DYNAMIC ANALYSIS OF THE TAX REFORM ACT OF 2014

HEARING

BEFORE THE

SUBCOMMITTEE ON SELECT REVENUE MEASURES

OF THE

COMMITTEE ON WAYS AND MEANS

U.S. HOUSE OF REPRESENTATIVES

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CONTENTS

DYNAMIC ANALYSIS OF THE TAX REFORM ACT OF 2014

WEDNESDAY, JULY 30, 2014

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON WAYS AND MEANS,
SUBCOMMITTEE ON SELECT REVENUE MEASURES,
Washington, DC.

The subcommittee met, pursuant to call, at 10:01 a.m., in room 1100, Longworth House Office Building, the Honorable Pat Tiberi [Chairman of the Subcommittee] presiding.

[The advisory of the hearing follows:]

HEARING ADVISORY

Chairman Tiberi Announces Hearing on Dynamic Analysis of the Tax Reform Act of 2014

1100 Longworth House Office Building at 10:00 AM
Washington, July 23, 2014

Congressman Pat Tiberi (R–OH), Chairman of the Subcommittee on Select Revenue Measures, today announced that the Subcommittee will hold a hearing on dynamic analysis of the discussion draft of the *Tax Reform Act of 2014*, as released by Chairman Dave Camp on February 26, 2014. Specifically, the Subcommittee will review dynamic analyses of the macroeconomic effects of the draft conducted by outside economists, the role of dynamic analysis in assessing tax reform proposals, how dynamic analysis can provide recommendations to strengthen the draft, and recommendations for improving the availability and use of dynamic analysis. **The hearing will take place on Wednesday, July 30, 2014, in 1100 Longworth House Office Building, beginning at 10:00 A.M.**

In view of the limited time available to hear witnesses, oral testimony at this hearing will be from invited witnesses only. However, any individual or organization not scheduled for an oral appearance may submit a written statement for consideration by the Committee and for inclusion in the printed record of the hearing. A list of invited witnesses will follow.

BACKGROUND:

As part of the Committee's pursuit of comprehensive tax reform, Chairman Camp released on February 26, 2014, a discussion draft of legislation intended to overhaul the Tax Code. The draft was intended to achieve a simpler, fairer, and pro-growth Tax Code. In the interests of transparency and accuracy, the Chairman continues to seek feedback from a broad range of stakeholders, taxpayers, practitioners, economists, and members of the general public on how to improve the discussion draft.

The Joint Committee on Taxation (JCT) serves a critical role in the legislative process by providing expert and impartial analysis of the potential effect of proposals to change U.S. tax policy. In evaluating the discussion draft, JCT conducted both a static and a dynamic estimate. Under the static analysis, the draft is projected to reduce the deficit by $3 billion over the 10-year budget window. The dynamic analysis released by JCT demonstrates that the draft will increase output, consumption, and employment over that same 10-year window. Outside analyses performed by a wide array of economists found similar results.

In announcing this hearing, Chairman Tiberi said, **"Fixing our broken Tax Code will strengthen the economy to help employers create more jobs and increase wages for American families. Chairman Camp has worked hard to produce a tax reform draft that does just that. This hearing provides a good opportunity to hear economic analysis on how the draft achieves this goal and to learn about more actions the Committee can take to improve the draft and the accuracy of our measurements."**

FOCUS OF THE HEARING:

The hearing will focus on macroeconomic analyses of Chairman Camp's discussion draft and the role of dynamic analysis in evaluating options for tax reform in general. The hearing will address: (1) dynamic estimates of the effects of Chairman Camp's discussion draft; (2) how dynamic analysis can help to assess the impact of tax reform; (3) what changes could be made to the draft to achieve stronger growth; and (4) what changes could be made to JCT's models, assumptions, or procedures to obtain more transparent, accurate, and robust results.

DETAILS FOR SUBMISSION OF WRITTEN COMMENTS:

Please Note: Any person(s) and/or organization(s) wishing to submit written comments for the hearing record must follow the appropriate link on the hearing page of the Committee website and complete the informational forms. From the Committee homepage, *http://waysandmeans.house.gov*, select "Hearings." Select the hearing for which you would like to submit, and click on the link entitled, "Click here to provide a submission for the record." Once you have followed the online instructions, submit all requested information. ATTACH your submission as a Word document, in compliance with the formatting requirements listed below, **by the close of business on Wednesday, August 13, 2014.** Finally, please note that due to the change in House mail policy, the U.S. Capitol Police will refuse sealed-package deliveries to all House Office Buildings. For questions, or if you encounter technical problems, please call (202) 225–3625 or (202) 225–2610.

FORMATTING REQUIREMENTS:

The Committee relies on electronic submissions for printing the official hearing record. As always, submissions will be included in the record according to the discretion of the Committee. The Committee will not alter the content of your submission, but we reserve the right to format it according to our guidelines. Any submission provided to the Committee by a witness, any supplementary materials submitted for the printed record, and any written comments in response to a request for written comments must conform to the guidelines listed below. Any submission or supplementary item not in compliance with these guidelines will not be printed, but will be maintained in the Committee files for review and use by the Committee.

1. All submissions and supplementary materials must be provided in Word format and MUST NOT exceed a total of 10 pages, including attachments. Witnesses and submitters are advised that the Committee relies on electronic submissions for printing the official hearing record.

2. Copies of whole documents submitted as exhibit material will not be accepted for printing. Instead, exhibit material should be referenced and quoted or paraphrased. All exhibit material not meeting these specifications will be maintained in the Committee files for review and use by the Committee.

3. All submissions must include a list of all clients, persons and/or organizations on whose behalf the witness appears. A supplemental sheet must accompany each submission listing the name, company, address, telephone, and fax numbers of each witness.

The Committee seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202–225–1721 or 202–226–3411 TTD/TTY in advance of the event (four business days notice is requested). Questions with regard to special accommodation needs in general (including availability of Committee materials in alternative formats) may be directed to the Committee as noted above.

Note: All Committee advisories and news releases are available on the World Wide Web at *http://www.waysandmeans.house.gov/*.

Chairman TIBERI. The hearing will come to order. Good morning and thank you for joining us with our subcommittee's hearing on dynamic analysis of Chairman Camp tax reform discussion draft, the Tax Reform Act of 2014.

Today we examine the discussion draft of the Tax Reform Act of 2014 released by Chairman David Camp in February. The draft attempts to overhaul the Tax Code to create one that is simpler, fairer, and more pro-growth. I applaud Chairman Camp for his work on the draft and for working to fix our broken Tax Code to strengthen the economy, help employers create more jobs, and increase wages for American families.

An important goal for any tax reform plan is economic growth, and the Joint Committee on Taxation for the first time provided a

dynamic analysis of the tax legislation where it found the draft will increase GDP by as much as $3.4 trillion and would create nearly 2 million private sector jobs.

[The information follows:]

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

FEB 21 2014

Honorable Dave Camp
U.S. House of Representatives
Committee on Ways and Means
1102 Longworth HOB
Washington, D.C. 20515

Dear Chairman Camp:

This letter provides an analysis of the macroeconomic effects of your proposal to modify both the individual and corporate income tax by broadening their tax bases and changing statutory tax rates. The following analysis uses both an Overlapping Generations Model and the Joint Committee on Taxation staff's Macroeconomic Equilibrium Growth model to simulate the macroeconomic effects of your proposal. This analysis is based on the proposals as they correspond to the estimates presented on Table #14-1 00 2R1, *Estimated Revenue Effects of the "Tax Reform Act of 2014."*

OVERVIEW

The following discussion analyzes the macroeconomic effects of a proposal to broaden the bases for the individual and corporate income tax and to restructure statutory tax rates on individual and corporate income. We assume the proposal would be generally effective for taxable years beginning after December 31, 2014. This analysis is presented relative to the 2013 economic and receipts baseline ("present law"), published by the Congressional Budget Office ("CBO") in February, 2013.[1]

We analyzed the proposal using the Joint Committee staff macroeconomic equilibrium growth model ("MEG")[2] and an Overlapping Generations Model ("OLG").[3] In general, the

[1] Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2013-2023*, February 5, 2013.

[2] A detailed description of the MEG model and its behavioral parameters may be found in: Joint Committee on Taxation, *Macroeconomic Analysis of Various Proposals to Provide $500 Billion in Tax Relief.* (JCX-4-05), March 1, 2005, and Joint Committee on Taxation, *Overview of the Work of the Staff of the Joint Committee on Taxation to Model the Macroeconomic Effects of Proposed Tax Legislation to Comply with House Rule XIII.3(h)(2),* (JCX-105-03), December 22, 2003.

[3] The OLG model used in this analysis was leased from Tax Policy Advisers. Information about this model may be found in John W. Diamond and George R. Zodrow, *Description of the Tax Policy Advisers Model*, unpublished document, 2013.

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

lower effective marginal tax rates resulting from the combination of lower statutory tax rates and changes to the definition of taxable income provide an incentive for increased labor effort, and under some modeling assumptions for some years, increased business investment. Relative to present law, the policy provides an incentive for increased consumer purchases of goods and services by increasing after-tax income of households. This effect can be important when the economy is operating below full capacity. The extent of both supply and demand effects depends on the sensitivity of individual labor choices to changing effective marginal rates, the responsiveness of individual savings choices to changes in the after-tax return on earnings from investment, and the responsiveness of businesses to changing incentives for overall investment and the location of investment and taxable profits in the United States. In addition, the projected impacts of the proposal on the economy depend on assumptions about the monetary policy response by the Federal Reserve Board. In general, under most modeling assumptions, the proposal is projected to increase overall economic activity as measured by changes in gross domestic product ("GDP") relative to the present law baseline over the 10-year budget period.

DESCRIPTION OF PROPOSAL

Individual income tax

Under present law, there are seven different regular individual income tax brackets, starting (in 2015 dollars) at 10 percent for single filers with taxable income under $9,200 and joint filers with taxable income under $18,400, and topping out at 39.6 percent for single filers with taxable income above $412,650 and joint filers with taxable income above $464,200. The proposal would reduce the number of tax brackets to two: single filers with taxable income below $37,400 and joint filers with taxable income below $74,800 would pay a top statutory tax rate of 10 percent while all other taxpayers would pay a statutory tax rate of 25 percent on taxable income above these amounts. Specific tax brackets are shown below in Table 1. The proposal slows the indexing of individual income tax brackets and other income thresholds by changing the index from the Consumer Price Index - for all urban consumers ("CPI-U") to the chained CPI. The proposal includes several other changes to tax rates on capital gains and dividends, phases out the 10 percent rate bracket and certain other deductions, eliminates the alternative minimum tax, and creates a surtax on certain income. Table 2 provides more detail about these changes.

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

Table 1.–Statutory Individual Income Tax Rates Under Present Law and Proposal

2015 Income Brackets for Single Filers (estimated)	2015 Income Brackets for Joint Filers (estimated)	Statutory Tax Rates (present law)	Statutory Tax Rates (proposal)
<$9,200	<$18,400	10	10
$9,200-$37,400	$18,401-$74,800	15	10
$37,401-$90,600	$74,801-$151,100	25	25
$90,601 - $189,000	$151,101-$230,100	28	25
$189,001-$410,950	$230,101-$410,950	33	25
$410,951-$412,650	$410,951-464,200	35	25
>$412,650	>$464,200	39.6	25

The proposal also provides for a 10 percent surtax on certain sources of income as defined in a modified definition of adjusted gross income ("MAGI") above $400,000 for single filers and $450,000 for joint filers. In addition to the statutory rate changes, the proposal modifies or eliminates a number of individual income tax deductions, exclusions, and credits. The biggest changes include eliminating the deduction for State and local tax payments, reducing the principal cap associated with deductible home mortgage interest payments for new mortgages from $1 million to $500,000, reducing credit rates for the earned income credit, and converting certain excludable contributions to section 401(k) accounts into taxable contributions, with an exclusion at withdrawal. Other significant changes to the individual income tax base include an increase in the standard deduction but with a phase-out for filers with income above certain levels, repeal of the personal exemption, modification of credits for education expenses, and changes in allowable contributions to Roth Individual Retirement Arrangements.

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JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

Table 2. - Changes in Miscellaneous Statutory Tax Rates between Present Law and the Proposal

Tax Rate Feature	Present Law	Proposal
Top tax rate on long term capital gains and qualified dividends	20%	Same as ordinary income rate, with 40% of gains and dividends excluded
Phase-out of the 10% statutory rate bracket.	No phase-out of the 10% statutory rate bracket	The 10% rate is phased out for single filers with income above $250,000 and joint filers with income above $300,000 (2013 dollars).
Phase-out of personal exemptions and itemized deductions	Personal exemptions and itemized deductions are phased out for single filers with income above $250,000 and joint filers with income above $300,000 (2013 dollars)	Personal exemptions are eliminated. The standard deduction or an equivalent amount of itemized deductions, followed by the child credit are phased out sequentially starting at the top of the phaseout range for the 10% rate bracket.
Surtax on modified AGI ("MAGI") where MAGI = AGI less charitable contributions and qualified domestic manufacturing income, plus various other sources of income excluded and expenses deducted from AGI under present law, including employer provided health benefits and the self-employed health deduction, 911 income, tax exempt interest, and untaxed social security benefits, and excluded 401(k) contributions	None	10% on modified AGI above $400,000 for single filers and $450,000 for joint filers
Alternative Minimum Tax	26% on alternative minimum taxable income below 175,000 (in 2012 dollars, indexed to inflation) and 28% on alternative minimum taxable income above that amount	None

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

Corporate income tax and business-related provisions for pass-through entities

Under present law, C corporations are taxed at a top statutory rate of 35 percent for corporations with taxable income over $10,000,000. C corporations with taxable income less than $50,000 are taxed at a rate of 15 percent; corporations with taxable income from $50,001-$75,000 are taxed at a rate of 25 percent, and C corporations with taxable income from $75,001 to $10,000,000 are taxed at a rate of 34 percent. The proposal would tax all C corporations at a rate of 25 percent, phased in at a two percentage point reduction from 2015 through 2019. Income of other business forms, including S corporations, partnerships and sole proprietorships, is taxed through the individual income tax code; thus the changes to statutory tax rates for the individual income tax under this proposal would also apply to the taxation of the business income of these pass-through entities.

Both the individual and corporate income tax frameworks include many different deductions, credits, and other special treatment of certain types of income and expenses of businesses. This proposal repeals or modifies a number of them. Some of the larger changes include eliminating the modified accelerated cost recovery system ("MACRS") and lengthening depreciable lives for depreciation of property placed in service after December 31, 2015, and requiring amortization instead of expensing of research and experimental expenditures and certain advertising expenses beginning in 2015. The repeal of MACRS is accompanied by indexing of depreciable basis to chained CPI-U. The proposal also repeals the 20-percent tax on minimum alternative taxable income of corporations.

Taxation of Multinational Corporations

The proposal also makes significant changes to the taxation of foreign income earned by U.S. multinational corporations. Under present law, the income of U.S. corporations is subject to U.S. corporate income tax whether it is earned within the U.S. or abroad, but a number of provisions reduce that liability. Such provisions include deferral of U.S. taxation of business income earned abroad by foreign subsidiaries until the income is repatriated; a credit against U.S. tax allowed for foreign income taxes paid; and current deductibility of expenses of U.S. parent companies, such as interest that supports foreign income on which U.S. tax is deferred. Many U.S. multinational corporations reduce their overall tax liability significantly relative to the amount of tax they would pay under a worldwide corporate income tax system in which they would pay U.S. tax on all their income, domestic and foreign, when earned. The proposal broadly replaces the current system with a 95-percent exemption for dividends received by U.S.

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

corporations from foreign subsidiaries attributable to foreign business income of those subsidiaries.

Present law includes rules (commonly referred to as subpart F) to tax certain items of passive or mobile foreign subsidiary income when that income is earned rather than when it is repatriated. The proposal substantially modifies the subpart F rules, chiefly by providing broad taxation of all intangible income of foreign subsidiaries when the income is earned, with intangible income from serving foreign markets taxed at a reduced rate of 15 percent once the proposal is fully phased in. The proposal provides the same reduced rate of tax on foreign intangible income of U.S. parent companies. The proposal includes a one-time transition tax, subject to a foreign tax credit, on all previously untaxed foreign earnings and profits of foreign subsidiaries of U.S. corporations. The proposal also includes thin capitalization rules that restrict the deduction for interest expense of U.S. parent companies when, among other requirements, the U.S. members of the worldwide group are more heavily leveraged than the overall group. The net effect of the proposed changes to taxation of U.S. multinational corporations is to increase their U.S. income tax liability.

Conventional estimate of the effects of the proposal

Under our conventional revenue estimating methodology, this proposal is projected to result in an increase in revenues of about $3 billion over the 2014-2023 budget period relative to present law. The proposal is projected to result in a reduction in individual income tax payments (not including revenues due to broadening the taxable base of pass-through businesses) of about $590 billion over that budget period. The year-by-year conventional revenue estimate for this proposal relative to current policy appears in JCT Table #14-1 102 R1, *Estimated Revenue Effects of the "Tax Reform Act of 2014."*

MODELING APPROACHES AND MACROECONOMIC ANALYSIS

The following analysis was performed using the Joint Committee on Taxation staff's MEG model and an OLG model. Information about parameter assumptions that are key to determining behavioral responses in each model appear in the Appendix. Both models start with the standard, neoclassical assumption that the amount of output is determined by the availability of labor and capital, and in the long run aggregate demand equals aggregate supply. Individuals

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

are assumed to make decisions based on observed characteristics of the economy, including wages, prices, interest rates, tax rates, and government spending levels.

In the MEG model, monetary policy conducted by the Federal Reserve Board is explicitly modeled, with lagged price adjustments allowing for the economy to be temporarily out of equilibrium in response to fiscal and monetary policy changes. Labor supply decisions are modeled separately for four groups: low income primary earners, low income secondary earners, other primary earners, and other secondary earners. Firms make investment decisions based on an expected after-tax rate of return. Individuals in the MEG model do not anticipate future changes in the economy or government finances; thus, this type of model is often referred to as a "myopic" behavior model. This feature of the MEG model allows the simulation of tax and government expenditure policy that may result in an unsustainable growth path. Specifically, policies that result in the Federal debt increasing or decreasing at a faster rate than the growth of GDP can be modeled.

In the OLG model, individuals are assumed to make consumption and labor supply decisions in order to maximize their lifetime well-being given the resources they can foresee will be available to them. They are assumed to have complete information, or "perfect foresight," about economic conditions, such as wages, prices, interest rates, tax rates, and government spending, over their lifetimes. Economic decisions are modeled separately for each of 55 adult-age cohorts. Firms' investment decisions respond to the effects of tax policy on the expected future value of the firm. Changes in marginal tax rates on firm profits, and changes in the value of deductions for investment affect this future valuation. The version of OLG used in this analysis includes a separate multinational corporation ("MNC") sector that uses both capital and intellectual property in the production of goods and services.

We analyze the proposal using varying assumptions about several types of taxpayer and Federal Reserve Board response to the proposed tax changes. We rely on information from various JCT tax models[4] used in the production of conventional revenue estimates to obtain information about the effects of the proposal on individual and business average and effective

[4] Descriptions of the JCT conventional estimating models may be found in JCX-46-11, *Testimony of the Staff of the Joint Committee on Taxation before the House Committee on Ways and Means Regarding Economic Modeling*, September 21, 2011 and other documents at www.jct.gov under "Estimating Methodology."

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

marginal tax rates, and on after-tax returns to capital and labor to characterize the tax proposal within the MEG and OLG models. Changes in both statutory tax rates and the definition of taxable income can impact effective marginal tax rates as well as average tax rates.

The MEG model is used to examine the importance of different assumptions about Federal Reserve policy. Under the "Aggressive Fed" policy, it is assumed that the Federal Reserve Board would work to counteract any demand incentives resulting from fiscal policy. For this proposal, since the policy results in a net decrease in income tax paid by individuals, providing them with more take home income for consumption purposes, the aggressive Fed simulation would include an immediate increase in interest rates to counteract these demand effects. The "Neutral Fed" simulations assume that the Federal Reserve Board targets a fixed monetary growth rate, and does not try to counteract fiscal policy.

The MEG model is also used to present results using differing assumptions about the responsiveness of labor to changes in effective marginal tax rates and average taxes for each proposal. The "High Labor Elasticity" simulations use labor supply responsiveness parameters that are consistent with the upper range of measured response levels from empirical studies. The "Low Labor Elasticity" simulations reduce the responsiveness to changes in effective marginal tax rates by 50 percent.

Both the MEG and OLG models are used to explore the impact of varying assumptions about the responsiveness of capital investment and international capital flows to tax policy changes. In the MEG model, there is no explicit distinction between domestic and multinational corporations. International capital flows respond to changes in the after-tax rate of return on capital between the United States and the rest of the world, as well as to changes in the relative attractiveness of imports and exports. In contrast, the OLG model has several different types of businesses, including a multinational corporate ("MNC") sector with foreign subsidiaries. The addition of foreign subsidiaries presents the MNC with the ability to optimize over both the location of investments (both highly mobile intellectual property ("IP") and capital), as well as some ability to shift profits from the U.S. parent to low tax subsidiaries. The ability of MNC to shift profits from the United States to low tax jurisdictions is meant to capture the many ways that firms can shift their profit overseas, including transfer pricing, debt leveraging, interest

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

stripping, and hybrid instruments. The OLG model treats all of these different types of profit shifting strategies the same and limits the amount of shifting to the extra-normal returns to IP.[5]

This analysis presents two OLG simulations that vary the degree of responsiveness of this MNC sector to changes in tax policy. In particular, we vary the responsiveness of MNCs to shifting intellectual property and profits. The "default IP elasticities" simulation reflects the calibration of the model to hit estimates for cross-border capital movements under present law, with the relatively mobile intellectual property estimated to be roughly 8.5 times more responsive than capital. Profit shifting is calibrated to be about 20 percent of the corporate tax base in 2013, consistent with the middle point of estimates of this shifting under present law. We present an additional simulation ("reduced IP elasticities") in which the IP responsiveness is assumed to be the same as that of capital, and the profit shifting elasticity is reduced by about one third.

One important difference between the MEG and OLG models is in their treatment of Federal fiscal policy. In the MEG model, it is possible to simulate structural Federal budget deficits as forecast in the CBO baseline and to allow for increases or decreases in the deficit in simulating proposals. In contrast, the OLG model cannot simulate either the present law fiscal baseline or policy proposals that incorporate unsustainable Federal budget deficits or surpluses. The MEG model assumes individuals cannot foresee future unsustainable Federal budget conditions, while the OLG model assumes that individuals have perfect foresight about the economy, including unsustainable Federal budget conditions. Thus, in the OLG model there is no equilibrium solution when Federal budget conditions appear unsustainable in the long run. It is necessary to create counterfactual stable ratios of debt to GDP within both the baseline and policy simulations of the OLG model.

Because both present-law fiscal conditions and the path of the budget deficit are necessarily modeled differently within the OLG and MEG models, it is difficult to compare the results between the two models directly, as they are essentially modeling different types of economies. Because the MEG model simulates the effects of the actual proposed law, its results

[5] The MNC modeling follows the work in M.P. Devereux and R. de Mooij in "An applied analysis of ACE and CBIT reforms in the EU," *International Tax and Public Finance*, 18(1), 2011, 93-120 and M.P. Deverewx, L. Bettendorf, A. VanderHorst, S. Loretz. And R. de Mooij, "Corporate tax harmonization in the EU," *Economic Policy*, 63, 2010, 537-590.

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515-6453

are of interest. Because the MEG model assumes people are unable to foresee the probable effects of the proposed law change, while the OLG model assumes that people can foresee these effects, the OLG model provides a useful alternative perspective on the economy.

The OLG simulations presented here include an assumption in the base (present law) simulation that average tax rates are higher and transfer payments are lower than they actually are. To the extent that the policy simulation changes the path of debt growth, it is necessary to include a fiscal policy reaction function so that the debt to GDP ratio does not change significantly in the policy simulation. The specific changes in tax and spending that are used to provide fiscal balance can affect results. Because this proposal results in increased economic growth and decreasing deficits, the fiscal balance reaction to the policy requires either an increase in government outlays or a decrease in taxes. These simulations adjust transfer payments, thereby allowing us to analyze the specific tax policy in your proposal.

Following is a series of tables that show the effects of this proposal on real (inflation adjusted) gross domestic product, business capital stock, employment, and consumption. Results from each policy simulation for each variable are presented as percentage changes from the present-law baseline forecast values for the variables in each of Tables 3-7 below. The Joint Committee staff configures the present-law baseline forecasts for Federal government receipts and spending in the MEG model to approximate the February 2013 forecast of the CBO[6] as closely as possible.

A. Effects on Real Gross Domestic Product and Revenues

In the MEG model, economic growth responds to changes in average and effective marginal tax rates on labor, and changes in the after-tax return to capital. In the OLG model, economic growth also responds to changes in average and effective marginal tax rates on labor, as well as to changes in the anticipated after-tax value of firms. Changes in tax rates on interest, dividends, and capital gains income, as well as on business profits accruing to corporations and pass-through entities, affect the after-tax return to capital and the anticipated after-tax value of firms.

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[6] Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2013-2023*, February 5, 2013.

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515-6453

The level of economic activity also responds to changes in the after-tax income of individuals under certain assumptions about the current state of the baseline economy and Federal Reserve policy. During periods when the economy is operating below its full employment capacity - when not all available labor or capital is employed - increases in after-tax income increase demand for goods and services, leading to more economic growth.

This proposal reduces the overall effective marginal tax rate on labor, providing an incentive for people to work, supplying more labor to the economy. The importance of this effect depends on how responsive labor is to these changes. The proposal also increases the after-tax income of individuals by reducing individual tax rates overall, thus increasing demand for goods and services. Because the economy is currently operating below full employment levels, this increased demand can be expected to lead to an increase in economic output, to the extent that Federal Reserve policy does not take action to counteract this effect.

The proposal reduces effective marginal tax rates on interest and rental income and business profits of corporations and pass-through entities relative to present law, which increases the after-tax return to capital. But it also reduces a number of credits and deductions, the largest of which are inventory and depreciation deductions, which reduces the after-tax return to capital relative to present law. On net, the after-tax return to business capital is reduced relative to present law by these changes overall.

The proposal is projected to result in increases in economic activity relative to that projected under present law, as measured by changes in real GDP. The increase in projected economic activity is projected to increase revenues relative to the conventional revenue estimate by $50 to $700 billion, depending on which modeling assumptions are used, over the 10-year budget period.

Congress of the United States
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Table 3.–Percent Change in Real GDP Relative to Present Law

		Fiscal years 2014-2018	Fiscal Years 2019-2023	Fiscal Years 2014-2023
MEG				
High labor elasticity	Aggressive Fed	0.2%	0.2%	0.2%
	Neutral Fed	0.1%	0.8%	0.5%
Low Labor Elasticity	Aggressive Fed	0.2%	0.1%	0.1%
	Neutral Fed	0.1%	0.7%	0.4%
MEG, reduced investment response to taxation of multinationals				
High labor elasticity	Aggressive Fed	0.3%	0.3%	0.3%
	Neutral Fed	0.3%	0.8%	0.6%
OLG				
Default IP elasticities		1.8%	1.4%	1.5%
Reduced IP elasticities		1.8%	1.4%	1.6%

Table 3 (above) shows the predicted effects of this policy on real gross domestic product, relative to what is projected under present law for the proposal. These changes are shown for the first five years, second five years, and full 10 years of the standard budget window. GDP is projected to grow by 0.1 percent to 1.6 percent during the 10-year budget period. The positive growth effects of the proposal arise primarily from its effects on labor supply and consumption demand. In the following sections on capital stock, employment, and consumption effects, the influence of the proposal on each of these components of growth and the economy can be seen in more detail.

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JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

In the standard MEG model simulations, the larger growth effects occur in simulations that assume more labor response to reductions in effective marginal tax rates, and in which the Federal Reserve Board is assumed not to moderate increases in demand arising from higher after-tax income.

An additional modeling assumption affecting the projected effects of this proposal is the extent to which changes in the taxation of foreign income and income from intellectual property are expected to provide an incentive for more investment and profit reporting within the United States. The MEG model is not designed to model specifically the difference between IP and capital or the effects of shifting of reported profits between countries to take advantage of differences in relative tax rates. The conventional revenue estimate accounts for the effects of the latter behavior on revenues, but not on economic activity. In the OLG model, the ability to shift profits to minimize tax liability without shifting economic activity results in increased economic activity within the United States. To approximate the separate modeling of these effects using the MEG model, we assume that the various tax increasing portions of the changes on taxation of multinational corporations and intellectual property do not affect their investment incentives, as shown in the "MEG, reduced investment response to taxation of multinationals" simulations. In these simulations, anticipated GDP growth is higher than in the base MEG simulations.

B. Effects on the Capital Stock

The reduction in statutory tax rates on corporate and non-corporate business income increases the after-tax return to investment for some businesses that do not make use of many of the business deductions under present law. For those businesses that do make use of accelerated depreciation, expensing of research and experimentation expenses, or other business tax expenditures, the elimination of these provisions is expected to reduce the after-tax return on investment. Overall, the proposal is expected to increase the cost of capital for domestic firms, thus reducing the incentive for investment in domestic capital stock.

Table 4 shows the expected change in business capital relative to what was projected to occur under the present law baseline, but does not indicate a reduction in capital stock over time. In other words, the negative numbers in these tables result from a projected slower rate of growth in capital due to the proposal. Investment in capital is generally projected to increase slightly relative to present law in the first half of the budget period, and decrease relative to present law in the second half. The repeal of accelerated depreciation does not occur until 2016, thus

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

delaying the negative influence of this provision, at the same time that reduced tax rates on income from capital are providing an incentive for increased investment. Over time, the cumulative effects of the repeal of MACRS and amortization of intellectual property begin to outweigh the positive incentives from reduced rates in standard MEG simulations.

As mentioned above, a crucial modeling assumption for analyzing this proposal is predicting the extent to which the changes in the taxation of foreign capital will provide an incentive for both U.S. multinational and foreign corporations to shift investment and profits to the United States. Because the proposal treats domestic investment in intellectual property less favorably and earnings on some foreign income more favorably than under present law, in the simulations with reduced sensitivity of the location of intellectual property to changes in taxation, the effects of reducing responsiveness to incentives for foreign-based capital investment, particularly in intellectual property, are shown to reverse or dampen (depending on the degree of responsiveness assumed) the negative effects on capital stock generated by the increased cost of domestic capital.

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

Table 4.–Percent Change in Business Capital Relative to Present Law

		Fiscal years 2014-2018	Fiscal Years 2019-2023	Fiscal Years 2014-2023
MEG				
High labor elasticity	Aggressive Fed	0.1%	-1.0%	-0.5%
	Neutral Fed	0.0%	-0.5%	-0.3%
Low labor elasticity	Aggressive Fed	0.1%	-1.0%	-0.6%
	Neutral Fed	0.0%	-0.6%	-0.3%
MEG, reduced investment response to taxation of multinationals				
High labor elasticity	Aggressive Fed	0.3%	-0.6%	-0.2%
	Neutral Fed	0.2%	-0.2%	0.0%
OLG				
Default IP elasticities		0.2%	0.0%	0.1%
Reduced IP elasticities		0.0%	-0.3%	-0.2%

C. Effects on Private Sector Employment

Reductions in effective marginal tax rates on labor - that is, increases in the portion of wages from additional work effort that a person keeps - provide an incentive for people to work more, supplying more labor to the economy. Somewhat offsetting that effect, reductions in total individual tax payments (as measured by changes in the average tax rate), increase peoples' total take home income, providing an incentive for people to work less. Policies that reduce effective marginal tax rates by more than average tax rates generally provide a net incentive for more labor to be supplied by the economy. This proposal reduces effective marginal and average tax rates on labor overall relative to present law. Table 5 below shows the predicted effects of these

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JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

changes on peoples' willingness to work. As a result of this proposal, labor force participation is projected to increase relative to present law from 0.3 percent to 1.5 percent over the 10-year budget period. In the MEG model, labor force participation is affected by assumed labor force responsiveness parameters. Labor force response is higher in the OLG simulations than in the MEG simulations in part because the capital stock declines less in the OLG simulations, thus allowing for relatively less reduction or more increase in labor productivity and wages. In addition, labor is more responsive in the OLG model than in the MEG model.

Table 5.–Percent Change in Labor Force Participation Relative to Present Law

		Fiscal years 2014-2018	Fiscal Years 2019-2023	Fiscal Years 2014-2023
MEG				
High labor elasticity	Aggressive Fed	0.3%	0.4%	0.3%
	Neutral Fed	0.3%	0.4%	0.3%
Low labor elasticity	Aggressive Fed	0.2%	0.3%	0.3%
	Neutral Fed	0.2%	0.3%	0.3%
MEG, reduced investment response to taxation of multinationals				
High labor elasticity	Aggressive Fed	0.3%	0.4%	0.3%
	Neutral Fed	0.3%	0.4%	0.3%
OLG				
Default IP elasticities		1.4%	1.3%	1.3%
Reduced IP elasticities		1.5%	1.5%	1.5%

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Washington, DC 20515–6453

Table 6 shows changes in employment predicted to result from the proposal. While the willingness of people to work at a given combination of wage rates and taxes on wages is an important component of total employment, changes in employment are also influenced by the amount of business demand for labor. Relative to present law, the proposal results in a net increase in after-tax income, leading consumers to demand more goods and services, and employers to increase output. Because the proposal reduces the after-tax return to capital relative to present law, businesses are expected to substitute some labor for capital. In some MEG simulations, employment is projected to increase by somewhat more than the labor force as a result of this increased demand for labor services, thereby reducing unemployment. As expected, the projected increase in labor force is more sensitive to assumptions about the elasticity of labor to marginal tax rates, while the projected increase in employment is also quite sensitive to actions of the Federal Reserve Board. In the OLG simulations, it is assumed there is no involuntary unemployment, and thus changes in employment are the same as changes in the labor force.

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

Table 6.–Percent Change in Private Sector Employment Relative to Present Law

		Fiscal years 2014-2018	Fiscal Years 2019-2023	Fiscal Years 2014-2023
MEG				
High labor elasticity	Aggressive Fed	0.3%	0.6%	0.5%
	Neutral Fed	0.2%	1.3%	0.7%
Low labor elasticity	Aggressive Fed	0.3%	0.5%	0.4%
	Neutral Fed	0.2%	1.2%	0.7%
MEG, reduced investment response to taxation of multinationals				
High labor elasticity	Aggressive Fed	0.4%	0.6%	0.5%
	Neutral Fed	0.4%	1.2%	0.8%
OLG				
Default IP elasticities		1.4%	1.3%	1.3%
Reduced IP elasticities		1.5%	1.5%	1.5%

D. Effects on Consumption

Table 7 shows how the proposal affects consumption relative to present law. In addition to the interaction between consumption demand and short-term economic growth, consumption is often of interest as an indicator of individuals' well-being. Generally, increased growth and employment facilitate more consumption, with consumption increasing relative to present law by between 0.4 percent and 2.1 percent over the 10-year budget window. The increased labor supply due to reduced marginal rates, and increase in after-tax income relative to present law allow for a substantial increase in consumption, consistent with the increasing pressures on

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

demand described above. Consumption is also increased because the slightly reduced after-tax return to capital reduces incentives to save. Those simulations that predict higher employment generally also predict higher consumption.

Table 7. - Percent Change in Consumption Relative to Present Law (base proposal)

		Fiscal years 2014-2018	Fiscal Years 2019-2023	Fiscal Years 2014-2023
MEG				
High labor elasticity	Aggressive Fed	0.3%	0.6%	0.5%
	Neutral Fed	0.2%	1.1%	0.7%
Low labor elasticity	Aggressive Fed	0.2%	0.6%	0.4%
	Neutral Fed	0.1%	1.0%	0.6%
MEG, reduced investment response to taxation of multinationals				
High labor elasticity	Aggressive Fed	0.2%	0.7%	0.5%
	Neutral Fed	0.2%	1.1%	0.7%
OLG				
Default IP elasticities		2.3%	1.9%	2.1%
Reduced IP elasticities		2.2%	1.9%	2.0%

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JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

E. Conclusion

Broadening of the individual and corporate income tax bases through elimination of many preferences in the form of deductions, exemptions, and tax credits allows for a reduction in average and effective marginal tax rates for most individual taxpayers, which provides both an incentive for increased labor effort, and an increase in demand for goods and services. These changes also reduce the after-tax return to investment under many modeling assumptions, providing an incentive for a reduction in the U.S. domestic capital stock. On net, these changes are expected to result in an increase in economic output relative to present law.

I hope this information is helpful to you. If we can be of further assistance in this matter, please let me know.

Sincerely,

Thomas A. Barthold

Thomas A. Barthold
Chief of Staff

cc: Warren Payne and Dave Olander

Enclosures: Appendix and Table #14-1 002 R1

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Washington, DC 20515–6453

APPENDIX - Key Parameter Assumptions

The amount of taxpayer response to changes in fiscal policy is governed by how sensitive their work, consumption and savings decisions are to changes in their disposable income, and to changes in the after-tax rate of return to additional work or investment. Tables A-1 and A-2 below show the parameters used to model the degree of responsiveness for the MEG and OLG models respectively.

