a challenge to predict the short-term effects as well. In the standard Keynesian macroeconomic model, short-term fiscal stimulus (a spending increase or tax cut) boosts the economy during downturns by spurring households to spend and businesses to invest, creating more demand and thus more jobs. When the economy is at full employment, deficit-financed tax cuts can hurt by creating inflationary pressure. If the economy is running at capacity, companies will respond to higher demand by bidding up wages to try to keep or retain workers, which translates into higher product prices and inflation.

The wild card is the Federal Reserve, which tries to stimulate the economy when it is underperforming and slow it down when inflationary pressures arise. Fed policymakers are likely to respond to tax cuts by tightening up monetary policy to prevent inflation. Since monetary policy affects the economy more slowly than fiscal policy, short-term deficits that are larger than the Fed had expected can still have an immediate effect, but the effect beyond that is complicated by the Fed’s response. While this is probably more predictable than how future Congresses will deal with the national debt, it significantly complicates forecasting the effects of fiscal policy beyond a year or so.

VALUE AND LIMITATIONS OF LONG-TERM MACROECONOMIC MODELS

A model of the economy can be a very useful tool in assessing tax reform options. A well-designed model incorporates individuals’ and firms’ decision processes and their interaction with each other and with government policy. Although the point predictions of such models are of questionable value, since they depend on parameters that are highly uncertain, the models do demonstrate the channels through which tax policy can affect the economy. They also allow for consistent comparisons of different policy options.

There are four basic kinds of models used for macroeconomic analysis of tax policy (with almost infinite variations): neoclassical growth models; disequilibrium (or Keynesian) models; infinite horizon models; and overlapping generations (OLG) models.⁴ The first two types of models represent a very stylized version of the economy. Individuals and firms do not make optimizing decisions. Instead, the results of those optimization decisions are reflected in numerical measures of the response of saving, labor supply, and factor substitution (firm’s ability to substitute capital and labor for each other in the production process), which are known as elasticities. Taxes can affect the economy by altering the return to saving and working for individuals or the costs of labor and capital for firms. Such models are often enhanced

by disaggregating different economic sectors (such as manufacturing, agriculture, services, etc.) on the assumption that they have different production technologies (i.e., use capital and labor differently) and often include different classes of workers who have different skill levels.

The neoclassical growth model assumes full employment: markets for all goods and services always clear instantaneously so unemployment, which is a disequilibrium between the supply and demand for labor, is not possible. Disequilibrium or Keynesian models assume that such disconnections are the norm, but that they can be affected by government policy and the business cycle. Thus, during a recession, tax cuts can reduce unemployment and increase GDP because lower taxes spur individuals to spend more or companies to invest more, which increases the demand for goods and services, translating into more jobs.

Modern disequilibrium models are typically combined with standard growth models. In such models, tax changes can affect labor supply and saving, which affects output and the demand for capital in the next period. The changes alter the return to capital and labor, which adjust again affecting output and the demand for productive inputs. The process continues until the demand and supply for capital return to equilibrium, from which point on the economy grows at a constant steady-state rate.

Such models have been used for decades and are well understood. They are attractive because their results are fairly easy to explain and intuitive, but they have some limitations. First, Keynesian models, being inherently short-term in focus, do not tell policymakers about the long-term effects of tax policy, when, presumably, the level of equilibrium is of most interest. Indeed, they may not provide the answer tax cut advocates want in the short term. Such models typically predict that spending increases or cuts will have a larger effect than tax changes because government spending immediately generates additional demand for goods and services, whereas tax cuts affect demand only to the extent that the recipients choose to spend them rather than save. In such models, tax cuts are good, but spending is better and deficits are a plus in the short-term.

A more fundamental problem with both the disequilibrium and the growth models are that they are too aggregated. They assume, for example, that labor supply and saving decisions of individuals (or groups of individuals) depend only on the average tax rate on labor and capital income. Thus, replacing a progressive income tax with a flat rate tax that raises the same amount of tax revenue would be expected to have no effect on work or saving decisions since the average tax rate remains the same. But reducing high tax rates is likely to produce a larger positive effect than the negative effect of increasing tax rates at the bottom or broadening the tax base. The individual decisions do not average out to zero. Similarly, policies that affect individuals' and firms' expectations about the future can have big effects on their behavior now, but the neoclassical and disequilibrium models are not forward-looking.

Infinite horizon (or Ramsey) models and OLG models are more modern representations of the economy based on the decisions of individuals and firms. Individuals maximize utility subject to an intertemporal budget constraint (that is, typically, they cannot die in debt). Firms maximize profits. The government must balance its budget over the long term (although not necessarily over any finite interval). In some such models, people have perfect foresight: they can predict the future accurately. In other more realistic models, the future is uncertain so results depend on how people are assumed to form expectations. Rational expectations models assume that people have a very good macro model inside their heads so that their forecasts are correct on average.⁵ Other models assume myopia—people assume that the present will continue—or adaptive expectations.

In infinite horizon models, people (and firms) live forever. Obviously, this is an unrealistic assumption, but advocates of such models argue that they are a good and relatively simple representation of a world where people care about their children as much as they care about themselves. Therefore, the preferences of children enter their parents' utility functions and are represented in a motive to leave bequests. Since children will also care about their children, and so on, the very long time horizon may be warranted.

The OLG models represent the very long term by assuming that individuals live for a fixed number of years, but are replaced by children and grandchildren with similar preferences who are young when the parents age. By solving for the decision process of each generation and connecting them (primarily through interest rates), there is, again, a very long horizon in such models.

An advantage of this class of models is that it is possible to build in great detail on the tax structures facing individuals and firms. A disadvantage is that the models depend on parameters about which little is known. In particular, the models de-

pend on the parameters of individuals' utility functions: their trade-off between consumption and leisure (and thus labor) in the current period, and their willingness to trade future consumption and leisure for current consumption and leisure. For example, if people expect taxes to increase in 20 years, will they work harder and spend more now, and if so, by how much? These intra- and intertemporal elasticities (and, to a lesser extent, factor substitution elasticities of firms) are critical to the predictions of such models, but very little is known about the proper values. Critics have also pointed out that there is a considerable amount of evidence that individual decisions deviate in important ways from the predictions of the life cycle model, which underpins both of these frameworks.

These models are also very sensitive to their exact structure. The CBO found larger growth effects in the infinite horizon model than in the OLG model; the smallest long-term effects arose in the neoclassical growth model. Different forms of uncertainty and assumptions about individuals' attitudes towards uncertainty can also produce markedly different predictions about the effects of a given policy.

A key implication is that a single model will not be adequate for evaluating the long-term effects of public policies since the results may be very sensitive to the choice of model. When employing any model, parameter assumptions should be subjected to extensive sensitivity analysis. That is, different values for key parameters, such as labor supply and saving elasticities, in the case of the disequilibrium and growth models, and intra- and inter-temporal elasticities of substitution, in the case of the infinite horizon and OLG models, should be tried to see how sensitive the results are to the parameter assumptions.

Put differently, there is no basis for producing a single point estimate for the macroeconomic effect of tax or spending policies, even when they are not deficit-financed. While the kind of dynamic analysis that CBO and JCT have done using a range of models can be an informative input to public policy, it is of virtually no value in improving estimates of the short- or long-term effects on revenues. Indeed, since none of these models has been validated in actual practice, choosing a particular model, a set of parameters, and assumptions about the way deficits will be offset and the Federal Reserve will react would almost surely add new biases and significantly increase the variance of revenue estimates. This problem also raises the risk that policymakers will gravitate towards policies whose macroeconomic feedback effects are most overstated in a particular model chosen by estimators, even though these policies may not necessarily be the best ones for the economy in the long run. It certainly raises the risks that forecast accuracy would be significantly worse with this approach.

THE POTENTIAL USEFULNESS OF DYNAMIC ANALYSIS

Despite its limitations, dynamic analysis is potentially a useful complement to policy making, although existing models are quite limited in what they can simulate. All else equal, it would be nice to discriminate in favor of pro-growth policies, especially if the growth benefits are widely shared rather than concentrated at the top.

Note, however, that this is not necessarily an argument in favor of tax cuts. First, as noted, when financing is considered, almost any tax cut could turn out to be counterproductive over the long run. Second, some tax cuts would tend to reduce economic growth no matter how they are financed and some spending increases would tend to enhance growth.

For example, a horse-and-buggy tax credit would certainly create jobs in the horse and buggy industry, potentially reversing a century-long downturn, but almost nobody would argue that this would be good for the economy overall. The resources that were diverted into horses and buggies could surely be better used in any of thousands of goods and services that consumers value more.

You might think that Congress would never enact such a thing, but the manufacturers' tax deduction and many of the other targeted tax breaks, enacted as part of the American Jobs Creation Act of 2004, are not much different. They distort market prices and interfere with the efficient allocation of scarce economic resources. While there may be a role for targeted taxes or subsidies in markets when they are not working—for example, when there is pollution—many if not most tax breaks cannot be justified on those grounds.

On the other side, some kinds of government spending may produce economic benefits over and above their direct value to beneficiaries. Some examples include investments in infrastructure, education, information, and research and experimentation. Not all such projects produce benefits in excess of their costs (as the recent debate about the bridge to nowhere in Alaska illustrates), but well chosen public investments can produce substantial payoffs.

Unfortunately, the kinds of models designed to do dynamic analysis are not well suited to discriminating among good and bad kinds of targeted tax incentives or spending programs. Typically, such models represent different sectors at a highly aggregated level and have only a rudimentary representation of the tax system and no detail at all about spending. Indeed, in some macroeconomic models, government spending is tantamount to throwing the money (and the real resources it represents) into the ocean.

However, government analysts can do a microeconomic analysis of the efficiency effects of different programs and, indeed, the CBO, GAO, and CRS do when Congress asks. Often, the analysis can be informed by empirical estimates—as in the case of investments in infrastructure, education, and research—although the research findings can vary wildly.

At a minimum, as part of the summary analysis of each piece of proposed legislation, it would be nice to include a qualitative analysis of the likely efficiency effects of each provision.

OTHER ADVANTAGES OF SPECIFYING FINANCING FOR TAX CUTS

As noted, the way tax cuts (or spending increases) are financed can fundamentally alter the assessment of their long-term economic effects. It also affects how we assess the distribution of tax benefits. The standard distribution table ignores the question of how deficits will be financed. As a result, tax cuts can look like good news for almost everyone. Advocates can argue that everyone is a winner and may appear to be right. Anyone arguing against the tax cuts is just a selfish demagogue practicing the “politics of envy.”

If we were explicit about financing, however, the picture would change. A deficit-neutral tax change has to make some people worse off and those people often object. The people who will pay for the government’s current generosity appear to be our children, and maybe that works politically because children and those not yet born don’t vote. However, if one accepts the key assumption of the infinite horizon model that parents care as much about their children and grandchildren as they do about themselves, then being explicit about who will bear the burden of current tax cuts would create political fallout.

How the tax cuts are financed then becomes very important. Under the scenario where a future Congress decides to close the deficit by soaking the rich, the President’s tax cuts become a lot more progressive than they appeared before financing was considered. If, instead, we follow the growth-maximizing path and slash spending, then many, if not most, taxpayers will find that they lose much more in future benefits than they gain in short-term tax cuts.

Thus, the best case for economic growth (all households take an equal share of resulting future debt service) produces the bleakest case for progressivity. For example, under any of the major tax cuts passed since 2001, the vast majority of households would be worse off under this financing option unless the economic benefits turned out to be implausibly large.⁶ And the best case for progressivity (high-income taxpayers face income tax rate hikes to offset the debt) is the worst case for long-term economic growth.

If Congress has in mind financing options that involve less draconian trade-offs, it should be explicit about them.

CONCLUSION

Dynamic scoring is not feasible because of lack of knowledge about how deficits will be offset, uncertainty about key parameters in economic models, and inherent limitations in those models themselves. Dynamic analysis, however, is useful, but it should be applied to spending as well as taxes. What’s more, the economic analysis of tax and spending provisions should be done on a provision-by-provision basis, not just overall packages.

Finally, both dynamic analysis and the assessment of the distribution of winners and losers from tax changes could be made much more accurate if Congress specified a financing mechanism for each major piece of tax legislation.

ENDNOTES

¹Views expressed are mine alone and do not necessarily reflect the views of any organization with which I am affiliated.

²The CBO now applies “probabilistic scoring” to measure the cost of similar spending programs.

³Alan J. Auerbach, “On the Performance and Use of Government Revenue Forecasts,” *National Tax Journal*. Vol. 52 no. 4 (December 1999) pp. 765-782

⁴For a good survey, see Jane G. Gravelle. 2003. “Issues in Dynamic Revenue Estimating,” CRS Report for Congress RL31949, U.S. Congressional Research Service; or the Appendix of

U.S. Congressional Budget Office. 2003. "How CBO Analyzed the Macroeconomic Effects of the President's Budget." CBO Paper. Available at: <http://www.cbo.gov/ftpdocs/44xx/doc4454/07-28-PresidentsBudget.pdf>.

⁵Ironically, a consequence of this assumption is that it is impossible for economists to develop an accurate aggregate model of the economy because individuals' behavior changes the parameters of the economists' models, invalidating them.

⁶Jason Furman, "A Short Guide to Dynamic Scoring," Center on Budget and Policy Priorities, August 24, 2006. Available at <http://www.cbpp.org/7-12-06bud2.pdf>.

Mr. CRENSHAW. And now we will go to questions. And I want to ask unanimous consent that all members be allowed 7 days to submit statements for the record. Without objection, so ordered.

Let me start by, first of all, saying I appreciate some of the clarification. There is a lot of misunderstanding from time to time among members in terms of static versus dynamic. The fact that Dr. Holtz-Eakin talked about, the fact that static scoring is not exactly that, in the sense that when projections are made, consideration is given to changes in behavior. But in the final analysis, the dynamic analysis is much broader and only occurs in certain instances big enough to have a big enough impact.

And as Mr. Neal pointed out earlier, if you do a dynamic analysis and you find that the GNP is only impacted .1 percent, while it might seem significant, that is \$13 billion. And as Dr. Holtz-Eakin pointed out, if our economy grew .4 percent faster than Great Britain over a period of years, it all adds up at the end of the day. So it is, I think, a valuable exercise, and it is good to hear some of the difference between what we often think is just purely static and dynamic.

Let me start by just asking the question that this is one of the, I guess, concepts, this dynamic scoring concept that is part of this legislation that I filed. And I should say that Mr. Spratt and Chairman Nussle had worked on similar legislation to kind of modernize what goes on. The last time we actually did anything in terms of these budget concepts was 1967. And that is still kind of bible, and the world has certainly changed in the last 40 years.

So as we deal with entitlements, as we deal with trust funds, as we deal with public/private partnerships, maybe the question to Dr. Holtz-Eakin is, is this the kind of legislation that you see that we need today to kind of modernize those concepts?

Mr. HOLTZ-EAKIN. I think it is high time for a thorough rethinking of budget concepts, and I think the notion of having a commission go back and replicate the effort in 1967 was entirely desirable. There are many instances where the threshold question, what is on and what is not on the Federal budget, are now murky and that needs to be clarified. You know, when is it that the taxpayers are at risk for providing resources to meet obligations undertaken by the Federal Government. And so a commission that simply did a rethinking of what the boundaries were, reclassified transactions for whether they are appropriately on the spending or the tax side, the profusion of those things which are labeled offsets to spending, which are really receipts by any other name, or tax credits which are called tax cuts but which are spending by any other name makes the budget less clear. I think having a commission undertake that kind of rethinking would be entirely desirable at this point in time.

Mr. CRENSHAW. Thank you. And maybe, Mr. Diamond, you mentioned that the kind of macroeconomic impact that I guess Treas-

ury put together, there is a chart in our kits, can somebody put that chart up and maybe—I can't see it very good. But maybe can you highlight some of the points you made about, when you look at that base simulation, you know, if you extend the lower dividends and capital gains tax rates and then you see that if you have got to make a choice between lower spending or increasing taxes, highlight a couple of those points that you made earlier, as I look, I can see, I think that is what maybe Mr. Neal was referring to. If you look at that real GNP, you get .1 percent growth. If you were to lower the ordinary tax rates, that second column, and then I think the best I can see 1.1 percent, GDP might grow 1.1 percent, which would be very sizable. Highlight a couple of those so that we can see kind of more clearly what you talked about when you discussed that Treasury, maybe what was your input into that.

Mr. DIAMOND. Well, I started off with one of the points that has been made in the testimony of many people over the years, which is the positive-negative relationship between dynamic scoring and the fiscal offset. So if you assume one fiscal offset, you get a positive result, and if you assume another fiscal offset, you get a negative result and you can see that in column 3. The effects of the total package are in column 3, the second column of column 3. If it is financed by a decrease in government consumption, so this would be the full tax relief proposed by the President, you would see that it would increase real GNP by 0.7 percent, whereas if you financed it by an increase in future taxes, real GNP would actually decrease by 0.9 percent.