Table A.1- Key Parameter Assumptions in the MEG Model

Labor supply elasticities in disaggregated labor supply	Income	High Elasticity Substitution	Low Elasticity Substitution
Low income primary	-0.1	0.2	0.15
Other primary	-0.1	0.1	0.1
Low income secondary	-0.3	0.8	0.4
Other secondary	-0.2	0.6	0.3
Wage-weighted population average with baseline rates	-0.1	0.2	0.1
Savings/consumption parameters			
Rate of time preference	0.015		
Intertemporal elasticity of substitution	0.35		
Derived long-run savings elasticity to the after-tax rate of return on capital	0.25		

Congress of the United States
JOINT COMMITTEE ON TAXATION
Washington, DC 20515–6453

Table A.2 Key Parameter Assumptions in the OLG Model

Description	Value
Time preference	0.015
Intertemporal elasticity of substitution	0.4
Intratemporal elasticity of substitution between consumption and leisure	0.6
Leisure share of time endowment	0.4
Population growth rate	0.015
Technological growth rate	0.019
Capital share for	
Corporate	0.2
Multinational (not including IP)	0.15
Non-corporate	0.3
Housing	0.985
Adjustment cost*	5.0
Debt-to-capital ratio (average)	0.35
Substitution elasticity between capital and labor in	
Non-housing†	1.0
Housing†	1.0
Substitution elasticity for intellectual property‡	
Default elasticity	8.6
Low elasticity	1.0

**Quadratic adjustment cost function*
†Cobb-Douglas production function
‡Substitution elasticity between foreign and domestic after-tax profits attributable to intellectual property

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#14-1.002 R1
VERY PRELIMINARY
23-Feb-14

ESTIMATED REVENUE EFFECTS OF THE "TAX REFORM ACT OF 2014"

Fiscal Years 2014 - 2023

[Billions of Dollars]

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
I. Tax Reform for Individuals													
A. Individual Income Tax Rate Reform													
1. Simplification of individual income tax rates [1]	tyba 12/31/14	—	-43.4	-62.3	-61.7	-64.1	-62.8	-64.8	-60.1	-64.6	-59.9	-231.9	-543.8
2. Deduction for adjusted net capital tax:													
a. Tax capital gains at ordinary rates, with a 40% deduction for net capital gain	tyba 12/31/14	—	0.3	2.0	2.4	2.7	3.0	3.3	3.7	4.1	4.4	7.4	26.0
b. Tax dividends at ordinary rates, with a 40% deduction for qualifying dividends	tyba 12/31/14	—	0.7	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	7.2	18.7
3. Conforming amendments related to simplification of individual income tax rates	tyba 12/31/14	*Estimate Included in Item I.A.1.*											
B. Simplification of Tax Benefits for Families													
1. Increase in standard deduction, including phase-out of benefit for all filers with MAGI exceeding certain thresholds [1]	tyba 12/31/14	—	-44.2	-46.0	-70.3	-73.0	-76.3	-79.4	-82.2	-85.8	-89.1	-253.5	-666.2
2. Increase and expansion of child tax credit, including phase-out of credit for taxpayers with MAGI above certain thresholds [1]	tyba 12/31/14	—	-5.0	-45.7	-48.0	-55.1	-72.6	-74.6	-82.3	-84.0	-86.5	-153.9	-554.0
3. Modification of earned income tax credit [1]	tyba 12/31/14	—	0.2	15.9	15.9	16.3	32.5	33.1	33.8	34.4	35.2	48.2	217.2
4. Repeal of deduction for personal exemptions [1]	tyba 12/31/14	—	66.1	99.0	104.2	108.1	112.3	116.6	121.5	126.8	132.6	377.4	987.2
C. Simplification of Education Incentives													
1. American opportunity tax credit [1]	tyba 12/31/14	—	0.3	3.4	5.8	5.7	-5.3	-4.9	-5.3	-5.3	-5.3	17.2	-8.7
2. Expansion of Pell Grant exclusion from gross income	tyba 12/31/14	*Estimate Included in Item I.C.1.*											
3. Repeal of exclusion of income from United States savings bonds used to pay higher education tuition and fees	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1
4. Repeal of deduction for interest on education loans	tyba 12/31/14	—	0.3	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.7	4.8	13.0
5. Repeal of deduction for qualified tuition and related expenses	tyba 12/31/14	*Provision Expired December 31, 2013*											
6. No new contributions to Coverdell education savings accounts	cma 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.2
7. Repeal of exclusion for discharge of student loan indebtedness	ada 12/31/14	—	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	1.1

Page 2

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
8. Repeal of exclusion for qualified tuition reductions	tyba 12/31/14	—	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	2.5
9. Repeal of exclusion for education assistance programs	spoeia 12/31/14	—	0.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.4	3.8	10.5
10. Repeal of exception to 10-percent early distribution tax for higher education expenses	dma 12/31/14	*Estimate Included in Item I.G.6*											
D. Repeal of Certain Credits for Individuals													
1. Repeal of dependent care credit [1]	tyba 12/31/14	—	[2]	3.1	3.2	3.2	3.2	3.3	3.3	3.3	3.4	9.5	26.0
2. Repeal of credit for adoption expenses	tyba 12/31/14	—	0.1	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.7	4.7
3. Repeal of credit for nonbusiness energy property	pipsa 12/31/13	*Provision Expired December 31, 2013*											
4. Repeal of credit for residential energy efficient property	pipsa 12/31/14	—	0.5	1.1	0.6	—	—	—	—	—	—	2.3	2.3
5. Repeal of credit for qualified electric vehicles	vac 12/31/11	*Provision Expired December 31, 2011*											
6. Repeal of alternative motor vehicle credit	pps 12/31/14	*Provision Expired December 31, 2014*											
7. Repeal of alternative fuel vehicle refueling property credit	pipsa 12/31/14	*Provision Expired December 31, 2014*											
8. Repeal of credit for new qualified plug-in electric drive motor vehicles	vac 12/31/14	—	0.1	0.3	0.4	0.6	0.7	0.8	0.7	0.7	0.6	1.4	5.0
9. Repeal of credit for health insurance costs of eligible individuals	mha 12/31/13	*Provision Expired December 31, 2013*											
10. Repeal of first-time homebuyer credit	rpa 6/30/11	*Provision Expired December 31, 2010*											
E. Deductions, Exclusions and Certain Other Provisions													
1. Changes to certain itemized deductions [1]	tyba 12/31/14	—	48.0	82.9	85.9	92.1	97.5	103.3	109.8	116.1	122.9	309.0	858.4
2. Exclusion of gain from sale of a principal residence	saea 12/31/14	—	0.6	1.3	1.7	1.8	1.9	2.0	2.1	2.2	2.3	5.5	15.8
3. Mortgage interest (includes lodging allowance exemption limitation)	tyba 12/31/14	*Estimate Included in Item I.E.1.*											
4. Charitable contributions	cma tyba 12/31/14	*Estimate Included in Item I.E.1.*											
5. Denial of deduction for expenses attributable to the trade or business of being an employee	tyba 12/31/14	*Estimate Included in Item I.E.1.*											
6. Repeal of deduction for taxes not paid or incurred in a trade or business	tyba 12/31/14	*Estimate Included in Item I.E.1.*											
7. Repeal of deduction for personal casualty losses	tyba 12/31/14	*Estimate Included in Item I.E.1.*											
8. Limitation on wagering losses	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1
9. Repeal of deduction for tax preparation expenses	tyba 12/31/14	*Estimate Included in Item I.E.1.*											
10. Repeal of deduction for medical expenses	tyba 12/31/14	*Estimate Included in Item I.E.1.*											
11. Repeal of disqualification of expenses for over-the-counter drugs under certain accounts and arrangements [3]	eia 12/31/14	—	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.5	-0.5	-1.1	-3.3
12. Repeal of deduction for alimony payments and corresponding inclusion in gross income	dnoaeia 12/31/14	—	0.1	0.2	0.3	0.4	0.6	0.7	0.9	1.1	1.2	1.0	5.5
13. Repeal of deduction for moving expenses	tyba 12/31/14	—	0.5	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2	2.9	8.9
14. Termination of deduction and exclusions for contributions to Archer medical savings accounts	tyba 12/31/14	*Negligible Revenue Effect*											

Page 3

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
15. Repeal of 2-percent floor on miscellaneous itemized deductions	tyba 12/31/14	*Estimate Included in Item I.E.1*											
16. Repeal of overall limitation on itemized deductions	tyba 12/31/14	*Estimate Included in Item I.E.1*											
17. Deduction for amortizable bond premium allowed in determining adjusted gross income	tyba 12/31/14	—	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
18. Repeal of exclusion, etc., for employee achievement awards [5]	tyba 12/31/14	—	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	1.3	3.4
19. Clarification of special rule for certain governmental plans	pa DOE	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
20. Limitation on exclusion for employer-provided housing	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
21. Fringe benefits [6] [7]	tyba 12/31/14	—	2.7	3.8	4.1	4.2	4.3	4.4	4.8	5.0	5.1	15.0	39.0
22. Repeal of exclusion of net unrealized appreciation in employer securities	da 12/31/14	—	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.9
23. Consistent basis reporting between estate and person acquiring property from decedent	tiwastrda DOE	[2]	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	1.6
F. Employment Tax Modifications													
1. Modification of deduction for Social Security taxes in computing net earnings from self-employment [8]	tyba 12/31/14	—	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.0	5.1
2. Determination of net earnings from self-employment [9]	tyba 12/31/14	—	0.3	0.9	1.2	1.5	1.7	1.9	2.2	2.6	2.9	4.6	15.2
3. Repeal of exemption from FICA taxes for certain foreign workers [10]	rrfpa 12/31/14	—	0.5	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.1	2.9	7.7
4. Repeal of exemption from FICA taxes for certain students [11]	rrfpa 12/31/14	—	0.9	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.8	4.8	13.0
5. Override of Treasury guidance prevailing that certain employer-provided supplemental unemployment benefits are not subject to employment taxes [12]	generally Apa 12/31/14	[4]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.9
6. Treatment of certified professional employer organizations	[13]	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
G. Pensions and Retirement													
1. Elimination of income limits on contributions to Roth IRAs	tyba 12/31/14	—	1.1	2.3	2.2	2.4	2.6	1.9	1.8	1.7	1.6	7.1	16.7
2. No new contributions to traditional IRAs [1]	tyba 12/31/14	*Estimate Included in Item I.G.1*											
3. Inflation adjustment for Roth IRA contributions	tyba 12/31/14	*Estimate Included in Item I.G.1*											
4. Repeal of special rule permitting recharacterization of Roth IRA contributions as traditional IRA contributions	tyba 12/31/14	[2]	[2]	[2]	[2]	[2]	0.1	0.1	0.1	0.1	0.1	0.2	0.4
5. Repeal of exception to 10-percent early distribution tax for first home purchases; and elimination of first time home purchase as a basis for a distribution from a Roth IRA being a qualified distribution	da 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.3

Page 4

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
6. Termination for new SEPs	tyba 12/31/14	—	[2]	[2]	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6
7. Termination for new Simple 401(k)s	pyba 12/31/14	*Estimate Included in Item I.G.6*											
8. Rules related to designated Roth contributions	pyba pyba tyba 12/31/14	—	10.3	14.7	15.1	15.6	16.0	16.9	17.7	18.4	18.9	55.8	143.7
9. Modification of required distribution rules for pension plans	generally dwtrmda 12/31/14	—	[2]	[2]	0.1	0.2	0.4	0.7	0.7	0.7	0.7	0.3	3.5
10. In-service distribution age lowered to 59 1/2 for pension plans and governmental 457(b) plans	da 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.2
11. Modification of rules governing hardship distributions	pyba 12/31/14	*Negligible Revenue Effect*											
12. Extended rollover period for the rollover of plan loan offset amounts in certain cases	tyba 12/31/14	*Negligible Revenue Effect*											
13. Coordination of contribution limitations for 403(b) plans and governmental 457(b) plans	pya tyba 12/31/14	—	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.9
14. Application of 10-percent early distribution tax to governmental 457 plans	wa 2/26/14	—	[2]	[2]	[2]	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.6
15. Inflation adjustment for qualified plan benefit and contribution limitations	yeamsea tyba 2014	—	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7	1.8
16. Inflation adjustments for qualified plan elective deferral limitations [14]	pya tyba 12/31/14	—	1.1	2.1	3.7	4.7	6.3	7.9	9.8	11.5	13.6	11.6	60.5
17. Inflation adjustments for SIMPLE retirement accounts	tyba 2014	—	[2]	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	1.1
18. Inflation adjustments for catch-up contributions for certain employer plans	pya tyba 12/31/14	*Estimate Included in Item I.G.16*											
19. Inflation adjustments for governmental and non-exempt organization plans	tyba 12/31/14	*Estimate Included in Item I.G.16*											
H. Certain Provisions Related to Members of Indian Tribes													
1. Indian general welfare benefits	DOE	*Negligible Revenue Effect*											
2. Tribal Advisory Committee	DOE	*Estimate Included in Item I.H.1*											
3. Other relief for Indian tribes	DOE	*Estimate Included in Item I.H.1*											
Total of Tax Reform for Individuals		—	**43.5**	**70.5**	**77.2**	**77.6**	**76.8**	**84.5**	**94.4**	**100.9**	**117.4**	**268.9**	**743.4**
II. Alternative Minimum Tax Repeal													
1. Repeal of alternative minimum tax on individuals	tyba 12/31/14	—	-12.0	-147.9	-135.8	-147.4	-157.2	-166.7	-177.2	-188.0	-198.9	-443.2	-1,331.8
2. Repeal of alternative minimum tax on corporations	tyba 12/31/14	—	-9.0	-20.1	-19.7	-15.5	-12.1	-9.9	-8.3	-7.8	-8.0	-64.0	-110.2
Total of Alternative Minimum Tax Repeal		—	**-21.0**	**-168.0**	**-155.5**	**-162.9**	**-169.3**	**-176.6**	**-185.5**	**-196.4**	**-206.9**	**-507.2**	**-1,442.0**
III. Business Tax Reform													
A. Tax Rates													
1. Phase-in 25-percent corporate tax rate	tyba 12/31/14	8.1	-14.3	-31.9	-55.4	-76.1	-97.5	-96.2	-104.3	-109.5	-107.5	-169.5	-680.3
B. Reform of Business-Related Exclusions and Deductions													
1. Revision of treatment of contributions to capital	cmatsia DOE	1.4	1.1	1.1	1.1	0.9	0.7	0.6	0.5	0.5	0.5	6.1	8.8

Page 5

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
2. Repeal of deduction for local lobbying expenses	apoia 12/31/14	—	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.6
3. Expenditures for repairs in connection with casualty losses	ita 12/31/14	*Negligible Revenue Effect*											
4. Reform of accelerated cost recovery system (with indexing for inflation) [15]	ppisa 12/31/16	-2.5	-9.0	-1.9	26.0	85.9	50.6	47.2	42.4	36.8	33.1	59.4	269.5
5. Repeal amortization of pollution control facilities	fpisa 12/31/14	—	0.1	0.5	1.0	1.2	1.4	1.4	1.0	0.7	0.5	2.9	7.9
6. Net operating loss deduction	tyba 12/31/14	—	5.7	8.5	8.2	7.6	7.6	7.9	8.0	8.2	8.4	30.2	70.1
7. Circulation expenditures	apoia tyba 12/31/15	—	—	0.2	0.3	0.2	[2]	-0.1	[4]	[2]	[2]	0.6	0.6
8. Amortization of research and experimental expenditures	apoia tyba 12/31/14	—	19.0	25.2	23.0	20.6	18.1	20.5	21.6	21.9	22.8	87.8	192.6
9. Repeal of deductions for soil and water conservation expenditures and endangered species recovery expenditures	apoia 12/31/14	—	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.8
10. Amortization of certain advertising expenses (with phaseout of exemption)	apoia tyba 12/31/14	—	6.1	14.7	19.2	23.7	25.2	23.3	21.2	19.0	16.7	63.7	169.0
11. Expensing certain depreciable business assets for small business	tyba 12/31/13	-5.6	-10.1	-8.3	-7.3	-6.0	-4.5	-3.6	-3.3	-2.9	-2.3	-37.3	-58.9
12. Repeal of election to expense certain refineries	ppisa 12/31/13	*Provision Expired December 31, 2013*											
13. Repeal of deduction for energy efficient commercial buildings	ppisa 12/31/13	*Provision Expired December 31, 2013*											
14. Repeal of election to expense advanced mine safety equipment	ppisa 12/31/13	*Provision Expired December 31, 2013*											
15. Repeal of deduction for expenditures by farmers for fertilizer, etc	epoia tyba 12/31/14	—	1.4	1.0	0.4	0.1	0.1	0.1	0.1	0.1	0.1	2.9	3.4
16. Repeal of special treatment of certain qualified film and television productions	pai 12/31/13	*Provision Expired December 31, 2013*											
17. Repeal of special rules for recoveries of damages of antitrust violations, etc	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
18. Treatment of reforestation expenditures	epoia tyba 12/31/14	—	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.5	1.4
19. 20-year amortization of goodwill and certain other intangibles	pia 12/31/14	—	0.3	0.8	1.0	1.2	1.5	1.8	2.0	2.1	2.1	3.3	13.0
20. Treatment of environmental remediation costs	epoia 12/31/14	—	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
21. Repeal of expensing of qualified disaster expenses	apoia 12/31/14	*No Revenue Effect*											
22. Phaseout and repeal of deduction for income attributable to domestic production activities	tyba 12/31/14	—	2.5	9.1	15.2	16.9	15.2	14.0	14.0	14.2	14.5	43.9	113.8
23. Unification of deduction for organizational expenditures	epoia tyba 12/31/14	—	[4]	[4]	[4]	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.6
24. Prevention of arbitrage of deductible interest expense and tax-exempt interest income	generally tyba 12/31/14 & oio/a 2/26/14	[4]	-0.1	[4]	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.7	1.6
25. Prevention of transfer of certain losses from tax indifferent parties	taoa 12/31/14	[10]	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.7
26. Entertainment, etc. expenses [17]	apoia 12/31/14	—	1.2	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8	6.0	16.7

Page 6

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
27. Repeal of limitation on corporate acquisition indebtedness	ipoaeotia 12/31/14	—	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	-0.1	-0.1
28. Denial of deductions and credits for expenditures in illegal businesses	apoia DOE as tyea DOE	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
29. Limitation on deduction for FDIC premiums	tyba 12/31/14	—	0.9	1.3	1.3	1.5	1.4	1.4	1.5	1.5	1.6	4.8	12.2
30. Repeal of percentage depletion	tyba 12/31/14	—	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.4	5.3
31. Repeal of passive activity exception for working interests in oil and gas property	tyba 12/31/14	[16]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.1
32. Repeal of special rules for gain or loss on timber, coal, or domestic iron ore	tyba 12/31/14	*Estimate Included in Item 1.A.1*											
33. Repeal of like-kind exchanges	generally ta 12/31/14	[16]	0.6	1.3	1.7	2.4	3.5	4.8	6.5	8.7	11.7	5.8	40.9
34. Restriction on trade or business property treated as similar or related to service in involuntarily converted property in disaster areas	dtia 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1
35. Repeal of rollover of publicly traded securities gain into specialized small business investment companies	ta 12/31/14	—	[2]	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.5	1.3
36. Termination of special rules for gain from certain small business stock	oiea DOE	—	[4]	-0.1	-0.1	-0.1	0.8	1.0	1.0	1.1	1.2	-0.2	4.8
37. Certain self-created property not treated as a capital asset	Da 12/31/14	—	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6
38. Repeal of special rule for sale or exchange of patents	Da 12/31/14	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.2
39. Depreciation recapture on gain from disposition of certain depreciable realty	Da 12/31/14	*Estimate Included in Item 1.A.1*											
40. Common deduction conforming amendments	tyba 12/31/14	*No Revenue Effect*											
C. Reform of Business Credits													
1. Repeal of credit for alcohol, etc., used as fuel [18]	fuoua 12/31/13	*Provision Expired December 31, 2013*											
2. Repeal of credit for biodiesel and renewable diesel used as fuel	fuoua 12/31/13	*Provision Expired December 31, 2013*											
3. Research credit modified and made permanent	tyba 12/31/13 & apoia 12/31/13	-4.1	-1.9	-2.8	-2.9	-3.3	-3.7	-4.1	-4.5	-4.9	-5.3	-14.6	-34.1
4. Modify low-income housing program and repeal 4% credit	caa 12/31/14	—	[2]	0.2	0.4	0.8	1.1	1.5	1.9	2.2	2.6	1.4	10.7
5. Repeal of enhanced oil recovery credit	DOE	*No Revenue Effect*											
6. Phaseout and repeal of electricity produced from certain renewable resources	enrepaa 12/31/14	—	0.6	1.2	1.3	1.3	1.3	1.2	1.0	0.9	0.9	4.4	9.6
7. Repeal of Indian employment credit	tyba 12/31/13	*Provision Expired December 31, 2013*											
8. Repeal of credit for portion of employer Social Security taxes paid with respect to employee cash tips	tbpa 12/31/14	—	0.5	0.9	1.0	1.1	1.2	1.2	1.1	1.4	1.4	1.6	10.1
9. Repeal of credit for clinical testing expenses for certain drugs for rare diseases or conditions	apoia tyba 12/31/14	[4]	0.6	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.2	3.4	9.1
10. Repeal of credit for small employer pension plan startup costs	cpoaa 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]

Page 7

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
11. Repeal of employer-provided child care credit	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.2
12. Repeal of railroad track maintenance credit	tyba 12/31/13	*Provision Expired December 31, 2013*											
13. Repeal of credit for production of low sulfur diesel fuel	epoa tyba 12/31/14	*No Revenue Effect*											
14. Repeal of credit for producing oil and gas from marginal wells	tyba 12/31/14	*No Revenue Effect*											
15. Repeal of credit for production from advanced nuclear power facilities	epaia 12/31/14	—	—	0.1	0.1	0.1	0.1	[2]	[2]	[2]	[2]	0.3	0.6
16. Repeal of credit for producing fuel from a nonconventional source	fpaa 12/31/14	*Provision Expired December 31, 2009*											
17. Repeal of new energy efficient home credit	haa 12/31/13	*Provision Expired December 31, 2013*											
18. Repeal of energy efficient appliance credit	epa 12/31/13	*Provision Expired December 31, 2013*											
19. Repeal of mine rescue team training credit	tyba 12/31/13	*Provision Expired December 31, 2013*											
20. Repeal of agricultural chemicals security credit	apoa 12/31/13	*Provision Expired December 31, 2012*											
21. Repeal of credit for carbon dioxide sequestration	tyba 12/31/14	—	[2]	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.4	1.1
22. Repeal of credit for employer health insurance expenses of small employers [1]	apsoii												
	tyba 12/31/14	—	1.0	1.4	1.0	1.3	1.3	1.4	1.5	1.6	1.7	4.6	12.2
23. Repeal of rehabilitation credit	[19]	—	0.3	0.7	0.8	1.1	1.4	1.5	1.5	1.6	1.6	2.9	10.5
24. Repeal of energy credit	pgaa 12/31/16	*Provision Expires December 31, 2016*											
25. Repeal of qualifying advanced coal project credit	aaca 12/31/14	—	0.1	0.1	0.2	0.2	0.2	0.1	[2]	[2]	[2]	0.6	0.8
26. Repeal qualifying gasification project credit	aaga 12/31/14	—	0.1	0.1	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.2	0.3
27. Repeal of qualifying advanced energy project credit	aaea 12/31/14	—	0.1	[2]	[2]	[2]	[2]	[4]	[4]	[4]	[4]	0.4	0.3
28. Repeal of qualifying therapeutic discovery project credit	aaca 12/31/14	*Provision Generally Expired December 31, 2010*											
29. Repeal of work opportunity tax credit	sgenwtwbca 12/31/13	*Provision Expired December 31, 2013*											
30 Repeal of deduction for certain unused business credits	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.1
D. Accounting Methods													
1. Limitation on use of cash method of accounting	tyba 12/31/14	—	0.5	1.1	0.3	0.9	1.6	3.1	4.3	6.9	9.0	2.8	27.6
2. Rules for determining whether taxpayer has adopted a method of accounting	tyba 12/31/14	*Negligible Revenue Effect*											
3. Certain special rules for taxable year of inclusion	[20]	—	1.7	2.7	2.1	2.0	0.8	0.2	0.2	0.3	0.3	8.6	10.4
4. Installment sales	saoda 12/31/14	—	0.2	0.4	0.2	[2]	[2]	0.1	0.1	0.1	0.1	0.8	1.3
5. Repeal of special rule for prepaid subscription income	pra 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.2	0.2
6. Repeal of special rule for prepaid dues income of certain membership organizations	pra 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.2	0.2
7. Repeal of special rule for magazines, paperbacks, and records returned after close of the taxable year	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.2	0.2
8. Modification of rules for long-term contracts	ccia 12/31/14	—	0.6	1.8	1.5	0.7	0.4	0.3	0.4	0.4	0.4	4.6	6.5
9. Nuclear decommissioning reserve funds	tyba 12/31/14	—	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.6	1.2
10. Repeal of last-in, first-out method of inventory	tyba 12/31/14	—	0.9	1.7	1.7	1.6	4.8	9.7	14.6	26.1	18.0	5.9	79.1

Page 8

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
11. Repeal of lower of cost or market method of inventory	tyba 12/31/14	—	[2]	0.1	0.1	0.1	0.2	0.5	0.7	1.3	0.9	0.3	3.8
12. Modification of rules for capitalization and inclusion in inventory costs of certain expenses	tyba 12/31/14	—	-0.3	-0.6	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-1.9	-4.5
13. Modification of income forecast method	pgaa 12/31/14	—	0.2	0.1	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.3	0.3
14. Repeal of averaging of farm income	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.1
15. Treatment of patent or trademark infringement awards	pgpiaaa 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.1
16. Repeal of redundant rules with respect to carrying charges	apoa 12/31/14	*Negligible Revenue Effect*											
17. Repeal of recurring item exception for spudding of oil or gas wells	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.2
E. Financial Instruments													
1. Treatment of certain derivatives	pnapca 12/31/14	—	0.1	0.8	1.6	2.2	2.4	2.5	2.3	2	1.8	4.7	15.7
2. Modification of certain rules related to hedges	tcia 12/31/14	*Negligible Revenue Effect*											
3. Current inclusion in income of market discount	oaa 12/31/14	—	[2]	[2]	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.9
4. Treatment of certain exchanges of debt instruments	ta 12/31/14	—	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.8
5. Coordination with rules for inclusion not later than for financial accounting purposes	tyba 12/31/14	—	1.1	2.2	2.1	1.9	1.1	0.3	0.3	0.3	0.3	7.3	9.5
6. Rules regarding certain government debt	oia 12/31/14	*Negligible Revenue Effect*											
7. Cost basis of specified securities determined without regard to identification	saoada 12/31/14	[2]	0.5	0.6	0.6	0.3	0.4	0.4	0.4	0.4	0.4	1.8	3.8
8. Wash sales by related parties	saoda 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.1
9. Nonrecognition for derivative transactions by a corporation with respect to its stock	teia DOE	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.2
10. Termination of private activity bonds	bia 12/31/14	-0.2	-0.6	-0.4	0.7	1.8	2.7	3.7	4.5	5.4	6.2	1.4	23.9
11. Termination of credit for interest on certain home mortgage	tyea 12/31/14	*Estimate Included in Item III.E.10.*											
12. Repeal of advance refunding bonds	ar bia 12/31/14	[4]	-0.3	[2]	0.7	1.0	1.2	1.3	1.4	1.5	1.5	1.4	8.3
13. Repeal of tax credit bond rules [1]	bia DOE	[2]	[2]	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.4	0.5	2.2
F. Insurance Reforms													
1. Exception to pro rata interest expense disallowance for corporate owned life insurance restricted to 20-percent owners	cai 12/31/14	—	0.1	0.1	0.6	0.8	0.9	1.0	1.1	1.2	1.3	1.8	7.3
2. Net operating losses of life insurance companies	tyba 12/31/14	—	0.1	0.1	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.2	0.3
3. Repeal of small life insurance company deduction	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.2	0.2
4. Computation of life insurance tax reserves	tyba 12/31/14	—	0.8	2.8	3.1	3.2	3.2	3.2	3.2	2.9	2.1	9.9	24.5
5. Adjustment for change in computing reserves	tyba 12/31/14	—	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	2.5
6. Modification of rules for life insurance proration for purposes of determining the dividends received deduction	tyba 12/31/14	—	0.2	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	1.7	4.5

Page 9

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
7. Repeal of special rule for distribution to shareholders from pre-1984 policyholders surplus account	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
8. Modification of proration rules for property and casualty insurance companies	tyba 12/31/14	—	0.1	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	1.0	2.9
9. Repeal of special treatment of Blue Cross and Blue Shield organizations, etc	tyba 12/31/14 & tyba 12/31/16	—	0.2	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	1.4	4.0
10. Modification of discounting rules for property and casualty insurance companies	tyba 12/31/14	—	0.6	2.2	2.5	2.6	2.6	2.6	2.0	1.9	0.3	7.9	17.9
11. Repeal of special estimated tax payments	tyba 12/31/14	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
12. Capitalization of certain policy acquisition expenses	tyba 12/31/14	—	0.5	1.9	1.8	1.6	1.5	1.3	1.2	1.0	0.9	5.8	11.7
13. Tax reporting for life settlement transactions	generally tyba 12/31/14	—	[4]	[4]	[2]	[2]	[2]	[2]	[2]	0.1	0.1	[2]	0.2
14. Clarification of tax basis of life insurance contracts	generally tra 8/22/06	*Estimate Included in Item III F.13*											
15. Exception to transfer for valuable consideration rules	ta 12/31/14	*Estimate Included in Item III F.13*											
G. Pass-Thru and Certain Other Entities													
1. Reduced recognition period for built-in gains trade permanent	tyba 12/31/13	-0.2	-0.2	-0.3	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-1.4	-3.0
2. Modifications to S corporation passive investment income rules	tyba 12/31/14	[16]	-0.1	-0.3	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-1.1	-3.6
3. Expansion of qualifying beneficiaries of an electing small business trust	after 1/1/15	[16]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	-0.1
4. Charitable contribution deduction for electing small business trusts	tyba 12/31/14	[16]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	-0.1
5. Permanent rule regarding basis adjustment to stock of S corporations making charitable contributions of property	cont tyba 12/31/13	[4]	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.4	-1.1
6. Extension of time for making S corporation elections	tyba ara 12/31/14	[16]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
7. Relocation of C corporation definition	DOE	*No Revenue Effect*											
8. Repeal of rules relating to guaranteed payments and liquidating distributions	tyba 12/31/14	[16]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.3
9. Mandatory adjustments to basis of partnership property in case of transfer of partnership interests	ta 12/31/14	[16]	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	1.1
10. Mandatory adjustments to basis of undistributed partnership property	da 12/31/14	*Estimate included in Item III G.9*											
11. Corresponding adjustments to basis of properties held by partnership where partnership basis adjusted	mda 12/31/14	*Estimate Included in Item III G.9*											
12. Charitable contributions and foreign taxes taken into account in determining limitation on allowance of partner's share of loss	tyba 12/31/14	[16]	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.9
13. Revenues related to unrealized receivables and inventory items	tyba 12/31/14	[16]	[2]	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.8
14. Repeal of time limitation on taxing precontribution gain	Pca 12/31/14	[16]	[16]	[16]	[16]	[16]	[16]	[16]	0.1	0.1	0.2	[16]	0.4

Page 10

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
15. Partnership interests created by gift	tyba 12/31/14	[16]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	[2]	[2]	0.5	0.8
16. Repeal of technical termination of partnerships	tyba 12/31/14	[16]	[2]	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5
17. Publicly traded partnership exception restricted to mining and natural resources partnerships	tyba 12/31/16	[16]	[16]	[16]	0.4	0.6	0.6	0.6	0.7	0.7	0.7	1.0	4.3
18. Ordinary income treatment in the case of partnership interests held in connection with performance of services (with exception for real estate)	tyba 12/31/14	0.2	0.3	0.3	0.5	0.5	0.4	0.3	0.3	0.2	0.2	1.6	3.3
19. Partnership audits and adjustments	generally rffp tyea 12/31/14	[16]	0.8	1.2	1.3	1.4	1.5	1.6	1.7	1.9	2.0	5.7	12.9
20. Immediate recognition of certain built-in gains and preventive of tax-free spinoffs involving REITs	generally 2/26/14	[2]	0.2	0.3	0.4	0.5	0.6	0.7	0.9	1.1	1.2	1.4	5.9
21. Extension of period for preventive of REIT election following revocation or termination	tora 12/31/14	[16]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
22. Certain short-life property not treated as real property for purposes of REIT provisions	tyba 12/31/16	[16]	[2]	[2]	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6
23. Repeal of special rules for timber held by REITs	tyba 12/31/16	[16]	[16]	[16]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.2
24. Limitation on fixed percentage rent and interest exceptions for REIT income tests	generally less & date 12/31/14	[16]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
25. Repeal of preferential dividend rule for publicly offered REITs	di tyba 12/31/14	*Negligible Revenue Effect*											
26. Authority for alternative remedies to address certain REIT distribution failures	di tyba 12/31/14	[16]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
27. Limitations on designation of dividends by REITs	di tyba 12/31/14	[16]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
28. Non-REIT earnings and profits required to be distributed by REIT in cash	dmra 2/26/14	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.1
29. Debt instruments of publicly offered REITs and mortgages treated as real estate assets	tyba 12/31/14	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
30. Asset and income test clarification regarding ancillary personal property	tyba 12/31/14	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
31. Hedging provisions	tyba 12/31/14	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
32. Modification of REIT earnings and profits calculation to avoid duplicate taxation	tyba 12/31/14	[16]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
33. Reduction in percentage limitation on assets of REIT which may be taxable REIT subsidiaries	tyba 12/31/16	[16]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1
34. Treatment of certain services provided by taxable REIT subsidiaries	tyba 12/31/14	[16]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
35. Study relating to taxable REIT subsidiaries	DOE	*No Revenue Effect*											
36. C Corporation election to become, or transfer assets to, a RIC or REIT	eatora 2/26/14	*Estimate Included in Item III G.10*											
37. Interests in RICs and REITs not excluded from definition of United States real property interests	Da 12/31/14	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1

Page 11

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
38. Dividends derived from RICs and REITs ineligible for deduction for United States source portion of dividends from certain foreign corporations	dro/a 2/26/14	[2]	[2]	[2]	[2]	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.5
39. Exclusion of dividends from controlled foreign corporations from the definition of personal holding company income for purposes of the personal holding company rules	tyba 12/31/14	[4]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
H. Taxation of Foreign Persons													
1. Prevention of avoidance of tax through reinsurance with non-taxed affiliates	tyba 12/31/14	—	0.4	0.9	0.9	0.9	1.0	1.0	1.1	1.2	1.5	3.1	8.9
2. Taxation of passenger cruise gross income of foreign corporations and nonresident alien individuals	tyba 12/31/14	—	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.9
3. Restriction on insurance business exception to passive foreign investment company rules	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.1	0.1	0.1	0.4
4. Modification of limitation on earnings stripping	tyba 12/31/14	—	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.2	2.9
5. Limitation on treaty benefits for certain deductible payments	pma DOE	0.1	0.4	0.6	0.7	0.7	0.7	0.8	0.8	0.8	1.1	2.5	6.9
I. Provisions Related to Compensation													
1. Nonqualified deferred compensation	aa tpa 12/31/14	-1.3	-0.3	0.6	-0.2	0.7	1.7	1.8	1.6	2.8	1.8	-0.5	9.2
2. Modification of limitation on excessive employee remuneration	tyba 12/31/14	0.4	0.7	2.2	2.9	1.7	1.4	1.1	1.0	0.9	0.8	7.9	12.1
3. Excise tax on excess tax-exempt organization executive compensation	tyba 12/31/14	—	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	1.7	4.0
4. Denial of deduction on research expenditure for stock transferred pursuant to an incentive stock option	DOE	*Negligible Revenue Effect*											
5. Determination of worker classification [21]	spa 12/31/14	—	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.8	-2.6
J. Zones and Short-Term Regional Benefits													
1. Repeal of provisions relating to Empowerment Zones and Enterprise Communities	DOE	*Provisions Expired December 31, 2012*											
2. Repeal of DC Zone provisions	DOE	*Provisions Expired December 31, 2011*											
3. Repeal of provisions relating to renewal communities	DOE	*Provisions Expired December 31, 2009*											
4. Repeal of various short-term regional benefits	DOE	*Provisions Expired December 31, 2011*											
Total of Business Tax Reform		**-0.8**	**17.5**	**54.8**	**68.7**	**76.0**	**65.4**	**71.6**	**67.9**	**77.5**	**61.2**	**219.1**	**562.4**
IV. Participation Exemption System for the Taxation of Foreign Income													
A. Establishment of Exemption System													
1. Deduction for dividends received by domestic corporations from certain foreign corporations	[22]	-9.5	-14.7	-19.9	-23.7	-24.0	-23.7	-23.6	-24.4	-25.0	-26.4	-88.8	-212.0
2. Limitation on losses with respect to specified 10-percent owned foreign corporations	dri tyba 12/31/14 & ta 12/31/14	*Estimate Included in Item IV.A.1*											

Page 12

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
3. Treatment of deferred foreign income upon transition to participation exemption system of taxation and modifications to OFL rules [23]	[24]	-1.2	12.3	23.3	29.5	11.6	11.8	16.6	24.8	31.4	19.0	66.5	170.4
4. Look-thru rule for related controlled foreign corporations made permanent	[25]	-0.8	-1.1	-1.2	-1.2	-1.2	-1.3	-1.4	-1.5	-1.7	-1.8	-4.4	-13.1
B. Modifications Related to Foreign Tax Credit System													
1. Repeal of section 902 indirect foreign tax credits; determination of section 960 credit on current year basis	[22]	*Estimate Included in Item IV.A.1*											
2. Foreign tax credit limitation applied by allocating only directly allocable deductions to foreign source income	[22]	*Estimate Included in Item IV.A.1*											
3. Passive category income expanded to include other mobile income	[22]	*Estimate Included in Item IV.C.1*											
4. Source of income from sales of inventory determined solely on basis of production activities	tyba 12/31/14	—	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.9	1.8
C. Rules Related to Passive and Mobile Income													
1. Subpart F reform	[22]	-0.1	8.1	14.6	13.8	14.4	13.7	13.1	13.0	12.7	12.3	50.8	115.6
2. Subpart F income to only include low-taxed foreign income	[22]	*Estimate Included in Item IV.C.1*											
3. Foreign base company sales income	[22]	*Estimate Included in Item IV.C.1*											
4. Inflation adjustment of de minimis exception for foreign base company income	[22]	*Estimate Included in Item IV.C.1*											
5. Active financing exception extended with limitation for low-taxed foreign income	[25]	-2.9	-1.6	-2.9	-4.0	-4.6	-2.4	—	—	—	—	-16.0	-18.4
6. Repeal of inclusion based on withdrawal of previously excluded subpart F income from qualified investment	[22]	[2]	[2]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[2]	[2]
7. Foreign intangible income subject to taxation at reduced rate; intangible income treated as subpart F income	[22] & tyba 12/31/14	*Estimate Included in Item IV.C.1*											
8. Denial of deduction for interest expense of United States shareholders which are members of worldwide affiliated groups with excess domestic indebtedness	tyba 12/31/14	—	2.2	3.8	3.1	3.0	1.9	2.8	2.3	2.0	1.7	12.1	24.0
Total of Participation Exemption System for the Taxation of Foreign Income		**-11.5**	**5.4**	**18.0**	**8.7**	**-0.6**	**1.3**	**7.7**	**14.4**	**19.6**	**5.0**	**28.1**	**68.3**
V. Tax Exempt Entities													
A. Unrelated Business Income Tax													
1. Clarification of unrelated business income tax treatment of State and local retirement plans	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.1

Page 13

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
2. Name and logo royalties treated as unrelated business taxable income	tyba 12/31/14	—	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.8	1.8
3. Unrelated business taxable income separately computed for each trade or business activity	tyba 12/31/14	—	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	1.3	3.2
4. Exclusion of research income limited to publicly available research	tyba 12/31/14	—	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.7
5. Parity of charitable contribution limitation between trusts and corporations	tyba 12/31/14	*Negligible Revenue Effect*											
6. Increased specific deduction	tyba 12/31/14	—	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	-0.1	-0.3
7. Repeal of exclusion of gain or loss from disposition of distressed property	paa 12/31/14	*Negligible Revenue Effect*											
8. Qualified sponsorship payments	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
B. Penalties													
1. Increase in information return penalties	intbiboa 1/1/15	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1
2. Manager-level accuracy-related penalty on underpayment of unrelated business income tax	tyba 12/31/14	*Negligible Revenue Effect*											
C. Excise Taxes													
1. Modification of intermediate sanctions	tyba 12/31/14	*Negligible Revenue Effect*											
2. Modification of taxes on self-dealing	tyba 12/31/14	*Negligible Revenue Effect*											
3. Excise tax on failure to distribute within 5 years contributions to donor advised fund	generally cmta 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
4. Simplification of excise tax on private foundation investment income	tyba 12/31/14	—	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.8	-1.6
5. Repeal of exception for private operating foundation failure to distribute income	tyba 12/31/14	*Negligible Revenue Effect*											
6. Excise tax based on investment income of private colleges and universities	tyba 12/31/14	—	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	1.7
D. Requirements for Organization Exempt from Tax													
1. Repeal of tax-exempt status for professional sports leagues	tyba 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	-0.1
2. Repeal of exemption from tax for certain insurance companies and co-op health insurance issuers	tyba 12/31/14	[2]	[2]	[2]	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.7
3. In-State requirement for workmen's compensation insurance organizations	pia 12/31/14	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
4. Repeal of Type II and Type III supporting organizations	generally DOE & tyba 12/31/15 fee	[2]	[2]	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	1.4
Total of Tax Exempt Entities		**[2]**	**0.5**	**0.7**	**0.8**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**3.0**	**8.0**
VI. Tax Administration and Compliance													
A. IRS Investigation-Related Reforms													
1. Organizations required to notify Secretary of intent to operate as 501(c)(4)	generally ioea 12/31/13	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]