This is a standard argument that it is kind of a zero-one assumption. And I guess my point was, one, to point out that we can actually compare the alternative policies, the dividend cuts, versus the lower ordinary rate brackets, versus these other three things, the increase in the child credit, the increased standard deduction and bracket width for joint filers, and the increase, or the 10 percent bracket, and that when you compare those, that you see that the growth effects of the dividend and gains cut is larger than column three for the credits and deductions and so forth. And also, that you can see that there is an increase in growth from lowering the ordinary tax rate brackets. So if you take the 0.4 percent number and then you look at column two and you get real GNP goes up by 1.1 percent, the different between those numbers is a rough estimate of the effect of lowering the tax rates in the top four income brackets. So with a government consumption offset, after 10 years, you get that basically increased growth by 0.7 percent, and with a tax offset, it does not affect growth because your number is the same as with the dividend tax cuts in column one.

And the final point I was kind of hoping to make is that it is not always a positive negative outcome. We see for the dividend taxes that in all of the cases provided in the Treasury report, that the tax cuts led to a larger economic growth. So maybe we should look for those types of proposals and pass those types of tax cuts instead of the types of tax cuts that lead to negative long run growth.

Mr. CRENSHAW. And that is kind of an example of a dynamic analysis that Burman said it is not scoring, but it is kind of information that would be helpful in making these kind of policy decisions.

Mr. DIAMOND. Exactly. If you have 6 to 10 proposals, you could look at each one, at least in this example, in terms of how they would affect long run growth and then obviously, like we have both noted is that you would also want to, you know, you have other things, you have other factors that you consider, but this at least gives you some hard evidence on one factor that goes into your policymaking decision.

Mr. CRENSHAW. Thank you very much. Mr. Neal.

Mr. NEAL. Thank you very much Mr. Chairman. And thank you for your expert testimony this morning. Just a general question to the three of you. Does Congress currently constitutionally have the tools to balance the budget? Mr. Eakin.

Mr. HOLTZ-EAKIN. Absolutely.

Mr. NEAL. Mr. Diamond.

Mr. DIAMOND. Yes.

Mr. NEAL. And Mr. Burman.

Mr. BURMAN. Yes.

Mr. NEAL. Thank you for clearing up that notion. The reason I raise that question is, one of the things that I witnessed during the time that I have been here, the 18 years, is that the more we employ gimmickry, somehow the scenario will change. So in the 1990s, if we simply had term limits, all would be well. Fascinatingly enough, many of the people that voted for them and were most vociferous in their support of them, geez, they all stayed because the country needed them.

Then there was the argument from the caucus of the line-item veto that really should be called the stop me before I spend again caucus. And then, of course, raging with popularity in the 1990's and, by the way, being discussed again is this notion of a balanced budget amendment to the Constitution. Finally, I take you back to January of 2001, what the scenario looked like financially for the Nation. Long term projected surpluses, without any gimmickry, and I guess the question that I would like to pose to the three of you, is there any evidence, Mr. Eakin, first, that these tax cuts pay for themselves?

Mr. HOLTZ-EAKIN. Tax cuts don't pay for themselves, although I think it is important to—I believe that. I don't want to be evasive. But the question is what does "pay for itself" mean? I think this term gets tossed around a lot without a precise definition of what that means. So I would like to hear someone define that before I answer it.

Mr. NEAL. Well, let me throw this out to you. If you are late on your mortgage payment for 7 months, and if the bank is in foreclosure proceedings, and if you call the bank and say please, I will change my behavior if you will forget about this; what is the bank's position?

Mr. HOLTZ-EAKIN. Rather unsympathetic.

Mr. NEAL. Thank you. Would the other two panelists like to respond to the first question I raised about the notion of whether or not these tax cuts really do pay for themselves? Mr. Diamond.

Mr. DIAMOND. They don't. That is clear.

Mr. NEAL. Thank you. Mr. Burman.

Mr. BURMAN. Obviously they don't. Greg Manke, who was President Bush's first CEA chair, said in a textbook that people who

thought that tax cuts paid for themselves were like snake oil salesman trying to sell a miracle cure.

Mr. NEAL. The Congressional Research Service and the Treasury have both drawn the same conclusion that our three panelists have drawn. And their argument is that little will be of consequence in terms of those tax cuts paying for themselves. But there is an element in the Congress that insists on ignoring the evidence at hand, and that is why we go through many of these procedures that we do, and I think that your testimony today has been very helpful.

Thank you, Mr. Chairman.

Mr. CRENSHAW. Thank you. Mr. Barrett.

Mr. BARRETT. Thank you, Mr. Chairman. Gentlemen, thank you for coming this morning. I have got a couple of questions for you. If you compared the margin, and Dr. Holtz-Eakin, if you would answer this. If you compared the margin of error, let's say, static analysis versus dynamic analysis, I mean, can you give us some kind of figures that dynamic analysis is much more effective? Or, I mean, compared to the two?

Mr. HOLTZ-EAKIN. I would hesitate, I can't give you numbers that would illuminate that. I think that the right answer to that question is two dimensions. I mean, the first is that, by definition, the current, quote, static procedures leave out potential responses that the dynamic analysis would put in. And that is just the nature of the beast.

And so to the extent that those responses, economic growth responses are important to the Congress, then it is "better to get them in."

The second piece is that I don't divide scoring issues reflexively into static and dynamic. I think I divide them into those things we know a lot about it. We have seen programs like it before. We have collected a lot of evidence. The research community has looked at that evidence and come to some conclusions and those scoring issues like the very first terrorism risk insurance bill, where we are in a new world and there is no evidence. Well, I don't think that is a static dynamic problem. That is we don't know a lot about this particular program.

We don't have a lot of evidence, and the techniques brought to bear on it are far less the source of uncertainty than the fact that we just don't have much in the way of evidence.

Mr. BARRETT. I know that Dr. Holtz-Eakin and maybe Dr. Diamond, you mentioned that the process is a little more complicated than the static method. And I firmly believe we need to go to a dynamic type of analysis. But should it be when we are talking about overall budget reform and trying to be more accurate, when we are talking about this, does it make sense, when we are talking about dynamic analysis, also talk about further budget reforms, like, No. 1, a biannual budget so you guys are only having to go through this process once every 2 years and possibly because of the complexity and the added things in the process, doesn't it make more sense? And I am asking this to all three of you guys, for a major overhaul of the Tax Code, another step in the right direction to simplify things, whether it is a flat tax, consumption tax, just a major going back and taking a look at not only dynamic analysis, but the budg-

et process and possibly the Tax Code? And I pose that question to all three of you guys.

Mr. DIAMOND. I will take part of it, which is the added complexity in dynamic analysis, or the dynamic scoring process. I mean, you would have added a number of questions because you are now asking not only about the micro behavior, but you are also asking about the macro behavior so there is definitely some additional complexity. But that complexity, I am not always certain that that makes it less reliable. To some extent, the standard or conventional revenue estimating process is extremely uncertain. And when I was at JCT, I was making decisions daily that I had no evidence for. But because I needed to have an estimate, a member had asked for an estimate, and I was responsible for presenting it, so that is what I did. And I made an educated guess. And so I am not certain that we should throw dynamic scoring out because of its uncertainty or its complexity. Revenue estimating and I think cost estimating are uncertain by nature, and I am not sure that assuming that all the effects are zero is always the best assumption. I think a lot of times it is a very good assumption.

The other problem is that you do have to, when we do dynamic analysis, include this government offset effect, or this debt effect. But in policies that don't receive a dynamic analysis we don't consider the effect or the debt effect or the debt servicing cost of that proposal. So if you have one policy that is pro growth and its growth is offset by the cost of servicing the debt, you have one policy that has no growth effect, but it is not analyzed dynamically, so you just kind of see it as it is conventionally scored, and I think there could be a real misperception there of when it comes to comparing which of those policies would be good for the country. And I will leave the other questions for the other guys.

Mr. BURMAN. I am pretty skeptical about the value of dynamic scoring in most contexts. The one exception might be that if we actually did have a major tax reform that was revenue neutral and we were broadening the base and lowering the rates like we did in 1986. So I think the idea of thinking about this in the context of a major overhaul of the tax system, which I think is really necessary given the huge demands that are going to be put on it in the decades to come, is a good idea.

Mr. HOLTZ-EAKIN. Your question really had two different pieces to it, one of which is process issues. And dynamic scoring would be one part of changing the process of deliberation. And I think it is important to step back and recognize that, you know, the Congress adopts policies for their benefits and they have an enormous amount of information about their benefits provided by their constituents, first and foremost, by analyses, from interested groups and think tanks and things like that.

The budget is there to reflect and report the costs. And what the current budget costs don't reflect are the efficiency costs and the economy. When you get a dollar of Federal revenue, you don't ask the question how much did we muck up the economy in the process of collecting that dollar? What dynamic scoring would do would be to include that efficiency cost, at least in part and imperfectly into recognizing the cost of Federal programs. Since budget are supposed to reflect costs, that strikes me as entirely desirable. To ex-

tend the mandates of dynamic scoring to somehow also reveal all the distributional fairness benefits or all the other things I think is unfair. We are not asking the budget to tell us what the best policies are. We are asking it to tell us what they cost.

And so I think as a part of the process reforms to get in order our fiscal House, going forward, it strikes me as sensible. As I tried to be clear, I don't think it going to change dramatically most things. But for some big things it will be important.

Well, what are the big things where it will show up? All the things we are going to face. Anything that has a profound impact on how we raise the revenue, like a major tax reform. We are going to face big issues in our retirement programs. Medicare, Social Security. Any changes in those have profound impacts on how much people work over their lives, how they save for their retirements. They will have profound impacts on the economy. So all the big issues that are coming up will require this sort of understanding, and it seems to me that to build into the process the capacity to get those feedbacks is entirely sensible. And I am really cognizant of all the problems. I tried to list them all and be honest about it. But I don't think it is sensible to say, gee, we have all these problems and we can't do it, because that is the luxury of hand wringing in public.

You know, once you are on the other side of CBO and someone wants a number, as Mr. Diamond was real clear, you give them the number. You don't have the luxury of wringing your hands. You do it. So think hard about what you want to do, make provisions to get it done in a sensible fashion. And then I think all the work after that is a really a matter of understanding it on the part of members, understanding what you are getting in a dynamic analysis. It is clear there is not a complete understanding of what is going on in the current scoring process. So there is a lot of education on the other side as well as just the issue of getting it done.

Mr. BARRETT. Thank you, Mr. Chairman.

Mr. CRENSHAW. Mr. Baird.

Mr. BAIRD. I thank our distinguished witnesses. It is good to see you again, Dr. Holtz-Eakin. We have missed you around here.

First a question about logic, really. We often hear people say there was a tax cut if the revenues increased. Therefore, tax cuts caused the increase in revenues. I would like each if you if you may briefly say is that justified.

Mr. HOLTZ-EAKIN. You can't draw the conclusion from that and try to estimate that component.

Mr. BAIRD. Mr. Diamond, would you concur with that?

Mr. Burman.

Mr. BURMAN. I agree. There are some very silly arguments. Like we end up saying well, we had tax increases in the 1990's and the economy grew really fast, and therefore, the tax increases cause economic growth and we had tax cuts in this decade and the economy grew, without allowing for all the other things that are happening at the same time.

Mr. BARRETT. I appreciate that. I hope folks will remember this election season, especially in the context if I where given, say, \$600 billion of deficit spending plus 2 to 3 percent interest rates, I think I could make the economy grow, regardless of what happened with

taxes virtually, and nobody seems to talk about that. Back home it seems to me, folks got more money in their pocket from refinancing their house than they ever got from a so-called middle class tax cut. Any thoughts on that on those other factors? Say, low interest rates or deficit spending as stimuli to the economy?

Mr. BURMAN. It is actually a little bit hard even to draw the inference because there was a huge amount of economic stimulus, not just the tax cuts. There has been a lot of spending over the last 6 years. It is actually a little bit hard to draw the inference about what the independent contribution of that stimulus was to the economy when you consider that the Federal Reserve, at the same time, was also trying to keep the economy on an even keel.

It certainly is right that there are other factors that are very important and the concern is that if we don't pay for the deficits that have come as a result of the tax cuts, through cuts in government programs or something like that, then the long-term effect could be higher interest rates and people could be spending a lot more on their mortgages and on buying cars.

Mr. BAIRD. Let me follow up on that one question, and if you want to elaborate on the earlier one too. I am kind of interrupting myself. You used an interesting phrase. The deficits that come as a result of the tax cuts, would the three of you concur at least a portion of the current deficit or recent deficits are resulting from the tax cuts rather than the tax cuts lowering the deficit?

Mr. BURMAN. I certainly would concur. Actually to clarify, the tax cuts are not the only cause.

Mr. BAIRD. I agree entirely. Mr. Diamond.

Mr. DIAMOND. I concur. There are several things that figure into the increased deficits.

Mr. BAIRD. But the tax cuts are part of it rather than reducing the deficits?

Mr. DIAMOND. Absolutely.

Mr. BAIRD. Dr. Eakin.

Mr. HOLTZ-EAKIN. Certainly tax cuts don't pay for themselves. So it certainly has to be true.

Mr. BAIRD. I believe that we ought to use some form of dynamics. I concur with Mr. Barrett and others, I think the more about information you can give us about the effects of our actions, the better off we are. I think we would be naive to assume, if the mock up of the budget deficit that we are going to have dynamic scoring rescue us, because every tax cut is going to generate more revenue, which I tend to hear from folks, and I think it may be uninformed and it may be naive. Is there merit also to the dynamic scoring of spending? And let me give you an example. I got an \$80,000 appropriation for a little theater in a defunct logging town, that has revitalized that town to measures you can't imagine. It has leveraged donations of wood from the timber company. The communities come together. They have got a steam locomotive bringing tourists up there, \$80,000 has generated a tremendous amount of economic activity. Is there merit to dynamic scoring of spending?

Mr. HOLTZ-EAKIN. I think in principle, you want to look at both sides of the budget when you do this. I think that is inescapable. I think the key is to step back from all the rhetoric that has surrounded this. This isn't a gimmick. It is not a way to evaluate

things based on the budgetary outcomes. That is a terrible way to evaluate policies. You evaluate policies by their impact on the overall well-being of the citizens of the United States. What this does is allow a particular channel of economic growth to enter into the formal measures of the costs, and I think it is entirely desirable to discriminate between good and bad fiscal policies on those grounds. Paying for themselves is a different game. And that is not really what this is about.

Mr. DIAMOND. I stated in my testimony that we should do both taxes and spending, and partly because I would be a little worried the example—I mean, that is \$80,000 that probably did increase growth in that area, obviously, but that is \$80,000 that was taken from other areas. So we may have seen reduced growth there. So the national impact may have been a zero. But we are not sure. It would depend, and we would have to look at that.

Mr. BAIRD. Yeah. We would have the \$220 million bridge in Alaska minus \$80,000. So we will have to struggle through up there.

Mr. BURMAN. I think there are a lot of examples of spending that can enhance growth, like well-designed increases in education, research, or infrastructure. But the example of the bridge in Alaska points out that are some bad infrastructure investments as well.

Mr. BAIRD. I thank the chairman and thank the panelists.

Mr. CRENSHAW. Mr. Chocola.

Mr. CHOCOLA. Thank you, Mr. Chairman. Thank you all for being here today. I haven't been here that long. I am in my second term and I was in the corporate world before I came to Washington, and I am still trying to sort out the differences sometimes. Maybe you all could help me today a little bit. We used to engage in analysis of spending and revenue, policies and practices, things like capital expenditures, things like our pricing policy. We went through analysis, but we didn't talk in the terms of static or dynamic.

We were just trying to figure out what the world was going to look like after we did what we were thinking about doing. If we were thinking about a price increase, we would think about the behavior of our customers, behavior of our competitors, and what would it do to our volume, our pricing, our cost, our margins, what it would do to our ability to buy stuff. What were we doing? Were we engaged in static or dynamic analysis? Dr. Holtz, you point out that static is not really static. So what were we doing? Was it static or dynamic?

Mr. HOLTZ-EAKIN. You are trying to look at your future in the presence of one set of policies versus another, and that is a—that is the nature of doing a “corporate score of alternative marketing policies” or whatever it might be. It would be a full-blown dynamic analysis from the point of view of the corporations, the kind of thing that we have talked about today. Just in case you are not clear exactly the differences, I doubt your corporate world had the power to tax or print money.

Mr. CHOCOLA. No, we did not. But we were trying—we were trying to determine the outcome of behavior, outcome of decisions, and so I guess, you know, that my question is, can we learn anything from the corporate world? We weren't as big as the Federal Government, obviously, but there are huge corporations that have to

make these decisions based on real-world consequences. And can we learn from Microsoft or the way they analyze capital expenditures or their pricing policies?

Mr. HOLTZ-EAKIN. It depends, I think, what you mean by “can we learn.” certainly, everyone who is involved in the policy analysis business, whether it is within the government or beyond learns enormously by looking at the kinds of things that corporations do, looking at their investment strategies, looking at their research strategies, trying to understand how they respond to different environments, how they, in fact, would innovate when given different pressures, whether they come from policies or not.