Page 14

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
2. Declaratory judgments for 501(c)(4) organizations	pia DOE	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
3. Restriction on donation reporting for certain 501(c)(4) organizations	rdl tyba 12/31/13	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
4. Mandatory electronic filing for annual returns of exempt organizations	generally tyba DOE	*No Revenue Effect*											
5. Duty to ensure that IRS employees are familiar with and act in accord with certain taxpayer rights	DOE	*No Revenue Effect*											
6. Termination of employment of Internal Revenue Service employees for taking official actions for political purposes	DOE	*No Revenue Effect*											
7. Release of information regarding the status of certain investigations	DOE	*No Revenue Effect*											
8. Review of IRS examination selection procedures	DOE	*No Revenue Effect*											
9. IRS employees prohibited from using personal email accounts for official business	DOE	*No Revenue Effect*											
10. Moratorium on IRS conferences	DOE	*No Revenue Effect*											
11. Applicable standard for determinations of whether an organization is operated exclusively for the promotion of social welfare (earliest one year after the date of enactment)	DOE	*Negligible Revenue Effect*											
B. Taxpayer Protection and Service Reforms													
1. Extend Internal Revenue Service authority to require truncated Social Security numbers on Form W-2	DOE	*Negligible Revenue Effect*											
2. Free electronic filing	DOE	*Negligible Revenue Effect*											
3. Pre-populated returns prohibited	DOE	*No Revenue Effect*											
4. Form 1040SR for seniors	tyba DOE	*No Revenue Effect*											
5. Increased refund and credit threshold for Joint Committee on Taxation review of C corporation returns	DOE	*Negligible Revenue Effect*											
C. Tax Return Due Date Simplification													
1. Due dates for returns of partnerships, S corporations, and C corporations	generally tyba 12/31/14	—	[4]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1
2. Modification of due dates by regulation	generally tyba 12/31/14	*Estimate Included in Item VI.C.1*											
3. Corporations permitted statutory automatic 6-month extension of income tax returns	generally tyba 12/31/14	*Estimate Included in Item VI.C.1*											
D. Compliance Reforms													
1. Penalty for failure to file	rfa 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.3
2. Penalty for failure to file correct information returns and provide payee statements	intbiib 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1
3. Clarification of 6-year statute of limitations in case of overstatement of basis	[26]	[2]	[2]	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.5	1.1

Provision	Effective	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
4. Reform of rules related to qualified tax collection contracts [1]	DOE	[2]	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.8	2.2
5. 100 percent continuous levy on payments to Medicare providers and suppliers	ла DOE	[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.7
6. Treatment of refundable credits for purposes of certain penalties	[27]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.1
Total of Tax Administration and Compliance		**[2]**	**0.3**	**0.4**	**0.4**	**0.4**	**0.4**	**0.5**	**0.6**	**0.6**	**0.6**	**1.6**	**4.6**
VII. Excise Taxes													
1. Repeal of medical device excise tax	sa DOE	-1.6	-2.4	-2.5	-2.7	-2.9	-3.1	-3.3	-3.5	-3.7	-3.8	-12.2	-29.5
2. Modifications relating to oil spill liability trust fund	[28]	—	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4	1.2
3. Modification relating to inland waterways trust fund financing rate	fua 12/31/14	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.2
4. Excise tax on systemically important financial institutions (.035% quarterly tax rate)	sqbo 12/31/14	—	3.1	7.5	9.2	9.8	10.2	10.8	11.3	11.9	12.5	29.6	86.4
5. Clarification of orphan drug exception to annual fee on branded prescription pharmaceutical manufacturers and importers	fiwapda 12/31/13	*No Revenue Effect*											
Total of Excise Taxes		**-1.6**	**0.8**	**5.1**	**6.6**	**7.0**	**7.3**	**7.6**	**8.0**	**8.4**	**8.9**	**17.9**	**58.3**
VIII. Deadwood and Technical Provisions													
A. Repeal of Deadwood	DOE	*No Revenue Effect*											
B. Conforming Amendments Related to Multiple Sections	DOE	*Estimates Included in the Sections to Which the Changes Relate*											
Total of Deadwood and Technical Provisions		***No Revenue Effect***											
NET TOTAL		**-13.9**	**47.1**	**-18.5**	**6.9**	**-1.5**	**-17.2**	**-3.7**	**-8.2**	**11.5**	**-12.8**	**23.5**	**3.0**

Joint Committee on Taxation

NOTE: Details may not add to totals due to rounding. Revenue provisions as submitted in summary draft CAMP_041

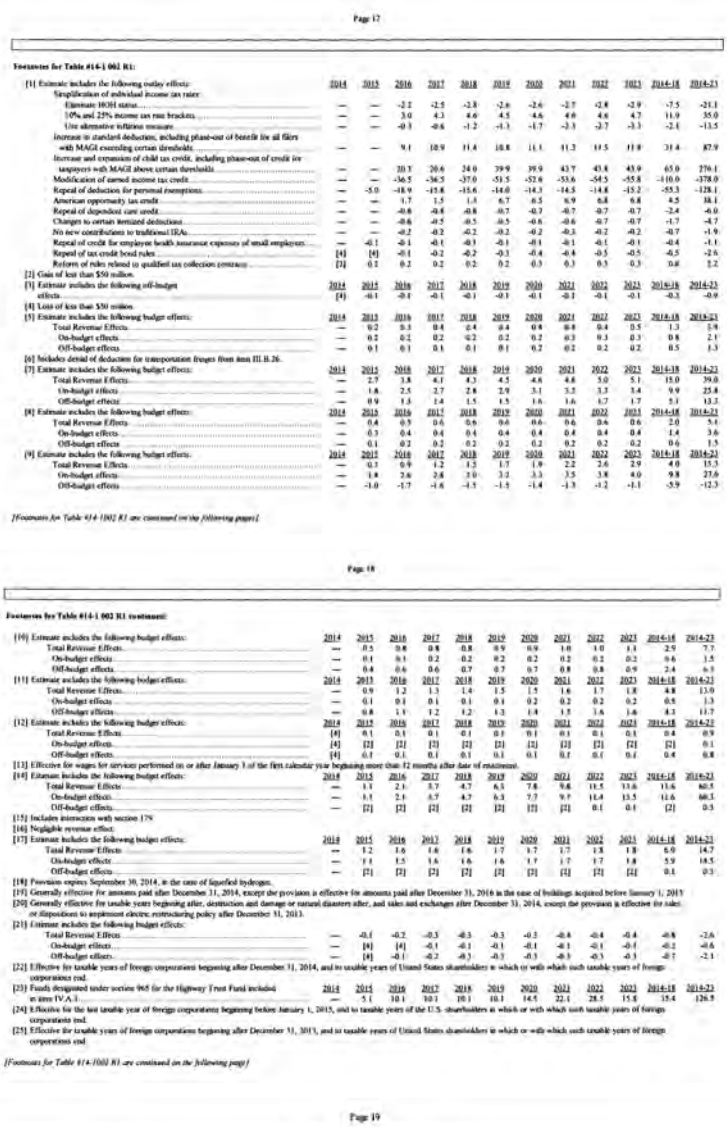
[Legend and Footnotes for Table #14-1 002 R1 appear on the following pages]

Legend for Table #14-1 002 R1:

Legend for "Effective" column:

aara = allocations and reallocations after
aat = amounts attributable to
ada = amounts discharged after
apa = appliances produced after
Apa = amounts paid after
apoeia = amounts paid or expenses incurred after
apoia = amounts paid or incurred after
apoif = amounts paid or incurred for
apoii = amounts paid or incurred in
apoitiwbwftea = amounts paid or incurred to individuals who begin work for the employer after
ar = advance refunding
bia = bonds issued after
caa = credits allocated after
ceia = contracts entered into after
cia = contracts issued after
cma = contributions made after
cmatsia = contributions made and transactions entered into after
cmi = contributions made in
cpoia = costs paid or incurred after
cqba = calendar quarter beginning after
cyba = calendar years beginning after
Da = dispositions after
da = distributions after
dda = disasters declared after
dwrteda = distributions with respect to employees dying after
di = distributions in
diaa = debt instruments acquired after
dma = distributions made after
dmoa = distributions made on or after
DOE = date of enactment
dosaea = divorce or separation agreement entered into after
dro/a = dividends received on or after
dri = dividends received in
ea = expenditures after
earcpasa = electricity and refined coal produced and sold after
etaoa = elections and transfers on or after
eia = expenses incurred after
epasa = electricity produced and sold after
epoia = expenses paid or incurred after
epoii = expenses paid or incurred in
feo = for existing organizations
fiwapda = fees imposed with annual payment dates after
fpasa = fuel produced and sold after
fpisa = facilities placed in service after
fsoua = fuel sold or used after
fua = fuel used after
haa = homes acquired after
ipoiwrtiia = interest paid or incurred with respect to indebtedness incurred after
irtbfooa = information returns required to be filed on or after
irtbfa = information returns required to be filed after
leia = leases entered into after
lia = levies issued after
lsa = losses sustained after
mba = months beginning after
oaa = obligations acquired after
oia = obligations issued after
ooa = organizations organized after
oioa = obligations issued on or after
ora = or revocations after
pa = payments after
paa = property acquired after
papepa = property acquired and pensions established after
pca = productions commencing after
Pca = property contributed after
pfa = pleadings filed after
pia = policies issued after
pma = payments made after
ppa = property purchased after
ppisa = property placed in service after
pra = payments received after
prptjasa = payments received pursuant to judgments and settlements after
pyba = plan years beginning after
pya = plan years and
rfa = returns filed after
rff = returns filed for
rffp = returns filed for partnership
rrfspa = remuneration received for services performed after
rpa = residences purchased after
sa = sales after
saea = sales and exchanges after
saoda = sales and other dispositions after
seaoda = sales, exchanges, and other dispositions after
spa = services performed after
teia = transactions entered into after
tfwaetria = transfers for which an estate tax return is filed after
toda = transfers or distributions after
tora = terminations or revocations after
tfspa = tips for services performed after
tyba = taxable years beginning after
tyea = taxable years ending after
yewowa = years ending with or within a
vaa = vehicles acquired after
wa = withdrawals after

[Footnotes for Table #14-1 002 R1 appear on the following pages]



Page 17

Footnotes for Table #14-1 002 R1:

[1] Estimate includes the following outlay effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
Simplification of individual income tax rates:												
Eliminate HOH status	—	—	-2.2	-2.5	-2.8	-2.6	-2.6	-2.7	-2.8	-2.9	-7.5	-21.1
10% and 25% income tax rate brackets	—	—	3.0	4.3	4.6	4.5	4.6	4.6	4.6	4.7	11.9	35.0
Use alternative inflation measure	—	—	-0.3	-0.6	-1.2	-1.3	-1.7	-2.3	-2.7	-3.3	-2.1	-13.5
Increase in standard deductions, including phase-out of benefit for all filers with MAGI exceeding certain thresholds	—	—	9.1	10.9	11.4	10.8	11.1	11.3	11.5	11.9	31.4	87.9
Increase and expansion of child tax credit, including phase-out of credit for taxpayers with MAGI above certain thresholds	—	—	30.7	30.6	34.0	39.9	39.9	43.7	43.8	43.9	65.0	376.1
Modification of earned income tax credit	—	—	-36.5	-36.5	-37.0	-51.5	-52.6	-53.6	-54.5	-55.8	-110.0	-378.0
Repeal of deduction for personal exemptions	—	-5.0	-18.9	-15.8	-15.6	-14.0	-14.3	-14.5	-14.8	-15.2	-55.3	-128.1
American opportunity tax credit	—	—	1.7	1.5	1.1	6.7	6.5	6.9	6.8	6.8	4.5	38.1
Repeal of dependent care credit	—	—	-0.6	-0.6	-0.8	-0.7	-0.7	-0.7	-0.7	-0.7	-2.4	-6.0
Changes to certain itemized deductions	—	—	-0.6	-0.5	-0.5	-0.5	-0.6	-0.6	-0.7	-0.7	-1.7	-4.7
No new contributions to traditional IRAs	—	—	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2	-0.7	-1.9
Repeal of credit for employer health insurance expenses of small employers	—	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.4	-1.1
Repeal of tax credit bond rules	[4]	[4]	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5	-2.6
Reform of rules related to qualified tax collection contracts	[2]	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.8	2.2

[2] Gain of less than $50 million.

[3] Estimate includes the following off-budget effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
	[4]	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.9

[4] Loss of less than $50 million.

[5] Estimate includes the following budget effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
Total Revenue Effects	—	0.2	0.3	0.4	0.4	0.4	0.8	0.8	0.4	0.5	1.3	5.9
On-budget effects	—	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.8	2.1
Off-budget effects	—	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.5	1.3

[6] Includes denial of deduction for transportation fringes from Sec. III.B.26.

[7] Estimate includes the following budget effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
Total Revenue Effects	—	2.7	3.8	4.1	4.3	4.5	4.8	4.8	5.0	5.1	15.0	39.0
On-budget effects	—	1.8	2.5	2.7	2.8	2.9	3.1	3.2	3.3	3.4	9.9	25.8
Off-budget effects	—	0.9	1.3	1.4	1.5	1.5	1.6	1.6	1.7	1.7	5.1	13.2

[8] Estimate includes the following budget effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
Total Revenue Effects	—	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.0	5.4
On-budget effects	—	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.4	3.6
Off-budget effects	—	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	1.5

[9] Estimate includes the following budget effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
Total Revenue Effects	—	0.3	0.9	1.2	1.5	1.7	1.9	2.2	2.6	2.9	4.0	15.3
On-budget effects	—	1.8	2.6	2.8	3.0	3.2	3.3	3.5	3.8	4.0	9.8	27.6
Off-budget effects	—	-1.0	-1.7	-1.6	-1.5	-1.5	-1.4	-1.3	-1.2	-1.1	-5.9	-12.3

[Footnotes for Table #14-1002 R1 are continued on the following page]

Page 18

Footnotes for Table #14-1 002 R1 continued:

[10] Estimate includes the following budget effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
Total Revenue Effects	—	0.5	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.1	2.9	7.7
On-budget effects	—	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	1.5
Off-budget effects	—	0.4	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9	2.4	6.1

[11] Estimate includes the following budget effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
Total Revenue Effects	—	0.9	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.8	4.8	13.0
On-budget effects	—	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.5	1.3
Off-budget effects	—	0.8	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.6	4.3	11.7

[12] Estimate includes the following budget effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
Total Revenue Effects	[4]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.9
On-budget effects	[4]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1
Off-budget effects	[4]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.8

[13] Effective for wages for services performed on or after January 1 of the first calendar year beginning more than 12 months after date of enactment.

[14] Estimate includes the following budget effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
Total Revenue Effects	—	1.1	2.1	3.7	4.7	6.1	7.8	9.4	11.5	13.6	11.6	60.5
On-budget effects	—	1.1	2.1	3.7	4.7	6.1	7.7	9.3	11.4	13.5	11.6	60.3
Off-budget effects	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.1	[2]	0.3

[15] Includes interaction with section 179.

[16] Negligible revenue effect.

[17] Estimate includes the following budget effects:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
Total Revenue Effects	—	1.2	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8	6.0	14.7
On-budget effects	—	1.1	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.8	5.9	14.5
Off-budget effects	—	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	0.1	0.2

[18] Provision expires September 30, 2014, in the case of liquified hydrogen.

[19] Generally effective for amounts paid after December 31, 2014, except the provision is effective for amounts paid after December 31, 2016 in the case of buildings acquired before January 1, 2015.

[20] Generally effective for taxable years beginning after, destruction and damage or natural disasters after, and sales and exchanges after December 31, 2014, except the provision is effective for sales or dispositions to implement electric restructuring policy after December 31, 2013.

[21] Estimate includes the following budget effects:												
Total Revenue Effects	—	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.8	-2.6
On-budget effects	—	[4]	[4]	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.6
Off-budget effects	—	[4]	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.7	-2.1

[22] Effective for taxable years of foreign corporations beginning after December 31, 2014, and to taxable years of United States shareholders in which or with which such taxable years of foreign corporations end.

[23] Funds designated under section 965 for the Highway Trust Fund included in item IV.A.1.	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-18	2014-23
	—	5.1	10.1	10.1	10.1	10.1	14.5	22.1	28.5	15.8	35.4	126.5

[24] Effective for the last taxable year of foreign corporations beginning before January 1, 2015, and to taxable years of the U.S. shareholders in which or with which such taxable years of foreign corporations end.

[25] Effective for taxable years of foreign corporations beginning after December 31, 2013, and to taxable years of United States shareholders in which or with which such taxable years of foreign corporations end.

[Footnotes for Table #14-1002 R1 are continued on the following page]

Page 19

Footnotes for Table #14-1 002 R1 continued:

[26] Effective for returns filed after the date of enactment and returns filed on or before the date of enactment if the statute of limitations has not expired as of such date.

[27] The amended definition of underpayment is effective for all open tax years, but the revision of section 6676 is effective only for claims filed after February 26, 2014.

[28] Effective for calendar quarters beginning more than 60 days after date of enactment.

Chairman TIBERI. Chairman Camp requested feedback on the draft on the JCT analysis on economic modeling generally and how to treat dynamic revenue that results from a macroeconomic analysis of the discussion draft. I am pleased that so many stake-

holders and economists have offered feedback thus far, and during the hearing this morning we intend to examine some of the feedback relating to dynamic analysis.

The Tax Reform Act is a huge, important step forward in creating a better Tax Code for both individuals and businesses, but that is not to say it can't be improved upon. And that is why Chairman Camp released this as a discussion draft, to gather feedback from stakeholders and experts in a public and transparent manner.

I am looking forward to our great bipartisan discussion today. I thank our witnesses for being here and taking the time. I now yield to Ranking Member Neal for his opening statement.

Mr. NEAL. Thank you, Mr. Chairman. Thanks for calling this important hearing on dynamic scoring. As many of us know, this is an issue that has been around for a considerable period of time. And I would note that, as the chairman described, the response to Mr. Camp's proposal on the Republican side, I think it is fair to say, was more dynamic than the response on the Democratic side.

What it does allow is the opportunity to have an open and honest dialogue about dynamic scoring today. The witnesses that the committee has put before us are all distinguished. I have known many of them in different capacities and have great regard for the suggestions that they have made time and again. It is one of the best things about serving on the Ways and Means Committee, you really do hear from good witnesses, and the people that you associate with on this committee I think are superb in their talent.

So with the panel that is assembled today we can finally, I hope, put to bed a few widespread and seemingly widely held myths. One of the most dangerous is the notion that tax cuts pay for themselves. As congressional observers can verify, the notion that tax cuts pay for themselves was a rallying cry for the deficit finance tax cuts from the previous decade—and, frankly, the issue has been hanging around a lot longer than that—tax cuts that failed to produce the job gains and the economic growth that we were promised in the runup to their passage.

From my perspective, to date this conversation surrounding dynamic scoring has been a bit intellectually short. During the last two decades, dynamic scoring has been a way to push tax cuts, whether deficit financed or not.

Do some tax cuts generate income growth? Yes. But to apply the assessment that all tax cuts pay for themselves, reduce the deficit, or grow the economy really doesn't make sense economically.

You should know, I am not categorically opposed to the discussion or the approach to dynamic scoring that will be outlined today. I believe that Congress and the Joint Committee on Taxation and the Congressional Budget Office should all have the best ideas and the opportunity to put those policies forward that will influence the overall economic discussion, but not to miss the point that for the last two decades dynamic scoring has been a euphemism for enacting large tax cuts.

The point that is often overlooked with dynamic scoring comes up when there are two sides of the ledger. If we are to consider the positive effects that tax cuts may or may not have on the economy, equally we should consider the positive effects that government

spending and investment policies and initiatives would have on the economy as well.

Might I suggest that the dust-up that we are about to have in the next 48 hours over a big infrastructure program, I perhaps would be all in favor of applying dynamic scoring to the idea of what greater efficiencies would be caused by a large infrastructure bill based on the notion that we might not be able to predict everything that would happen tomorrow, but certainly over years to come it may well inure to the benefit of American people.

So any time that we are to consider changing how CBO and JCT keeps score, we also should also be mindful that these changes have lasting consequences, and in doing so we may be undermining one of the few remaining nonpartisan and well informed commentators of the Nation's economic health. I understand the short-term political gains for pushing tax cuts, but again I caution against pursuing this track singularly.

Let me conclude by thanking the chairman. It has been a joy to work with him over the years that we have both served on this Select Revenue Subcommittee. And I yield back my time.

Chairman TIBERI. Thank you.

Chairman TIBERI. Before I introduce today's witnesses, I ask unanimous consent that all members' written statements be included in the record. Without objection, so ordered.

Chairman TIBERI. We now turn to our panel of distinguished witnesses, and I would like to welcome all of them.

First, Mr. John Diamond, a professor at Rice University in Houston, Texas.

Thank you for being here.

Second, Mr. Doug Holtz-Eakin, president of the American Action Forum here in Washington, D.C.

Thank you, Doug.

Third, Mr. Curtis Dubay, research fellow at The Heritage Foundation here in Washington, D.C.

Thank you for being here.

Fourth, Mr. Scott Hodge, president of the Tax Foundation, also here in Washington, D.C.

Thank you for being here, Scott.

Fifth, Mr. John Buckley, former chief tax counsel, Committee on Ways and Means, and former chief of staff for the Joint Committee on Taxation here in Washington, D.C.

Thank you, John, for being here.

And last but not least, Mr. J.D. Foster, deputy chief economist at the Chamber of Commerce, also here in Washington, D.C.

Thank you all for being here and sharing with us your testimony.

First we are going to have Mr. Diamond.

You are recognized for 5 minutes.

STATEMENT OF JOHN DIAMOND, PROFESSOR, RICE UNIVERSITY (HOUSTON, TX)

Mr. DIAMOND. Chairman Tiberi, Ranking Member Neal, and distinguished Members of the Committee, it is a pleasure to present my views on the importance of dynamic analysis.

So why is dynamic analysis important? A popular management adage is, if you can't measure it, you can't manage it. Dynamic

analysis provides valuable information about the effects of policy proposals on economic growth, and it is important that we use this information to better manage U.S. fiscal policy. Routinely disregarding information on the macroeconomic effects of alternative proposals leads to a budget process that undervalues proposals that increase the size of the economy and overvalues proposals that shrink the size of the economy. We can no longer afford a budget process that fails to maximize economic growth.

We can learn several lessons from three dynamic analyses of the Tax Reform Act of 2014, one using the model I developed with my colleague George Zodrow at Rice University, one by the JCT, and one by the Tax Foundation.

We find that the Tax Reform Act would increase GDP by 1.2 percent after 5 years, by 2.2 percent after 10 years, and by 3.1 percent in the long run.

The analysis using the OLG model by JCT found significantly different results, and there are several explanations for that. One, JCT assumes that the initial level of corporate income tax revenues lost due to income shifting is 20 percent of the corporate income tax base, whereas Dr. Zodrow and I use 24 percent. Also, JCT assumes that excess revenues go to increasing government transfers, rather than further corporate income tax rate reductions, as in our analysis.

Further rate reductions enhance growth effects because the associated decline in income shifting allows for further rate reduction that is obtained without the negative effects of base broadening. An additional difference is that we account for the negative impact of base broadening on real wage rates and thus labor supply in the model.

The Tax Foundation found much smaller results, with only a 0.2 percent increase in GDP in the long run, as the cost of capital increased under TRA, but the Tax Foundation analysis discusses, but then ignores the benefits of reduced income shifting, the benefits of the reallocation of firm-specific capital to the United States, and the benefits of moving to a territorial system. We included these important factors.

The results indicate that a base-broadening, rate-reducing corporate income tax reform is more likely to result in positive macroeconomic effects if the initial amount of income shifting is large and is reduced significantly when the statutory corporate income tax rate in the U.S. declines; if the accelerated depreciation is retained, instead of being used as a base-broadening provision; and if the base-broadening, rate-reducing reform includes a move to a territorial system, including anti-base-erosion proposals.

In addition, base-broadening, rate-reducing individual income tax reform can also increase GDP, depending on the size of the rate reductions, the base broadeners chosen, and the extent to which individual income tax reductions are financed by base broadening in the corporate sector. However, more analysis is needed, and several principles should guide that analysis.

First, dynamic analysis should be used to compare the macroeconomic effects of various programs. Second, dynamic analysis should examine and present results of the effects of groups of provisions separately from the entire proposal. For the Tax Reform

Act, it would be interesting to see the effects of the individual provisions, the effects of the rate-reduction and base-broadening provisions in the corporate sector, and the effects of the territorial provisions separately. This would both increase information and increase the reliability of the analysis. Third, the analysis should be timely and transparent, with enough information released so that others can replicate the results.

Let me end by noting that JCT has created a great deal of institutional knowledge on microdynamic scoring, and it leads to an immense ability of credibility in those results. I am confident they can do the same for dynamic analysis.

Chairman TIBERI. Thank you, Mr. Diamond.

[The prepared statement of Mr. Diamond follows:]

DYNAMIC ANALYSIS OF THE TAX REFORM ACT OF 2014

Testimony before the Subcommittee on Select Revenue Measures,
Committee on Ways and Means, United States House of Representatives
July 30, 2014

John W. Diamond, Ph.D.
Edward A. and Hermena Hancock Kelly Fellow in Public Finance
Rice University's Baker Institute for Public Policy
CEO, Tax Policy Advisers, LLC*

*The opinions expressed herein are solely my own and do not represent the views of the Baker Institute, Rice University, Tax Policy Advisers, LLC or any other organization.

Introduction

Chairman Tiberi, Ranking Member Neal, and Members of the Committee, thank you for inviting me to present my views on the importance of dynamic analysis. In my remarks, I plan to discuss why dynamic analysis is important, comment on several recent dynamic analyses of the Tax Reform Act of 2014 (TRA 2014), discuss how TRA 2014 could be changed to enhance the projected increases in economic growth, and comment on how to implement dynamic analysis to improve the budget process.

Why Dynamic Analysis is Important

A popular management adage is, "If you can't measure it, you can't manage it." Dynamic analysis provides valuable information about the effects of policy proposals on economic growth, and it is important that we use this information to better manage US fiscal policy. In fact, routinely disregarding information on the macroeconomic effects of alternative proposals leads to a budget process that undervalues proposals that help grow the economy and overvalues proposals that shrink the economy. We can no longer afford a budget process that fails to maximize economic growth.

Dynamic analysis allows the budget process to account for the effect of policy proposals on the level of gross domestic product (GDP), which is a function of the size of the capital stock and total hours of work in the economy. In addition, dynamic analysis may be used to examine the effects of policies on wages, consumption, welfare (for certain types of models), distributional outcomes (both within and across generations), as well as other important variables. While dynamic analysis will provide valuable information about the relative economic effects of alternative policies, it will not solve the fiscal crisis facing the United States. Policymakers will still face many tough decisions. In addition, it is important to note that preparing a dynamic analysis is no easy task and presenting and communicating the results to members, their staff, and the general public is also difficult.

Implementing a budget process that encourages the adoption of pro-growth, fair, and simple tax and spending policy reform is critical given that current fiscal policies are projected to lead to larger budget deficits and dramatic long-run increases in the debt-to-GDP ratio, especially if the sluggish rebound in economic growth over the last several years continues.

Note that dynamic analysis is already used on a fairly wide scale. For example, the Joint Committee on Taxation (JCT) has produced dynamic analyses of several significant tax proposals (JCT, 2003; JCT, 2005; JCT, 2006; JCT, 2014a; JCT, 2014b). In addition, 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 (Carroll, Diamond, Johnson, and Mackie, 2006) and the proposal to permanently extend the President's tax relief (OTA, 2006). The Congressional Budget Office also publishes macroeconomic analyses of various proposals, including the President's Budget (CBO, 2003a and 2003b).

Dynamic Analysis of TRA 2014

TRA 2014 was a comprehensive proposal for reform of both the corporate and personal income tax systems. The corporate income tax (CIT) reform was structured as a traditional base-broadening, rate-reducing (BBRR) reform. The plan would have lowered the CIT rate to 25 percent, phased in over five years, and eliminated a variety of business tax preferences, including accelerated depreciation (so that tax depreciation would approximate economic depreciation), expensing of research and development costs and half of advertising costs, and the deduction for domestic production. The plan would have not allowed the last-in first-out (LIFO) inventory accounting rule and would have permanently created a 15 percent tax credit for research and development expenses.

The reform also changed the treatment of foreign source income, including moving to a 95 percent participation exemption (territorial) system. The effective tax rate is roughly 1.25 percent with a 25 percent CIT rate. It also allowed for current taxation of foreign source income from intangibles, defined as income in excess of 10 percent on basis in depreciable assets (excluding other subpart F income and commodities income) due to foreign sales at a minimum tax rate of 15 percent (25 percent for US sales), subject to foreign tax credits. The 15 percent rate also applied to intangibles income (income in excess of 10 percent on basis in depreciable assets other than from commodities) on sales to foreign markets from the United States. The reform would have limited subpart F income to low-taxed income and created a minimum tax of 12.5 percent for foreign sales and active financial services income, in addition to the minimum tax rates noted above. There was also a one-time tax on the stock of unrepatriated profits, at an 8.75 percent rate on cash and equivalents and at a 3.5 percent rate on illiquid assets.

The plan would have also reformed the tax treatment of individual income by broadening the tax base and lowering the rates on individual income. It would have included a 10 and 25 percent rate bracket, with a 10 percent surtax on high income households (above $450,000 for married couples). The standard deduction, child credit, and the 10 percent bracket were phased out for high-income households. The plan would have repealed itemized deductions for state and local (non-business) taxes, medical expenses, personal exemptions, and the alternative minimum tax. In addition, it would have limited the mortgage interest deduction. Capital gains and dividends would have been taxed as normal individual income after a 40 percent exclusion.

The Diamond-Zodrow (DZ) computable general equilibrium model was used to simulate the effects of TRA 2014. The model is structured so that consumers choose consumption, labor supply, and saving to maximize welfare over their lifetimes. The model includes 55 adult generations (intended to capture an adult's working life from age 23 to 78) alive at any point in time, and is thus typically described as an overlapping generations model. Firms choose labor demand and the time path of investment to maximize profits, subject to adjustment costs. The model includes five different production sectors, including a multinational corporation (MNC), a domestic corporation, a non-corporate (pass-through) firm, and owner and rental housing sectors. In addition, the corporate firms have a variable debt-to-equity ratio. The government uses corporate and personal income taxes to finance a fixed level of government services. The model must begin and end in a steady-state equilibrium with all key macroeconomic variables growing

at an exogenous growth rate (which equals population plus productivity growth). The model is calibrated to roughly match the US economy in a given base year.

The model includes domestic and foreign MNCs (parents and subsidiaries) with highly mobile firm-specific capital (FSK) that earns above normal returns, and relatively immobile ordinary capital that earns normal returns. This approach follows Becker and Fuest (2011) who argue that differential capital mobility is an important part of modeling international capital flows. All of the multinational corporations — the US parent firm and its foreign-based subsidiary, and the foreign-based rest of the world parent firm and its US subsidiary — are assumed to have analogous production functions. The modeling approach we utilize generally follows the approach for firm-specific capital developed by de Mooij and Devereux (2009) and Bettendorf, Devereux, van der Horst, Loretz, and de Mooij (2009). The MNC is assumed to own a unique firm-specific production input (FSK), such as patents or other proprietary technology, brand names, and good will, coupled with unique managerial skills and knowledge of production processes, which allows it to permanently earn above-normal returns. This firm-specific factor is treated as "quasi-fixed," as it is assumed to be fixed in total supply in any given period, but this fixed amount can be reallocated across the US and the rest of the world. The main role of this assumption is to determine the fraction of production using FSK that occurs in the US relative to the rest of the world. The elasticity of FSK (in terms of its location) with respect to the tax rate differential is assumed to be 8.6, which is calculated from the assumption that the capital-share-weighted aggregate portfolio elasticity of all capital (both FSK and ordinary capital) is 3.0. Assuming a relatively small portfolio elasticity of 0.5 for ordinary capital implies an elasticity of 8.6 for FSK. The basic idea is that the location decision of where to use FSK is highly elastic with respect to the tax rate differential, although we do phase in over time the reallocation of production involving FSK in response to changes in relative taxes. In addition, MNCs engage in income shifting that depends on the tax differential between the United States and the rest of the world, including tax havens. MNCs must make a repatriation decision and are subject to a residual US tax on repatriations. The model includes foreign trade, international capital mobility, and foreign ownership of domestic capital. Ordinary capital (capital that earns a normal rate of return) is disaggregated into structures, equipment, and inventories.

Simulation Results: Economic Effects of TRA 2014

Diamond-Zodrow Results

Table 1 shows the Diamond-Zodrow analysis of TRA 2014, which was prepared for the Business Round Table (**BRT**). The most important factor is the reduction in income shifting as the CIT rate declines. In addition, other important factors include the move to territorial, the more efficient allocation of capital, and the reallocation of FSK. DZ find that TRA 2014 would increase GDP by 1.2 percent after five years, by 2.2 percent after 10 years, and by 3.1 percent in the long run. The long-run increase in GDP is primarily driven by a 5.0 percent increase in the ordinary capital stock and a 0.3 percent increase labor supply. In the long run, a 57 percent reduction in income shifting allows the CIT rate to decline an extra 5 percentage points to 19.9 percent.

The DZ model includes differential capital mobility by having one capital good that is relatively immobile and another capital good that is assumed to be highly mobile. An important question is how did this assumption affect the reported results. Table 2 shows the effects of adopting TRA 2014 under the assumption that all capital is relatively immobile (both capital goods have an elasticity of 0.5 with respect to the tax rate differential). In this case, GDP increases by 1.3 instead of 1.2 percent five years after reform, by 1.7 percent instead of 2.2 percent 10 years after reform, and by 3.0 instead of 3.1 percent in the long run. Without differential mobility FSK increases by 0.6 percent and 1.1 percent in the long run instead of 16.3 and 23.5 percent. The labor supply increase is slightly higher in this case. This demonstrates that the addition of FSK is not driving the results in the DZ analysis. Although the reallocation of FSK to the US increases production of the good produced by the US multinational, the GDP effects of this reallocation are offset by other factor reallocations, especially a return of ordinary capital to the rest of the world.

Table 1: Diamond-Zodrow Analysis of Camp for BRT

Variable % Change in Year:	5	10	LR
GDP	1.2	2.2	3.1
Ordinary capital stock (K)	0.5	1.3	5.0
Firm-specific capital (FSK) stock	16.7	23.5	23.5
Reduction in income shifting (IS)	35.3	57.1	57.1
Labor supply (hours worked) (L)	0.5	0.3	0.3
CIT rate (%)	25.0	19.9	19.9

Table 2: Diamond-Zodrow Analysis of Camp with Immobile FSK

Variable % Change in Year:	5	10	LR
GDP	1.3	1.7	3.0
Ordinary capital stock (K)	1.0	1.9	5.1
Firm-specific capital (FSK) stock	0.6	1.1	1.1
Reduction in income shifting (IS)	35.4	57.6	56.9
Labor supply (hours worked) (L)	0.7	0.5	0.5
CIT rate (%)	24.9	17.9	18.0

JCT Results

The JCT analysis used two models, the MEG model and the OLG model, which is based on the DZ model. Comparing JCTs OLG results with the DZ results show that the results differ significantly. While the GDP results are roughly similar initially, the results published by JCT decline during the budget window, while the DZ results increase during the budget window and into the long run. In addition, comparing the results shows that JCT found large labor supply effects and smaller and declining capital stock effects, while DZ found small labor supply effects and positive and increasing capital stock effects.

However, even though DZ and JCT used the same model, there were several significant differences that help explain the differences in the results. The two main differences are:

- JCT assumes that the initial level of CIT revenues lost due to income shifting is 20 percent of the current CIT base, not 24 percent as in DZ.
- JCT assumes that any excess revenues go to increasing government transfers, rather than further CIT rate reductions, as in DZ.

Both assumptions are critical, as the reduction in income shifting is an important driver of the results in the DZ analysis. Larger amounts of initial shifting allows for a larger reversal of income shifting as the US reduces its CIT rate. Further rate reductions enhance this effect as the associated decline in income shifting allows further rate reduction that is obtained without the negative effects of base broadening. An additional difference is that DZ accounts for the negative impact of base broadening on real wage rates and thus on labor supply in the model (that is, the effect of base broadening on consumer prices, e.g., elimination of deductions for state and local taxes and limitation of charitable contributions effectively increases consumer prices and thus reduces the real after-tax wage), which offsets some of the positive impact of rate reductions; JCT does not include this effect in the model but may account for it in its calculation of effective tax rates. Finally, there are also some differences in parameter values.

Tax Foundation Results

The Tax Foundation found much smaller results, with only a 0.2 percent increase in GDP in long run. The small size of its result is attributable primarily to a reduction in the capital stock of 0.2 percent as the cost of capital increases under TRA 2014. The Tax Foundation predicted that labor supply would increase by 0.5 percent. But, the Tax Foundation analysis discusses but then ignores the benefits of reduced income shifting, the benefits of reallocation of firm-specific capital to the United States, and the benefits of moving to a territorial system. DZ included these important factors in modeling the effects of TRA 2014, which helps explain the differences in the results.

For example, using the DZ model and simulating the effects of a similar (base broadeners are slightly different) CIT reform (but no individual income tax reform) while ignoring the three factors above produces significantly negative effects with GDP down 1.7 percent in long run, and a CIT rate reduction to only 31.4 percent. This illustrates the powerful effects on GDP of

reversing income shifting and using the revenue gains from reform to further lower the corporate income tax rate.

Enhancing the Economic Growth Effects of TRA 2014

There are several lessons that can be drawn from these simulations. First, a BBRR reform that repeals targeted investment incentives — such as eliminating accelerated depreciation or other incentives that affect investment at the margin — to finance rate reductions grants a windfall gain to existing capital by reducing the tax rate applied to such capital, with the windfall exacerbated by the existence of above normal rates of return. The resulting increase in the cost of capital reduces investment and output, and makes it much less likely that a BBRR reform will result in positive macroeconomic effects in both the short and long run.

Second, the international considerations stressed above make it more likely that a BBRR reform will generate positive macroeconomic effects. A reduction in the statutory corporate income tax rate will result in a reallocation of highly mobile firm-specific capital that earns above-normal returns to the United States — although this effect is offset to a significant extent by other general equilibrium effects, including the return of ordinary capital to the rest of the world and a reduction in labor supply. More importantly, a reduction in the statutory corporate income tax rate reverses some income shifting from the United States, which provides a "free" source of revenue — effectively a CIT rate cut without the costs of base broadening — that significantly increases the benefits of a BBRR reform. In addition, the changes in trade that accompany a reversal of income shifting also have important effects, increasing net exports and thus output. Note, however, that the amount of income shifting in the initial equilibrium, as well as the extent of the reversal of this income shifting with a reduction in the CIT rate in the United States, are open to debate, and that the macroeconomic benefits of a BBRR reform would be significantly reduced if the extent to which income shifting is reversed with US CIT rate cuts were smaller than assumed in the simulations.