The difference is private firms are using their own or their shareholders’ money and if they fail, they go away. That is not true of the government. And so, to full-scale import a corporate policy evaluation framework into the government is actually not appropriate. This isn’t a corporation. This is a different entity. It has different powers, and it has different metrics by which it evaluates success because it doesn’t go out of business.

Mr. CHOCOLA. Well, the reason they would go away, there is lots of reasons but one, they are making bad decisions which are bad investments or bad—they don’t generate the revenue they estimate or they are acting unethically or essentially they are making bad decisions based on bad information. You know, I think what we are here to do today is to figure out, how do we get the best information so we can make the best decisions and implement the best policies?

So from that standpoint, because there is less—maybe more severe consequences in the corporate world than there is in government sometimes, isn’t there a way that we could learn from the analyses they use?

Mr. HOLTZ-EAKIN. I think you said it best when you said you want to bring all the information in the best form to the process, and my cautionary note to this, you know, as the one who really believes you can do this, I think I am relatively unique in that I actually believe you can do dynamic scoring and learn something from it on a regular basis. You just have to be careful about what you think you are going to get back. I don’t think you will get more accuracy. I don’t think that is the primary objective. I think you will get to discriminate between better and worse policies more clearly and you will know them when you see them. But because legislation takes place at different points in the year and the economy is always changing, you are doomed to inaccuracy.

So given you are doomed to inaccuracy, I would place the premium on knowing a good policy when you see someone, regardless of when it is enacted.

Mr. CHOCOLA. Well, we always knew we were wrong. We always knew. But painfully, it is the question of, how wrong are you? And so, you know, I guess my question is, is there—well, let me ask, is there a dynamic model that is even close to being accepted in the analysis world?

Mr. HOLTZ-EAKIN. Yours? I think there are multiple—I think the issue is that if you put at this table a sort of a broad range of the American Economic Association, I actually don’t recommend that you do this, but if you imagine doing that, you could find three con-

sensus models, getting down to one would be hard, and it would be, in fact, I think the primary responsibility of the budget committees to make a decision about how to bring the information from those three models down to a single number.

Mr. CHOCOLA. And the only way you are going to do that is trying it and see which one works the best. Right? Mr. Diamond, we are out of time.

Mr. DIAMOND. Even then, trying them and seeing which one, someone who works with the models often don't know what works the best. I mean, you know, often I am in positions where you are just—you just don't have any information. But I agree with Dr. Holtz-Eakin there, there are basically three models out there that are considered.

Mr. CHOCOLA. You have to do the analysis and then do some kind of post analysis what you thought happen, did that happen, right?

Mr. DIAMOND. That is correct. It may be that—that the model, the best model changes with—depending on where you are in the business cycle and what policy you are looking at. So in 2001 and 2003, I think what JCT calls their meg model, was probably a very reasonable model because they could build in unemployment into the baseline. Currently, if you were to do something, I think—and then again, so you have to even ask, do you want to do short run versus long run effects or not? So all of these questions kind of bear on which model you choose. I am not sure it is an open-closed answer. Even if you used one model and it does well one time, that doesn't mean it will do well next time necessarily.

Mr. CRENSHAW. Mr. Diaz-Balart.

Mr. DIAZ-BALART. Thank you, Mr. Chairman. It is wonderful having this distinguished panel here. Doctor, it is always good to see you here, and Mr. Neal always has the ability to put things in real basic terms and I am going to give him credit I am going to try to do those things as well. One of the things we always forget when we are dealing with taxes is, we always talk about the effect on government, which is essential, obviously.

We don't talk about the effect on the guy who pays the bill, on the taxpayer. So I want to, following Mr. Neal's model, first ask some pretty basic questions. Tax increases are paid for by government or are they paid for by the taxpayer? Who pays the taxes for tax increases? It is a pretty basic question. I know. I am following Mr. Neal.

Mr. BURMAN. Taxpayers.

Mr. DIAZ-BALART. Right. And when a taxpayer is asked to pay more money, it is not voluntary, right? I mean when the government says we are going to increase your taxes, it is not voluntary. That is correct. Third, and again, following kind of Mr. Neal's questions, does Congress has obviously the constitutional ability to raise taxes massively or small or increase taxes. So my question is, for example, when Congresswoman Pelosi and the ranking member of Ways and Means, Mr. Rangel, supported and went to the floor and voted for a half-trillion dollar increase on taxes which were paid for by the taxpayer, if they got the votes, they would be able to do that, they could do that, right? Congress could do that if they

got the votes. They could increase taxes by a half-trillion dollars. Who would pay those increases? Taxpayers?

OK. Do we—and by the way, I mention that because that, in fact, was a proposal that was voted for by many on the floor of the House. So this is not theory. So in other words, if Ms. Pelosi was on the majority, Mr. Rangel, chair of Ways and Means, they could possibly then, if they got the majority, pass the proposal that they supported and voted for to increase the taxes on the American taxpayer by half a trillion dollars which just to put in perspective here with my colleagues is more money than the yearly expenditures of every single government in Latin America plus the Caribbean combined.

Or to put it in a different way, is more money than the expenditures of 1 year of the government of Communist China. So they could, right, constitutionally, if they had the votes, pass such a tax increase as they proposed—as they voted for on the House floor, correct?

Mr. DIAMOND. Correct.

Mr. DIAZ-BALART. Now here is my question. When we are looking at dynamic scoring, do we ever look at the impact on—not the government which is essential, that is what we do. Do we ever look at the impact on the taxpayer, on the family as to—if we take out from—if we take away from them more money, how does that impact their decisions, their ability to pay their bills, their ability to send kids to school, their ability—do we look at that at all when we look at taxing?

Mr. HOLTZ-EAKIN. Absolutely. The mechanics of doing a dynamic score would require anyone who doing it to first look at the policy of the tax increase in this case, look at how it impacts households and firms and all their decisions, did they work, did they save, did they spend money, on what and the feedback that has on economic growth and the overall collection of receipts and spending at the Federal lever. So it is embedded in there.

Mr. DIAZ-BALART. So do we do that now? Do we do that now though?

Mr. HOLTZ-EAKIN. We do it now to a certain degree. But again, we stop—in the mechanics of it, you would never let any policy change the total level of the economic growth off of the baseline. That is the conventional scoring at the moment.

Mr. BURMAN. Distributional analysis from the Treasury, Joint Committee on Taxation, and the Tax Policy Center, periodically show the distribution of tax changes as a result of particular legislation. I think one important point is that the tax increase by itself doesn't actually affect the long-term obligations of American taxpayers. What determines those is the level of spending. If we are financing current spending from deficits, that just means that we haven't specified to who is actually going to pay for it. If we are running a \$500 billion deficit now, then the implicit payer of the taxes might be my children or my grandchildren unless you come up with a way to cut spending to offset the deficit.

In some ways, these distributional analyses are very misleading when we are running deficits because they don't present a complete picture of who is bearing the burden. We are basically accepting

the notion that the tax or spending we are not paying for right now effectively is never going to be paid for.

Mr. DIAZ-BALART. Thank you. Thank you.

Mr. CRENSHAW. Mr. Wicker.

Mr. WICKER. Thank you, Chairman Crenshaw. Dr. Holtz-Eakin, we have a pretty good little briefing prepared by the committee staff here, and it, of course, defines static analysis for us. And then it talks about the distinction between dynamic scoring and dynamic analysis. You weren't with CBO in 1997, but maybe you remember or maybe somebody else on the panel does.

In 1997 Congress cut taxes by about \$89 billion over 5 years and yet tax revenue the next year increased from 19.3 percent of GDP to 20 percent. And for the time being there, the budget was balanced even though we cut taxes. How would—in very practical terms that even a congressman could understand, how would static scoring apply to that one example? And then what would be the distinction between dynamic scoring in that 1997 tax cut of \$89 billion and dynamic analysis?

Mr. HOLTZ-EAKIN. Well, on scoring versus analysis, I am not going to pretend that everybody accepts these definitions, but I think of the difference being analysis is focused on economic performance. You do a dynamic analysis to see how fiscal policy affects the U.S. economy, it is going to grow faster or slower, and you might want to expand the scope to take account of—within the U.S. economy, different kinds of households rich, poor, savers, old, young, whatever, so you can break it apart in pieces too, but the basic issue is you look at economic performance.

Scoring is about taking that economic performance, better or worse, whatever you are looking at and saying, OK, well if the economy is doing better, we are going to, perhaps, spend less on unemployment insurance when it goes down, collect more on tax revenue whether it is from corporate source or individual sources, receipts go up, let's calculate the size of that impact and look at the net impact on the Federal budget, both the direct tax cut plus the offsets that you might get—

Mr. WICKER. And coming to a number.