Third, although the simulations indicate that the net macroeconomic effects of the particular territorial tax reform analyzed are positive, the gains from such a reform are fairly modest. This is not surprising: since the current worldwide tax system — which taxes foreign source income only when repatriated and allows foreign tax credits (including cross-crediting of taxes from high-tax countries against income from low-tax countries) — imposes a very low residual US tax rate on repatriations, switching to a territorial system is likely to have relatively limited macroeconomic effects.

The net effect of all these factors implies that the macroeconomic effects of a BBRR CIT reform depend very much on both the details of the specific reform proposal and the context in which it is imposed. These results indicate that a BBRR CIT reform is more likely to result in positive macroeconomic effects if (1) the initial amount of income shifting is large and is reduced significantly when the statutory CIT rate in the US declines, (2) accelerated depreciation is retained instead of being used as a base broadening provision, and (3) the BBRR reform includes a move to a territorial system of the type analyzed in the report, that is, one that includes anti-base erosion provisions that are sufficiently effective that the tax sensitivities of international capital and income shifting are the same as prior to the enactment of the reform.

BBRR individual income tax reform can also increase GDP. The magnitude of the gains depends on the reduction of individual income tax rates, the reduction of capital gains and dividends tax rates (if treated separately such as under a dual income tax), and the base broadeners that are used to finance the rate reductions. In addition, an important factor is how much individual income tax rate reduction is financed by base broadening in the corporate sector.

Implementing Dynamic Analysis to Improve the Budget Process

As noted above, dynamic analysis has already been used on a wide scale. However, there are a number of important issues regarding how to use dynamic analysis to improve the budget process.

One of the primary goals of dynamic analysis should be to compare the macroeconomic effects of various provisions. If the sole focus is measuring the economic effects of a base reform proposal for the sole purpose of determining the revenue feedback, then much of the additional information that could be gleaned from dynamic analysis would not be realized. Obviously, analyzing every provision separately would be counterproductive, as this would be an overwhelming burden on staff resources. However, dynamic analysis should be used to compare alternative proposals, which will require more flexibility and foresight in the timing of the legislative process.

Dynamic analysis should examine and present results on the effects of groups of related provisions separately from the entire proposal for large policy reforms. For example, it would be informative to break TRA 2014 into three dynamic analyses examining the effects of corporate tax reform, a move to territorial, and the effects of the individual income tax reforms (and it may be of interest to break these apart as well). Providing estimates of parts of larger reforms would allow for more outside feedback and analysis and would reduce the extent to which the results seem to emanate from a "black box." In addition, it may be informative to examine the effects of groups of provisions on major economic aggregates, including employment and wage income, capital, consumption, and potentially welfare. Providing disaggregated analyses would increase the reliability of the work and potentially help highlight the winners and losers of policy changes.

While examining every provision on its own would be impossible, there may be times when it makes sense to examine a single provision. For example, analyzing all current tax expenditures in a single piece of legislation would not be likely to get a dynamic analysis. However, examining each independently allows for a dynamic analysis on proposals that may have a substantial impact. Recently, JCT provided a dynamic analysis of the effects of permanently extending the provision allowing 50 percent bonus depreciation and found that it would increase GDP by 0.2 percent over the budget window and would increase the business capital stock by 0.6 to 1 percent over the budget window. Note that a temporary extension of this provision would have different economic effects and such an analysis would be of interest. However, we must avoid only analyzing proposals with positive economic effects and not analyzing proposals with negative economic effects.

Debt service costs in both the short and long runs are generally included in dynamic analysis but are not included in conventional cost or revenue estimates. This is important because budget gimmicks within the budget window can obscure the long-run effects of policies, especially policies that are debt-financed and temporary. The effects of increasing the debt should also be examined for spending policy reforms.

Dynamic analysis should also be applied to spending proposals. However, the demand-side effects of spending and tax proposals should not be considered, especially for permanent proposals. In cases in which the purpose of the policy is purely to impact short-run demand, the long-run effects of debt financing such expenditures should be carefully examined.

Macroeconomic aggregates are not the only information that should be provided to policymakers. Some measure of economic well-being should be provided in addition to the macroeconomic aggregates. This is important because positive macroeconomic effects can be associated with negative welfare effects for US residents (Diamond and Viard, 2008). Dynamic analysis of distributional effects are also often of interest both within income groups and across generations for certain proposals.

The extent of the uncertainty contained in a dynamic analysis must be acknowledged. 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) 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 and 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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Chairman TIBERI. Mr. Holtz-Eakin, you are recognized for 5 minutes.

STATEMENT OF DOUGLAS HOLTZ-EAKIN, PRESIDENT, AMERICAN ACTION FORUM (WASHINGTON, DC)

Mr. HOLTZ-EAKIN. Chairman Tiberi, Ranking Member Neal, Members of the Committee, it is a great privilege to be here today and to again discuss the important issue of dynamic scoring, which I had first discussed with this committee over a decade ago. It will come as no surprise that I really want to make three points in my remarks. First, to endorse the principle of dynamic scoring and to

stress that it can be done in a disciplined fashion to rank all proposals in a fair way. Second is to emphasize that it is perhaps most important in the area of comprehensive tax reform, to look at all the impacts. And then third, to comment briefly on the committee draft proposal itself.

So on the principle of dynamic scoring, as the members well know, the idea is to look at the conventional scoring that the CBO and Joint Committee would do, which is to look at all of the revenue and expenditure effects in the Federal budget from enacting legislation, but to then take the further step of looking at the impact of those proposals on macroeconomic performance, the rate of economic growth, the rate of inflation, the rate of unemployment, and the like, and the feedbacks that that economic performance would have on the Federal budget in both the tax and the expenditure sides, so that you incorporate all of the impacts of moving from current law, to the proposal, into the analysis.

And as a matter of disciplined budgeting and good economic policy, it is important to recognize all those effects so that two proposals that are the same budgetarily but have very different growth effects are identified as not the same, but in fact one is inferior and the one that produces more growth is superior. And it is important for the committee to have that information, as Mr. Diamond mentioned.

There are lots of important issues which I lay out in my written testimony about how you might want to institutionalize this. It is important to have rules, for example, on what monetary policy will be doing during the fiscal policy simulations. It is important to understand how to balance the long-run budget in the process of analyzing these proposals.

But all of these are in fact just rules by which scoring would be done. There are a large set of rules by which conventional scoring is done at the moment. You can develop rules to do dynamic scoring. And I would encourage the committee to move ahead with that so that we have a way to rank all proposals in a fair fashion and to bring the economic policy impacts into the discussion.

It is especially important in tax reform. Tax reform, by definition, is lowering marginal rates, broadening the base. And when you do that, two important things can happen. Number one, because tax rates are lower and the base is broader, fewer economic decisions are made on the basis of tax influences and more on fundamental business conditions or fundamental preferences of households and you get rid of a lot of misallocations. You get people working the amount that they want and not hiding out of the labor force, you get capital coming back to the United States from overseas, which is parked there now because of Tax Code reasons, and you in general use the labor, the capital, and the technologies in the economy better. That makes the economy bigger, and you want to recognize that in doing the analysis.

The second thing is that you can in fact remove some of the double taxation of saving and investment, and provide better incentives for innovation, for accumulation of human capital and skills, physical capital investment, and that will make the economy grow better. And you want to recognize that in the analysis as well.

If you do what you think is a tax reform and those two things aren't happening, you don't have a good tax reform. It is important for the committee to know that the policy can be improved. And so I think, in this setting especially, doing a dynamic score should be part of the process.

And lastly, if you look at the committee draft, it has those characteristics. There is a large literature which has looked at the potential benefits of tax reforms, which either push us toward a more comprehensive income tax, or in some cases push us to a more growth-oriented consumption tax base. The committee proposal is at neither of those extremes, but it is close enough to comprehensive reform that it would in fact generate beneficial growth impacts. Our reading of the literature suggests they could be as much as half a percentage point over the next 10 years. The estimate you have heard before, a little more modest than that. But those are important numbers in an economy that is growing too slowly, generating too few jobs, and generating too little income growth for the American public.

So I appreciate the chance to be here today and I look forward to your questions.

Chairman TIBERI. Thank you.

[The prepared statement of Mr. Holtz-Eakin follows:]

50

Dynamic Analysis of Tax Reform

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

Douglas Holtz-Eakin, President
American Action Forum*

July 30, 2014

* The opinions expressed herein are mine alone and do not represent the position of the American Action Forum. I am grateful to Gordon Gray, Marisol Garibay and Sarah Hale for their assistance.

Introduction

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

- The economic impacts of tax reforms are extremely important. The principle of dynamic scoring is a good one that would potentially bring into the process greater information regarding beneficial tax policies,
- Dynamic scoring is especially important for comprehensive tax reform proposals that have the potential to significantly alter the growth outlook for the U.S. economy, and
- The American Action Forum's analysis of the Ways and Means Committee ("the Committee") tax reform proposals indicated it would translate into roughly a 0.5 percentage point increase in trend growth or about 500,000 jobs annually in the near term. In addition, it could contribute up to $1.5 trillion in deficit reduction.

I will pursue each in additional detail.

Dynamic Scoring is Good Science

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Dynamic Scoring Is Especially Important for Comprehensive Tax Reform

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[3] Romer, Christina, Jared Bernstein, "The Job Impact of the American Recovery and Reinvestment Plan." Politico Council of Economic Advisers and Office of the Vice President-Elect January 2009 Web. http://www.politico.com/static/PPM116_obamadoc.html
[4] Congressional Budget Office, "The Budget and Economic Outlook: 2014 to 2024." Congressional Budget Office, February 2014, Web. http://www.cbo.gov/publication/45010

Chairman TIBERI. Mr. Dubay, recognized for 5 minutes.

STATEMENT OF CURTIS DUBAY, RESEARCH FELLOW, HERITAGE FOUNDATION (WASHINGTON, DC)

Mr. DUBAY. Good morning, Chairman Tiberi, Ranking Member Neal, and distinguished Members of the Committee. The views I express in this testimony are my own and should not be construed as representing any official position of The Heritage Foundation.

Thank you for having me here today to discuss the important issue of dynamic scoring and tax reform. I have been working on tax reform for a decade now, first at the Tax Foundation, then at

PricewaterhouseCoopers, and for the last 6 years at Heritage. In that time, I have learned the primary reason we badly need tax reform is to improve the economy's potential and increase incomes and opportunities for all American families.

Chairman Camp's recently released tax reform proposal was a big step in the right direction for finally achieving tax reform, in large part because it included a dynamic estimate of the plan's income on the economy from the Joint Committee on Taxation. The chairman and staff should be applauded for securing that estimate.

Dynamic analysis is the right way to evaluate tax reform because we know that tax reform improves the economy. It does so by increasing incentives for families, businesses, investors, and entrepreneurs to engage in economically productive activities like working, investing, and taking risks, which are the catalyst for economic growth. And we know that they all respond to incentives.

Traditional static scoring hampers task reform's progress because it does not measure how it strengthens the economy. It is incomplete. A tax reform plan with only a static score is like a business plan without an estimate of profitability.

Now, there is certainly a reasonable disagreement over how responsive families and businesses are when tax rates fall. Those are reasons to present a range of estimates, using various models and an array of elasticities that fall within the mainstream estimates from empirical academic literature, not for shunning dynamic analysis altogether.

As my colleagues in The Heritage Foundation's Center for Data Analysis, or CDA, wrote recently, it is better for estimates of tax reform to be approximately right than precisely wrong. Static scoring is precisely wrong.

CDA conducted a dynamic estimate of the Camp plan. They found it would increase economic output by $92 billion per year during the 10-year budget window and it would increase employment by 548,000 jobs per year. CDA found these positive impacts because of the lower rates on families and businesses the plan institutes in its first few years and the move to a territorial system.

According to CDA's estimates, the growth effects of the Camp plan taper off the longer it is in place, as policies that increase tax on investment, and therefore increase the cost of capital, have time to go fully into effect. Those include longer depreciation lives for capital and amortization of research and development and advertising expenses.

To reverse that downward trend and increase the Camp plan's positive impact on growth, current depreciation schedules at minimum would need to be restored and advertising and R&D returned to fully deductible expenses. Lower rates would also help make the Camp plan more pro-growth. The top rate under the plan is 38.3 percent. That is only 5 percentage points below where it is today.

Chairman Camp understandably chose to adhere to the flawed revenue baseline constructed by the Congressional Budget Office when making his plan revenue neutral. The revenue target that baseline sets is too high, because it assumes that Congress intends for expiring tax policies to expire permanently.

Under the reasonable assumption that Congress does not intend to raise taxes by default, Chairman Camp's plan could raise nearly $1 trillion less and still remain revenue neutral. That money could be used to reverse the policies that raise the cost of capital and reduce the plans top rate significantly.

Chairman Camp's proposal has given renewed energy to the tax reform debate. A key to maintaining that momentum is to make sure JCT continues offering dynamic estimates of tax reform and other major pieces of tax legislation. The more JCT does dynamic estimates, the better it will become at doing them and the more opportunities outside experts will have to help JCT refine its methodology to improve it analyses even more.

Thank you again for having me here today, and I look forward to your questions.

Chairman TIBERI. Thank you.

[The prepared statement of Mr. Dubay follows:]

CONGRESSIONAL TESTIMONY

Tax Reform Would Help American Families: Dynamic Scoring Makes it More Likely

Testimony before
Subcommittee on Select Revenue Measures of the
Committee on Ways and Means
United States House

July 30, 2014

Curtis S. Dubay
Research Fellow – Tax and Economic Policy
The Heritage Foundation

My name Curtis S. Dubay. I am Research Fellow in Tax and Economic Policy at The Heritage Foundation. The views I express in this testimony are my own, and should not be construed as representing any official position of The Heritage Foundation.

Why We Need Fundamental Tax Reform

The country needs tax reform because the tax code is an albatross around the neck of the economy. The tax system is an impediment to a vibrant, prosperous and growing economy. This stronger growth would substantially improve the real incomes of most Americans and considerably reduce the fiscal problems of the federal and state governments.

The current tax system has high marginal tax rates that discourage work, savings, and investment. It has a tax base heavily biased against savings and investment. This reduces investment, productivity growth, real wages, and output. The current tax system distorts investment decisions making the economy less efficient since business decisions are not made on purely economic grounds. And it has extraordinarily high compliance costs due to its complexity.

Fundamental tax reform would address each of these problems and therefore promote economic growth.

Tax rates on families, businesses, and investment are too high. After the "fiscal cliff" tax increase in early 2013, American families in some states now pay marginal tax rates exceeding 50 percent. That rate includes just a family's federal and state income taxes, not the myriad of other taxes they pay. The high rates discourage productive activities like working, saving, investing, and taking on new risk—activities that are the bedrocks of economic growth.

By double taxing saving and investment at high rates, the code deters families from saving for retirement, education, a rainy day, or for any other purpose they desire.

The tax code is littered with too many politically motivated credits, deductions, and exemptions that only serve to further inhibit economic growth.

The corporate tax code is also a major inhibitor of growth. The U.S. has the highest tax rate of any country in the Organization of Economic Cooperation and Development (OECD) – a collection of the 34 most industrialized countries in the world. That high rate makes it unattractive for businesses, both foreign and domestic, to locate new investment here.

Further inhibiting investment is the fact that the U.S. is the only developed nation that taxes its businesses on the income they earn in foreign countries. This creates another disincentive for U.S. businesses to invest domestically, which further suppresses wage growth and job creation for American workers. It also encourages U.S. firms to merge with foreign firms, moving their headquarters and legal domicile abroad to avoid the impact of the U.S. worldwide income tax system.

The U.S. also has one of the worst capital cost recovery systems in the industrialized world. The tax code discourages investment by denying businesses the ability to fully deduct the costs of their capital purchases at the time they make them. Instead, it applies cumbersome depreciation schedules that raise the cost of capital, which hurts productivity gains, wage growth and job creation.

Small businesses suffer under the current system. After the 2013 fiscal cliff deal, they pay a top federal income tax rate of 39.6 percent- plus the Obamacare 3.8 percent investment income tax for passive investors or the 2.9 Medicare self-employment tax for those that "materially participate" in the management of the business. Thus, the top federal tax rate on small business income is as high as 43.4 percent. Large corporations pay a federal tax rate of 35 percent. This disparity is unfair to small businesses and put them at a disadvantage against their larger competitors.

The tax code is absurdly complicated. The arrival of personal computers and tax software has permitted the creativity of policymakers in Washington to run amok, creating tax complexities far beyond what even tax professionals could manage unaided by electronics. There are a multitude of credits, exemptions, and deductions, many of which are subject to special rules and phased-out over different levels of income. As if this was not bad enough, there is a parallel tax called the Alternative Minimum Tax (AMT), and the payroll and self-employment taxes that fund Social Security and part of Medicare. All of this complexity imposed on individual taxpayers is relatively minor compared to the torturous rules and exceptions businesses large and small must suffer.

The Elements of Sound Tax Reform: What Tax Reform Should Do

Done properly, tax reform would greatly enhance economic efficiency by accomplishing four major economic objectives:

- **Lower individual and corporate income tax rates**. Tax reform must lower rates, in particular the top marginal rates, to strengthen the economy by improving incentives to work, to save and to invest.

- **Eliminate the bias against savings and investment**. The tax code creates a bias against saving and investing through multiple layers of taxation. Tax reform must reduce, and ideally would eliminate, this harmful bias against investment by lowering the corporate tax rate, eliminating taxes on capital gains and dividends, and allowing businesses to deduct their capital costs when incurred. Moving to a territorial and border adjusted tax system is also necessary to fully eradicate disincentives to save and invest.

  Often overlooked in the tax reform debate is the fact that defining the tax base (what the tax code taxes) is as important as lowering the tax rate. Lowering rates is important, but if lower rates apply to an improper base, then tax reform could have no net benefit for the economy. Worse, if the tax base is structured poorly enough, tax reform could be a net negative for growth.

- **Eliminate Tax Preferences**. Eliminating the bias against investment would go a long way towards repairing the base, but more work is necessary to ensure the base is neutral. That means tax reform should eliminate deductions, credits, and exemptions that are not economically justified. Tax reform should eliminate unjustified policies that Congress intended to benefit particular industries like those targeted at aiding particular energy sources. The best way to avoid these problems is to start tax reform by defining a proper base first.

- **Make the tax system simpler and more transparent so taxpayers better understand how much they pay to fund the federal government**. Washington can help reduce the size of government by making the cost of government more tangible to the American people. Because of income and payroll tax withholding and the hidden costs of corporate, employer payroll and excise taxes, most Americans have little idea how much they are paying to fund the federal government or how proposed policy changes will affect them. The sheer complexity of the system makes it difficult to understand the true impact of the tax system. Simplicity aids not only the goal of transparency (because taxpayers understand the system) but also the economic goal of lower compliance costs.

  Tax reform should strive to make that cost explicit to taxpayers. Once taxpayers know how much of their hard-earned income goes to fund the federal government, they will be more willing to reduce the size of government to lessen its cost to them. A transparent code would, by definition, be simpler than the system we have today.

If tax reform achieved these objectives, the economy would enjoy sizeable gains. Although empirical work on the economic benefits of tax reform has been light in recent years, a recent analysis from the Tax Foundation shows the economy could improve significantly from pro-growth tax reform that selects the correct tax base and administers a low, flat rate.

According to the analysis, the economy could grow as much as 15 percent more over 10 years because of tax reform. After those 10 years, the average American family's wages would rise almost 10 percent.[1] That would be an extra $5,000 in the pockets of families making $50,000 per year, roughly the median income in the U.S.

A stronger economy also plays a vital role in improving state, local and federal government finances. It means higher tax revenues and lower spending needs for those temporarily distressed from unemployment. A stronger economy offering better wages and better job opportunities is also the most powerful antidote to persistent poverty and with less poverty comes fewer demands for anti-poverty spending.

What Tax Reform Should Not Do

There are pitfalls that Congress must avoid when crafting a tax reform. Those should-nots include:

[1] Andrew Lundeen, "Slow Economic Growth Does Not Need to Be the New Normal," May 15, 2014 http://taxfoundation.org/blog/slow-economic-growth-does-not-need-be-new-normal.

- **Should not raise revenue.** Tax reform is not a way for Congress to extract more of the taxpayers' hard-earned income. Higher tax revenues run counter to tax reform's central goal of encouraging growth. Using the traditional method of estimating revenue, tax reform should result in the new system raising the same amount of revenue as the current one. Ideally, tax reform should cap revenue at its historic average measured as a share of the economy (GDP).
- **Should not impose retroactive tax hikes or tax windfalls.** Tax reform should not retroactively raise taxes as it is inherently unfair. Often forgotten, however, is that tax reform should not bestow tax windfalls either. Some taxpayers, mostly businesses, accrue deferred tax liabilities and tax assets like unused credits and deductions they are entitled to use in future tax years. Tax reform should not decrease those liabilities nor increase the value of those assets. Doing so would have little upside for growth since businesses already made planning decisions when they accrued them. Retroactively changing them is an undeserved tax windfall that has no place in tax reform.
- **Should not shift the tax burden up or down the income scales.** Tax reform should not result in any particular income group paying higher taxes, nor should any group pay less. Tax reform is not a venue for class warfare. When determining how a tax reform plan affects tax distributions, lawmakers should consider the distribution of *all federal taxes*, not just the income tax. Focusing just on the income tax would be too narrow since the other federal taxes make up 53 percent of all federal revenue.
- **Should not add new tax systems.** Some lawmakers have devoted a great deal of attention in recent years to developing new tax systems that would apply in addition to corporate and individual income taxes, payroll taxes, capital gains and dividends taxes, and various excise taxes already in place at the federal level.

  These additional taxes include a carbon tax, a value-added tax (VAT), a national sales tax, and a financial transactions tax among others. An additional tax would make complying with taxes even more difficult than it already is. And, despite protestations from those that favor adding new tax systems to the contrary, Congress would undoubtedly spend the revenue a new tax would raise thereby growing the government. Such has been the experience in Europe after countries there added VATs on top of their income taxes. Tax reform should not add to the already too-big number of taxes the federal government levies today.

Non-Economic Objectives

Congress should design tax reform with certain specific non-economic objectives in mind. Any plan should limit the tax system's adverse impact on the core institutions of civil society including (1) the family and (2) voluntary associations such as religious and educational institutions, charities, and community organizations.

A just political order protects individuals' natural rights to life, liberty and property. Therefore, a just tax system minimizes the derogation of those rights by (1) imposing an equitable and reasonable burden on taxpayers, (2) being general in its application with special privileges for none and (3) respecting taxpayer rights to due process.

Chairman Camp's Tax Reform Plan

In February 2014, Dave Camp (R–MI),Chairman of the House Ways and Means Committee, , released a comprehensive tax reform plan. He chose to improve the current system as much as possible and minimize its negative impact on the economy. Such an approach generally requires lowering rates and broadening the tax base. Although it will not result in as much economic growth as fundamental reform that fully moves to consumption tax base, this approach can result in a system that is less of a burden on the economy if it makes enough improvements.

This approach usually forces policymakers into trade-offs that must balance pro-growth reforms with reforms that move in the opposite direction, thereby subduing its economic benefits. These trade-offs are especially pronounced when one works within the confines of static revenue neutrality as Chairman Camp did.

Revenue neutrality holds that the reformed tax code will raise the same amount of revenue as the current tax system. This is a sensible political constraint and is understandable when tax revenues are near their historical average as a percentage of the economy. Within the confines of the current tax system, it often means choosing between lowering rates and increasing double taxation, or reducing the tax burden on savings and investment but lowering rates only slightly or not at all.

Using a *static* revenue score further complicates reform. Static revenue neutrality assumes that the contemplated tax reform will have no positive economic effects and therefore necessitates higher tax rates within the reform effort than would be warranted if the real-world positive economic effects of sound tax policies were taken into account. Tax reform would be more effective if, instead of focusing so much on revenue neutrality and replicating the current distribution of the tax burden, it focused more on whether tax reform would make most Americans better off.

Chairman Camp chose to achieve growth by lowering tax rates and making a few other pro-growth enhancements, requiring him to broaden the tax base to make his reform revenue neutral. By accepting the current flawed base and adhering strictly to static revenue neutrality, he was forced to broaden the tax base in many economically counterproductive ways in order to achieve substantial tax rate reductions.

Pro-Growth Policies. The pro-growth changes in the Camp plan are headlined by a reduction in tax rates and the number of statutory tax brackets. The current system has seven tax brackets that range in rates from 10 percent to 39.6 percent. In addition, there is a 3.8 percent Medicare tax on wage and self-employment income over $250,000 ($200,000 for single filers), which also applies to investment income because of Obamacare. As a result, the top rate is 43.4 percent before personal exemption and itemized deduction phaseouts.

The Camp plan would reduce the top tax rate to 38.8 percent and have three marginal brackets. Taxable incomes up to $71,200 for joint returns ($35,600 for single returns) would be taxed at 10 percent. A 25 percent marginal tax rate would be added for those with taxable incomes greater than these amounts. Finally, an additional 10 percent surtax would be imposed on taxpayers with

modified adjusted gross income (MAGI) above $450,000 for joint returns ($400,000 for single returns), creating a third bracket taxed at 35 percent. The plan also retains the 3.8 percent Medicare tax on employee wages and self-employment. Combining the 35 percent rate and the 3.8 percent Medicare tax results in a 38.8 percent top tax rate.

The surtax effectively creates a new alternative minimum tax (AMT) for upper-income taxpayers because it applies to MAGI. A wide range of items are added back to calculate MAGI for purposes of the 10 percent surtax, including the standard deduction, all itemized deductions except the deduction for charitable contributions, the foreign earned income exclusion, tax-exempt interest, employer contributions to health plans, defined-contribution retirement plans, and the portion of Social Security benefits excluded from gross income.

Income that is qualified domestic manufacturing income (QDMI) would not be subject to the 10 percent surtax unless, generally, that income is treated as net earnings from self-employment. Taxing retirement savings, municipal bond interest, and employer-provided health insurance could be problematic.

The top rate would apply to pass-through entities (such as S corporations, LLC's, and partnerships) that do not manufacture. Although the rate they would pay under the Camp proposal is lower than under the current system, these pass-throughs (typically small businesses) would pay a significantly higher rate than businesses that pay the corporate income tax. This would be unfair to these businesses and would create problematic incentives when choosing organizational structures.

The Camp plan taxes capital gains and dividends at a top rate of 24.8 percent, which is roughly in line with the current rate after accounting for personal exemption and itemized deduction phaseouts. It does so by exempting 40 percent of taxpayers' capital gains and dividends and then applying their marginal rate to the remainder. It also retains the Obamacare 3.8 percent tax on investment income.

The Camp plan eliminates many credits and deductions that are unnecessary for tax neutrality, including many alternative energy provisions that only serve to distort the energy market. This is a positive step toward a neutral tax code and one that also reduces complexity. The plan also correctly taxes many forms of income that are excluded from taxable income today.

Camp eliminates personal exemptions but expands the standard deduction to $22,000 for families and $11,000 for single filers. This would make filing taxes easier for many lower- and some middle-income taxpayers because it would reduce the number of taxpayers who itemize. The Ways and Means Committee estimates that the percentage of taxpayers who itemize would decline from roughly one-third to about 5 percent—a steep decline.

Camp also eliminates the deduction for state and local taxes. This deduction encourages the growth of state and local governments.

Elimination of the existing AMT and the consolidation of several tax preferences for higher education would simplify the tax law for many families.

Phaseouts Lessen Simplicity. The increase of overall simplicity would have been even greater had Camp not made other changes that added back complexity for both individuals and businesses. Some of that complexity for individuals arises from the phaseout of tax brackets and credits, which would increase *effective* marginal tax rates above the statutory marginal rates for certain income levels.

For example, the earned income tax credit is phased out for those with incomes greater than $20,000 (single) and $27,000 (joint) at a 19 percent rate. This creates a 29 percent bracket for many with incomes between $20,000 and $48,053. The benefit of the 10 percent tax bracket would be phased out by effectively creating a 30 percent tax bracket for those with taxable incomes between $300,000 and $513,600 (joint) and between $250,000 and $356,800 (single).

Thus, the plan has a patchwork of at least seven different marginal tax rates, often with lower marginal tax rates on those with higher incomes. Despite this complexity, it is still an improvement over the current morass of phaseouts in the code. However, fundamental tax reform would ideally create a code with substantially fewer or no marginal effective rate spikes.

The plan reduces marginal tax rates on average and would improve incentives for work and risk-taking. Lower rates for lower income levels would also improve work incentives for families.

Strong Business Reforms. The most pro-growth aspects of the Camp plan are its corporate income tax rate reductions and its international tax provisions. The plan would lower what is now the world's highest rate from 35 percent at the federal level to 25 percent, putting it more in line with the international average. A lower rate would encourage both U.S. and foreign businesses to invest here, resulting in more jobs and higher wages.

Camp's move away from the current worldwide system of taxing the foreign income of U.S. businesses would provide an additional and much-needed boost to domestic investment. His plan would institute a dividend-exemption regime that levies a 1.25 percent tax on the foreign income of U.S. businesses. This change from the worldwide system closer to a territorial one would benefit the economy substantially.

The Camp plan also preserves Section 179 expensing of capital costs by small businesses, allowing them to deduct up to $250,000 in capital costs each year. This is the proper treatment for all investment, reduces small firms' cost of capital, and aids their cash flow.

Policies that Hurt Growth. By making the joint filing income bracket two times the single filing threshold, the Camp plan eliminates the marriage penalty for many Americans. However, the structure of the new earned income tax credit (EITC) would mean that those who are eligible could be subject to a marriage penalty. Moreover, the 30 percent bracket caused by the phaseout of the 10 percent bracket benefit means that those with incomes above $250,000 could experience a marriage penalty; the 35 percent bracket (due to the 10 percent surtax) means that those with incomes greater than $400,000 would also probably be subject to a marriage penalty. This result is still better than the marriage penalty under the current system.

The Camp plan limits the deduction for mortgage interest. In any tax system, if the interest received by the lender is taxable, then the interest paid by the debtor should be deductible. Otherwise, the tax system artificially raises the cost of borrowing.

Starting in 2017, the Camp plan increases business taxes by extending the length of the period over which businesses may deduct the cost of buying machinery or equipment and building factories or other structures. The plan also requires the use of straight-line depreciation. This alternative depreciation system (ADS) would nearly double the recovery period for many assets.

The U.S. capital cost recovery system is already worse than the Organization for Economic Co-operation and Development (OECD) average, and the Camp plan would make it exacerbate the problem.[2] This reduction in the competitiveness of U.S. businesses would grow over time as the adverse impact of less investment and less modern technology accumulated. The Camp plan would return the U.S. to the type of capital cost recovery system that was in place during the Carter era, before President Ronald Reagan's Economic Recovery Tax Act of 1981 lessened the problem by enacting the Accelerated Cost Recovery System.

Research and experimentation (R&E) expenses by businesses should be deductible as incurred, as should all business expenses, but research is especially important to innovation and job creation. The Camp plan would require businesses to deduct these expenses over a five-year period. This adverse treatment is mitigated slightly by retaining the R&E tax credit in modified form.

The Camp plan would require that half of advertising expenses be deducted over a 10-year period. This would deny businesses the ability to deduct these routine business expenses and thus overstate their taxable income.

Camp's plan would repeal Last-In First-Out (LIFO). This accounting method for inventories has been a permitted since the 1930s. It is simple and prevents business from paying tax on phantom inflationary gains on inventories.

The plan also includes a tax on systemically important financial institutions (SIFI). The tax, better known as a bank tax, would apply to only a few of the largest banks and other financial firms—those with more than $500 billion in assets. The tax would be 0.035 percent on those banks' assets, assessed quarterly. Sound tax policy does not single out particular businesses in certain industries for extra taxation. If there are issues arising because of how other laws affect these banks, those issues should be addressed outside of the tax code.

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[2] See Kyle Pomerleau, "Capital Cost Recovery Across the OECD," Tax Foundation *Fiscal Fact* No. 402, November 19, 2013, http://taxfoundation.org/article/capital-cost-recovery-across-oecd (accessed July 18, 2014).

Chairman Camp's Tax Reform Plan a Milestone for Dynamic Analysis[3]

Chairman Camp's plan includes a dynamic analysis from the Joint Committee on Taxation (JCT). This is a long overdue and welcome change to how tax policy is discussed at the federal level. The Camp bill will remain a hallmark piece of legislation and fundamentally change how tax legislation is evaluated by JCT in the future.

Static vs. Dynamic Scoring. Despite universal agreement among economists that taxes influence behavior and therefore affect economic growth, conventional government scores of tax policy have historically excluded the effects of behavioral changes on macroeconomic growth. This is known as "static scoring."

For instance, when JCT scores how much revenue would be raised by eliminating the tax deduction for 401(k) contributions, it acknowledges that individuals will contribute less to 401(k)s, but fails to account for the macroeconomic effects of lower contributions through reduced national savings and investment.

In "dynamic scoring," however, individual responses do not occur in a vacuum, nor are they equally offset by other responses. Rather, the changes that individuals and businesses make in response to tax policy can have a very significant impact on economic growth.

Benefits of Dynamic Scoring. Particularly as it relates to comprehensive tax reform, dynamic scoring is paramount to developing and implementing a more pro-growth tax code that will ultimately generate higher incomes for all individuals and businesses. Without dynamic scoring, it is easy for policymakers to implement economically damaging tax policy.

For example, virtually all economists agree that gasoline taxes are less harmful to economic growth than capital gains taxes. Yet static scoring would show that raising either of those taxes by equal amounts would have equally nonexistent impacts on the economy, and because gasoline taxes tend to fall more heavily on low- and middle-income taxpayers than capital gains taxes, policymakers may be more easily persuaded toward bad tax policy such as increasing capital gains taxes.

Nonpartisan tax experts have applauded dynamic scoring. Tax analyst Martin Sullivan has argued:

> Gradually, lawmakers, the press and the public would be far better acquainted with the following important and powerful economic ideas.... Marginal rate reductions are more economically beneficial than infra-marginal tax giveaways. Inefficient taxation of

[3] Rea S. Hederman, Jr., Rachel Greszler and John L. Ligon, "Chairman Camp's Tax Reform Plan a Milestone for Dynamic Analysis," Heritage Foundation *Issue Brief* No. 4156, February 28, 2014, http://www.heritage.org/research/reports/2014/02/chairman-camp-s-comprehensive-tax-reform-proposal-and-dynamic-scoring

> residential investment reduces economic growth. Overtaxation of corporate capital hinders economic growth.[4]

The use of dynamic scoring appropriately places the emphasis of tax policy on efficiency, leaving other aspects (such as fairness) to be addressed outside the tax code where they more appropriately belong.

Outside the federal government, dynamic scoring is already in play. Ten state governments—including Texas, California, and New York—use some form of dynamic scoring in their budget forecasts. Similarly, in the private sector, many businesses have incorporated dynamic forecasts into their strategic planning.

A Huge Step Forward. The inclusion of a dynamic estimate, although still not the official score, is a huge step forward toward fundamental tax reform. The discussion of JCT using dynamic scoring has been an ongoing debate for decades. Previous chairs of the Ways and Means Committee, such as Bill Thomas (R–CA) and Bill Archer (R–TX), were instrumental in pushing the JCT to include dynamic analysis.

Since 1995, JCT has begun to address the shortcomings of its tax analysis. This has included convening panels of experts to discuss dynamic scoring and working on models that can provide quantitative dynamic estimates. The director of the JCT argued in 1995 against using dynamic scoring. In 2003, the House of Representatives required JCT to provide macroeconomic analysis of revisions to the tax code. Now JCT is on record with a dynamic economic estimate of a fundamental tax reform bill.

The significance of JCT's economic estimate cannot be underestimated. The daily tax publication *Tax Notes* quotes a source saying, "Once we start down this road, it is going to be very hard to go back to a world where we only look at estimates where [gross domestic product] is fixed."[5]

Making Assumptions. The assumptions used in dynamic models are fundamental to the models' results. As such, the use of assumptions is also a main criticism against dynamic scoring because the creator or user of the model has a high degree of control over the model's projected outcome. However, economic literature provides ranges of appropriate modeling assumptions, and providing full disclosure of model assumptions would help eliminate unconventional or erroneous assumptions.

Further, static revenue estimates are subject to the same criticism on the use of assumptions. The difference between dynamic and static assumptions, however, is primarily that static revenue estimates rely on a single, universally rejected assumption that taxes have no effect on

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[4] Martin A. Sullivan, "Practical Aspects of Dynamic Revenue Estimation," in Dan R. Mastromarco, David R. Burton, and William W. Beach, *The Secret Chamber or the Public Square* (Washington, DC: The Heritage Foundation, 2005).

[5] Luca Gattoni-Celli, "Pivotal Macroeconomic Analysis of Camp's Reform Tests JCT," *Tax Notes*, February 26, 2014.

individuals' and businesses' behaviors. While dynamic scoring involves significantly more assumptions, it at least attempts to predict a more accurate outcome.

Relying upon static scoring is a bit like forgoing an annual physical exam under the assumption that, despite having gained 30 pounds since last year, one's overall health has not changed. Ignorance may be bliss, but it is not reality.

Incomplete Without It. JCT's dynamic models, like any models, may be subject to criticism for their assumptions and methodology. However, it is better to be approximately correct than precisely wrong. As the use of dynamic analysis becomes more common, JCT will hopefully refine and strengthen its models to more accurately predict the actual path of the economy in response to tax changes. As this modeling effort improves, the dynamic analysis that includes revenue feedback from economic growth or decline should become as important as the traditional static revenue score.

Dynamic Impact of the Camp Proposal. As estimated by the JCT [6] and The Heritage Foundation's Center for Data Analysis (CDA)[7], the Camp plan is modestly pro-growth in the traditional 10-year budget window.

Because the Camp plan does not implement its adverse capital cost recovery provisions until 2017, there will be an initial rush to invest before the new rules take effect. CDA analysis shows that by 2020, all increases in investment from the rate cuts evaporate and then investment begins to fall rapidly.

It is questionable whether the Camp plan will remain pro-growth outside that 10-year window. Growth is boosted in the early years after the plan goes into effect because tax rates are lowered immediately. This strongly boosts work incentives and has a positive impact on economic growth. However, the economic damage from base-expansion policies that increase double taxation and impede investment will slow growth years later when the capital stock is less than it would have been had these changes not been made. It is likely that once those negative effects are fully in place, they will more than offset the positive effects from the modest tax rate reductions and growth will be negative.

Ways to Improve the Camp Plan. According to the JCT's dynamic estimate, the growth effects of Camp's tax reform plan could increase tax revenues between $50 billion and $700 billion—an exceedingly wide range. Assuming revenue came in at the upper end of the range, that money could be used to offset some of the anti-growth policies in the plan. For instance, reversing the most harmful tax increases on investment—the changes in depreciation, amortizing research and advertising expenses, and abolishing LIFO inventory accounting—would reduce revenue by $711 billion. This would make the Camp plan more pro-growth.

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[6] Staff report, "Macroeconomic Analysis of the 'Tax Reform Act of 2014,'" Joint Committee on Taxation, U.S. Congress, February 26, 2014, http://waysandmeans.house.gov/uploadedfiles/jct_macroeconomic_analysis_jcx_22_14__022614.pdf (accessed July 18, 2014).