Mr. HOLTZ-EAKIN. And putting a number on it.

Mr. WICKER. The problem is this. Mr. Chocola and the panel had a nice discussion about how we know we are going to be wrong, it is just a question of who is going to be closer, and when we are making decisions, oftentimes we are constrained by the scoring. We believe in our hearts based on experience and intuition and everything that is available to us that this would be good policy.

We can't do it because somebody counting beans in some office somewhere says it scores as costing more than you could do under this particular budget constraint that we have.

Mr. HOLTZ-EAKIN. Well, as a former chief bean counter, let me just sort of point out how I think about this, which I think is important. If you go to this table that was put out there—

Mr. WICKER. Table three?

Mr. HOLTZ-EAKIN. Table three was passed out. I am just eyeballing the three GNP effects. If you go from column 1 to column 2, you always go up. If you go from column 2 to column 3 you always go down. So if you asked me the question, which tax policy

in a dynamic scoring setting has the better long run impacts, I would pick the one that goes from column 1 to column 2 over the one that goes from column 2 to column 3. And that is true regardless of whether you use a future government consumption offset of a future index offset. So if you have a floor debate between going 1 to 2 or 2 to 3, and you go to the bean counters, the bean counters are always going to give you a ranking that is the same.

So that is point No. 1 and on that, I think that is the merit involved, it ranks proposals in a particular way. Second question is, well, is it really point 7 and it is up or is it really, you know, zero between 1 and 2? Well, you know, that is where the uncertainty arises, and you know, I say this lovingly, one of the reasons you get elected is you get to make the tough decisions, whether or not it is a good idea. And I am sympathetic, but the scoring system is not primarily to tell Congress what the outcome will be. It is to tell Congress the difference between this representative's proposal and this representative's proposal. That takes primary responsibility. I would love it if it was simultaneously exactly accurate about one versus the other, but I don't think that is feasible, not about the way the business is being done.

Mr. WICKER. Thank you. Well, if there is no one else waiting, could I perhaps have another second or two Mr. Chairman?

Mr. CRENSHAW. Sure.

Mr. WICKER. Tax cuts don't pay for themselves. Everybody on the panel agrees. And it seems that our briefing from the committee agrees that no credible economist really believes that tax reductions could generate enough revenue through revenue growth to fully compensate for the tax reduction. Now, "fully" is a very important word there. And I guess this is what dynamic scoring is all about. In the example that I gave you where we cut taxes by \$89 billion over 5 years but revenue increased, would anybody here suggest that the tax cuts had nothing whatever to do with revenues increasing?

Mr. DIAMOND. I wouldn't. I mean, I would—knowing at least part of the 97 tax cuts were capital gains related, I think you could look at column one and say that that is one proposal that probably pays for more of itself but not fully.

Mr. WICKER. So tax cuts don't fully pay for themselves but they can partially pay for themselves.

Mr. DIAMOND. That is correct.

Mr. WICKER. And that is the problem with static scoring, is static scoring assumes it is just a total loss of revenue.

Mr. BURMAN. Correct. But for some tax cuts as Dr. Holtz-Eakin and Professor Diamond have pointed out, the dynamic costs are actually larger than the static costs. Even in the case of capital gains, there are complications. The problem is that with capital gains the difference between tax rate and capital gains and other income is exploited by everybody designing a tax shelter. When you make that difference larger, there will be more tax sheltering activity and that kind of thing doesn't show up in these dynamic models because it is just very hard to represent.

So the issues are complicated, but it is certainly true that for a lot of kinds of tax cuts, there would be general agreement that behavioral effects would be positive, especially if they were paid for.

Mr. WICKER. Well, the chairman has been very indulgent on me with the time. Let me just observe in following up on Mr. Barrett's question. It would seem to me that somewhere in the public record of the debate back in 1997, some entity somewhere in the private sector perhaps tried to do a dynamic score of the statute and the tax cut that the Congress enacted, and I would be interested if somewhere out there someone within the sound of my voice could discover if a dynamic score was urged upon the powers that be and how accurate it turned out to be as opposed to the scoring that we actually received. Thank you, Mr. Chairman.

Mr. CRENSHAW. Thank you. Mr. Cuellar, do you have any questions?

Mr. CUELLAR. Not at this time. Thank you, Mr. Chairman.

Mr. CRENSHAW. Would you put the chart back up because to follow up on a couple of questions Mr. Wicker asked, when you talk about dynamic analysis, one of the things when we looked earlier, when you argue about do tax cuts pay for themselves, and I think most people say they don't in full, but somehow that if you don't tax overtime, wages, people might work more overtime and that might—I mean, that might change the dynamic.

I think it has been pointed out there are relatively few situations where dynamic analysis would really be useful, but one of them would be these capital gains and the ordinary rates. And it seems to me that the one thing that stands out when—when you make that offsetting decision, when you look at that last column of number 3, when you say if you decide you are going to control spending as an offset so to speak, you end up saying the economy is going to grow by .7 percent, and if you say you are going to use the offset of raising taxes, you find in accordance with that dynamic analysis that the economy loses .9 percent.

Now, if that is a dynamic analysis, is that legitimate? I mean, do you all agree? I mean, I think Mr. Diamond, that he was involved in the analysis, might say that that is true, but does anybody disagree when you make those kind of assumptions that you—that you can get the result that is on that screen? Maybe start with Mr. Burman, because he might not think so.

Mr. BURMAN. I am skeptical of the actual point estimate. I agree that the dynamic analysis is helpful for ranking different options, but these models require so many simplifications, so many assumptions about how people respond, incentives to work and save, about what time period people make decisions over that I think that the sensitivity of these results to the assumptions can be really extreme. People who build these models, like Professor Diamond, tried the sensitivity analysis and they show that there is a range of outcomes. CBO has done this in other contexts as well and that is very helpful, but the point estimate itself is what I am fairly skeptical of.

Mr. DIAMOND. I assumed you agreed with the analysis.

Mr. CRENSHAW. Let him answer last and see what kind of—

Mr. HOLTZ-EAKIN. I think the primary pieces that go into long-run growth, to make the economy bigger, you either have to have more stuff in the way of people, more stuff in the way of buildings and factories, or more stuff in the way of technologies, and the only way you get the latter two of those, you give up something now,

you make an investment, and so the key to long-term growth is saving, and these policies which cut government consumption, means the country saves more. You have to get this answer.

Mr. CRENSHAW. Mr. Diamond.

Mr. DIAMOND. I will start out by just touching on one point Dr. Burman made, and that is that the OTA provided two other tables it provided for low and high parameter runs. And then I would just point out the result and kind of what you are getting there is you can see when you are going across from columns 1 to 3 that when you go from column 2 to column 3, adding in the remaining tax cut provisions, which were the child credit, the increased standard deductions and bracket width for married filers and the 10 percent rate bracket which are all somewhat or inframarginal for most taxpayers, meaning they are not going to have any of these behavioral effects that we talked about with dynamic analysis labor increases and so forth, in fact they may have the opposite.

You can see that real GNP, the increase or predicted increase in real GNP drops from 1.1 to 1.7 percent. What happens now when you go down now to the future income taxes now, you are having these extra tax cuts but instead of offsetting them with decreases in government consumption, you are raising taxes on waiver income and capital income. So you are getting this magnified effect because now you have actually increased capital income taxes as opposed to lowering them because the tax cut for the child credit, the marriage penalty relief and the 10 percent rate bracket, that has been paid for through an increase in capital income taxes and labor income taxes, and that is why that result is so kind of substantial. And that is all I have to say.

Mr. CRENSHAW. Thank you.

Mr. BAIRD. Mr. Chairman? When you get a chance, you may have more questions, if I could ask.

Mr. CRENSHAW. Go ahead. And then I have one final one. Baird.

Mr. BAIRD. Just two quick questions, follow up on Mr. Diaz-Balart's comments, and I think Mr. Burman alluded to this. It is true that people pay the taxes, that is where the money comes from. Who will pay for the deficit?

Mr. BURMAN. Well, that is the big problem. We haven't specified how we are going to close the deficit. It might be higher taxes on our children. It might be cuts in spending programs, which depending on what we are cutting could have big or small effects on the economy. The spending programs presumably benefit people as well, so cutting those would have a cost. The problem with deficit financing is that we really don't know what the debt effects are going to be.

Mr. BAIRD. Who pays—so it will be the people who will pay for the deficit at some point?

Mr. DIAMOND. I mean, currently, we are all paying for it in that every year we make an interest payment.