[7] Rea S. Hederman, Jr., Rachel Greszler and John L. Ligon, "Heritage's Macroeconomic Estimate of Camp's Tax Reform Proposal," *The Daily* Signal, February 26, 2014, http://dailysignal.com/2014/02/26/heritages-macroeconomic-estimate-camps-tax-reform-proposal/.

Camp also followed the JCT's rationale that extending the roughly 50 tax policies that expire regularly—known as tax extenders—is a tax cut. This required him to generate an unnecessary $1 trillion in his plan. That revenue could also be used to offset anti-growth policies in the plan.

How Tax Reform Would Make Filing Taxes Better for Families

Tax reform would make filing taxes easier for American families. Every year as April 15 approaches, families all over the country scramble to find documentation for their incomes and any expenses they incurred that might be deductible, creditable, or exemptible. It is a day of consternation for most families because of the mind-numbing complexity of completing this annual task.

The best that can be said of Tax Day is that it provides a yearly reminder of just how convoluted the tax code is and how much damage it does to the economy. It should also serve as a periodic reminder that filing taxes does not have to be this way. Tax reform, if done right, would help Americans in numerous ways.

Raise Their Incomes. The biggest difference taxpayers would notice would be increased annual incomes. Families would see their incomes grow because tax reform would lessen the severe disincentives that the tax code currently imposes on the fundamental activities of economic growth—working, saving, investing, and taking on risk. This would allow the economy to grow stronger, which would mean more opportunities for Americans at all income levels to find higher-paying jobs and earn larger wage increases.

Done correctly, tax reform would also mean that families earn more but would not pay higher marginal tax rates on their higher earnings. The tax code would not punish families as it does today for being more successful and for earning higher compensation because they are more productive.

Simpler to File. Since tax reform would make what is taxable—i.e., the tax base—easier to define and would have at most only a few deductions and credits necessary to maintain neutrality, filing taxes annually would be immensely simpler for all families.

There would be no need for pricey software, and only those families with the most complex financial arrangements would require paid tax preparers. Highly skilled lawyers and accountants could put their considerable talents to more productive uses, which would further boost the economy.

Increased Fairness. A renewed confidence in the fairness of the system would result because of the more easily understandable tax base and minimal number of deductions and credits. Tax liabilities would be more transparent because there would be few if any ways for taxpayers with more knowledge of the tax code (or ability to pay accountants and lawyers who have it) to lower their tax liability in ways that are largely inaccessible for average taxpayers.

It would also be readily apparent that everyone was paying their fair share. Families with similar financial circumstances would be confident that they were paying similar amounts of tax. It

would also be clear that higher-earning families were paying commensurately higher taxes. High earners pay almost all federal income taxes today—the top 10 percent of earners pay 71 percent[8]—but because the tax code is so convoluted, many believe they get away with paying less than they rightfully owe.

Less Influential Government. The government would be less influential in citizens' personal decisions because taxes would no longer pick winners and losers in the market, nor would it seek to reward or punish families for making certain economic decisions.

For instance, no longer would taxes reward taxpayers who choose to purchase certain government-determined environmentally friendly products or make it relatively more appealing to provide childcare outside the home. Taxes would not influence the decisions of families to have a second earner enter or stay in the workforce. Families would make these decisions based on market considerations and the unique preferences of every family.

Reduced Chances of IRS Abuse. The IRS has the almost impossible job of trying to enforce the incomprehensible tax system Congress has created. However, that does not excuse the agency for its behavior in targeting certain conservative groups for enhanced and unwarranted scrutiny. Those actions badly damaged its credibility, which is regrettable because most people who work at the IRS are hardworking and dedicated professionals who do not deserve to be tarred with the misdeeds of others.

Nevertheless, the IRS will need reform to restore its credibility. Although there will always be the need for a revenue-collecting agency, tax reform should significantly curtail the mischief in which the agency is able to engage.

The job of determining taxpayers' taxable income and whether they paid the proper amount of tax on it would be simplified, meaning the agency could significantly shrink in size. A smaller agency would lessen the chances of bad behavior. Although taxpayers would likely still have to provide some personal information to the agency, it would be far less than they have to report today, which would further reduce the ability of the agency to act improperly.

A Territorial Tax System Would Create Jobs and Raise Wages for U.S. Workers

An intense debate is raging over the proper way to repair the broken system the U.S. uses to tax its international businesses. The recent spike in U.S. businesses inverting (merging with a foreign business and moving the combined business' headquarters overseas to avoid the U.S. worldwide tax regime) is the latest evidence of the problems with the current system.

There is widespread agreement that the current system destroys jobs and suppresses wages for U.S. workers. However, there is a sharp division about how to fix the system's shortcomings. One side argues for strengthening the current worldwide system that taxes U.S. businesses on the income they earn in foreign countries. The other side argues for a territorial system, which would mostly exclude foreign-earned income from U.S. taxation.

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[8] The Heritage Foundation, "Reduce the Tax Burden," *Federal Budget in Pictures 2014*, Chart 1, http://www.heritage.org/federalbudget/pdf/2014/top10-percent-income-earners.pdf.

Strengthening the worldwide system would be disastrous for U.S. workers because it would drive U.S. businesses and their jobs overseas. The U.S. needs to abandon the worldwide tax system, not strengthen it, because it is not neutral and therefore reduces investment by U.S. firms at home and abroad. In stark contrast, a territorial system is neutral to investment, meaning that it neither discourages nor encourages the amount or location of investment.

Congress should scrap the worldwide system and move to a territorial system like almost every other developed nation has. Such a policy improvement would be a boon for U.S. workers by removing the worldwide system's disincentive to invest and its barriers to international competitiveness.

Chairman Camp's plan is a major advancement toward this goal because it would institute a partial dividend exemption regime that would essentially establish a territorial system. The move to a territorial system is one of the main drivers of increased growth that would result from the Camp plan in its first 10 years of implementation.

The U.S. Worldwide Tax System. The U.S. worldwide system taxes the domestic and foreign income of businesses with U.S. headquarters. Businesses can claim a "foreign tax credit" for taxes that their foreign subsidiaries (incorporated entities) or foreign branches (unincorporated entities) pay in other countries. This credit limits double taxation. Where the foreign tax rate exceeds the U.S. rate, no U.S. liability is generated. In the more common circumstances where the U.S. tax rate is greater, U.S. businesses owe a residual tax on their foreign earnings equal to the difference between the U.S. tax rate and the tax that their subsidiaries paid in the foreign country where they earned the income.

As a result of the worldwide tax system, U.S. businesses are expected to pay the same amount of tax on income that they earn abroad as they would if they earned that income in the U.S.

U.S. businesses owe tax on their foreign earnings in the current filing period when they earn that income through a foreign branch. However, when they earn "active" income (income they earn by selling a good or service) through a foreign subsidiary, the income is generally subject to U.S. tax only when dividend income is remitted to the U.S. parent. Because of this, the foreign tax liability is said to be "deferred."

This treatment parallels the tax treatment when a U.S. parent corporation receives a dividend distribution from a domestic subsidiary. Deferral of foreign earnings is therefore proper and normal as a matter of tax policy design and has the additional benefit of lessening the damage to international competitiveness and domestic investment that the worldwide system causes.

The Territorial Tax System. In contrast to worldwide taxation, a territorial system taxes businesses on only income earned within a country's borders. It applies to all businesses that operate within a country's boundaries, whether that business is headquartered in that country or another.

Instead of a pure territorial system, most countries use an exemption system under which foreign income is mostly exempt from taxation. The exemption is generally 95 percent of foreign earnings. Chairman Camp's plan would set up a 95 percent exemption system for the U.S.

The exemption system is a simpler way of denying businesses an extra tax benefit that would occur from allowing a deduction of expenses incurred earning foreign income. Since they are not paying tax on that income under a territorial system, they should not receive deductions for expenses incurred in earning it. Taxing a small portion of foreign earnings serves as a proxy for those expenses. Such a system is easier to apply than forcing businesses to somehow separate expenses incurred in earning exempt foreign income from expenses generated earning taxed domestic income.

A Neutral Tax Policy. Neutrality is the guiding principle of sound tax policy. It holds that taxes should influence the economic decisions of individuals and businesses as little as possible. If neutrality is defined from the standpoint of where a business earns its income, taxing businesses the same regardless of where they locate their operations could make sense. Such an analysis supports a worldwide tax system.

However, neutrality is not concerned with *where* businesses earn their income. Market demand and the nature of a business's functional operations rightfully determine location. Rather, neutrality is about minimizing the influence of taxes on the returns to business activity. That way taxes do not influence businesses' decisions.

Therefore, true tax neutrality is defined with respect to a particular business activity, such as an investment's timing, location, and amount. In the case of business investment, true tax neutrality is defined with respect to a business's investment decisions, not the business itself. A tax system violates neutrality to the extent it raises the minimum required pre-tax return on an investment and thus influences the business's decision-making process regarding an investment.

Worldwide Tax System Reduces Investment. The U.S. worldwide tax system is the wrong policy because it is not neutral. By seeking to tax the location where businesses earn income equally, it reduces the extent to which U.S. businesses invest in foreign markets.

Before deciding whether to invest abroad, a U.S. business looks at all of the costs it would incur and the potential income it would earn by moving into a new market. All of the different variables go into determining whether the return from expanding into the new market would generate the return that the business requires for taking that risk. The business will make the investment if the estimated return matches or exceeds the rate it requires.

The worldwide tax system in the U.S. makes it less likely that the new investment's estimated rate of return will match or exceed the business's required rate of return because the U.S. tax on

its foreign income raises the return required to justify the new investment. This applies whether the business is deciding to expand in a specific new country or determining the location of a new investment that it could place in several possible countries.

Even though a higher required rate of return under the worldwide system makes fewer investments viable, supporters of the worldwide system argue that the foreign tax credit and deferral mitigate the tax system's disincentives for U.S. businesses to invest abroad. While this is true, mitigation is not elimination. A tax-based disincentive persists.

Even with deferral, the extra tax under the worldwide system does not change the investment calculations of a business seeking to meet new demand abroad. The extra U.S. tax imposed on its foreign income from the worldwide system remains a cost to the U.S. business even though it does not owe the U.S. tax right away because it must report the accrued liability on its financial statements. It therefore still reduces the investment's estimated profitability.

U.S. businesses can mostly remove that accrued tax liability from their financials by establishing their intent to invest foreign-source income abroad permanently, but doing so makes it extremely difficult for them to ever bring that income back to the U.S. Rather, businesses generally decide to permanently reinvest their foreign earnings after they earn them. It is unlikely that they would ever decide not to bring their foreign earnings back to the U.S. before making an investment.

Because the worldwide system causes some potential investments to fall short of meeting the required rate of return, it causes U.S. businesses not to make investments that they would otherwise have made if the extra tax had not interfered. While the worldwide tax system does not prevent all foreign investment, the extra tax it applies stops the marginal investments that do not meet the higher rate of return.

Taxes matter at the margin, and the worldwide tax system is dissuading a multitude of U.S. businesses from making potential investments that they would otherwise make. Because it reduces investment, the worldwide system destroys jobs and suppresses wages for U.S. workers.

The Superior Territorial System. In contrast, under a territorial tax system, U.S. businesses would mostly factor in only the taxes they would pay to foreign countries before making a decision on whether to invest abroad. U.S. taxes would be a minor and insignificant factor in the decision, assuming a partial exemption system. Almost totally eliminating U.S. taxes from the business investment decision would increase investment because marginal opportunities that currently fall short of the required return under the worldwide system would become viable because the extra U.S. tax would no longer factor into businesses' investment decisions.

That investment would allow U.S. businesses to meet their global demand more efficiently and allow U.S. businesses to form stronger corporate synergies that would further enhance efficiency. As explained below, these efficiency increases would greatly benefit U.S. workers.

Compared with the current worldwide system, a territorial system would also increase the competitiveness of U.S. businesses. Foreign businesses unencumbered by the worldwide U.S. tax system are free to make investments that the U.S. worldwide tax system makes unprofitable for

U.S. businesses. In these situations, U.S. businesses decline in standing compared with their foreign competitors because foreign businesses enjoy increased earnings and enhanced global efficiency from making investments that the U.S. worldwide system forces U.S. businesses to forgo. A territorial system would free U.S. businesses to make those investments so they can match the increased earnings and efficiency of their foreign competition.

Territorial Taxation in OECD Countries. Only six other countries in the Organization for Economic Cooperation and Development (OECD), a group of the 34 most highly developed nations in the world, employ a worldwide system for taxing their multinational businesses: Chile, Greece, Ireland, Israel, South Korea, and Mexico.[9] The other 27 have mostly territorial systems achieved through the exemption method.

Each of these six countries has a top corporate income tax rate that is lower than in the U.S., which is unsurprising since the U.S. has the highest rate in the OECD. The U.S. rate exceeds 39 percent when the federal tax rate of 35 percent and the average rate of the states are combined. Most states do not tax foreign income, so the 35 percent federal rate is what matters in international tax issues. However, the 35 percent federal rate is still the highest for central governments in the OECD and well above the rates in the other countries with worldwide systems.

The U.S. rate far exceeds the 25 percent average rate of the other 33 countries in the OECD. The top rates in all the countries with worldwide systems match or are lower than the average rate in the OECD, except for Mexico (30 percent). The rates in Chile (20 percent) and Ireland (12.5 percent) are considerably lower than the OECD average.

Like the U.S., the six other countries with worldwide tax systems provide their businesses with a credit on the tax that they pay in foreign locations. The comparatively lower rates in these countries, combined with their foreign tax credits, means that their worldwide systems are a minor issue because their businesses pay little, if any, additional tax to their home countries on their foreign income. They effectively have territorial systems because their rates are consistent with OECD norms.

The U.S. worldwide system is more damaging to U.S. businesses than to businesses with headquarters in other worldwide taxation countries because of the high U.S. corporate tax. The high rate and worldwide system require U.S. businesses to pay an additional tax to the U.S. on their foreign earnings in every other developed country in which they earn income. Although the ability to cross-credit excess foreign tax credits offsets some of the extra tax, cross-crediting does not lessen the worldwide system's negative impact on business investment because its mitigating impact occurs long after businesses decide whether a new investment matches its required return.

The developed world has mostly abandoned worldwide taxation in favor of territorial taxation because of the worldwide system's harmful economic effects on investment. Those in favor of

[9] Diana Furchtgott-Roth and Yevgeniy Feyman, "The Merits of a Territorial Tax System," Manhattan Institute for Policy Research *Issues* No. 29, October 2012, p. 2, http://www.manhattan-institute.org/pdf/ir_29.pdf (accessed March 7, 2013)

strengthening the worldwide system usually fail to acknowledge this important fact that gives real world credence to the superiority of territorial over worldwide.

Creating Jobs and Raising Wages in the U.S. In addition to allowing their businesses to maintain their global competitive edge, a chief benefit that other developed nations realized from switching to a territorial tax system is more jobs and higher wages for their workers that arise from their businesses increasing investment.

The best way to illustrate how a territorial system in the U.S. would create jobs and raise wages is through an example.

If a hypothetical Ohio manufacturer of automotive tires wants to invest in Germany because its market researchers have perceived growing demand for their tires there, the business can best meet that demand by having a domestic presence in Germany. Any time the product of a U.S. business experiences higher demand that justifies new investment, it is good for the business and its domestic workers because it means growth that benefits them both.

The U.S. business would likely open two subsidiaries to serve the German market better: a distributor to sell tires in the German market—and perhaps in the rest of Europe and beyond—and a manufacturer to make the tires to sell to the distributor. For the German distributor and manufacturer to function, they would need services and intangible intellectual property ("intangibles") provided by the U.S. parent company.

Some specific examples of intangibles that the U.S. parent tire business would license or sell to its German manufacturing subsidiary would include:

- The design of its entire line of tires,
- The manufacturing process for the tires, and
- Business practices used to ensure the quality and consistency of its tires.

The German distributor would also license or buy intangibles from the U.S. parent. Some of these items would include:

- The tire company's brand name,
- Branding practices,
- Customer relationships, and
- Business relationships, such as with car companies.

The German distributor and manufacturer would also need a host of services that the U.S. parent would provide. These are services that the German subsidiaries would need to provide on their own or pay other companies to provide if their U.S. parent did not provide them, such as:

- Procurement,
- Management,
- Executive functions,
- Human resources,

- Employee training,
- Treasury,
- Finance,
- Accounting,
- Legal,
- Government affairs,
- Public relations,
- Communications,
- Logistics, and
- Information technology.

In addition, the U.S. parent would provide the German manufacturer with additional services such as engineering and quality control. To the German distributor, it would provide marketing, advertising, sales support, and customer support.

The U.S. parent's provision of intangibles and services to its German subsidiaries would create jobs in the U.S. and raise wages for the U.S. parent's current employees. First, the parent's existing workforce would provide the services listed above. They would also work with the German subsidiaries to use the intangibles properly, whether the U.S. parent licensed it or sold it to its German subsidiaries.

The wages of employees of the parent business would rise because their productivity would increase. Their productivity would necessarily rise because of the increased efficiency that would result from new investment and from the corporate synergies that would result from the business more seamlessly meeting its customers' demands. Higher productivity is the key driver of higher wages.

The U.S. parent's expansion into the German market would create new jobs as its German subsidiaries grow more quickly. At some point, its existing workforce would run out of the capacity to meet the growing demands of the German subsidiaries. At that point, the parent would need to add new workers so as not to slow the growth of its German businesses.

From the sample of services and intangibles provided by the U.S. parent, expansion into the German market would clearly create highly skilled, high-paying jobs in the U.S. For instance, it would need more scientists and researchers to maintain and improve its intangibles; engineers to help the German manufacturer with the machinery needed to make the tires; more marketing experts, sales personnel, and business services professionals to help the distributor sell the tires; and more managers, executives, human resource professionals, finance experts, accountants, lawyers, communications experts, technology experts, and government affairs experts to help both subsidiaries with these respective business functions. These are just a sampling of the good jobs that the U.S. parent would create because it invested in a foreign country.

The increased wages and creation of new jobs resulting from a U.S. business expanding abroad are powerful examples of how globalization and integrated worldwide production generate benefits for U.S. workers by allowing U.S. businesses to increase both foreign and domestic investment.

These jobs are from a hypothetical anecdote. Academic research confirms that these beneficial effects accrue domestically in the real world when U.S. businesses expand abroad. In fact, the research finds that for every 10 percent U.S. businesses increase investment abroad, their domestic investment increases 2.6 percent.[10] That investment is necessary to support the new investment abroad with the provision of services and intangibles. More domestic investment results in more domestic jobs.

More investment also means higher wages for domestic workers. The same research also shows when businesses increase what they pay workers at their foreign subsidiaries by 10 percent, the wages of their domestic workers rise 3.7 percent. The wage increases result from both increased domestic investment and the increased productivity of workers as described above, both of which occur because the U.S. business invested abroad.

A territorial tax system makes it more likely that the hypothetical U.S. tire business would invest in Germany and that U.S. workers would experience the higher wages and increased job creation because of that investment. In contrast, the worldwide tax system forces businesses to forgo many similar investments, precluding U.S. workers from enjoying those benefits.

Net Job Creation. Some argue that a territorial system would create an extra incentive for U.S. businesses to invest overseas, but this is incorrect. Instead, a territorial system would remove a disincentive created by the current worldwide system. A territorial system is neutral to investment decisions because, by taking U.S. taxes mostly out of the equation, it provides neither incentives nor disincentives for businesses to determine where to locate their resources. Eliminating a disincentive is not the same thing as creating a new incentive.

A territorial system certainly creates jobs overseas, but that is only half the story. During the 2012 presidential campaign, Vice President Joseph Biden, reflecting the Obama Administration's preference for harmful worldwide taxation,[11] famously quoted a misleading academic study that found that moving to a territorial system would create 800,000 jobs in foreign countries.[12] The implication was that U.S. businesses would create those jobs in foreign countries instead of in the United States. The analysis ignores that these jobs would be created to meet new demand in foreign countries—an improvement in efficiency that the worldwide system largely prevents today.

Of course, as more authoritative academic research cited previously shows and the example above makes clear, increased foreign investment would result in more investment in the U.S. That investment would lead to more jobs and higher wages in the U.S. The study that Vice President Biden cited fails to mention that, while investment by U.S. business creates jobs overseas, it also results in jobs at home.

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[10] Mihir A. Desai, C. Fritz Foley, and James R. Hines Jr., "Domestic Effects of the Foreign Activities of U.S. Multinationals," *American Economic Journal: Economic Policy*, Vol. 1, No. 1 (February 2009), pp. 181–203.
[11] ABC News, "Transcript: Vice President Joe Biden's DNC Speech," September 6, 2012, p. 4, http://abcnews.go.com/Politics/OTUS/transcript-vice-president-bidens-democratic-convention-speech/story?id=17178040 (accessed July 21, 2014).
[12] Kimberly Clausing, "A Challenging Time for International Tax Policy," *Tax Notes*, July 16, 2012, http://services.taxanalysts.com/taxbase/magdailypdfs.nsf/PDFs/1361N0281.pdf/$file/1361N0281.pdf (accessed July 21, 2014; subscription required).

References to lost U.S. jobs also fail to note that U.S. businesses would rarely create those jobs in the U.S. regardless of the tax regime in place because they will seldom make the same investments in the U.S. as in foreign markets. U.S. businesses would create new jobs abroad and at home to take advantage of new opportunities in growing foreign markets. The jobs that the U.S. economy gains from increased investment because U.S. businesses expand abroad are all a net gain.

Driving U.S. Businesses Abroad. Despite the ample benefits that would accrue to U.S. workers from moving to a territorial system, a strengthened worldwide system remains the policy preference of many policymakers. Those who favor this approach usually propose strengthening the worldwide system by reducing or denying businesses the foreign tax credit and deferral. They also often support instituting a minimum tax rate on all the foreign income of U.S. businesses, either in place of limiting deferral and the foreign tax credit or in addition to those harmful measures.

During the 2012 campaign President Obama often said that he wants to close loopholes in the tax system that encourage U.S. businesses to ship jobs overseas. Since no such explicit policies exist, he was likely referring to the foreign tax credit and deferral. Arguing that the foreign tax credit and deferral encourage businesses to move jobs overseas gets the economics exactly wrong. They exist to lessen the damaging impact of worldwide taxation.

Applying these policies would be devastating for U.S. workers. Rather than miss out on even more opportunities to increase their competitiveness and profitability, many businesses would seek ways to avoid the even higher residual U.S. worldwide tax that would result.

The worldwide system only applies to businesses headquartered in the U.S. If a U.S. business moves its headquarters abroad, it would still owe tax on income earned in the U.S., but moving its headquarters to another country would avoid the extra tax on foreign income. The U.S. has strong anti-inversion rules that make it difficult for a business headquartered in the U.S. to move its headquarters to another country, but little prevents U.S. businesses from selling themselves to foreign-owned businesses. Or, as recent events illustrate, U.S. businesses can merge with foreign businesses to facilitate the inversion process.

When a business moves its headquarters to another country, it takes high-quality jobs with it and leaves a palpable absence in the communities it once inhabited. Businesses often become synonymous with the cities in which they are founded and grow, such as Microsoft and Seattle; Nike and Beaverton, Oregon; Apple and Cupertino, California; FedEx and Memphis; Coca-Cola and Atlanta; and GM, Ford, and Chrysler and the city of Detroit.

Until recently, Anheuser-Bush and St. Louis would have been on that list. However, in 2008, Anheuser-Bush merged with InBev, a Belgium beverage company. In part because of the high corporate tax rate in the U.S. and the worldwide tax system, the newly merged business placed its headquarters in Belgium. Consequently, St. Louis lost executive and other quality jobs that left for the new Belgium headquarters. It also lost the community involvement of Anheuser-Busch and its employees working in the headquarters.

A stronger worldwide tax system could similarly drive more U.S. businesses to put themselves up for sale to foreign businesses and move their headquarters abroad with the same damaging impact on and destruction of quality jobs in the communities that they leave behind.

Misunderstanding Outsourcing. Those who favor a stronger worldwide system often claim—albeit wrongly—that it would prevent U.S. businesses from outsourcing production and thereby shipping U.S. jobs overseas. U.S. businesses outsource by moving certain business functions, often manufacturing, to foreign countries where they pay lower costs for those activities.

Their concern is misguided because the tax system does not cause U.S. businesses to outsource. The lower costs, mostly lower labor prices, are the motivating factor. Advances in information technology and reductions in transportation costs have enabled some U.S. businesses to further reduce the costs by producing their products overseas. Businesses that use other nations' comparative advantages become more competitive.

These developments are part of a long-term change in the global economy that benefits U.S. consumers through lower prices, but they cause short-term and medium-term pain for workers in industries that outsource. This phenomenon is not new. The economy frequently experiences structural changes that cause short-term unrest by uprooting previous ways of doing things, but ultimately help to fuel expansion. U.S. economic policy—tax policy included— can do little to change the powerful force of globalization, even if it were beneficial to do so. Strengthening the worldwide tax system will not stop most businesses from outsourcing because the gains in competitiveness from outsourcing will usually far exceed the extra tax cost.

Anti-Base Erosion and Earnings Stripping. Although a territorial system would not create an incentive for U.S. businesses to move jobs overseas, it does need certain policy safeguards to protect the U.S. tax base from erosion.

Examples abound in the press of U.S. businesses engaging in elaborate schemes to shift money between foreign affiliates. Ultimately, this movement of income results in it arriving in countries where they face little or no tax. The arrangements have eye-catching names such as the "double Irish with a Dutch sandwich."[13] The unstated implication of such reports is that U.S. businesses set up these complicated systems to duck U.S. taxes.

Supporters of worldwide taxation use the public outrage about these little understood arrangements to argue for strengthening the worldwide system. For example, the Senate Permanent Subcommittee on Investigations called on Apple CEO Tim Cook to explain how Apple pays such a low amount of tax on its foreign income. That committee took advantage of the hearing to make it seem like Apple, by virtue of its tax arrangement in Ireland and other

[13] Charles Duhigg and David Kocieniewski, "How Apple Sidesteps Billions in Taxes," *The New York Times*, April 28, 2012, http://www.nytimes.com/2012/04/29/business/apples-tax-strategy-aims-at-low-tax-states-and-nations.html (accessed July 21, 2014).

foreign countries, is dodging U.S. taxes. For instance, Senator Carl Levin (D–MI) claimed that Apple's foreign tax strategy was reducing tax collections in the U.S.[14]

The indignation from such news reports and the Senate hearings is generally misplaced. The money U.S. businesses shift between foreign affiliates is not income that they earned in the U.S. It is income that they earn in foreign countries and then shift between those countries to minimize their *foreign* tax liability. A U.S. business, such as Apple, for the most part cannot earn income from the sale of tablet computers in the U.S. and shift it to a foreign country without paying U.S. tax on the income. To do so would be illegal tax evasion.

Eventually, the foreign income often ends up in jurisdictions that levy little or no tax on the income because businesses use the differences in foreign tax laws to minimize their tax bills—U.S. tax law included. U.S. "check-the-box" rules allow businesses to shift foreign income to low-tax jurisdictions more easily. The businesses leave their foreign income there indefinitely and do not pay U.S. tax on it because of deferral the same as if they earned the income in a country with higher taxes. The income that accumulates in these low-tax countries is usually generated by intangibles that the businesses sell to subsidiaries there. Those businesses usually have no functional operations other than as entities that own, assume the risk, and possibly fund the upkeep and development of intangibles.

While the indignation in the U.S. is for the most part misplaced under the current worldwide system, the issue could become a more pressing problem under a territorial system because U.S. businesses would have a larger incentive to move more of their intangibles abroad to subsidiaries in countries with lower tax rates. Under a territorial system, businesses that can move more of their intangibles overseas, instead of gaining an indefinite reprieve from U.S. taxes as under the current worldwide system, would receive a permanent one. If U.S. businesses can sell their intangibles to their foreign affiliates at prices that are too low and thereby create an incentive to sell them more intangibles than a neutral tax system would suggest, they would erode the U.S. tax base, reducing U.S. tax collections for a given set of tax rates. This would push tax rates higher to collect a targeted amount of revenue, such as the historical average of 18 percent of GDP. Higher rates are the antithesis of pro-growth tax policy. Policies that curb such abuses are vital for a properly functioning territorial system and for maximizing potential growth under a reformed tax code.

However, there are no widely accepted methods for determining the value of many intangibles that businesses sell between their various entities, especially newly developed intangibles. Intangible property typically is unique in nature and generates income that is difficult to isolate and highly speculative at the time of the sale or license. Thus, unlike tangible property, intangible property is generally not sold in open markets that would help to establish market-based prices.

These factors make it difficult to establish a fair market price between two unrelated businesses. The amount of intangibles owned by foreign subsidiaries varies by industry and function of the

[14] Teresa Welsh, "Are Apple's Tax Shelters an Outrage?" *U.S. News & World Report*, May 21, 2013. http://www.usnews.com/opinion/articles/2013/05/21/is-carl-levin-or-rand-paul-right-on-apples-tax-shelters (accessed July 21, 2014).

various subsidiaries. There is no way to create an overarching rule to dictate where and in what quantities intangibles should reside. Despite these difficulties, properly accounting for intangibles is essential in both territorial and worldwide tax systems, and it will likely become even more important because intangibles will likely become a bigger part of business profitability as technology expands its share of the economy.

Stricter transfer pricing policies governing the sale of intangibles would likely not address this problem because of the inherent difficulties in valuing and determining the proper location of intangibles. The sensible way around this dilemma is to set broad policies that allow the U.S. to tax income businesses earn from intangibles if the business pays little or no tax on that income. In other words, the U.S. would tax intangible income if a business moves its intangibles to a low or no-tax country where they generate little or no economic activity. This assumes that U.S. tax authorities can properly identify such income. Such policies would greatly reduce the incentive for U.S. businesses to improperly move intangibles abroad and erode the tax base under a territorial system.

The Camp plan would tax foreign intangible income earned in foreign countries as current U.S. income at a reduced 15 percent rate. The taxable income would be calculated based on the foreign subsidiary's depreciable tangible property. U.S. parents would then be able to deduct 40 percent of that figure if it is sold for use, consumption, disposition, or to provide services outside the U.S. This is a viable way around the difficult problem of accurately pricing intaugibles that would curtail the incentive for U.S. businesses to sell too much of their intangibles abroad to escape U.S. tax under a territorial system.

Whether the U.S. wisely adopts a territorial system or tweaks the existing worldwide system, anti-base erosion policies will continue to need the backing of policies that prevent earnings stripping. Earnings stripping occurs when U.S. businesses take on large amounts of domestic debt to finance income produced in foreign countries with lower tax rates than the U.S. The U.S. business can deduct the interest on the debt which lowers its U.S. tax. Meanwhile, foreign subsidiaries can use the borrowed capital to invest and increase their earnings. Such an arrangement artificially shifts income to lower-taxed countries. The Ways and Means draft proposal handles this issue by denying U.S. businesses interest deductions if its indebtedness exceeds 110 percent of their combined foreign subsidiaries indebtedness or if its net interest expense exceeds 40 percent of its taxable income.

Repatriation Holiday No Fix. Supporters of territorial taxation routinely argue that the U.S. needs such a reform to allow businesses to repatriate their foreign earnings to invest domestically. They use the same justification to support a repatriation holiday that would absolve U.S. businesses of paying tax that they previously accrued on foreign-source income. While there is certainly nothing wrong with businesses bringing more income back to the U.S., elimiuating the lockout effect in which businesses keep foreign earning abroad to avoid U.S. tax alone will not spur job creation and wage growth because it is backward-looking.[15] However, changing to a territorial system on future profits will unlock investment at home and abroad that

[15] J. D. Foster and Curtis S. Dubay, "Would Another Repatriation Tax Holiday Create Jobs?" Heritage Foundation *Backgrounder* No. 2610, October 4, 2011, http://www.heritage.org/research/reports/2011/10/would-another-repatriation-tax-holiday-create-jobs.

the current worldwide system is holding back. That new investment will improve the efficiency and competitiveness of U.S. firms and spur U.S. job creation and wage growth.

Tax Reform Should Eliminate the Deduction for State and Local Taxes

What tax reform should do with the deduction for state and local taxes is one of the difficult questions in tax reform. Tax reform should eliminate the state and local tax deduction because it encourages state and local governments to raise their taxes higher than they would without it. If tax reform eliminated the deduction, state and local governments would face stronger pressure to keep their taxes low. Chairman Camp's proposal wisely does away with the deduction.

Violating Neutrality Appropriate in Certain Circumstances. The purpose of tax reform is to free the economy to grow stronger by setting a neutral tax base and by lowering tax rates in a revenue-neutral manner to improve incentives for families, businesses, investors, and entrepreneurs to engage in productive activity.

The principle of neutrality holds that taxes should not influence the economic decisions of taxpayers. To maximize economic growth, tax reform should institute the most neutral tax code possible. However, there are instances where violating neutrality is appropriate.

One is when a historical anomaly makes it unavoidable. This is the case with the exclusion for employer-provided health insurance. The exclusion is a historical artifact dating back to World War II. Because eliminating it without other reforms would create major disruptions in the health insurance market, sensible tax reform plans either retain the exclusion or better provide credits for families to purchase health insurance.

Another instance is when the benefit of a particular policy justifies its harm to neutrality. Retaining the Earned Income Tax Credit to encourage low-income families to improve their situations is an example.

Tax reform should also eliminate neutral policies that have negative unintended consequences that are greater than the harm that would be done to neutrality from their elimination.

State and Local Tax Deduction Is Neutral but Should Be Eliminated. The tax code allows taxpayers to deduct certain state and local taxes, including income taxes, sales taxes for residents of states that (wisely) go without an income tax, real estate taxes, and personal property taxes. State and local income taxes makes up about 95 percent of all state and local tax deductions.[16]

According to sound tax policy theory, the deduction is neutral because taxpayers should not have to pay tax on income they do not spend or save. State and local taxes deprive taxpayers the ability to do both with the income they claim.

[16] Internal Revenue Service, "Individual Complete Report (Publication 1304), Table 2.1, Returns with Itemized Deductions: Sources of Income, Adjustments, Itemized Deductions by Type, Exemptions, and Tax Items, by Size of Adjusted Gross Income, Tax Year 2011," http://www.irs.gov/file_source/pub/irs-soi/11in21id.xls (accessed July 21, 2014).

However, the rubber of tax policy theory does not always hold up when it meets the rugged road of economic reality. When it comes to the state and local tax deduction, the harmful negative unintended consequence it creates in the real world outweighs the benefit of ensuring taxpayers do not pay tax on income they cannot spend or save.

The deduction therefore is another circumstance that warrants violating neutrality, and that is why tax reform should eliminate it.

Deduction Encourages State and Local Governments to Raise Taxes. The harmful unintended consequence of the deduction is that it encourages state and local governments to raise their taxes. Higher taxes allow state and local governments to grow larger because they spend up to the maximum amount of revenue they can collect.

The deduction encourages state and local governments to raise their taxes because it transfers a portion of their tax burdens from their residents to the federal government. For instance, for every dollar a state taxes a family paying the 33 percent federal marginal tax rate, the family effectively pays only $0.67 of the state tax, because the deduction on the family's federal taxes reduces their federal tax bill by $0.33.

This reduction in the "price" of the state's taxes encourages states to raise their taxes higher than they otherwise would, because taxpayers offer less resistance since they do not pay the full cost of the higher taxes. Taxpayers are more willing to accept higher taxes because of the deduction in the same way consumers are more willing to buy a product or service when prices fall.

However, there is no related reduction in the size of the federal government from the reduction in federal revenue due to the deduction. The federal government can and does borrow freely, so Congress sets spending amounts irrespective of tax revenue. State and local governments have much less latitude when it comes to borrowing, so their spending must more closely match their tax receipts.

If the deduction were eliminated in tax reform, the total amount of taxes taxpayers pay would likely not change. Tax reform should be revenue and distributionally neutral, meaning taxpayers would likely pay around the same amount of federal taxes as before, but their federal taxes would no longer effectively reduce the burden of their state and local taxes.

Faced with newly shouldering the entire burden of state and local taxes, taxpayers would markedly increase their opposition to state and local tax hikes. Taxpayers would also likely make stronger efforts to reduce their existing tax burden. Combined, these effects would help restrain the tax burdens of state and local governments.

Highest-Taxed States Would See Most Pressure. The highest-taxed state and municipalities would likely see the strongest efforts by their residents to lower taxes. Taxpayers in high-tax-burden states tend to have higher incomes. For instance, according to the Tax Foundation, New York, New Jersey, and Connecticut have the three highest state and local tax burdens and rank in the top five in terms of per-capita income. Most other high-tax states also have relatively high per-capita incomes.[17]

Higher-income taxpayers also overwhelmingly claim the deduction for state and local taxes. According to IRS data, taxpayers with adjusted gross income over $100,000 claim almost 76 percent of all state and local tax deductions.[18]

These data show that while taxpayers in high-tax states pay a hefty amount of state and local taxes, they also see that burden reduced the most because of the deduction. If tax reform eliminated the deduction, these taxpayers would see the biggest increase in their effective state and local taxes. They would likely put the most pressure on their state and local governments to stop tax increases and apply the most pressure on those governments to reduce their high taxes.

Lower Rates an Added Bonus. Eliminating the state and local tax deduction should be done only within the context of overall tax reform. Congress should not eliminate it (for instance, through "loophole closing") without other offsetting tax changes. To do so would be an unnecessary tax increase.

Eliminating the deduction in revenue-neutral tax reform would allow for even lower marginal tax rates for families. The state and local deduction reduces taxes by more than $1 trillion over 10 years.[19] That revenue would provide for substantial additional rate reduction. Lower rates enhance the growth-promoting potential of tax reform, which is an added bonus of eliminating the deduction.

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[17] Elizabeth Malm and Gerald Prante, "Annual State-Local Tax Burden Ranking: New York Citizens Pay the Most, Alaska the Least," Tax Foundation, October 2012, http://taxfoundation.org/sites/taxfoundation.org/files/docs/BP65_2010_Burdens_Report.pdf (accessed July 22, 2013).

[18] Internal Revenue Service, "Individual Complete Report."

[19] Office of Management and Budget, *Budget of the U.S. Government, FY 2014, Analytical Perspectives*, April 10, 2013, p. 261, http://www.whitehouse.gov/sites/default/files/omb/budget/fy2014/assets/spec.pdf (accessed September 10, 2013). Adding the score of deductibility of state and local taxes and the score for real estate taxes on owner-occupied property reduces tax revenue by $435 billion over five years. A traditional budget window is 10 years. The revenue reduction for these policies would grow in the second five years of a 10-year window enough to put the total revenue reduction in a 10-year window over $1 trillion.

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Chairman TIBERI. Mr. Hodge, you are recognized for 5 minutes.

STATEMENT OF SCOTT HODGE, PRESIDENT, TAX FOUNDATION (WASHINGTON, DC)

Mr. HODGE. Thank you, Mr. Chairman, Ranking Member Neal, Members of the Committee. I appreciate the opportunity to be here today.

There are many very good reasons to overhaul the Tax Code, simplicity and equity, but really economic growth ought to be the primary objective. And while we all may want a simpler, more equitable Tax Code, if that kind of a tax system actually leads to less

economic growth, we ought to think twice about some of those policies.

And this is why dynamic analysis must be an essential tool of any effort to reform the Tax Code. There are many base broadeners that may seem like a reasonable tradeoff for a lower rate when measured on a conventional basis, but what we find actually turn out to be antigrowth when measured on a dynamic basis.