Mr. BAIRD. You read my mind. That was going to be my next.

Mr. DIAMOND. Then also, eventually you have to pay it off. It is the principle interest question. We are all currently paying interest. At some point, someone will have to pay the principle.

Mr. WICKER. Will the gentleman yield on that?

Mr. BAIRD. Sure.

Mr. WICKER. We are just speaking hypothetically here, and I would like to balance the budget and have advocated a balanced budget. But Dr. Diamond, you just said eventually you would have to pay it off. Corporations don't eventually pay off their debt. They roll it over. And I have heard economists say, we realistically will never pay down the public debt. We hope that it is within a manageable percentage of GDP, but what says that this country will eventually have to pay off the public debt? And if so, when?

Mr. DIAMOND. You don't have to pay off the principle. You can continue to make interest payments forever.

Mr. WICKER. Which is just what corporations—

Mr. DIAMOND. They often—I mean they have often rolled over one piece of debt for a new piece of debt.

Mr. WICKER. Bonds.

Mr. DIAMOND. I agree with you. You don't have to pay it off, but you are still paying the costs through the interest payments and I agree that as long as GDP is growing faster than the government debt, then in some sense, you are actually getting more wealthy. I mean even though you have more debt stacking up, if your income is going up faster than your debt, I mean these are the types of things that we should look at.

Mr. WICKER. Indeed. If Donald Trump owes a million dollars, it is not quite as severe as Roger Wicker owing a million dollars.

Mr. DIAMOND. But whether we are going to pay it off or not, there is still a cost.

Mr. WICKER. There is a cost, no question.

Mr. BAIRD. I will reclaim my time. But Mr. Holtz-Eakin may want to respond to Mr. Wicker.

Mr. HOLTZ-EAKIN. Just in the context of the question at hand which is the dynamic analysis issue, I think it is important to recognize that what is going on here is that taxpayers pay, bear the burden of a policy by having a lower ability to finance their private lifestyles because of the decisions made in the fiscal policy. And so, you know, my case, all I care about is Diet Coke and Twizzlers and when I pay taxes, I can't get as much of either. And what the dynamic scoring would show for you, if you showed a tax financed or a deficit financed, whatever your fiscal policy was for a given level of spending, it would affect the growth in the economy.

I mean, somewhere out there in some future generation, they might pay for it by having a less productive economy and less GDP and that is one way that the burden of particular spending policies gets inflicted on the private sector.

So one of the things dynamic scoring would allow you to do would be to compare what is the impact of paying for it all now with taxes versus paying half of it now with taxes and doing it later and showing to the extent you care about it, the distribution across generations because there are different ways to shift this off to the future and slower economic growth is, in fact, one of them.

Mr. BAIRD. Two points that I want to follow up on. I have looked at the OMB budget figures every year, and one of the things that strikes me is we are all committed to cutting waste, fraud, and abuse. That is given, and I think we ought to eliminate it. But that won't solve the problem. As I looked at the budget deficit figures last year unless I am mistaken and actually has been the case for

the last 4 or 5 years since I have been here, actually, the non-defense discretionary spending is less than the size of the Federal budget deficit if you include borrowing from Social Security in the budget deficit figure and you include spending on Iraq.

In other words, if you—when we look at this chart you had up in decreasing future government consumption, if you completely eliminate nondefense discretionary spending, you are still in deficit. So you shut down the Federal prisons, you open up the borders, you shut down the national parks, you eliminate the Department of Education, some of these people may like, some people may not like but you are ending the whole show, except for defense and the mandatory programs.

I will be the first to admit we have to deal with the mandatory spending side. We just have to do that, and frankly neither side has shown a great deal of courage in that regard. But this notion that—when we put here, decreasing future government consumption. Pretty easy to put down. Pretty hard to implement. When you put this statement here, do we have an idea of what that would look like, decreasing future government consumption, by what amount and where?

Mr. DIAMOND. I mean, you definitely could have that idea and that may be another important aspect of dynamic analysis to give members what that would look like, to give some examples of what that would look like. That could be done. I don't have any of the numbers with me, but that could be done.

Mr. HOLTZ-EAKIN. Just to beat a dead horse, I don't think it is imperative how that gets done. I think it is imperative if you are looking at policy choices now, they are on a level playing field. If you are going to specify an unrealistic, hypothetical, politically unattainable cut in government consumption for all policies in the future, then they are on a level playing field and that is fine.

So for the future of actually doing an analysis, you don't have to specify where to get the votes in 2080. You just have to make sure everyone gets the same treatment.

Mr. BAIRD. I would argue it is easier because it is easier to say theoretically we are going to cut government spending than it is to say we are going to deal with the deficit through taxes because the taxes come straight out of your pocket so there is an inequality there in the underlying assumption.

You just say cut waste, fraud and abuse and we will solve the problem. First is you may have to suck it up and pay a little bit for the services you are receiving today in order so you don't pass the deficit on to your kids. The point I would be making is yes in the abstract, you are giving us the numbers how they turned out but the political reality and the day-to-day reality for the taxpayers and those who elect to who represent them is different.

The final question I would just ask is I heard this issue about debt and deficit is a percentage of GDP. And in theory, I understand the concept, but here is the problem, I think there is a huge disconnect happening right now relative to prior times in which we have achieved debt at a comparable level of percentage of GDP. And here is the disconnect. In the past, and I have looked at the chart over the fluctuation of deficit and debt as a percent of GDP,

the baby boom generation was paying in in the form of taxes, not drawing out. That would be point one.

And point two is, we were not competing against 1.3 billion Chinese and 1 billion Indians and hundreds of million of people in Indonesia. I think there is an enormous historical disconnect and we are kidding ourselves if we think that we can carry the same deficit percentage GDP ratio now that we have carried in the past without any long-term consequences. Any comment on that?

Mr. HOLTZ-EAKIN. Well, I would concur that you really should be looking forward all the time, not looking back. And if the budget was balanced today, we would still have a big problem if we don't change Social Security, Medicare and Medicaid so looking forward and recognizing the demographic shift is imperative, and in looking forward, you are going to face an international economic arena that is very different than in the past and policies better reflect that or we will not be well served.

Mr. BURMAN. My view is that, just looking at the demographics, if you can't figure out what to do with Social Security Medicare and Medicaid right now, the next best thing would be not adding on to the national debt. The lower the debt is 10 years from now, the more able our children will be to deal with these problems that we have pushed off to them. By contrast, if we pile onto the debt and it is larger, it is going to require much higher taxes to bring things in the balance and much more draconian cuts in programs and they are not going to be any easier when there are twice as many people in AARP as there are now.

Mr. DIAMOND. I agree with what they said. To be an optimist, hopefully the growth in China will expand our market more so than just—there is going to be a mutual gain there. So it is not always—one to one. That ignores a lot of questions about security and dangers and all that stuff. We will leave for—

Mr. BAIRD. Well, I guess that \$64 billion a month trade deficit, that is a fairly optimistic scenario, but I thank the gentleman for the comments.

Mr. CRENSHAW. Let me ask you just two final questions, and Mr. Wicker has another question. And one, Dr. Holtz-Eakin, when I asked you earlier about the legislation that kind of prompted this discussion, the modernization of all these concepts you said it was necessary appropriate and timely, could you give us a couple of examples of where, you know, where changes need to be made? In other words, for instance, like the pension benefit guarantee corporation, kind of public-private partnership, I mean, they didn't have one of those in 1967, and—but a couple of examples like that of how, you know, how modernizing the concepts might help us get a better handle on what is revenue, what is expenses, just one or two that you encountered when you were head of CBO.

Mr. HOLTZ-EAKIN. Well, certainly the PBGC is No. 1 on my list. The statutory language says that the taxpayers are not at risk if the PBGC runs out of assets to pay off pension insurance. I don't believe anyone in this room thinks the Congress would stand back and let that happen. So the taxpayer is at risk. The budget doesn't reflect that at all because the budget has a very strange treatment of the PBGC where premiums are counted in and actual benefits are paid out, but if someone puts a pension plan in the PBGC,

there is no change in the budget immediately of the recognition that we will pay out more in the future.

If it is a government program, put it on the budget completely. If it is really not and the taxpayers is not at risk, then get all the treatment off, but currently, it is a little halfway house, and that is, I think, misleading and not appropriate.

So that is No. 1. Another one that came up recently has been the Universal Service Fund, which, when it was created, some people believed was not going to be reflecting the Federal budget, but, in fact, it uses the sovereign powers of the Federal Government to collect revenues from telecommunications companies and use them for particular policy purposes, so it is reflected on the Federal budget.