And let me echo Mr. Diamond that in order to do tax reform right, members should be provided a dynamic analysis of each component of the plan as it is being put together, not just at the end of the process after it is all done. And only then will members know which components maximize growth and which don't.

However, economic growth should not be an accidental outcome of tax reform or the process. Before even beginning to think about the process of tax reform, lawmakers ought to set out a goal, an objective for how much economic growth they hope to achieve as a result of their tax reform plan. Any policy that subtracts from that goal ought to be rejected. Any policy that adds to it should be accepted.

And let me echo my colleagues that Chairman Camp's plan has many positive features that by themselves would promote economic growth and competitiveness. And chief among those are the lower rates on corporate and individual tax rates and eliminating the AMT. And when we modeled these policies in isolation with no offsets, we found that they would boost GDP growth by nearly 5 percent and create more than 5 million new jobs.

And we also found that on a dynamic basis these rate cuts were much less costly than they appear on a static basis, as much as 60 percent less costly for the corporate rate cut and 20 percent less costly for the individual rate cut. Actually, the corporate rate cut pays for itself beyond the budget window.

However, what we found is that many of the offsets that were required to keep the chairman's plan revenue neutral on a static basis had the effect of dampening the growth potential of the plan over the long term. And when we modeled the chairman's plan, we found that the plan would increase GDP by 0.22 percent over the long run.

However, we also found that because the plan raised the cost of capital in a number of ways it would reduce the capital stock modestly, which would slightly decrease pretax wages. But because the plan reduces marginal tax rates on labor income, it would raise after-tax wages slightly, and that in turn would encourage more labor force participation and create as many as 486,000 full-time jobs. But what these results mean, though, is that people would be working longer, but producing less total output with less capital.

However, what we found was that by modifying just a few of the plan's provisions that raise the cost of capital, we can generate even more economic growth. For instance, if we just maintain the current MACRS depreciation system, as opposed to the ADS system that is in the current plan, we could boost GDP growth by 1.3 percent and create as many as 685,000 jobs.

In a similar way, we modeled the original Camp plan with 50 percent bonus expensing on a permanent basis, and found that

such a plan would increase GDP by nearly 2 percent and create as many at 780,000 new jobs.

Well, before I conclude, I do want to say that the Joint Committee on Taxation does deserve credit for doing a dynamic analysis to the chairman's plan. However, the JCT does invite some criticism of its work because of the rather opaque way in which it presents its results, and the lack of transparency in documenting how it produces the results that it does. As my seventh grade math teacher said, show me your work. And that is what we would like to see, because the Joint Committee has made substantial changes to their models over the last decade or so, and it is time they subjected those changes and their core models to review by experts in the field. And if members are going to have any confidence that JCT's estimates are accurate and it is using state-of-the-art tools, then it must allow outside experts to review those on a peer-reviewed basis.

Well, despite all the criticism, dynamic scoring is really about accuracy, credibility, and having the tools to guide us toward tax policies that promote economic growth and steer us away from policies that reduce living standards. And by contrast, the conventional static analysis leaves lawmakers in the dark about the economic consequences of their tax choices, and to me that is economic malpractice.

Relying on static scoring turns tax reform into an exercise in arithmetic, rather than an exercise in promoting policies that raise people's living standards and the overall health of the American economy.

Thank you, Mr. Chairman. I appreciate any comments you may have.

Chairman TIBERI. Thank you, Mr. Hodge.

[The prepared statement of Mr. Hodge follows:]

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Written Testimony of
Scott A. Hodge, President, Tax Foundation

Dynamic Analysis of the Tax Reform Act of 2014
Before the U.S. House of Representatives Committee on Ways and Means,
Subcommittee on Select Revenue Measures

July 30, 2014

Chairman Tiberi, Ranking Member Neal, and members of the Committee:

Thank you for the opportunity to speak to you today about dynamic analysis of the Tax Reform Act of 2014.

Just a brief background on the Tax Foundation. We were founded in 1937 and are the nation's oldest organization dedicated to promoting economically sound tax policy at the federal, state, and local levels of government. We are a nonpartisan 501(c)(3) organization.

For 77 years, the Tax Foundation's research has been guided by the immutable principles of sound tax policy which say that taxes should be neutral to economic decision making; they should be simple, transparent, and stable; and they should not hinder economic growth.

All of these are good reasons to reform our tax code, but economic growth ought to be the primary objective. While we all may want a simple and more equitable tax code, if such a tax code actually slows economic growth and lowers living standards, then we should reconsider those policies.

And this is why dynamic analysis must be an essential tool of any effort to reform the tax code. As we'll see, there are many base broadeners that seem a reasonable tradeoff for lower rates when measured on a conventional basis, but are actually anti-growth when measured on a dynamic basis. Indeed, the biggest obstacle to crafting pro-growth tax reform is the strict adherence to the constraint of revenue neutrality measured on a conventional static basis.

In order to do tax reform right, members should not have to wait for a dynamic analysis of the final tax reform plan, they should be provided a dynamic analysis of each component of the plan as it is

being constructed. Only then, will members know which components maximize growth and which slow growth.

However, economic growth should not be an accidental outcome of the process, it should be initial goal of the process. Before even beginning to think about how to reform the tax code, lawmakers should set out a target for how much additional economic growth they hope to achieve as the result of the tax overhaul. Any policy that subtracts from that goal should be replaced with policies that move closer to the goal.

Modeling the Camp Draft

Chairman Camp deserves a lot of credit for undertaking the Herculean task of drafting a comprehensive tax reform plan. The Chairman's plan has many positive features that, by themselves, would promote growth and competitiveness. Chief among these are the reduction in the corporate tax rate to 25 percent, the cut in the individual income tax rates to 10 percent and 25 percent, and the elimination of the corporate and individual AMTs.

When we modeled these policies in isolation with no offsets, we found that they would boost GDP by 4.74 percent, increase the capital stock by 11.5 percent, after-tax incomes by 7.57 percent, and the number of full-time equivalent jobs by 5.2 million.[1]

We also found that these rate cuts lost less revenues when measured dynamically—within the ten-year budget window the corporate rate cut would be 59 percent less costly and the individual rate cuts would be 21 percent less costly. (The corporate rate cut pays for itself in the long run.) This means that the tax reform plan would have required fewer offsets had members been provided this information at the beginning of the process.

However, we find that many of the offsets that were required to keep the Chairman's draft both revenue and distributionally neutral on a static basis had the effect of dampening the growth potential for the plan.

We modeled the economic effects of the Chairman's draft using our Taxes and Growth Dynamic Tax Model.[2] The model is known in economics jargon as a Neoclassical open-economy growth

[1] Scott Hodge, Stephen Entin, & Michael Schuyler, *Using Dynamic Analysis Makes Tax Reform 30 Percent Less Challenging*, TAX FOUNDATION SPECIAL REPORT NO. 210 (Aug. 26, 2013), http://taxfoundation.org/article/using-dynamic-analysis-makes-tax-reform-30-percent-less-challenging.

[2] For more detail on the Tax Foundation's Taxes and Growth Model, *see* Michael Schuyler, *The Taxes and Growth Model—A Brief Overview*, TAX FOUNDATION FISCAL FACT NO. 429 (May 6, 2014), http://taxfoundation.org/article/taxes-and-growth-model-brief-overview. *See also* Tax Foundation, *The Tax Foundation's Small Comparative Statics Model of the U.S. Economy*, http://taxfoundation.org/tax-foundation-small-comparative-statics-model-us-economy.

model, which means that the results are driven by tax changes to the cost of capital and the cost of labor. The model allows us to simulate how tax changes will affect key measures, such as the level of long-term GDP, private investment, wages and jobs, and federal tax revenues (both dynamically and statically). It is an excellent tool for understanding the economic effects of tax policy.

Overall, we found that the domestic provisions of the reform plan would increase GDP by 0.22 percent over the long run, which is on the low end of the dynamic estimates produced by the Joint Committee on Taxation. Additionally, the plan would raise the cost of capital in a variety of ways which would reduce the capital stock by a modest 0.18 percent. And due to the reduction in the size of the capital stock, the plan would slightly decrease pre-tax wages by 0.21 percent.[3]

However, because the plan reduces marginal taxes on labor income it would raise after-tax wages slightly and that, in turn, would encourage more labor force participation and hours worked—equivalent to adding about 486,000 full-time jobs. What this means, though, is that people would be working longer but producing less total output with less capital.

I should point out that ours was not the only analysis of the Camp draft to determine that the plan would raise the cost of capital. The dynamic analyses performed by the Joint Committee on Taxation and the BRT's analysis performed by John Diamond and George Zodrow found similar results to different degrees.

Indeed, the JCT report on the Camp draft states:

> The reduction in statutory tax rates on corporate and non-corporate business income increases the after-tax return to investment for some businesses that do not make use of many of the business deductions under present law. For those businesses that do make use of accelerated depreciation, expensing of research and experimentation expenses, or other business tax expenditures, the elimination of these provisions is expected to reduce the after-tax return on investment. Overall, the proposal is expected to increase the cost of capital for domestic firms, thus reducing the incentive for investment in domestic capital stock.[4]

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[3] Stephen Entin, Michael Schuyler, & William McBride. *An Economic Analysis of the Camp Tax Reform Discussion Draft*, TAX FOUNDATION SPECIAL REPORT NO. 219 (May 14, 2014) at 6, http://taxfoundation.org/article/economic-analysis-camp-tax-reform-discussion-draft.

[4] Joint Committee on Taxation, *Macroeconomic Analysis of the "Tax Reform Act of 2014"*, JCX-22-14 (Feb. 26, 2014) at 15, https://www.jct.gov/publications.html?func=download&id=4564&chk=4564&no_html=1.

Alternate Simulations of the Camp Draft

We wondered how much the growth effects of the Camp draft could be improved if we scaled back just two of the many provisions that contributed to raising the cost of capital—the shift from MACRS to ADS, and the 40 percent exclusion for capital gains and dividends which is a bit less generous than the current treatment. (Other provisions that raised the cost of capital include: elimination of expensing for research and development; the amortization of advertising costs; the elimination of LIFO; the new bank tax; and the surtax on high-income individuals.)

We also modeled the Camp draft as drafted, but with the addition of 50 percent bonus expensing made permanent. (Seen below in Simulation 5.)

Table 1: Growth Effects of the Camp Reform Proposal and Four Alternatives

Economic and budget changes compared to 2013 tax regime (billions of 2013 dollars except as noted)	SIM. 1 Camp Draft vs. Current Law	SIM. 2 Camp with MACRS vs. Current Law	SIM. 3 Camp but with 50% Cap. Gain/Div. Exclusion vs. Current Law	SIM. 4 Camp but with MACRS & 50% Cap. Gain/Div. Exclusion vs. Current Law	SIM. 5 Camp Draft Adding 50% Bonus Expensing
GDP	0.22%	1.31%	1.62%	2.74%	1.81%
GDP ($ billions)	$35.5	$213.1	$266.4	$446.7	$295.3
Private business GDP	0.27%	1.40%	1.73%	2.89%	1.93%
Private business stocks	-0.18%	2.95%	3.85%	7.14%	4.41%
Wage rate	-0.21%	0.71%	0.96%	1.90%	1.13%
Private business hours of work	0.50%	0.71%	0.70%	0.79%	0.81%
Full-time equivalent jobs (in thousands)	486	685	751	957	780.5
Static federal revenue estimate, GDP assumed constant ($ billions)	$30.4	$46.1	$54.9	$70.5	-$52.8
Dynamic federal revenue estimate after GDP gain or loss ($ billions)	$21.2	$1.6	$4.0	$27.0	$12.4

The results of these simulations are informative:

- For example, in Simulation 2, our model shows that the Camp draft with no other change except for maintaining the current MACRS depreciation system—as opposed to the ADS system outlined in the draft—would boost GDP by 1.31 percent over the long run, the capital stock by 2.95 percent, wages by 0.71 percent, and create 685,000 full-time equivalent jobs.
- Alternately, in Simulation 3 we modeled the plan with a 50 percent exclusion for capital gains and dividends—as opposed to the draft's 40 percent exclusion. The model shows that this version of the draft would lift GDP by 1.62, the capital stock by 3.85 percent, wages by 0.96 percent, and create 751,000 full-time equivalent jobs.
- We then paired these two policies together in Simulation 4. The model shows that such a plan would increase GDP by 2.74 percent, the capital stock by 7.14 percent, wages by 1.90 percent, and create nearly 1 million new full-time equivalent jobs.
- Finally, in Simulation 5, we modeled the original Camp draft with 50 percent bonus expensing and found that such a plan would increase GDP by 1.81 percent, the capital stock by 4.41 percent, the wage rate by 0.86 percent, and create 780,500 full-time equivalent jobs.[5]

What these simulations tell us is that the growth potential of the plan could be substantially improved by removing certain provisions that raise the cost of capital, such as the shift to ADS, or expanding provisions that lower the cost of capital, such as increasing the exclusion of capital gains and dividend income or moving closer toward full-expensing of capital purchases.

Also note that each of these alternate simulations would raise revenues on a dynamic basis and cost less than the original camp plan. Scored on this basis would have made it much easier to achieve revenue neutrality, which would have required less base broadening.

What Are the Economic Effects of a Fundamental Tax Reform Plan?

As a thought experiment, we modeled a more fundamental reform plan that would eliminate all of the income tax biases against saving and investment. Most fundamental tax reforms are economically the same in that they tend to levy only one layer of taxation. Examples of fundamental reforms include the personal expenditure tax or other "saving-consumption neutral" tax systems, such as an

[5] Stephen J. Entin & Michael Schuyler, *Adding Bonus Expensing to the Camp Tax Reform Plan*, TAX FOUNDATION FISCAL FACT NO. 435 (July 7, 2014), http://taxfoundation.org/article/adding-bonus-expensing-camp-tax-reform-plan.

individual cash flow tax (a tax on income less saving, that is, on personal consumption expenditures), the Flat Tax, a national sales tax, or a VAT.

Generally, a neutral reform plan would adopt full expensing of investment in plant, equipment, and structures, defer tax on all saving, not just in retirement plans, end the double taxation of C corporation income, and eliminate the estate and gift taxes. We modeled a personal expenditure tax, which has a similar economic effect to each of the comprehensive plans previously listed.

- A 14 percent rate "personal expenditure tax" would lift GDP by nearly 12 percent and would be close to revenue neutral on a static basis. It would increase revenues on a dynamic basis, after growth, by about $236 billion (annual rate). It would raise hours worked by the equivalent of about 4.9 million full-time jobs.
- At an 11.5 percent rate, a "personal expenditure tax" would lift GDP by almost 15 percent and be roughly revenue neutral on a dynamic basis, after economic growth. It would create the equivalent of 6.5 million full-time jobs.

Each of these options would benefit the public enormously at no cost to the government. A win-win situation for everyone.

Transparency Would Improve the JCT's Dynamic Analysis

Chairman Camp deserves credit for introducing dynamic macroeconomic analysis into the tax reform debate by requesting a dynamic analysis of the plan from the Joint Committee on Taxation. To our knowledge, this is one of the most comprehensive plans that the JCT has scored on a dynamic basis and its economists should be commended for undertaking such a task.

The JCT's dynamic scoring of the Camp draft provides many useful insights into the workings of JCT's models and the economic effects of the plan. However, the JCT invites criticism of its work because of the opaque way in which it presents its results and its lack of transparency in documenting how it produces the results that it does.

We've been asked what the JCT can do to improve their models. The simple answer is, "Transparency. How do you fix a black box?"

To be fair, JCT does provide a general description of their models and the basic parameters of the models. But, they provide very little documentation of their assumptions, which calculations are performed inside the model and outside of the model, and how they achieve specific results.

Here are a few examples:

- **What is the tax burden on pass-throughs?** One of the biggest controversies over the Camp draft was how much it shifted the tax burden from the business sector to individuals and how much it increased the tax burden on pass-through businesses. According to the JCT, the plan amounted to a $590 billion tax reduction for individuals, "not including revenues due to broadening the taxable base of pass-through businesses." The Tax Foundation asked the JCT for a net figure on changes in the tax burden on pass-throughs and was told that figure was not available.

- **What are the effects of the lower corporate rates on income-shifting?** According to JCT, the lower corporate tax rates should have two effects: Encourage U.S. multinationals to shift more income back to the US; and, attract more foreign direct investment (FDI) into the US. From what Tax Foundation economists can surmise, the resulting income shifting had a bigger effect on tax revenues than economic growth. But JCT provides few hints as to how they made these calculations or what the specific results were. Similarly, certain Subpart F changes in the Camp draft are said to encourage U.S. firms to relocate assets such as patents back to the U.S. Again, it is unclear how JCT accounted for these changes.

  By contrast, in a December 2013 dynamic analysis of Britain's corporate tax reforms, HM Revenue & Customs (HMRC) and HM Treasury did account for the added effects of increased FDI from the corporate rate cuts, but did so outside of their general equilibrium model. [6] Unlike JCT, the HMRC and HM Treasury report documents how these calculations were made outside of the model, what assumptions were used, and what effect these results had on the base results of their model.

- **What happens beyond the ten-year window?** JCT limits the display of the results of their model to what occurs within the ten-year budget window even though the full effects of any tax reform plan happen beyond this arbitrary time period. JCT's models showed that the growth effects of the plan were less in the second half of the budget window than in the first half. The question is, what happens to growth after the budget window when all of the economic adjustments from the plan's policies have occurred? Tax Foundation economists asked the JCT if they had results for the end of the transition period beyond the budget window. They were told that all the information that was available was contained in its published report.

[6] HM Revenue and Customs, *Analysis of the Dynamic Effects of Corporation Tax Reductions* (Dec. 5, 2013) at 27, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/263560/4069_CT_Dynamic_effects_paper_20130312_IW_v2.pdf.

If members are to have any confidence that JCT's estimates are accurate and that it is using state of the art tools, then JCT must allow outside economists access to their models for peer review—as they did in their 1997 and 2001 review panels. JCT has made substantial changes to their models over the past decade and it is time they subjected those changes—and the core models—to a review by experts in the field. Transparency is the key to removing the image that JCT is operating a black box and the key to members of Congress getting reality-based analysis.

We are happy to let people get under the hood of the Tax Foundation's Taxes and Growth Model. We will give you a demonstration and let you see the underlying data and functions. We've posted the details of our model on our website so that other economists have access to the equations, assumptions, and data that form the basis of our model.

To be useful to the tax writing committees and Congress, the dynamic models JCT uses must be focused and limited in scope. They need not try to measure and predict the entire economic and political universe. They should not have to anticipate reactions from the Federal Reserve or the legislatures of the European Union (as some have suggested should be done). If we remember only two words of Latin, they should be "*ceteris paribus*."

Overly complex models are of limited use to lawmakers. It should be possible to easily enter the proposed changes in tax parameters, and to quickly run the models while lawmakers are debating them in a hearing room. For example, the Tax Foundation's Taxes and Growth Model fits on a laptop and can handle hundreds of types of changes in a matter of minutes. Questions could be answered in real time during a committee markup—at least in rough terms.

Most critically, there should be a clear presentation of how tax changes affect the price of key economic factors—especially the price of capital and labor. And any distributional tables should include the economic effect of any tax changes on pre-tax incomes.

The models should be transparent, easy to use, and understand. They should be testable and subject to peer review, because if they are not shown to produce realistic outcomes, they will not and should not be trusted. They should be tools for designing tax legislation and working on the federal budget. They should be made available to members of Congress and their staffs, researchers, students, the media, and any members of the public aspiring to policy wonk status. They should be helpful tools for teaching the economics of how taxes and spending affect growth.

Conclusion

There is a general perception that dynamic scoring is just a smokescreen for cutting taxes without paying for them. That's a fair criticism because some politicians and advocates have oversold dynamic scoring as a cure for everything that ails Washington.

What dynamic scoring is really about is accuracy, credibility, and having tools that guide us toward tax policies that promote economic growth and steer us away from policies that reduce living standards.

Relying on static scoring turns tax reform into an exercise in arithmetic, rather than an exercise in promoting economic growth.

Ultimately, conventional static analysis leaves lawmakers in the dark about the economic consequences of their tax choices. That is economic malpractice. And it makes the process about what is good for government, not what policies raise peoples' living standards and the health of the private economy.

Thank you Mr. Chairman. I'm happy to answer any questions that you may have.

ABOUT THE TAX FOUNDATION

The Tax Foundation is a non-partisan, non-profit research institution founded in 1937 to educate taxpayers on tax policy. Based in Washington, D.C., our economic and policy analysis is guided by the principles of sound tax policy: simplicity, neutrality, transparency, and stability.

Chairman TIBERI. And thank you for endorsing my bonus depreciation bill. Maybe you can work on my colleague from New England.

Mr. HODGE. Anything we can do to help.

Chairman TIBERI. Mr. Buckley, you are recognized for 5 minutes.

STATEMENT OF JOHN BUCKLEY, FORMER CHIEF TAX COUNSEL, COMMITTEE ON WAYS AND MEANS, AND FORMER CHIEF OF STAFF, JOINT COMMITTEE ON TAXATION (WASHINGTON, DC)

Mr. BUCKLEY. Chairman Tiberi, Ranking Member Neal, thank you and the rest of the committee members for the opportunity to speak before you today.

I think it is important to understand that all of the models being discussed today are models that are based on what I call supply-side principles, the notion that increasing the number and supply of people willing to work will automatically translate into greater economic growth. I think that theory is no longer relevant when we have a world economy where there are virtually unlimited supplies of labor overseas and U.S. multinationals responding to market outcomes—this is not due to any distortion—responding to market outcomes are increasingly accessing those unlimited labor supplies to produce goods and services.

I think the question is quite simple when you look at these models: Is the basic economic challenge facing this country a lack of jobs or too few people looking for work? I think we all know what the answer to that question is. Yet, the models that we use today, that are being discussed today, assume that increases in labor supply will automatically translate into increased economic growth. They handle the problem of unemployment in most models by simply assuming it does not exist.

I think it is important for the members to realize that the models have been totally erroneous in their projections in the past. They have predicted severe economic issues from the 1993 tax increases that did not occur. Indeed, the period following the 1993 tax increase was one of fairly robust economic growth. They projected large benefits from the 2001 and 2003 tax reductions. Again, that did not occur.

I think one reason why those projections have been wrong is that the models in large respect are divorced from reality. And here I want to use Professor Diamond's model as an example. He does not analyze the proposal against today's economy. He assumes we have an economy with no unemployment and an economy where people always act in their best interest, guided by the ability, with perfect foresight, to foresee the future.

He does not analyze the actual Camp proposal. He assumes that the Camp proposal will be accompanied by massive reductions in entitlement programs to bring our budget to a sustainable level. The amount of entitlement programs assumed in his model would be at least $2 trillion over the next 10 years, with a lot more to follow.

He assumes that the Camp bill will further reduce the corporate rate to 20 percent, which does have the effect of reducing the increase in the cost of capital that the prior witnesses have talked about that would occur under the actual Camp proposal.

Mr. Chairman, I think this committee is wise to examine dynamic scoring. I don't think it is wise to get involved in the argument of which model is best and which assumptions are appropriate. I think they should look at the underlying principles that

underlie these models and examine why they may no longer be relevant.

In the 20-year period preceding 2008, virtually all employment growth in this country occurred only in the sector of our economy not subject to cross-border competition, and most of that employment growth occurred in health care, government, and retail. Many believe that we cannot rely on those sectors any longer for increased employment opportunities.

Those responses were all due to market forces. A tax reform plan based on the primacy of economic neutrality does nothing to reverse the market forces that have caused a loss of domestic manufacturing employment. Indeed, for reasons that have been expressed before, the Camp bill, because it increases the cost of domestic capital, will reduce incentives to invest in the United States and therefore could be a long-term drag on economic growth.

Chairman TIBERI. Thank you, Mr. Buckley.

[The prepared statement of Mr. Buckley follows:]

Written Testimony of John L Buckley
Subcommittee on Select Revenue Measures
Committee on Ways and Means
July 30, 2014

INTRODUCTION

Chairman Tiberi, Ranking Member Neal, I want to thank you and the other Members of the Subcommittee for the opportunity to appear before you today.

While examining the projected macroeconomics effects of Chairman Camp's tax reform proposal is important, I am hopeful that this hearing will not be the last hearing to examine Chairman Camp's tax reform proposal. Its impact on critical sectors like manufacturing, housing and charities may not be captured in the macroeconomic models being discussed today, but they are important nonetheless.

In my testimony, I intend to offer a broad overview of the models that have been developed to analyze the macroeconomic impact of changes to our tax laws. But more importantly, I intend to ask the question of whether the economic principles underlying those models remain relevant in a world where companies, responding to market forces, are moving production offshore where there is a virtually unlimited supply of labor. In such a world, I believe that enhancing the competitiveness of US businesses and workers through public and private investments in physical and human capital is the key to long- term growth.

In simple terms, the question is whether the largest economic challenge faced by this country is the lack of jobs or too few people looking for work. I believe we all can agree it is the lack of job opportunities. Yet, the macroeconomic models discussed today assume that expanding the number of people looking for work (labor supply) will result in

increased economic growth. Most handle the problem of unemployment by simply assuming it does not exist.

As a result, the models encourage the enactment of tax policies that could reduce the competitiveness of domestic businesses in the world economy. For example, the staff of the Joint Committee on Taxation (JCT staff) analyzed Chairman Camp's tax reform plan utilizing the macroeconomic model that they developed. Using that model, they projected that the Camp proposal could reduce domestic business capital from what would be expected under current law, hardly positive for the goal of enhancing the competiveness of the domestic economy.

MULTIPLE MODELS AND ASSUMPTIONS

All of the macroeconomic models being discussed today are based on extraordinarily complex mathematical formulae. The projections produced by any one model are completely dependent on the structure of the model and the assumptions used. It is important to understand that there is no consensus in the economic community on a single model and there are many differing opinions on basic assumptions to be used.

As a result, the JCT staff used two models and an array of different assumptions in their macroeconomic analysis of the Camp proposal.

The Congressional Budget Office (CBO) has followed a similar approach in the past. "CBO does not believe that any single model can adequately explore the macroeconomic implications of fiscal policy: the best that analysis can do is to combine the separate insights that they can glean from different models."[1]

The concluding paragraph of the recent Business Roundtable study of the Camp proposal contains caveats similar to the concerns that led the JCT staff to provide an array of models and assumptions in their report to Chairman Camp. It states that the results of any one study of the impact of tax reform are "at best suggestive".

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[1] CBO, "Analyzing the Economic and Budgetary Effects of a 10 Percent Cut in Income Tax Rates" (Dec. 1, 2005),page 1. CBO Issue Brief.

Thus, it is clear that a serious examination of the macroeconomic effects of tax reform should not rely on the results of a single model with one set of assumptions.

RESULTS OF ANALYSIS USING JCT MODEL

The JCT staff has developed its own model (JCT model) for purposes of analyzing the macroeconomic impact of tax legislation. The JCT model, like all of the other models discussed today, is a supply-side model, based on the assumption that the amount of domestic economic activity is determined by the supply of labor and capital. In the long run, aggregate demand is assumed to equal supply; that is, no unemployment or unused capital. As a result of those assumptions, increases in the number of people willing to work (labor supply) or business capital are projected to result in greater economic growth.

Using their model, the JCT staff analyzed the impact of the Camp proposal following basic rules used in revenue estimating. They analyzed the actual Camp proposal and did not assume any legislative changes not contained in the proposal or any modifications to the actual Camp proposal. They utilized the most recent economic projections of the CBO, which means that their model contemplates an economy with substantial short-term levels of unemployment.

Those features of the JCT model may not be a surprise to many Members of this Subcommittee since they are a logical extension of the way in which the JCT staff does revenue estimates. But, as will be explained below, those features depart from the structure of most macroeconomic models developed by other governmental bodies, academics, and think tanks. However, they are consistent with the structure of models used by private corporations in business planning. Not surprisingly, they need to plan in the context of actual economic conditions, not a hypothetical economy based on "counterfactual" modeling assumptions.

The JCT presents the results of its model under 6 different sets of assumptions concerning responsiveness of labor supply to rate reductions and monetary policy of the Federal Reserve. The model shows modest increases in gross domestic products after 10 years under each set of assumptions relative to what would be expected under current law. The projected increases range from 0.1% to 0.6%.

On the surface, the JCT model shows positive, but modest, effects from the Camp proposal. But, when you examine the details, a less positive picture emerges.

The Camp proposal is projected to increase economic growth in a manner reminiscent of economic stimulus legislation. It would provide a net $590 billion reduction in individual income taxes over 10 years (not including additional individual income tax revenues from the impact of the business reforms). Since the proposal is essentially revenue neutral, it would result in a net $590 billion tax increase on corporate income and business income of individuals. Since individuals have greater proclivity to spend, that shift of tax liability is assumed to increase demand for goods and services. In the context of current economic conditions with substantial unemployment and unused business capital, the increased demand is projected to result in greater economic growth. This stimulus effect may be the primary driver of the economic growth projected by the JCT model.

The individual rate reductions would provide an incentive for people to work, leading to an increase in the supply of labor. Since the JCT model assumes that in the long run there is full-employment, the increased labor supply also results in greater economic growth. However, the projected growth is delayed because of the current levels of substantial unemployment.

The positive effects of the Camp proposal flow from those two effects of the net $590 billion reduction in individual income taxes. They come at a price. Because of the net increase in business taxes, the JCT concludes that the Camp proposal overall "is expected to increase the cost of capital for domestic firms, thus reducing the incentive for investment in domestic capital stock." The increased cost of capital will not be uniform for all businesses. Businesses, like many manufacturers, that

are capital intensive or have large research costs would see the largest increase in the cost of capital.

Not surprisingly, the increase in the cost of capital is projected to result in a reduction in business investment relative to what is currently projected. Also, that increased cost of capital is projected to result in a small reduction in savings by individuals.

Under the JCT model, over the next 10 years, the net effect of those positive and negative impacts is a modest increase in economic growth. In the short term, the negative effects of the reduction in business capital are muted because there is unused business capital in our current economy. Also, the Camp draft defers the repeal of accelerated depreciation until 2016, delaying the negative impact of that change. But, a statement in the JCT macroeconomic analysis suggests that the Camp proposal could be negative in the long term for business investment. "Over time, the cumulative effects of the repeal of [accelerated depreciation] and amortization of intellectual property begin to outweigh the positive incentives from reduced rates in standard [JCT model] simulations."

The JCT analysis does not answer the question of whether the long term stimulus and labor supply impacts of the individual tax reductions will offset the long term, negative impact on business investment.

OTHER MACROECONOMIC MODELS

Regardless of one's views concerning the merits of the JCT model, it is difficult to disagree with the conclusion that the Camp proposal would increase the cost of capital for domestic firms, resulting in lower domestic business capital. The net $590 billion tax increase on business income is a fact that should eliminate the possibility of debate. Moreover, the corporate rate reductions in the Camp proposal largely benefit existing corporate investments, whereas, the "business reforms" in the Camp proposal largely reduce incentives for future investments.

Other models have projected substantially larger growth effects from the Camp proposal, notwithstanding its effect of increasing the domestic

cost of capital. One example is the model that was developed by Professor Diamond and his colleague, Professor Zodrow, and used in their study of the Camp proposal commissioned by the Business Roundtable (Business Roundtable model). That model had a different outcome from the JCT model largely because it was modeling a different economy and different proposal.

Consistent with the structure of most macroeconomic models, the Business Roundtable model did not attempt to analyze the impact of the Camp proposal on our actual economy. Instead, it starts with a hypothetical economy constructed through counterfactual assumptions.

Macroeconomic models based on supply-side principles have always had conceptual difficulties in modeling an economy with unemployment or unused business capital. In such an economy, increases of labor or capital do not result in economic growth; they merely increase the supply of unused labor or capital. The Business Roundtable model solves that conceptual difficulty by simply assuming that in all periods there is no unemployment and the supply and demand for capital are in equilibrium. As a result, the model projects immediate increases in economic growth from a larger supply of labor even though there is substantial unemployment in our economy.

Many of us do not always conduct our affairs in a manner designed to maximize our long-term financial condition. Our ability to do so is limited by our inability to accurately predict the future. As a result, many individuals may not fully respond to the incentive effects of the rate cuts. The JCT model assumes that individuals are "myopic"; they act on the basis of current conditions without the ability to accurately predict the future. The Business Roundtable model assumes that we have an economy in which individuals always act in their best interest and, in doing so, they have the benefit of "perfect foresight"; that is the ability to accurately predict future economic conditions and governmental actions. The assumption of perfect insight is one reason why the Business Roundtable model has more favorable projections than the JCT model.

After creating a hypothetical economy through "counterfactual" assumptions, the Business Roundtable model creates a hypothetical legislative proposal quite different from the Camp proposal.

There appears to be a consensus among economists that a well-designed macroeconomic model should not project positive economic benefits from proposals that continue our fiscal policies that are unsustainable over the long term. The need to finance the growing deficits would "crowd out" private capital, eliminating the potential benefits of the proposal. As a result, most models will project positive outcomes only if the Federal budget is placed on a sustainable path. To "solve" this problem, the models assume the legislative proposal being analyzed will be accompanied by enactment of tax increases, entitlement reductions, or a combination thereof.

In that respect, the Business Roundtable model is consistent with the structure of most models. It assumes that the Camp proposal will be accompanied by dramatic reductions in entitlement programs that would result in Federal debt as a percent of our economy not growing from current levels. Recent estimates from the CBO suggest that accomplishing that goal would require entitlement cuts totaling $2 trillion over the next ten years with even greater reductions thereafter. The reductions are assumed to have no negative effect on the economy because of the model's assumption that we will always have a full-employment economy.

The Business Roundtable model does differ from most other models in one respect. It modifies the Camp proposal by assuming further reductions in the corporate rate to approximately 20%. This modification to the Camp proposal has the benefit for modeling purposes of substantially reducing the adverse impact on domestic business investment that would occur under the actual Camp proposal. But, it does result in a hypothetical proposal that violates the Chairman's commitment to a revenue-neutral reform using existing revenue estimating methods.

Then, the model analyzes the effect of the hypothetical proposal on the hypothetical economy using one set of highly uncertain assumptions. One the key assumptions in the Business Roundtable model is the

assumption that corporations will substantially reduce tax-motivated income shifting in response to the reduction in corporate rates and that reduction will begin immediately. The report to the Business Roundtable acknowledges that assumption is an "important determinant" of the model's results and it also acknowledges that the extent to which corporations will actually reduce income shifting is unclear.

Finally, consistent with the structure of other models, the Business Roundtable model makes one final intellectual leap. It assumes that the projections based on analyzing the impact of a hypothetical proposal on a hypothetical economy using highly uncertain assumptions is predictive of the impact of the actual Camp proposal on our actual economy.

It is no surprise that macroeconomic models like the Business Roundtable model have been consistently wrong in their past projections of the macroeconomic effects of tax legislation. One striking example of wildly inaccurate projections occurred in the context of the 1993 deficit reduction legislation. Then Rep. John Kasich said in the Floor debate that virtually all economic projections said that the bill would kill jobs. His observation was accurate, but the projections were wrong. One of the strongest periods of economic growth in recent history occurred after the enactment of the 1993 tax increases.

TIME TO EXAMINE UNDERLYING PRINCIPLES

I would encourage this Subcommittee not to become part of the debate among economists concerning whose model is the best. Instead, an examination of the supply side principles underlying all of these models is in order.

During the last 30 years, most major tax legislation has been shaped by supply side principles and the notion that market outcomes not affected by tax incentives offer the best path for economic growth. The Camp proposal is consistent with those concepts, responding to the call for an "even playing field" not affected by tax incentives.

A recent article by Sandile Hlatshwayo and Nobel Laureate economist Michael Spence suggests that those economic theories have little relevance now when " the global economy has an abundance of human resources and they are becoming more accessible as time goes on."[2] Those resources are becoming more accessible because multinationals have become adept at creating and managing global supply chains and they are getting better all the time.

The Spence article looks at employment growth in the US between 1990 and 2008 in the tradable sector of the economy (the sector subject to cross-border competition) and the non-tradable sector. Not surprisingly, virtually all of the domestic employment growth during that period (97.7%) occurred in the non-tradable sector, with employment in government, healthcare and retail accounting for most of that growth. The article concludes that there is " a long-term structural challenge with respect to the quantity and quality of employment opportunities in the United States" since continued large employment growth in those non-tradable sectors is unlikely.

In the opinion of the authors, the domestic employment challenge is not the result of market failures. Multinational enterprises moving jobs overseas are doing exactly what the market is telling them to do. A tax reform plan based on the primacy of market outcomes will not reverse the declines in domestic manufacturing employment. Indeed, a tax reform plan like the Camp plan could worsen domestic employment challenges by repealing broad-based incentives for domestic investment under the guise of economic neutrality while liberalizing tax rules for the overseas operations of US multinationals. Those provisions would create a playing field that tilts in favor of investments overseas.

Perhaps, one goal of tax reform should be an "even playing field". Narrowly targeted tax benefits need to be carefully scrutinized. However, even though it may violate concepts of economic neutrality, I believe that the even playing field should tilt in favor of domestic investment. It is especially important to not have an even playing field

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[2] Michael Spence and Sandile Hlatshwayo, " The Evolving Structure of the American Economy and the Employment Challenge", Council on Foreign Relations, March, 2011.

that tilts in favor of foreign investment, as would be the result under the Camp proposal.

I would like to thank the Subcommittee, once again, for inviting me to testify today and would be happy to answer any questions you may have.

Chairman TIBERI. Mr. Foster, you are recognized for 5 minutes.

STATEMENT OF J.D. FOSTER, DEPUTY CHIEF ECONOMIST, U.S. CHAMBER OF COMMERCE (WASHINGTON, DC)

Mr. FOSTER. Good morning, Chairman Tiberi, Ranking Member Neal, Members of the Committee. My name is J.D. Foster. I am the deputy chief economist at the U.S. Chamber of Commerce. Thank you for the opportunity to testify this morning on dynamic analysis of the Tax Reform Act of 2014.

I always enjoy when an esteemed tax lawyer pretends he is an economist. I would love to have the opportunity to give a brief before the U.S. Supreme Court. That would be great fun as an economist. I probably wouldn't do very well, but I would enjoy it.

Mr. Buckley notes, quite correctly, that the models we tend to use are supply side in nature, and indeed they are, and they do, in fact, assume a certain level of full employment. That is the same assumption, I should point out, that the Congressional Budget Office makes, that despite the poor performance of our economy in recent years, the economy will, in fact, get to full employment. It is, in fact, the forecast of the administration, which forecasts that we will, in fact, get back to full employment.

So one can, of course, question whether or not that will ever be the case under current policies, but at least that is the forecast in the basis of the modeling.

Returning to Chairman Camp's proposal, many lessons have been drawn from this, and I will summarize them, the five key lessons regarding dynamic analysis, as follows.

First, the Joint Tax Committee proved dynamic analysis of tax policy can be done credibly, refuting longstanding assertions to the contrary by some.

Second, dynamic analysis remains roughly equal parts art and science.

Three, it remains important to consider a variety of models under a variety of assumptions. As they gain experience, analysts should be able to settle on a single primary model and assumption set. But the tools are not there yet. Consequently, it remains important at this stage to give heed to each model's results under a variety of assumptions.

And with respect to the tax reform process itself, the most important lesson of all by far, the amount of additional growth required from tax reform should be made explicit and specific at the outset. Comprehensive tax reform offers a unique opportunity to strengthen the U.S. economy substantially compared to what it otherwise would be, but there is a lot of work, as evidenced by the tremendous effort that went into the Camp plan, and it would ultimately engage the whole Nation. The expected results should justify the effort.

Proponents of pro-growth tax reform long been handicapped at the outset, but in a manner only now apparent. Tax reform is typically required to meet a variety of ex ante, identified, and precisely quantified design criteria. One such criteria is revenue neutrality. A second is distributional neutrality. Each of these can be justified as necessary to reform, but each is likely to limit the ability of tax reform to improve the economy.

In addition, many tax provisions of little or no overall economic consequence hover over tax reform. It is likely some would be pre-

served, further reducing the extent of other changes that would be expected to benefit the overall economy.

In contrast, the most important criterion of all, a stronger economy, has been left generic and loose, and thus repeatedly suffered at the expense of the other criteria.

Tax reform's chief objective is a stronger economy. Yet, according to the body of analysis available to date, an honest appraisal must conclude the Camp proposal shows a fairly modest improvement in economic performance, likely much less than intended.

How did this come about? What constrained the effort so that it was unable to produce the kind of game-changing economic gain intended and what should be expected? Perhaps the models used for data economic analysis are yet too rudimentary to capture properly the full magnitude of growth effects from tax reform. Perhaps.

Much of the answer is certainly that while a significantly stronger economy was the goal, the size of required gain was not specified. As has been common in the past, whatever additional growth was anticipated, the result was accepted as the best one could do, even if it meant the best was not very much.

In contrast, major design criteria such as revenue and distributional neutrality were met with fair precision. Put simply, in a contest of competing requirements, this was not a fair fight. Substantially stronger growth never had a chance. Fortunately, the problem being clear, the solution is equally clear. Tax reform should proceed with a definite, specific, realistic, and quantified goal for a stronger economy.

Deciding tax reform's goal for economic improvement is a debate unto itself. To advance the debate one could contemplate an economic growth budget. How much economic growth is lost to current policy and how much economic growth are we willing to spend through the Tax Code? The analogy to tax expenditure analysis is obvious. Here we are not talking about the revenue effects of individual provisions, but rather the aggregate economic effects of tax policy overall.

Among competing goals, economic growth should be treated as first among equals in the formulation of comprehensive tax reform. As we have learned, this requires the goal to be explicit, not merely a stronger economy, but how much. Such an explicit goal also means we will have a clearer understanding of the economy budget, how much economic growth we are willing to give up through the Tax Code to achieve noneconomic goals.

Such a goal and such a debate is only possible because of the progress to date in dynamic analysis. This progress must continue for the analysis to be credible, and reliable, thus for the projected economic improvement to be credible, and thus for the comprehensive tax reform to be surely successful.

Thank you, Mr. Chairman.

Chairman TIBERI. Thank you, Mr. Foster.

[The prepared statement of Mr. Foster follows:]

Statement of the U.S. Chamber of Commerce

ON: Dynamic Analysis of the Tax Reform Act of 2014

TO: THE SUBCOMMITTEE ON SELECT REVENUE MEASURES COMMITTEE ON WAYS AND MEANS OF THE U.S. HOUSE OF REPRESENTATIVES

BY: J.D. Foster

DATE: July 30, 2014

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BEFORE THE SUBCOMMITTEE ON SELECT REVENUE MEASURES
COMMITTEE ON WAYS AND MEANS OF
THE U.S. HOUSE OF REPRESENTATIVES

Hearing on "Dynamic Analysis of the Tax Reform Act of 2014"

Testimony of J.D. Foster, Ph.D.
Deputy Chief Economist
U.S. Chamber of Commerce

July 30, 2014

Good morning, Chairman Tiberi, Ranking Member Neal, and distinguished members of the Committee. My name is J.D. Foster and I am the Deputy Chief Economist at the U.S. Chamber of Commerce. Thank you for the opportunity to testify today on the dynamic analysis of the Tax Reform Act of 2014.

The Tax Reform Act of 2014 was a landmark event in modern tax policy, as was the companion dynamic analysis released by the Joint Committee on Taxation (JCT). Many lessons regarding tax reform have been drawn from these events. I will, however, limit my remarks here to the lessons regarding dynamic analysis, and I summarize these in five points as follows.

With respect to the modelling exercise:

1) The JTC proved dynamic analysis of tax policy can be done credibly, refuting longstanding assertions to the contrary by some;
2) Dynamic analysis remains roughly equal parts art and science;
3) Thus, it remains important to consider a variety of models under a variety of assumptions with the intent that their respective results bracket a reasonable assessment of the policy's consequences. As they gain experience with the models and the process, analysts should be able to settle on a single, primary model and assumption set, but the tools are not there yet;
4) Consequently it remains important at this stage to give heed to the results from each of the models and under a variety of assumptions, without suggesting that this or that set of results is the right one.

And, with respect to the tax reform process itself, the most important lesson of all:

5) The amount of additional growth required from tax reform should be made explicit at the outset.

Growth as Explicit Objective

Of these five points, the fifth – an explicit growth goal at the outset – is by far the most important for enactment of comprehensive tax reform intended to improve economic performance, though its execution depends in part on continuing progress perfecting dynamic analysis. Comprehensive tax reform offers a unique opportunity to substantially and

permanently increase the size of the U.S. economy compared to what it otherwise would be. Perhaps no other policy reform offers such promise. The converse of this statement is recognition of how much damage policy errors in the current tax code do to fundamental processes of economic growth – work, saving, investment, and the pursuit of greater efficiencies – and therefore recognition of the importance of correcting those policy errors through comprehensive tax reform.

The tremendous effort that went into the Camp plan, and the requisite work to get a plan ultimately to a President's desk, underscore the enormous effort and care required to enact comprehensive tax reform. It would engage the nation in a rare, robust, and wide-ranging debate over national priorities, and it would consume prodigious amounts of congressional calendar and presidential political capital. If the primary goal is, as it should be, to make good on the promise of a stronger economy, then the expected results should justify the effort.

Proponents of a stronger economy through comprehensive tax reform have long been handicapped at the outset, but in a manner perhaps only now truly apparent. Comprehensive tax reform is typically required to meet a variety of ex ante precisely quantified or identified design criteria. However, the most important criterion of all – a stronger economy – has been left generic and vague, and thus repeatedly suffered at the expense of the other criteria. This is a problem. Fortunately, having defined the problem, an effective solution is relatively easy to adopt. Going forward, comprehensive tax reform should be guided by an explicit and quantified goal for increasing economic output and income.

Economic Growth – First Among Equals

Comprehensive tax reform raises a panoply of constraining requirements contesting with the growth objective. Unlike just about any other policy Congress might consider, most Americans are directly and personally touched by the tax system in one fashion or another. This makes tax reform a uniquely personal political endeavor. Common requirements imposed on tax reform are largely dictated by political considerations specifically to inoculate against certain political concerns.

Revenue neutrality, for example, isolates the question of how to tax from the question of how much to tax in the aggregate. Conservatives then need not fear tax reform becoming an excuse for a tax hike, while liberals need not fear tax reform being hijacked for a tax cut. Tax reform is difficult enough without these suspicions, yet barring tax reform from reducing the overall tax burden tends to limit the extent of economic gain tax reform can achieve.

A second, politically dictated requirement often imposed on comprehensive tax reform is distributional neutrality – holding constant the average tax rate levied on low-, middle-, and upper-income individuals and families. Simply put, liberals generally fear a shift of tax liability onto low-income citizens, while conservatives pushing for stronger economic growth oppose hiking taxes on capital income and gains typically earned by upper-income taxpayers.

Distributional neutrality largely inoculates tax reform from these burden shifting concerns. Yet distributional neutrality, like revenue neutrality, can also impose significant

limitations on how tax reform could improve economic performance, such as through lower tax rates of workers, small businesses, and corporations, and such as lower tax rates on capital income and capital gains, and through expensing of capital purchases, and by adopting a territorial tax system.

In addition to revenue and distributional neutrality, other considerations cum requirements demand attention. Many popular tax provisions of little or no overall economic consequence are threatened by comprehensive tax reform; likely some would be preserved in tax reform, reducing the extent of other changes that would be expected to benefit the overall economy.

Giving Growth a Fair Chance

As Chairman Camp has emphasized, tax reform's chief objective is a stronger economy. The Chairman worked diligently to release the first comprehensive tax reform plan in many years, a plan intended to meet the chief objective. According to the body of analyses available to date, an honest appraisal must conclude this plan shows a fairly modest improvement in economic performance, likely much less than intended. How did this come about? What constrained the effort so that it was unable to produce the kind of game changing economic gain intended and which should be expected?

Part of the answer may be that the models used for dynamic analysis are yet too rudimentary to capture properly the full magnitude of growth effects from tax reform. Only future work to improve the models will show whether this is true.

Much of the answer is certainly that while a significantly stronger economy was the goal, the size of the necessary improvement in the economy was not specified. As has been common in the past, whatever additional growth was anticipated to result was implicitly accepted as the best one could do even if it meant the best was not very much.

In contrast, major design criteria such as revenue and distributional neutrality, along with certain other presumed policies like preserving the Earned Income Tax Credit and the exclusion for employer-sponsored health insurance were met with fair precision. *Put simply, in the contest of competing requirements, this was not a fair fight; substantially stronger growth never had a chance.*

Fortunately, the problem being clear the solution is equally clear – tax reform should proceed with a definite, specific, realistic, and quantified goal for a stronger economy.

Setting a Goal

Deciding tax reform's goal for economic improvement is a debate unto itself and cannot be settled here. However, it is possible to advance the discussion. The most obvious goal is for tax reform to produce the greatest improvement in economic performance possible. Once the best available models are found by JTC, they could be used to calculate this figure and then perhaps this figure should then guide for tax reform thereafter.

Embracing the greatest possible economic improvement is as obviously impractical as it is obvious. Even after tax reform, the tax code will be called upon to accomplish a variety of economic and social policies, the most obvious of which is the revenue goal.

While much federal spending is clearly supportive of economic growth, much is also dedicated to a variety of humanitarian and social policy goals with at best tangential economic benefits. This is not the occasion to debate the propriety of these goals or the policies implemented to achieve them, but from a purely economic standpoint it follows that if the federal government through these non-economic policies requires 18 percent to 20 percent of Gross Domestic Product in taxes as per the historical norm, then the economy will be substantially smaller than it could be under a lower revenue requirement, all else held equal. Thus a reasonable alternative might be that tax reform must capture at least half the additional growth that would be possible under an ideal tax system collecting the requisite amount of revenue.

An ideal tax would minimize the amount of economic loss given the revenue goal, whereas the current tax system results in far more loss. How much more loss is yet to be determined, but suppose the JTC's models indicated the maximum achievable economic improvement through tax reform given the current revenue requirements is 14 percent. One possibility for sake of debate would be that comprehensive tax reform should at least raise output by 7 percent once a transition period concludes.

Under this approach, all other industrial and social policy goals demanded of the tax code would be implicitly budgeted to cost in terms of lost economic output and income no more than half of what is possible to achieve through tax reform. Tax policy uses tax expenditures to indicate the revenues foregone for non-tax purposes due to individual tax provisions. The approach suggested here sets a maximum economic expenditure to indicate the aggregate income and output foregone through the tax code in toto.

Establishing the explicit goal for improvement in economic performance arising from comprehensive tax reform is a debate unto itself. It is a good debate to have. Then, once a targeted economic gain is established at the outset, this economic goal can then go toe to toe in a fair match in the ensuing debates with the goals of revenue neutrality, distributional neutrality, and all the other legitimate concerns raised by tax reform. If the resulting product achieves anything less than the stated goal, then the crafters would be sent back to the drawing board to try again.

Explicit Growth Goals Requires Credible Models

For comprehensive tax reform to produce substantial gains in economic performance, the legislative process must be guided by an explicit and stated measure of improvement. For those involved in the process to accept an explicit and stated goal, analysts supporting policymakers in the endeavor must have tools of sufficient credibility, reliability, and facility to provide reasonable judgments as to whether the growth goals would be met or not.

The JTC's analysis of the Camp tax reform plan represents a remarkable advance in this regard. Indeed, without JTC's progress toward a functional dynamic analysis capability, and as well the parallel progress by the Congressional Budget Office (CBO), it would be impossible to have a testable economic gain objective and consequently successful comprehensive tax reform would continue to be sorely handicapped.

In part, the JTC's achievement is remarkable because so many have argued for so long that producing a credible dynamic analysis of comprehensive tax reform was simply too difficult. While still climbing the learning curve, the JTC has dispelled this myth.

The JTC's analysis also demonstrated the acceptance of certain basic propositions regarding modelling. For example, not long ago some analysts continued to argue the models should pretend the United States economy is alone in the universe, rather than acknowledge there's a great big global economy out there – the closed versus open economy debate. Often, those pressing the closed economy case would raise all manner of extraneous considerations, such as the difficulty of modelling exchange rates. While modelling exchange rates reliably is very difficult even for models designed specifically for the purpose, it turns out also not to be all that important to dynamic analysis of tax policy. And so, sensible models now acknowledge in their essentials that the U.S. is part of a global economy, capable of importing and exporting saving along with goods and services.

Another advance in dynamic analysis has been the coalescence of analysts' views regarding certain key parameter values for these models. In almost all cases, these parameters, most especially for the responsiveness of the supply of labor and saving, are estimated in other contexts by entirely different kinds of models. Only time and additional analysis will tell whether these currently assumed parameter ranges at least bracket the "correct" values for the dynamic analysis models, but broad census about these matters at least permits us to move on to more structural questions while refining the parameter estimates.

It is also clear, however, that the learning process has far to go with respect to broader questions of model design. The JTC, for example, used two models – the Macroeconomic Equilibrium Growth Model and an Overlapping Generations (OLG) Model. Each is a fine model, yet each was originally designed for other purposes and was adapted by the JTC for its dynamic analysis. This then requires extra care to prevent the respective models' design idiosyncrasies from entangling the results in extraneous issues.

It is curious the JTC did not include in its analysis a model designed specifically to examine tax policy's effects on growth, though the OLG model is a close cousin. The advantages of such a model become apparent if one considers the three-step essentials of how the CBO, Administration forecasters, and others doing medium-run economic forecasts proceed.

The obvious first step is to gauge the current state of the economy and its immediate trajectory. In many respects, this is one of the most difficult tasks even for current forecasting. Stage two is to develop a measure and forecast of the economy's potential output, such as the potential output forecast developed by CBO. This forecast of potential output anchors the overall forecasting exercise.

History and theory agree that if an economy is underperforming as the U.S. economy is today, then over time and usually in fairly short order markets will heal and the economy will eventually return to full employment, achieving its potential output. (This, of course, assumes no major unforeseen shocks and no adverse future policies.) Forecasters then describe the economy's recovery path from its current state to its full employment state at some future date, which means above normal growth rates in the economy over the duration of the recovery period.

Now bring dynamic analysis into the picture. Tax reform's goal is to raise the future level of economic output. Fundamentally, this means estimating the extent of increase in the level of potential output once all adjustments have taken place. This is the most critical step in dynamic analysis.

Once a new trajectory for potential output is established, what remains is to determine how the economy's actual path will differ, and hopefully increase, given the shift from the old to the new trajectory of potential output. The analyst or the model will alter the economy's actual path starting from its current state, either by accelerating near-term growth or extending the period of above-normal growth rates until the new, higher trajectory of potential output is attained.

Determining the extent of increase in potential output in the economy arising from a change in policy is the central result in dynamic analysis. Thus it is curious the JTC does not include among the models it uses a model with the trajectory of potential output as its central focus, and instead uses models with many other features, many of which are at best tangential to dynamic analysis.

A Caveat, and a Recommendation for Further Progress

The JTC's analysis showed that this work can be done credibly, but it also showed there is much left to learn. For this reason, it remains important for dynamic analysis of policies to be performed using a variety of models under a variety of parameter assumptions. The hope and expectation is for the results to bracket the correct answers, and offer some sense of the range of uncertainty about those answers.

This uncertainty, in turn, suggests the importance in considering the results of giving weight to each set of results. The natural temptation if one supports a policy is to emphasize the stronger results and if one opposes a policy to emphasize the weaker. Such emphasis however suggests one has greater confidence in one model or set of parameters than another, and such confidence appears as yet unwarranted.

I would like to conclude with a recommendation for the Committee's consideration. In January, 1997, the JTC with the urging of then Chairman Bill Archer sponsored a symposium on dynamic analysis. Participants included most of the leading researchers in the field and the symposium is widely regarded as a landmark event and part of the intellectual foundation that led almost two decades later to the JCT's recent dynamic analysis of Chairman Camp's plan.

My recommendation is for the JCT to hold a second such symposium using as part of its focus the analysis it did of the Chairman's proposal. The symposium would once again bring together the leading thinkers on economic modelling of policy changes, and would have as its dual focus a discussion on the state of dynamic analysis and next steps, and an examination of the most pro-growth tax reform policies in light of the current state of dynamic modelling.

9

Chairman TIBERI. Before I ask a question, Mr. Buckley, you took issue with a portion of Mr. Diamond's written testimony. I would like to comment on a data point in your testimony—in your written testimony—that I believe is incorrect, in your main thesis about the effects of the Camp draft on business investments. You rest this claim that the Camp proposal, and I am going to quote from your written testimony, "would result in a net $590 billion tax increase on corporate income and business income of individuals," end of quote.

So you cite the JCT macroeconomic analysis for this quote, but I think you forget a huge caveat that JCT included in their anal-

ysis. In fact, the $590 billion claim includes revenue raisers on pass-through businesses, but ignores the benefits of actual cuts in the individual rate on those same businesses and completely ignores the AMT repeal on those same pass-through businesses. And while we don't have exact numbers, the business tax cuts amount to hundreds of billions of dollars, wiping out a large portion of those tax increases that you cite. So I just wanted to make that point.

Mr. BUCKLEY. Mr. Chairman, may I respond——

Chairman TIBERI. At the end of my questions, you may.

So going to my question, and I would like to ask Mr. Hodge this first, a number of you, including you, Mr. Hodge, recommended changes to the discussion draft and argued that the tradeoff between tax reduction and cost recovery is particularly difficult.

There are several temporary tax policies, as you know, that are designed to speed up cost recovery, but which Congress only extends on a temporary basis, many times retroactively. We have had this debate. I have introduced, as you know, a couple of those that have both passed the House. One, bonus depreciation, which you mentioned. Another, Section 179 small business expensing. Permanent on both without offsetting them with raising taxes elsewhere.

So, first, do you think that we should assume these policies are permanent for purposes of defining tax revenue neutrality and distribution neutrality? That would be one question.

And second, how do you believe including permanent versions of both of these policies as part of the Tax Reform Act of 2014, without the need to offset them with higher taxes elsewhere, would increase economic growth through tax reform——

Mr. HODGE. As I mentioned, Mr. Chairman, we modeled the Camp proposal with 50 percent bonus expensing on a permanent basis and found that it significantly increased the growth potential of the plan. And we have actually modeled your proposal on its own and found that it would achieve quite considerable economic growth, create jobs, and more importantly, lower the cost of capital, which would be a great benefit to workers, it would provide them with better tools.

And we found that generally when it comes to expensing provisions or provisions that allow full cost recovery, that in the long run cost recovery or full expensing ends up paying for itself. In fact, our model shows that it has greater economic benefits than simply lowering the corporate tax rate. We think both should be done, and they should be done at the same time, and then you will get even greater economic growth.

But certainly I think those are the kind of provisions that, unfortunately, because of the static requirements that Chairman Camp was working under, required this tradeoff. And we really don't think it was necessary. You could have done both. You could have lowered the rate and moved toward expensing, and that would have boosted tremendously the growth potential of the plan.

Chairman TIBERI. Mr. Holtz-Eakin, your thoughts on that——

Mr. HOLTZ-EAKIN. The issue of the baseline is an important one. And right now the baseline has this tremendous asymmetry where if a spending program exceeds $50 million it is extended indefinitely regardless of whether it has been reauthorized by Con-

gress or not, but a comparable provision on the tax side is assumed to expire, and it leads to an imbalance, in my view, in the way policies are evaluated.

The top criteria should be to treat proposals in a fair fashion, and that is a fundamental asymmetry that is built into it. I would treat them both the same, thus the bonus depreciation would be extended. That has been the practice of the Congress, that would be the baseline if we had symmetry between the tax and the expenditure side. And so, I think you should do that, and you would get better information about the real budget outlook, and if you do the dynamic analysis you get better information about the economic policy.

Chairman TIBERI. Mr. Diamond.

Mr. DIAMOND. I agree with their analysis. I think it would be interesting. I think the JCT has actually looked at this in a dynamic analysis and I think that was very useful. I do take and actually used a version of an OLG model, and I take issue with four of the five points that Mr. Buckley raised.

Chairman TIBERI. I thought you would.

Mr. DIAMOND. He was correct on one. But he said it is only supply-side effects, but the 2003 act used my model and we found negative effects in the out years, so that is directly contrary to your testimony.

You dis the idea of perfect foresight, but two very prominent economists in 1987, in a book called "Dynamic Fiscal Policy," on page 10, give this reasoning for perfect foresight: Perfect foresight may seem extreme, but it is actually very useful. Actual deviations in individual behavior are both likely to understate and overstate. So one household may overstate wages and one household may understate wages.

So perfect foresight is kind of the perfect average. But he argues for using a myopic model. A myopic model systematically gets the wrong answer, so you assume everybody makes the same mistake every period. How can we possibly want that type of model over an OLG model, which has a much more reasonable side. So again, that is Auerbach, Kotlikoff page 10.

Supply and demand analysis, it is only supply side. That is false. My model includes both a labor supply and a labor demand. Firms have a derived labor demand. So we have both demand and supply effects. If only supply were to increase, what you would get is you would get an increase in labor supply, but you would also get a reduction in the wage rate. And I would expect any of my Econ 201 students to be able to point that out on a test question.

Finally, this issue of, what do you do with these huge projected budget deficits? And his response is that the model is totally unrealistic because we don't deal with it. We don't actually assume there is a massive reduction in transfer payments. I just assume not to look at it, because I can't tell you how you all are going to solve that problem.

But I can tell you this: If I assumed that the problem was solved by tax increases, then that implies that tax rates would be higher and economic distortions would be larger, and thus the positive effects of tax reform would be bigger, not smaller. So if I am wrong anywhere, I am wrong for underestimating the size of the effects.

Chairman TIBERI. Mr. Buckley.

Mr. BUCKLEY. Thank you, Mr. Chairman, for the opportunity to respond. First of all, my numbers come out of the Joint Committee analysis. What is indisputable from the Joint Committee analysis, and from some of the prior witnesses, is that the Camp draft will increase the cost of domestic capital, leading to projected reductions in business investment. That is the result of the Joint Committee analysis using their own derived model.

The point I am trying to make about the economic assumptions is that they are quite unrealistic. It is not ultimate full employment that is assumed in some of these models, it is that we have a full employment economy today and at all times.

Increases in labor supply can automatically translate into increased economic growth only an economy of full employment, otherwise they just add to the current surplus of unused labor supply. These are I think important issues.

Now let me apologize if Professor's Diamond's model got it right in 2003. Then Representative John Kasich stood on the floor of the House of Representatives and said every economic model in this country projects that this bill is a job killer. And they were wrong.

These models I think are very imperfect guides to policy. We have a world with unlimited labor supply overseas. If we do not enact policies to increase the competitiveness of U.S. businesses in the world economy, the increased labor supply will not be utilized.

Chairman TIBERI. Okay, thank you. We could have a good debate here. I am going to ask Mr. Foster to comment on my question.

Mr. FOSTER. Thank you, sir.

I think this might be time to refer to something I wrote in my testimony regarding the process with which one would use dynamic analysis in practice. And it starts with how CBO does its beginning forecast. First, we get some sense of where the economy is today. That in itself is difficult. Then CBO has a projection for potential output. That shows we are at full employment whenever we get there, where we would be, and how that trajectory goes over time. And then the forecaster has to figure out some way to draw the line so that we go from where we are to the potential.

What dynamic analysis really does, done properly, is to shift that potential, hopefully up. And then we figure out how does that change the trajectory from where we are to the new potential in going forward. It doesn't assume in practice that we are instantly at full employment. We use that for modeling exercises now because we are still learning how the models work, but in practice one would never do that, any more than CBO today in doing an economic forecast, or the administration, would say, okay, we think instantly we are at full employment.

Now, if we are at full employment, that is fine, today we are not there. So, one would not use that sort of methodology. We are still learning the models, and so we go to the abstraction of assuming we are at potential output today. That is not how dynamic analysis would ever be used in practice.

Chairman TIBERI. Thank you.

Mr. Dubay, do you want to add anything to that?

Mr. DUBAY. That is exactly what I was going to say, that tax reform is about increasing the economy's potential. So when you go back to, say, the 1993 tax hikes, it would be more accurate to say that the economy won't be as strong because of them. We probably would have had stronger job growth had we not raised taxes in the early 1990s, during that decade. Same thing goes for the tax cuts in the early 2000's, the economy wouldn't have grown as strongly as it did had we not cut taxes at that point.

On the issue of the extenders, I think it does hinder tax reform, because think about it, according to Chairman Camp they had to replace a trillion dollars of revenue they wouldn't otherwise had to had you had an equal treatment between tax policy and spending policy under the CBO baseline. So that means that Chairman Camp was forced into even more difficult choices, which included having to extend depreciation lives, which cut down on the growth potential. So I think it is important to equalize the treatment so that we can get better tax policy going forward.

Chairman TIBERI. Thank you.

Mr. Neal is recognized.

Mr. NEAL. Thank you very much, Mr. Chairman. I would like to submit for the record a series of posts from Bruce Bartlett, who served in the Reagan and Bush senior administrations, as well as working on the staff of Representative Kemp and Ron Paul.

Chairman TIBERI. Without objection.

Mr. NEAL. Thank you.

I don't think as we pursue this discussion that the argument should come to one side favoring tax increases. We are trying to figure out the manifestation of sound policy that will promote economic growth. I think we can all agree upon that.

And at the same time, I must tell you, as you practice economics, you can see how that doesn't always translate into the certainty of the speeches on the House floor or the meetings in the Oval Office, as I heard Vice President Cheney when I was invited, it was just a handful of us, to the Oval Office within days of Bush junior becoming President, and we went back and forth on tax policy as the President laid out his proposal.

And the President asked me what I thought, and I thought it was a very honest opportunity for the conversation. And I suggested, Mr. President, why don't we do some modest tax cuts for middle-income Americans and continue to pay down the debt? The rejection didn't come from the President, it came from Vice President Cheney, who had served with me in the House in a prior life.

And I call that to your attention, because even though you give us speculation, which I think is very important as to what outcomes might occur based on what policies, that is not the way it is translated in the course of a campaign. And that is part of the difficulty with the soundness of what has been offered here today in terms of discussion.

Now, Mr. Buckley also referenced a key point. I remember that discussion as we closed the debate on Clinton's budget in 1993. And the principal architect in the House at the time of dynamic scoring was the majority leader, Dick Armey. He argued, juxtaposed with the position of now Governor Kasich, two points.

One, if we embraced that budget that Clinton offered in 1993—and by the way, credit to Bush senior for the courage that he demonstrated—but if we embraced that Clinton budget in 1993, one of them said, it will take us to fiscal Armageddon.

The other said as the debate closed with the lights dimming, and I recall it vividly, we would head toward the greatest depression since the depression of the 1930s by endorsing and embracing that budget.

Instead, two budgets from Clinton and one from Bush senior took us to the greatest spurt of economic growth in the history of the company.

Mr. Eakin, appreciating the honesty that you frequently bring to these discussions, could you see a path of using dynamic scoring to bring about a sound infrastructure investment proposal for the country, trying to measure those outcomes——

Mr. HOLTZ-EAKIN. I think there is no reason to restrict insights into economic policy to just the tax side of the budget, there is no question about that. I think, if I could—I don't want to take too much time——

Mr. NEAL. No, please.

Mr. HOLTZ-EAKIN [continuing]. It is important to recognize that this is a scoring issue and that most of scoring is about ranking alternative proposals. There are a lot of claims about accuracy. There will always be inaccuracies in this process, static, dynamic, whatever you want to liable it. The future is a very difficult thing to predict, period.

But you should do your very best, as CBO does now and the Joint Committee does now, to sort of put yourself in the middle of the range of outcomes, it could be higher, it could be lower, try to get it right in the middle, and systematically rank things in the right order. And that is the most important thing that you would do if you brought dynamic scoring into the process, is get the rankings right, reflecting the best of our ability to model the economics.

The second thing I would say is, these are models. There is a lot of criticism about how they are not reality. They are not supposed to be reality. The whole point of a model is to extract from reality key features you care about. What are the key features for economic growth, put those in a model, see the growth impacts. And for that reason you shouldn't say, this is what is going to happen. You should say, this is what is going to be improved by this proposal, although the future may happen however it may be.

And so I don't think it does any good to say, well, there was a claim about a model and then we end up having rapid growth or a claim about a model and we had bad growth. Those are two different thanks.

Mr. NEAL. Thank you.

Mr. Buckley, one of challenges that is facing us is this notion of the worker participation rate. Today's announcement that the economy grew by 4 percent—and we still note there are too many people working part time and who are underemployed—and would you finish the position that you were offering earlier with Mr. Tiberi——

Mr. BUCKLEY. Well, my view is that what you need for long-term economic growth is for the United States to be competitive in the world economy. And that requires incentives for domestic investment, whether it is bonus depreciation or current law, you need investments in human capital so our workers are more productive in the world economy.

We have a world economy now. Our companies are very good at accessing this vast supply of labor overseas. And again, let me repeat, all because of market outcomes. This is not a distortion in economic. They are going overseas because the market tells them to do it.

We need to have policies to encourage them to stay here with investments in physical capital and human resources that will make our economy more productive in the long term. You should note some of these projections of economic growth assume that people work longer at lower wages because of the decline in capital investment. That is not my vision of how to improve our long-term economic situation.

Chairman TIBERI. Thank you, Mr. Neal. Having worked for John Kasich for 8 years, he certainly doesn't need to be defended here. But what I think he would say, which I have heard him say a whole lot of times, is that maybe the trajectory changed because of the 1994 election, where the House was taken by Republicans and the Senate was taken by Republicans and the trajectory of spending and the regulatory environment changed. That is what he would say. Again, he doesn't need defending, but since he is not here, he would take issue with a couple of those statements.

I recognize Mr. Paulsen for 5 minutes.

Mr. PAULSEN. Thank you, Mr. Chairman. And we appreciate all the testimony from the witnesses.

I am going to start out more specifically, then expand a little bit more broadly, and I am going to reference a specific tax that was included actually in—repealing a specific tax that was included in the Camp draft. It has had a very negative impact on companies in Minnesota, in my State and around the country. It is the medical device excise tax. And studies have shown that this excise tax has led to job reductions, hiring freezes, reduced investments in research and development and capital infrastructure in the medtech industry.

Mr. Holtz-Eakin, I will just start with you. Can you please describe maybe how repealing this tax and potentially reversing some of these trends could generate economic activity that could be incorporated into a dynamic analysis, and what would the overall effect be of repealing the medical device tax under a dynamic analysis look like——

Mr. HOLTZ-EAKIN. Well, as you know, the American Action Forum has actually done some work on the medical device tax and found that it does have negative impacts on employment in that sector, on investment and innovation in that sector. Those are analyses that one can capture under conventional scoring and should, but the conventional scoring would then have to take those employees and put them somewhere else in the economy, take the income that is lost there and have it generated somewhere else in the economy. Putting that into the dynamic analysis, along with

the other features, gives you a better trajectory of long-run investment, innovation, and growth.

I would say that as a matter of practice you don't want to have to do full-blown dynamic analysis on every proposal. Only large ones merit that kind of treatment.

Mr. PAULSEN. And then I will just expand a little more broadly then. One of the most important parts of developing tax reform legislation is analyzing the tradeoffs between lower rates and then those provisions that narrow the tax base. And, Mr. Hodge, you mentioned earlier that dynamic scoring is really about accuracy, credibility, having the tools that guide us toward tax policies that promote growth.

Now, some of the provisions are of little economic benefit that are in the code right now and clearly should be eliminated to help lower rates, but other provisions have significant economic effects that must be weighed very carefully against the benefit of lower rates. In the various models that all of you have looked at or used to estimate the economic effects of the discussion draft, which revenue raisers, other than general depreciation rules, have a material impact on the economy——

I can just start with Mr. Diamond, and we can just kind of go down.

Mr. DIAMOND. Well, any of the revenue raisers that affect the cost of capital would have had the largest impact on the growth effects. So accelerated appreciation, the research and investment credit, other things like that. In addition, revenue raisers on the individual side, you would want to get the revenue raisers that promote the most efficiency in the economy. So maybe reforming the mortgage interest deduction would have increased growth because it would have reduced the difference in the tax treatment of business capital and housing capital. And so some reform on that front, which I have written on previously, would also help to alter the proposal to get bigger growth effects.

Mr. PAULSEN. Mr. Dubay maybe.

Mr. DUBAY. Yeah, I agree. I agree. Anything that increases the cost of capital has depressing growth effects. One thing, I look at the 10 percent surtax as a pay-for, so that raises that top rate up to 38.3 percent, so I look at that as an opportunity to increase growth by getting that further down.

Mr. PAULSEN. Good point.

Mr. Hodge.

Mr. HODGE. Yeah, I would echo all of those, and I would also throw into the mix the capital gains treatment. And while the chairman's proposal doesn't really increase the effective capital gains rate that much, we think it would have some material effect. And I think, if anything, we should be reducing the capital gains rate back to where it was prior to 2 years ago when it was raised to 20 percent, or now it is 23.8 percent.

So all of those things can materially affect the growth potential of these plans, and really, it is the cost of capital, I will just echo everyone else's sentiment on this, that is the driving force here.

Mr. PAULSEN. Mr. Foster, just from the chamber perspective, just the cost of capital. Any other observation?

Mr. FOSTER. Well, the general rule is that the Tax Code inherently distorts economic activity, and so any movement in tax reform towards reducing those distortions, any at all, is beneficial. What we are not always very good at in economics is determining which ones are most harmful to economic growth and which are not. But the cost of capital, I think we all agree on this panel, is certainly very, very important.

Mr. PAULSEN. Mr. Chairman, I see my time is almost expired. I yield back.

Chairman TIBERI. Mr. Larson is recognized for 5 minutes.

Mr. LARSON. Thank you, Mr. Chairman. And let me reiterate what my distinguished colleague, Richie Neal, had to say before about the importance of these hearings and our distinguished panelists and commend the chairman for providing us the opportunity to learn from sources, exceptional sources, and people that have a great deal to say and have a vast amount of knowledge as well.

And this comes at a critical time in our economy and a critical time when people are thinking through going through a decision-making process. It also comes at a time when Congress, I believe, is at a 7 percent approval rating with the American people. And part of the reason that Congress is at that juncture is because people have a hard time seeing any action or believing what they are saying.

So what I always like to do is to try to apply what I call the Augie & Ray's test to this. Now, I am not an economist, nor am I an attorney, and so these are not pure, econometrics are not going to be applied here. But what you do get at Augie & Ray's is an unfiltered view of the world.

So, for example, listening here today, I am impressed with the varying ways that you can look at the impact of the GDP. But at Augie & Ray's, they would say, don't talk to me about the GDP, talk to me about the JOB. And it is the JOB that the American people are concerned about.

So it is great that we have this discussion, but how would you—and I am going to start with Mr. Buckley—how would you translate this? Because I think it is the responsibility of Congress to demystify these things for the American people so we can build the trust amongst them that policy and decisions like this are important. But how is it that this is going to impact my local manufacturers and those guys that stop by Augie & Ray's, how is a family household impacted by this? What kind of metrics? Or, I forget who used a term, I thought it was very good, what kind of measurements do we have with respect to that impact on those individuals that we can translate into meaningful policy——

And I will start with Mr. Buckley.

Mr. BUCKLEY. Well, I think the first thing you want is a positive business environment in the United States and positive incentives for investment in the United States. I think one agreement, if you are looking for a bipartisan agreement on this panel, is that the Camp bill increases the cost of domestic business, capital, and in the long run it is a negative for investment in the United States.

Now, it has a particularly large impact on capital-intensive industries, largely manufacturing. When people on this panel say it increases the cost of capital, they are talking about the average

cost of capital. It doesn't increase the cost of capital much for financial services businesses because they do not utilize research and development expensing or accelerated depreciation.

It will have a particularly adverse impact on those segments of our economy that utilize those incentives. They will see the biggest increase after cost of capital. And it is those types of jobs that I believe are necessary for middle-class growth and income. And it is those types of investments, and I would say investments in human capital as well, that are necessary for the United States to be productive or competitive in an economy that has worldwide flows of capital.

Mr. LARSON. Isn't this the same problem that we are faced with and other cognizance that the full committee has with trade over this same issue? It is a global economy, and yet this distrust at home amongst individuals over the fact that it is easier for jobs to go overseas, and we get left out in the process. And manufacturing seems to be depart and goes where the lowest common denominator, in this case labor is, so for reasons of profitability. You suggested earlier that we need to have incentives to be here. Do the rest of the panelists agree with that, do you think?

Mr. DIAMOND. I agree that we need to have incentives. I agree with most of what Mr. Buckley just said. On the topic of dynamic analysis, I think there are measures in the models that would be useful, and we need to look beyond strictly looking at GDP. And Mr. Hodge referenced this earlier, is you can have a positive GDP response when capital is declining, and so the GDP response is purely showing that people are working harder. But people like to consume both goods and leisure, so if increases in GDP come only from increased hours at work and possibly lower wages as demand and supply in the models equilibrate, that would be a bad thing.

In my model, I mean, you can look at employment, at wages, you can actually look at welfare, so you could see, and welfare would be a measure that is based on how much consumption do you have both in terms of consumption goods and in leisure time, and then we can measure this theoretical version of welfare. And going back to Dr. Holtz-Eakin's point, this isn't a projection that is meant to say this is exactly the right number. These are meant to compare alternative proposals so that we can reach and manage the U.S. economy to the highest potential growth path.

Chairman TIBERI. The gentleman's time has expired, but anyone else want to comment? Mr. Hodge, you want to comment?

Mr. HODGE. Just very quickly. I think getting to your point on how tax reform can benefit the average person, you can see that in dynamic analysis. For instance, when we analyzed on a dynamic basis bonus expensing, if you look at that, the distributional effects on a static basis, it shows that average people don't benefit at all. But when you look at it on a dynamic basis, after those economic effects have flowed through to pretax incomes, you see that the incomes of everybody have grown by about 2 percent.

That is the real benefit of a dynamic analysis, especially on a distributional basis. You get to see the effects on real people after the economic consequences have flowed through to their wages.

Chairman TIBERI. Mr. Holtz-Eakin.

Mr. HOLTZ-EAKIN. I think if you are talking to your constituents, you can say, look, we have three problems that we know about. We have too few people working. The people who have jobs are not getting raises, income is not going up. And we are at a disadvantage in the global economy, our competition is not fair.

So you could fix some of that with trade, but if you are just talking on tax policy, you can say, look, here is a proposal that the dynamic analysis says improves GDP growth. What does that mean? That means initially more people are working. You can produce more because more people work. That is a jobs problem. Eventually, everyone who wants to work is back at work, and GDP can only go up by making them more productive and generating more income. That means they are getting raises. That is good.

And some of these proposals would actually level the playing field between U.S. and international global competitors. That would be great for purposes of the location of activity in the United States. So this is about getting jobs, getting raises, and keeping our companies here, and that is what it is about.

Chairman TIBERI. Very good. Thank you. The gentleman's time has expired.