The fact that it wasn't expected to be on the budget by some parties led them to behave in ways that are inconsistent with standard budget treatment, and that has been sorted out over the years. Well, that is another example where, you know, the lines need to be drawn about what is in and what is out and just get business clarified. For those who are in and in a big and important part of the Federal Government now are financial transactions, whether they be loan guarantees or direct loans or some sort of investment activities, venture capital activities, how do you treat all these financial transactions and appropriately reflect the taxpayers' exposure to additional taxes to meet those obligations? That is a very important question. Financial arrangements have gotten increasingly intricate. When you bought something versus leased it is not obvious. When you have made a guarantee versus a loan is not obvious. There is a lot of work that would be beneficial in clarifying exactly what it is that is on the books at any point in time.

Mr. CRENSHAW. I thank you. Did either one of you all have a comment to make in that regard? Thank you. And the last question now I would ask, is as we kind of go through this exercise of talking about—I think it is helpful to understand that static score and actually has a little more dynamism in it that might be thought, and yet dynamic analysis is a pretty broad overarching concept that would be helpful probably in a handful of situations. Would each of you all comment on what role the Budget Committee might play? Because you have got JCT, you have got CBO and where—where and how can the Budget Committee fit in to kind of making this a better way to analyze spending, analyze taxes? Any thoughts on that?

Mr. DIAMOND. As I pointed out in my testimony, I think the current House Rule 13 is a decent place to start, and that maybe going from there, we should just try to have the analysis done in a more timely fashion and it should be done on spending and taxes and that we should avoid—I mean, we are going to have to limit what it is done on, otherwise, there is just not the staff resources to do it, although there is a very competent staff in place, you have got to limit those choices, and that needs to be done in a way that is not done with a political bias, it needs to be done from kind of an observer's—an unbiased observer's point of view, and then last, I guess is just being educated. I think back to the Fed model. The Fed does use all these models, and they do use macroeconomic analysis, and I guess it is a little easier because some of them are economists, they don't necessarily have the technical expertise, but

to some extent I think just being more involved, especially, you know, maybe telling us what you want to see without—without forcing us to give any one certain thing or exclude—without forcing any exclusion of information.

Mr. BURMAN. I had a couple of examples in my testimony of ways I thought the budget process could be improved. One issue was that we actually don't do a very good job of forecasting the baseline. And there is some evidence from Professor Alan Auerbach of Berkeley that information is not incorporated in the forecast. The errors tend to be correlated over time. Forecasters consistently overestimate the deficits for a period, and then consistently underestimate deficits after that.

He didn't figure out exactly how to exploit that information to make the forecast better, but it might be worthwhile to invest a fair amount of time thinking about whether there is sort of a systematic bias in the whole process of forecasting the baseline and whether we could eliminate it or use information from year to year to help us to retarget the baseline and do a better job of forecasting going forward. There are a number of little things. One example is that on the tax side, unlike on the budget side, we don't do probabilistic scoring and that produces legislation that looks like it doesn't cost anything, but it clearly has value.

An example in my testimony is that there is a tax credit for low-yielding oil and gas wells and it only kicks in if the price goes below a certain level. That score is costing nothing because that level is below the level that was prevailing when the legislation was put in place. But there is an enormous lobbying effort for this provision. So clearly some people thought it was going to be of some value under some circumstances, and the right answer would be, just as on the spending side, to include the expected costs to the government across the range of prices, and not just the point estimate of what you expect given a set price.

Mr. HOLTZ-EAKIN. I think there is an important role for the Budget Committee. First of all, given the state—not just the scientific knowledge, but the overall understanding and acceptance of these dynamic techniques, I think it remains appropriate for them to be supplemental at this point and not the major way of doing business, but they should be regularized and the Budget Committee can take the lead in doing that. And the Budget Committee then would have an important educational role to help members understand what it is that would come out of such an analysis and how it would differ from current practice, and that is the first and foremost role.

The second one is if it were the case that this would be brought formally into the budget process, it has to be the Budget Committee who is ultimately the guardian of what scores get entered into the budget that makes the call on when a dynamic analysis is done. You know, as I stress, not every piece of legislation merits this. And it would be a terrible misuse of resources to crank up big models for tiny proposals, but you can't leave it to the judgment of the CBO or the joint committee or somebody when they are going to do it or it is going to be perceived as a political call and that is going to undermine the entire effort.

So there has to be a call made at a higher level on the circumstances in which dynamic analysis would be employed. That is an important consideration. The Budget Committee would have to weigh in heavily there and they would also have necessary the coordination issue between the joint committee and the CBO because of the ability to disband both sides of tax and spending aspects of the budget. I think those are crucial to think about.

I just want to close by disagreeing somewhat with Mr. Burman, who I otherwise respect greatly, especially since he is so much taller and funnier than I am. I don't think this is going to be an issue getting the baseline more accurate. A while back, the Federal Reserve staff put out a study which I found very informative. It compared the CBO projections, which have a particular set of handcuffs on them which are called current law, they project under current law and they compared them with the OMB forecast which have a different set of handcuffs, which the president's policies are fully embedded in those forecasts and then the third player, the Federal Reserve who, you know, we are all jealous of because there is no handcuffs, they get to just project what they think will happen.

The Federal Reserve was more accurate by 1 percentage point over a 1-year horizon in forecasting the deficit and after that it was a wash. They were all wrong, and I think that tells you it will be very difficult to make dramatic improvements in budget forecast especially on the deficit, and that is not a good place to spend time and energy. It is just something that is just hard.

Mr. CRENSHAW. Well, thank you very much. No further questions—one final question.

Mr. WICKER. The President asked for a half million dollars for the Treasury Department for an Office of Tax Analysis to create a division for dynamic analysis. Both Appropriations Committees, House and Senate, have approved this figure. And so it seems that for the first time, we are actually going to have a little division within Treasury to do dynamic analysis. Is this a good idea? And is there a danger of political pressure being brought to bear on the people within this division? And I would just like to give each panelist an opportunity to talk about the merits of this proposal, which seems to be on track.

Mr. HOLTZ-EAKIN. I think it is a good idea. It is a good idea, No. 1 because, you know, I have a basic endorsement of the idea of doing this kind of analysis. No. 2, I am very skeptical of monopolies, and having just the congressional branch doing it is not a good idea. In my experience of CBO, every time that the CBO had to explain why it was different from the administration, whether it was in Social Security or in Medicare or any other aspect, PBGC, both parties' analyses were improved by just the simple act of getting together and trying to figure out why they were different, so I think it is actually very healthy and constructive for this kind of capacity to be broadly spread throughout the fiscal policy of the executive branch and the Congress.

Mr. DIAMOND. I think it is very useful and I know several of the people over there, they are not—you know, they are not out of the mainstream. Very reasonable people and in general my view of OTA, and I think Lynn will have a much deeper view, since he was

the deputy assistant of OTA, I don't think that is a real—the staff is, in some sense, nonpartisan in some way, and they don't—they have some political pressure, but my view is that they tend to fight it just a little whereas I think the appointed positions tend to put it on them. But that is—that is an uneducated view to some extent.

Mr. BURMAN. I was a deputy assistant secretary of Treasury heading up the office that would be doing this at the end of the Clinton administration, and I actually have serious concerns about this. I should point out that I have enormous respect for both of my colleagues, both of whom are funnier than I am, but I disagree on this one issue. The Treasury, unlike JCT and CBO, is an inherently political organization. The staff is nonpartisan. The staff is exceptionally good. I think the analysis that they did recently is a fine analysis, but there is political pressure in the budget process.

I was at the Treasury Department when we produced baseline receipts estimates. I can't even remember what was wrong with the bottom line, but we got a new forecast from the administration, and we produced a new set of baseline receipts estimates, and then we got another new forecast from the administration, and we produced another new baseline receipts estimates. Many, many broken arms at OMB later, they had their budget forecast.

I think the effort is duplicative of the work that is done by JCT and CBO, which are nonpartisan. I think that there is the pressure for politicization. I don't think the staff would ever do a bad analysis, but the problem is that the analysis that would be released would be very, very selective, at least that is the concern. And it might be that the analysis would always be above reproach, but I think there would always be a suspicion that the analysis that came out of the Treasury Department would be part of Treasury's advancing the President's agenda, which is what Treasury's role is.

So I think if you actually wanted to have an independent dynamic analysis division to act as a check on the other organizations that are doing it, it would be better to put it somewhere else, like at the Federal Reserve or in an independent agency.

Mr. CRENSHAW. Well, thank you very much for being here today. Thank you for your testimony. Thank the members. The meeting is adjourned.

[Whereupon, at 12:01 p.m., the committee was adjourned.]