Mr. Marchant is recognized for 5 minutes.

Mr. MARCHANT. Thank you, Mr. Chairman.

Several of you have recommended changes to the discussion draft, and in each case you have argued that the tradeoff between rate reduction and cost recovery is difficult. There are several temporary tax policies that are designed to speed up cost recovery, but which Congress only extends for short periods of times and often retroactively. The House has recently voted to make two of these, bonus depreciation and Section 179 small business expensing, permanent without offsetting them with higher taxes elsewhere.

First, do you think we should assume these policies are permanent for purposes of defining revenue neutral and distributionality neutral tax reform? Mr. Diamond.

Mr. DIAMOND. I actually find that a hard question to answer, so I will speak specifically to bonus depreciation. The effects of bonus depreciation are much different whether it is passed on a permanent basis or a temporary basis. If people think bonus depreciation is going to be temporary, it could cause firms to invest in the window and then would lead to decreased investment outside of the window; whereas, if bonus depreciation is permanent, you would have a more constant rising up of investment. And so over a time path, we get very different effects.

So I am not sure how we should make that assumption. I think it is going to be proposal by proposal we would have to think about that differently. But for bonus depreciation, I think it is a pretty complex proposal to look at.

Mr. HOLTZ-EAKIN. I will just repeat what I said earlier, which is for constructing baselines I think you should have equal treatment, and the current treatment is unequal. You could fix that by having the tax law sunset and the spending program sunset, or you could fix that by having current policy extended on both sides. It is my judgment that again and again we have done Section 179, we have done bonus depreciation, it is a sensible assumption to

treat those as permanent in the baseline until the Congress behaves differently.

Mr. DUBAY. I agree with Mr. Holtz-Eakin. I think we should be looking at these as permanent policy. There is a question at some point. At some point, all these policies were put into place with an expiration, so they were temporary at one time or another, but once Congress extends them one or two times, it is subjective as to what criteria you use, but once you have extended them a couple of times, at that point you should assume that they are permanent. It has a great benefit to having a consistent baseline everyone can agree on.

So one of the silver linings from the fiscal cliff tax hikes from last year, we have a much closer current law and current policy baseline. And I think we should be looking at the current policy baseline for revenue to continue that process of getting all on the same page.

Mr. MARCHANT. Let me ask a follow-up question on this before I hear from the rest of you. How would including these permanent versions of these policies as part of the Tax Reform Act of 2014, without the need to offset them with higher taxes elsewhere, increase the magnitude of economic growth inside of that reform——

Mr. DIAMOND. So for bonus depreciation, JCT actually provided a dynamic analysis in a committee hearing, and so they found that bonus depreciation would increase GDP by two-tenths of a percent. So that would be double the——

Mr. HODGE. I think they also found that it raised revenue.

Mr. DIAMOND. It raised revenue. Yeah, it increased the capital stock by 0.6 to 1 percent.

Mr. HODGE. Paid for itself.

Mr. DIAMOND. So, I mean, it would be substantial, especially considering the size of the policy, when you are talking a 0.2 percent increase in GDP for a policy that has a relatively small revenue impact.

Mr. MARCHANT. Mr. Chairman, one last question.

In countries such as Canada that over the years have lowered their corporate tax rate, and other countries that have, have they used a dynamic score, have they used a static score, or have they used projected surpluses in revenue to use up to pay for those——

Mr. HODGE. Every country has done it a little differently, Congressman. Canada has been just cutting their corporate tax rate with hardly any offsets against those rate cuts. In fact, they have seen corporate tax revenue stay very steady throughout the entire period of time, even during some of the recessionary period, and largely because of income shifting. They are benefitting from income shifting in propping up their corporate tax collections.

A country like Slovakia is a very interesting case. When they passed a flat tax more than a decade ago, they sought analysis, dynamic analysis, from about seven several different parties, including like the IMF, World Bank, local universities, and then their own treasury. And then they found one that they felt was probably more realistic, somewhere in the middle.

I think that is a pretty good model. Let's look at outside, have Mr. Diamond, have Tax Foundation, have others do an analysis

and then compare them. I think that is a fairly reasonable way of looking at what the economics profession is doing.

The British Treasury just did a dynamic analysis of their corporate tax rate cuts and found that it produced substantial benefits and increased revenues as a result. So I think this is where the economics profession is moving, and I think it is time that we did the same.

Chairman TIBERI. The gentleman's time has expired.

Ms. Sánchez is recognized for 5 minutes.

Ms. SANCHEZ. Thank you, Mr. Chairman.

And thank you to all of our witnesses for joining us today.

Before I get into my questions, I have to say that I am a bit disappointed by the fact that JCT, who are the people who did the official nonpartisan dynamic scoring for the Republican tax draft, were not invited to be here on the panel today to discuss their work.

And I also hope that this is not the last of our discussions about the desperate need for tax reform at the Federal level, because every day that the Congress waits to do tax reform is another day that we are falling further and further behind other jurisdictions who understand the need to reform.

I certainly don't purport to agree with all of the provisions in the Republican tax reform draft, and that is a draft that has not gotten a lot of warm embrace from its own caucus, but I do believe that that discussion draft deserves some discussion, and very thoughtful and deliberative discussion, about the substance of the bill itself because we have really not had that in this committee. Today we are here to talk about economic modeling.

So because we are here today to talk about the economic modeling, Mr. Buckley, I am hoping that you can explore some of the assumptions that go into this model. For example, some of the models that have been discussed assume that the permanent debt-to-GDP ratio is flat or that consumers make the perfect economic decision they ever will encounter in their lives, or that every person who wants a job can have a job. And what do you think the possible effects of making those assumptions that exist in these modelings, what do you think the effects of that are ultimately?

Mr. BUCKLEY. Well, I think the effects are that the model results are not necessarily very predictive of what would occur in the real world, but I think it is important to understand on the assumption of GDP, stability of debt to GDP, these models, most of the models simply will not project a result unless you fix the long-term budget situation in the United States. There is no positive impact from these policies unless you do that. And the modelers' choice of assumption makes a very big difference in the models' results, assuming reductions in entitlement benefits give you the biggest long-term growth.

Ms. SANCHEZ. It was stated earlier that the models are not supposed to reflect reality, but why can we not inject a little bit of reality into some of these models?

Mr. BUCKLEY. Well, let me take this opportunity to praise what the Joint Committee staff did in its model, because it did model reality. It modeled the existing economy with temporary substantial unemployment. It did model the current unstable long-term budget

situation. It didn't assume that we did it. It modeled a situation where it has been criticized that people are myopic. I think it is fairly reflective of our ability to predict the future.

So it did make a very good faith effort to model. I may disagree with the underlying theory of it, but it did, and it showed very modest increases in growth. And the modest increases in growth all come because of the individual tax reductions. The net effect of the business changes is negative.

Ms. SÁNCHEZ. Thank you.

I am sure that all our panelists today, the tax analysis departments of all your organizations probably did dynamic analysis of the 2001 and 2003 tax cuts. Is that correct? And a simple yes-or-no answer will suffice. No? Mr. Holtz, no.

Mr. DIAMOND. I was at the Joint Committee on Taxation at the time.

Ms. SÁNCHEZ. Okay.

Mr. DIAMOND. Yes, we did.

Mr. HOLTZ-EAKIN. My experience with that was at the CBO. We did a macroeconomic analysis of the President's budget, which included the 2003 tax provisions.

Mr. DUBAY. I was not at the organization then.

Ms. SÁNCHEZ. Okay.

Mr. HODGE. No, the Tax Foundation didn't do that at that time.

Ms. SÁNCHEZ. Mr. Foster——

Mr. FOSTER. I was not with the chamber at the time.

Ms. SÁNCHEZ. Okay.

Mr. Buckley, do you think that dynamic growth projections that were done for the 2001 tax cuts would have likely shown a tremendous amount of growth potential like the analysis that we see today——

Mr. BUCKLEY. I think if you used the conventional supply-side models, you would have seen a much larger growth response because they were net reductions in tax. The Camp bill is revenue neutral, so these models can't show a big increase in long-term growth because you are just moving liability around. In 2001, those were substantial tax cuts, and the way these models work, it would show big economic growth.

Ms. SÁNCHEZ. It would show big economic growth, but how does that compare to the actual economic state of the U.S. in the 2000s, which, I might add, were a result of two unfunded wars, an economic crisis in our financial sector, a tanking housing sector, trillions more in debt from an unpaid Medicare Part D program, and of course, over a trillion in un-offset tax cuts——

Chairman TIBERI. The gentlelady's time has expired. You may answer quickly. We could have a debate.

Mr. BUCKLEY. Her question answered itself. The results were not positive.

Chairman TIBERI. Thank you, Mr. Buckley.

Ms. SÁNCHEZ. Thank you very much.

Chairman TIBERI. Mr. Young is recognized for 5 minutes.

Mr. YOUNG. Thank you, Mr. Chairman, for holding this hearing. I think this has been quite instructive. I think it is very important. I would like to recognize my colleague, Dr. Price, who has intro-

duced some legislation in support of dynamic scoring and his leadership in this area. I cosponsored that legislation as well.

All of you have done dynamic analysis of the Camp draft. I certainly appreciate that and your efforts here.

I actually think this should be a bipartisan effort. I mean, this is about evidence-based policymaking. And I have actually discovered, outside of the klieg lights and C–SPAN coverage and so forth, that it is a bipartisan initiative to dynamically score a range of different policies, from immigration reform bills to transportation bills to tax bills.

I am a member of the No Labels Group, a group of conservatives, liberals, and everything in between where we periodically convene and talk about issues of the day and try and find some common ground. In our last meeting, over coffee, roughly a dozen Republican and Democrat Members came together, and I think on that day there were eight Democrats, four Republicans, there was nearly universal agreement in the need to dynamically score all our legislation moving forward.

Now, we can quibble over the details, but as I see dynamic scoring, let me sort of recharacterize this issue very similar to the way Mr. Dubay did. We can either be wrong all of the time by adopting this artificial static model, and it indeed is a model as well, or we can be right some of the time through dynamic analysis, and through an iterative process learn from our suboptimal models and make all of our assumptions very clear to the public and to the best minds in the country and the policymakers alike and improve upon those models.

I would add that we could do static analysis along with dynamic analysis and use the static analysis as a baseline and then compare which models perform better over a period of years, and ultimately perhaps transition into what I suspect would be a strictly dynamic analysis environment. I think that is the way to go.

With respect to tax reform specifically, if we consider the baseline under a dynamic analysis, fewer offsets would be needed to reach budget neutrality. And I think we therefore can work in a bipartisan fashion to do things under a dynamically analyzed tax reform model. We can extend the R&D credit, Section 179, the Earned Income Tax Credit, LIFO, accelerated depreciation. We can eliminate regressive taxes like the medical device tax.

Now, do you agree—I will ask Mr. Dubay—if the committee were to consider dynamic growth as part of its budget-neutral analysis, that the risks of a dynamic score being wrong are outweighed, perhaps significantly outweighed, by having extra revenue to use on keeping provisions intact, like Section 179 at the $500,000 level, that inarguably encourage growth? Yes or no, if possible.

Mr. DUBAY. Yes. I look at dynamic scoring as a more accurate answer than static scoring. It is not that it is right or wrong. It is certainly more accurate. Because as I said in my testimony, we know that tax reform will improve economic growth. Static scoring doesn't take into account those impacts. So we know that it is wrong and we know it is wrong in which direction. So we know that dynamic scoring gets us closer to the right answer.

Mr. YOUNG. Right.

So progress occurs in all realms, science, any area of academia, in our economy, in policymaking, through an iterative process, or it out to occur through an iterative process, through trial and error and improving upon suboptimal results. Same thing should apply with respect to tax policymaking.

Same thing should apply with respect to our analysis. I so was encouraged to hear of this notion of microdynamic analysis. We need to look at specific provisions of our Tax Code and other areas of policy, major ones, as Mr. Holtz-Eakin emphasized, in a dynamic way as well. Now, if that requires additional staffing at Joint Tax, this is an area where I am willing to invest in a few more staffers to ensure that we have more optimal growth-oriented policy that will increase the number of jobs, increase personal income, and so forth.

The last thing I would add is just emphasize that this doesn't have to, at least initially, be an either/or sort of question. We could have both and then transition into the one that is proven to work best over a period of years. I would start with dynamic analysis for PAYGO purposes.

But thank you so much for being here. I yield back.

Chairman TIBERI. Ms. Schwartz is recognized for 5 minutes.

Ms. SCHWARTZ. Thank you, Mr. Chairman. I appreciate the time and the conversation this morning. Just a couple of points and then a couple of questions, if I may.

One is that in this whole discussion about the use of dynamic scoring and economic growth, it does seem that—two particular points—suggesting that cutting taxes is always good for economic growth is kind of the suggestion here a bit. I think many of us who do actually think that there is an opportunity for us, Republicans and Democrats, to work together to lower rates, broaden the base, to really look at tax deductions in the way as to what works and what doesn't and what stimulates the economy and what doesn't is very real.

But the notion that tax cuts alone lead to economic growth is one that has been disproven time and time again, obviously tax cuts for the wealthiest and tax cuts for the wealthiest people and the wealthiest corporations. We have been promised that. If it worked, we would maybe not be in some of the situations we have been in, in the past. So it makes many of us very skeptical that that itself is not enough for us to build a basis for tax reform. It just isn't.

The second point is that economic growth really may mean different things to different people, and we sort of use that terminology as though it is the same thing. Does economic growth only mean growth in the GDP, which of course it has to be accounted for, but is it just an increase, the wealthy get much wealthier, which is kind of where we have been in the last decade, or does it also mean that the middle class gets wealthier?

And does that matter to anybody on the panel, is kind of the question. Should it matter to us? It is actually what has made this country great, by the way, is not just entrepreneurs and great corporations, but it is also people with the skills and the ability to take these jobs and be paid a fair wage and buy products.

So I think that what we have to look at is to understand that we should take into account, and I think Mr. Young said this, take

into account some of the dynamic scoring you are talking about, but it is not the only rationale for what we do. We have to look at our ability to meet our obligations in this Nation. We have to look at our ability to have the revenues we need to educate our people, to be able to compete economically in this world, to be able to grow that middle class. And then we have to be able to make some of that infrastructure transportation investment so in fact we can also compete in the global marketplace.

If we can't do those things, then just creating more wealth in this Nation will change who we are in this country, and that is one of the questions we need to actually say, are we comfortable with that and really a great disparity between the very rich and everybody else?

So here is my question really. As we look at the use of dynamic scoring, if we look at economic growth, I was going to ask Mr. Buckley, you touched on this, could you speak to how that incorporates in any way, if it does, the income inequality that has been happening in this country for the last decade, in particular, the issue you raised of wages and the competition from overseas? If we are really going to be a low-wage country with high wealth and low-wage workers, what does that mean to our competition overseas? Could you speak to what in some ways, I might understand, the narrow definition of economic growth without looking at that?

And my second question, if you would speak to what would be the impact on the economy if we actually do not have the dollars to make the investments in education, in workforce training, and in infrastructure that has been so key to making our country such a great economic powerhouse that it might be and helps businesses to grow and to locate and to stay here.

Mr. BUCKLEY. Well, first thing, when you look at the models, labor elasticity is higher at upper-income levels, so that upper-income individuals have the luxury of working or not working, and therefore these models have supported rate reductions that are disproportionately at the top. I think that is unwise for many reasons.

Now, the other thing, and here I may differ a little bit, or differ a lot, with my other people here. Dynamic scoring is, what you are essentially saying, we want to take into account the positive impacts of our policy decisions today. That is a luxury that we do not permit our corporations to make. They make investments, and they make investments with the expectation that the return in the future is going to be far in excess of the cost of the investment. But they cannot say, our investment we are making today is less costly because we anticipate income.

I believe you have to have kind of objective rules for budgeting. If the policy choices are wise, the positive impacts of those policy choices will flow right into future budget projections.

Chairman TIBERI. The gentlelady's time has expired.

Ms. SCHWARTZ. Thank you.

Chairman TIBERI. Mr. Reed is recognized for 5 minutes.

Mr. REED. Thank you, Mr. Chairman.

Mr. Hodge, you said something in your testimony, and believe it or not, we do listen to the testimony, and I was listening to your verbal testimony.

Mr. HODGE. Well, thank you.

Mr. REED. And I found it very intriguing. You said something about peer review, transparency, making the scoring process much more open to review by the public as well as people in positions that could comment on that process. I wholeheartedly agree. This is a conversation, coming to Congress in 2010, I have had repeatedly with different individuals in the position that do the scoring.

And one of the things that was brought back to me and that we had a conversation with in response to my request to get the black box, to get the magic assumptions, to get the calculations was, well, if we give you that information and we tell you how we do this, people may manipulate, work around, abuse, whatever term you want to use, their proposals, their legislation, to get the score that they want. And I was actually kind of amazed by that because I am a firm believer in transparency and I am a firm believer, if people are going to do that, that will stick out as you go through the process.

Have you ever heard that response from any of the folks, be it at the CBO or JCT, in regards to the pushback on disclosing these assumptions?

Mr. HODGE. Well, I will say somewhat cynically that I guess it shows that the Joint Committee really does believe tax policy changes behavior, that people will work around these things. And they are doing it now. I mean, the 10-year budget window used to be 5 years, and if you made it 15 years, then people would work around that.

No, transparency is the key here because it is the only way of understanding whether or not the tools that the committee is using are meeting current standards within the economic community. There has to be transparency. I would volunteer to come in and demonstrate our model to any one of you. It sits on a laptop. We can come in. I will show you what is behind the curtain. I will show you all the assumptions. I will show you the data that is behind it. I will show you the equations. You can pick them apart.

Mr. REED. The algorithms and everything else.

Mr. HODGE. We are happy to come in and demonstrate it for you. In fact, the committee ought to have that in front of you so that during a hearing you can do macroeconomic analysis, dynamic analysis during a markup.

Mr. REED. Now, just so we are clear, Mr. Hodge, I mean, the bulk of my conversation generally was not with JCT. It was with CBO and CBO representatives on the budget side. And they have got the same type of process of assumptions and algorithms and things over there.

Doug, have you ever dealt with that issue? And I think we have talked about this before.

Mr. HOLTZ-EAKIN. Well, I am handicapped by having actually done the job.

Mr. REED. Yeah.

Mr. HOLTZ-EAKIN. And it is important to recognize that scoring is not a model. Scoring is a judgment exercise. I scored the Terrorism Risk Insurance Act, first time it was passed. There is no model for that. I had to score a death benefit for people killed prior to the invasion of Iraq. There is no model for that.

And so while it is useful to have models that incorporate the impact of beneficial and bad policy so that you know what is going on, in the end this will always be at the CBO and at the Joint Committee an act of judgment.

Now, CBO has in its cost estimates something called basis of estimate. It has an obligation to be transparent about how it came to its conclusions and to lay out the judgments it made. But I think it is a fool's errand to pretend that somehow this is a machine and that you can change parameters or inspect parameters and know exactly what is going on. You should get good staff, respect their judgment.

It is important to the integrity of the Joint Committee that you not micromanage it. And there is a big difference between transparency, saying this is the conclusion to which I have come, and scientific replicability, and you will never get the latter and should not get the latter.

At CBO, I used proprietary data from large pharmaceutical companies to do the Medicare Modernization Act. There is no way that should be disclosed to anybody. So that estimate could not be replicated. And so it is important to think about this not as if it is scientific replicability of an experiment, but instead building an institutional culture for good judgments informed by all the information that is relevant. Those are two very different things.

Mr. REED. But would you not agree that if the institution assumed the wrong assumption or exercised the wrong judgment, that would be a problem, that we would not be able to see whether or not that was erroneously achieved——

Mr. HOLTZ-EAKIN. It has to explain how it came to its conclusions. I think that is an obligation of both the CBO and the Joint Committee. It is in the statute now. They may or may not be meeting that obligation successfully. I think that is a fair complaint.

At that point, if you look at how they did it and say, no, wait, there is a lot of evidence that the judgment you drew here is just incorrect, we have tons of data, they should be updating constantly their ability to do that estimate well. I have no quibble with that. And I believe that the CBO, while not perfect, has tried to do that. If you go to the CBO with additional data, if you go to them with additional research, they will incorporate that into their view of the scoring process.

Mr. REED. I appreciate it. Thank you for the input.

Thank you, Mr. Chairman. I yield back.

Chairman TIBERI. Thank you.

Mr. Neal, would you like to be recognized——

Mr. NEAL. Thank you, Mr. Chairman. I thought this was very helpful. I thought the panel was very informed. And I hope that you might consider down the road scheduling Joint Tax to come in and talk about the proposal as well.

Chairman TIBERI. Certainly will consider it.

Speaking of Joint Tax, sitting behind Mr. Gerlach the entire hearing has been the head of Joint Tax, professionally, Tom Barthold.

Thank you so much for being here. And I particularly want to thank you and your macroeconomic team and staff for the analysis

and all the hard work that you put into the Camp draft. We do very much appreciate it.

And Mr. Neal and I were talking about the witnesses today, and I think we both agree, topnotch panel, excellent testimony from all of you. It has been a real educational, informative discussion. Important to understand the importance of dynamic scoring, the limitations of dynamic scoring, and modeling in general. I think it always is helpful to help committee members as we continue to try to develop tax reform legislation that will help increase wages, help create jobs, and help grow our economy.

So it has been a real pleasure to have you all here. We do appreciate the time that you took today. And that concludes today's panel.

[Whereupon, at 11:40 a.m., the subcommittee was adjourned.]

[Submissions for the Record follow:]

The Advertising Coalition

THE ADVERTISING COALITION

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Title of Hearing: "Dynamic Analysis of the Tax Reform Act of 2014," Subcommittee on Select Revenue Measures, 30 Jul 2014.

THE ADVERTISING COALITION

July 31, 2014

The Honorable Pat Tiberi
Chairman
House Ways and Means Subcommittee on Select Revenue Measures
1136 Longworth House Office Building
Washington, DC 20515

Dear Mr. Chairman:

We are pleased that you held a hearing on the role of dynamic analysis in assessing comprehensive tax reform proposals, and that you brought a distinguished panel of tax experts to the Subcommittee to present their views about the relationship between tax reform and economic growth.

The Tax Reform Act of 2014, submitted by Ways and Means Committee Chairman Camp, proposed a radical change in the way businesses would be able to deduct the cost of their advertising. For the past 100 years, the Tax Code has permitted businesses to deduct the full amount of their advertising costs as an ordinary and necessary business expense. The Discussion Draft would require that 50% of these costs be amortized over a period of 10 years.

The Advertising Coalition strongly opposes this proposed change in the deductiou for advertising costs. Our members include a broad range of associations and businesses in the media and advertising industries and the Coalition believes that the advertising amortization proposal, if enacted, would have severe adverse impacts on job generation and economic activity in the United States.

Previously, The Advertising Coalition submitted a statement to the Committee on Ways and Means in which we provided a detailed analysis of the economic and tax policy issues related to the deduction of advertising costs. In this analysis, the highly regarded economic consulting firm IHS Global Insight estimates that advertising expenditures account for $5.8 trillion in economic output in the United States – that is 17.2 percent of the $33.8 trillion in total U.S. economic output. Advertising-driven sales of products and services help support 21.7 million jobs, or 16 percent of the 136.2 million jobs in our country. Every dollar of advertising spending generates just under $22 of economic output, and every million dollars of ad spending supports 81 American jobs.

We were pleased to see that Mr. Curtis Dubay of the Heritage Foundation concludes in his testimony at your hearing that the amortization of half the cost of advertising, as proposed in the Discussion Draft, would hurt economic growth because it would deny businesses the ability to deduct these routine business expenses and thus would overstate their taxable income. He also argues that this proposal would increase the cost of capital available to certain industries.

We ask that the following attached statement by The Advertising Coalition be included in the record of the July 30th hearing.

Respectfully,

James H. Davidson
On behalf of The Advertising Coalition

THE ADVERTISING COALITION

Comments by The Advertising Coalition
To the U.S. House Ways and Means Subcommittee on Select Revenue Measures

July 31, 2014

Executive Summary

We appreciate the opportunity to submit these comments on behalf of The Advertising Coalition (TAC) for entry into the record following the Subcommittee's July 30th hearing, "Dynamic Analysis of the Tax Reform Act of 2014." TAC includes national trade associations whose members are advertisers, advertising agencies, broadcast companies, cable operators and program networks, and newspaper and magazine publishers. Our coalition represents perhaps the single broadest constituency of advertisers, advertising agencies, and media-related companies in this country engaged in protecting the free flow of advertising content and volume. As a consequence, TAC is vitally interested in preserving the ability of businesses to deduct the cost of advertising as an ordinary and necessary business expense. We are disappointed that Chairman Camp's Discussion Draft, released in February, would amortize 50 percent of advertising costs over 10 years and we respectfully urge you to preserve the full deduction of advertising costs in the year incurred.

The policy contained within the Draft would be damaging not only to the advertising and media industries, but to all levels of the marketplace that are dependent upon the jobs and sales generated by advertising's ripple effect throughout the economy. A 2013 study conducted by the world-renowned economics and data analysis firm IHS Global Insight determined that every $1 spent on advertising generates nearly $22 in economic activity (sales), and that every million dollars in advertising supports 81 American jobs. In 2012, advertising drove $5.8 trillion of the $33.8 trillion in U.S. economic output and supported 21.1 million of the 136.2 million jobs in the United States.[1] These figures demonstrate that every form of advertising – ranging from newspapers, magazines, and television to the Internet – strengthens business and triggers a cascade of economic activity that stimulates job creation and retention throughout the U.S. economy.

We are deeply troubled by the fact that the Draft's suggested amortization of advertising costs would, in effect, increase a company's taxable income for every year in which a business purchases advertising. TAC also believes that this proposal does not consider the hardships it would create for the overwhelming majority of companies and firms that purchase new cycles of advertising each year. We are concerned that these businesses would feel the brunt of this tax annually and would have fewer resources to commit to new advertising spending year after year. The resulting decrease in advertising purchases would cause a chain reaction throughout the marketplace and impact media companies that depend on advertising as a critical source of revenue for daily operations. Given the complex role of advertising in the economy, this type of tax policy would not achieve two key objectives of tax reform: to make the Tax Code simpler and more efficient, and to foster a pro-growth environment.

This tax on advertising is not supported by sound economic or tax policy. Two leading economic experts on the role of advertising, Nobel Prize laureates in Economics Dr. Kenneth Arrow and Dr. George Stigler, concluded that "Proposals to change the tax treatment of advertising are not supported by the economic evidence" and that any policy of making advertising more expensive would cause a decisive decline in advertising spending.[2] In addition to helping businesses communicate the benefits of their products and

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[1] "The Economic Impact of Advertising Expenditures in the United States, 2012-2017." IHS Global Insight, Inc. (June 2013).

[2] Arrow, Kenneth et al. "Economic Analysis of Proposed Changes in the Tax Treatment of Advertising Expenditures." Lexecon Inc. (August 1990).

services, advertising is a critical driver of our economy and should remain a fully deductible expense, just like salaries, rent, utilities, and office supplies.

Advertising Consistently Has Been Defined as an Ordinary and Necessary Business Expense

The treatment of business advertising costs as ordinary and necessary business expenses under Section 162(a) of the Tax Code has been upheld in the U.S. Tax Court[3], supported by a Revenue Ruling from the Internal Revenue Service, and endorsed by two Nobel Laureates in economics. The commitment of Congressional leaders to tax reform can bring productive changes to the Tax Code, including a reevaluation of "tax expenditures" that may be inconsistent with sound tax policy. However, it is essential to distinguish between the treatment of tax expenditures and the need for businesses to deduct ordinary and necessary business expenses, such as advertising.

The Congressional Budget Act defines tax expenditures as "revenue losses [to the government] caused by provisions of the tax laws that allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability."[4] In other words, a tax expenditure is a form of federal spending designed to encourage specific behavior, and is an exception to sound tax policy. This is distinct from ordinary and necessary business expenses. Neither the Joint Committee on Taxation nor the Office of Management and Budget has ever classified the deduction for advertising costs as a tax expenditure.

The deduction for advertising costs is essential to the proper calculation of the net income tax liability of a business. This principle that has been upheld by the U.S. Tax Court in the face of challenges from the Internal Revenue Service that have tested this standard over a period of several decades.[5]

Advertising Creates Millions of Jobs and Adds Trillions of Dollars to the U.S. Economy

As the nation's leading advertisers and media operators, we understand first-hand the extent to which advertising is a powerful tool that not only may be used to promote goods and services, but also may educate consumers about the world around them. Advertising also is responsible for generating trillions of dollars in economic activity. Dr. Lawrence R. Klein, the 1980 recipient of the Nobel Prize in Economics, and IHS Global Insight, Inc. demonstrated that advertising is a key driver of economic activity and a generator of jobs by employing an acclaimed macroeconomic analysis of the U.S. economy. Their macroeconomic model is used today by the Treasury Department, Commerce Department, Labor Department, and most Fortune 500 companies. IHS Global Insight concluded that in 2012, 16 percent of all U.S. employment was related to advertising, the sales driven by advertising, and to the induced economic activity that occurs throughout the economy as a result of advertising.[6] Additionally, IHS Global Insight previously had established that advertising does not merely shift market share among competing firms, but rather stimulates new economic activity that otherwise would not have occurred. This, in turn, triggers a cascade of economic activity and stimulates job creation and retention throughout the U.S. economy."[7]

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[3] *RJR Nabisco Inc. v. Commissioner*, 76 T.C.M.71 (1998).
[4] P.L. 93-344, 88 Stat. 297, enacted July 12, 1974.
[5] *Id. RJR Nabisco Inc.*
[6] "The Economic Impact of Advertising Expenditures in the United States, 2012-2017." IHS Global Insight, Inc. (June 2013).
[7] "The Economic Impact of Advertising Expenditures in the United States," IHS Global Insight, Inc. (August 2010).

The IHS Global Insight study quantifies the levels of sales and employment that are attributable to advertising's stimulating effect. It comprehensively assesses the total economic contribution of advertising expenditures across 16 industries, plus government, in each of the 50 states, Washington, D.C., and each of the 435 Congressional Districts in the United States. The overall economic impact of advertising consists of the direct impact of advertising dollars and subsequent sales, supplier sales, inter-industry sales, and resulting consumer spending. Each of these effects also creates and maintains new jobs that are needed to support a higher level of production. The IHS Global Insight analysis quantifies the economic impact of advertising along four dimensions:

- **Direct Economic Impact**. This category refers to the dollars and jobs dedicated to developing and implementing advertising in order to stimulate demand for products and services. It includes the work of advertising agencies and the purchase of time and space on a host of media like radio, television, newspapers, magazines, the Internet, and other outlets. This level of impact stimulates transactions such as the sale of an automobile or an insurance policy sold as a direct result of television advertising.
- **Supplier Economic Impact**. Advertising-generated sales set off chain reactions throughout the economy and create sales and jobs supported by first-level suppliers. Using the example of a car sale, this level of impact encompasses activity by the suppliers of raw materials for upholstery, plastic, tires and parts, radio and GPS receivers, and other products and services that are used to produce the vehicle.
- **Inter-industry Economic Impact**. In the automobile example, sales to first-level suppliers generate subsequent inter-industry economic activity that creates jobs in a host of related industries, such as rail and truck transportation, gasoline and oil, insurance, and after-market sales of automobile products. The demand for products and services, sales, and jobs at this inter-industry tier depends upon the initial consumer purchase of the automobile, which is facilitated by advertising.
- **Induced Consumer Spending**. Every person with a direct, supplier, or inter-industry job also plays the role of consumer in the U.S. economy. They spend a portion of their salaries in the economy on items such as food, consumer goods and services, healthcare, and other needs. This spending initiates multiple rounds of economic activity, stimulates additional sales, and creates jobs.

Decades of Proposals to Overturn the Deductibility of Advertising Have Been Invalidated

For the past quarter century following enactment of the Tax Reform Act of 1986, a wide range of proposals have been advanced to limit the deduction for advertising costs as a means of raising additional revenue for the federal government. These proposals to change the treatment of advertising as an ordinary and necessary business expense generally are based on the theories that (1) advertising is durable and generates revenues beyond the period in which the cost is incurred; (2) advertising costs create intangibles assets and should, therefore, be capitalized in part, and (3) advertising costs are incurred with a future expectation of income and also should be capitalized in part.

In response to the 1987 book of revenue options drafted by the Joint Committee on Taxation that included limits the deductibility of advertising,[8] TAC worked with leading economists to identify economic policies and data that would provide a counterpoint to proposals to limit this deduction. The American Institute of Certified Public Accountants similarly examined and rejected a proposal to capitalize advertising costs. These analyses support the principle that advertising should be treated as none other than an ordinary and necessary business expense while concluding that theories advocating otherwise are invalid.

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[8] "A Description of Possible Options to Increase Revenues Prepared for the Committee on Ways and Means," Joint Committee on Taxation, pp. 138-139 (1987).

Durability of advertising. This argument centers on the notion that the benefit of advertising extends beyond the year in which it is purchased, and that it is more appropriate to link advertising expenses and the income they generate by requiring a portion of advertising costs to be deducted in subsequent years. TAC asked Dr. Kenneth J. Arrow and Dr. George G. Stigler, and the economic consulting firm Lexecon, Inc., to explain the role of advertising in the economy and provide their analysis of this theory. Dr. Arrow was awarded the Nobel Prize for Economics in 1972 and Dr. Stigler was awarded the Nobel Prize for Economics in 1982 for research on consumer choice and the role of consumer information in the economy. Drs. Arrow and Stigler prepared the "Economic Analysis of Proposed Changes in the Tax Treatment of Advertising Expenditures," in which they concluded, "Proposals to change the tax treatment of advertising are not supported by the economic evidence."[9]

Drs. Arrow and Stigler specifically examined a number of economic studies that proposed increasing the cost of advertising to the advertiser. The goal of many of these studies was to demonstrate the longevity of advertising's impact on sales in order to justify capitalizing all or part of advertising costs. The Nobel economists concluded that these studies on the durability of advertising had reached such different conclusions that they could not be used as a coherent basis for formulating tax policy. Moreover, Drs. Arrow and Stigler found that these studies suffered from technical flaws that rendered their conclusions meaningless. Their analysis suggests that most, if not all, advertising is short-lived.[10] The economists cautioned against changing the tax treatment of advertising, which would make advertising more expensive:

> ***"Since the information conveyed by advertising is valuable, one must be particularly cautious about taxes that would raise the cost, and hence lower the quantity of advertising. Such taxes would reduce the overall flow of economic information available to consumers. As a result, we expect that prices would rise, the dispersion in prices for particular products would increase, and consumers would be less able to find goods that satisfy their preferences."***[11]

Intangible assets. Critics of the current deduction for advertising costs have contended that it creates a preference for businesses that invest in advertising rather than tangible assets, and that advertising similarly must be depreciated over time. They also say it raises questions about whether the current deduction of advertising costs results in the creation of intangible assets.

However, the economic research provided by Dr. Arrow and Dr. Stigler shows that an intangible asset is the firm's product, not the advertising itself. The results indicate that advertising only communicates information about the product to customers. Dr. Arrow and Dr. Stigler said that while some economists have attempted to measure the relationship between a firm's advertising costs and its intangible capital, they incorrectly ignore the fact that there are many economic factors other than advertising that determine a firm's market value. Indeed, the value of the firm's product – e.g., its effectiveness or innovativeness – is the firm's true intangible asset. Advertising is only a means by which the firm can exploit fully the value of that asset.[12]

Drs. Arrow and Stigler offered the innovative user interface developed by Apple Computer as an example of this point. "The 'Finder,' which it provides on its Apple . . . personal computer . . . has been enormously popular and Apple has exploited its value by advertising its advantages to potential users. As a result of the success of this product [and other Apple innovations including the iPhone and iPad],

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[9] K. Arrow, G. Stigler, E. Landes, A. Rosenfield, Lexecon, Inc., "Economic Analysis of Proposed Changes in the Tax Treatment of Advertising Expenditures," (1990)
[10] K. Arrow, et. al., at p. 23.
[11] *Ibid* at p. iii.
[12] *Ibid* at p. 36.

Apple's sales have soared, as has its market value. But Apple's advertising [Mac versus PC, et. al.] is not the intangible here; it is only a tool for maximizing the value of the true intangible – the interface."[13]

Legal background. The case law supporting the current deduction of business costs had been settled for more than 20 years when the U.S. Supreme Court in 1992 introduced a different viewpoint in *INDOPCO, Inc. v. Commissioner of Internal Revenue*.[14] Prior to *INDOPCO*, an expense would have been capitalized only if it "create[d] or enhance[d] . . . a separate and distinct additional asset."[15] The Court in *INDOPCO* held that legal fees and other costs incurred by Unilever United States in the acquisition of INDOPCO, Inc. (formerly National Starch and Chemical Corporation) should be capitalized and not deducted in the year in which they were incurred because the resulting legal structure enhanced the future value of the enterprise.

The decision in *INDOPCO* raised the question of whether legal fees related to a corporate acquisition either should be deducted in the year incurred or capitalized because they contribute to future company income. The Court's ruling prompted TAC and many other industry groups jointly to ask the Internal Revenue Service (IRS) whether this decision would in the future extend to advertising expenditures and require any portion of advertising costs to be capitalized. The IRS Office of Chief Counsel responded on September 11, 1992:

> "Section 162-1(a) of the Income Tax Regulations expressly provides that 'advertising and other selling expenses' are among the items included in deductible business expenses under Section 162 of the Code. Section 1.162-20(a)(2) of the regulations provides, in part that expenditures for institutional or goodwill advertising which keeps the taxpayer's name before the public are generally deductible as ordinary and necessary business expenses provided the expenditures are related to the [business] patronage the taxpayer might reasonably expect in the future."[16]

Congress in 1993 also addressed the treatment of intangible business expenses that are incurred in generating consumer sales. Supporters of a change in the tax treatment of intangible assets advocated that some of these costs should be capitalized. The Omnibus Budget Reconciliation Act of 1993[17] provided that these costs generally should be amortized ratably over 15 years, but Congress specifically exempted any intangible "created by the taxpayer."[18] The legislation also excluded from amortization "any franchise, trademark, or trade name."[19] In other words, advertising that promotes an intangible asset – such as the brand name of a product – should not be capitalized, but rather may be deducted in the year the cost was incurred.

In the period leading up to the Omnibus Budget Reconciliation Act of 1993, the accounting profession conducted a formal examination of the business accounting standards for the treatment of advertising costs. The Accounting Standards Executive Committee (AcSEC) of the American Institute of Certified Public Accountants (AICPA) issued a Statement of Position in 1993 that recommended expensing advertising costs either as incurred or at the first time the advertising takes place, unless the advertising meets criteria for capitalizing direct-response advertising.[20] Because the Congress and the Committee on

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[13] "Economic Analysis of Proposed Changes in the Tax Treatment of Advertising Expenditures," Arrow, et. al.
[14] *INDOPCO, Inc. v. Commissioner of Internal Revenue*, 503 U.S. 79 (1992).
[15] *Commissioner v. Lincoln Savings & Loan Assn.*, 403 U.S. 345, 354 (1971).
[16] Rev. Rul. 92-80, 1992-39 I.R.B. 7, 1992-2 C.B. 57, 1992 WL 224893 (IRS RRU), September 11, 1992.
[17] P.L. 103-66,107 Stat. 312, enacted August 10, 1993.
[18] *Ibid*, sec. 197 (e)(2).
[19] *Ibid*, sec. 197 (d)(1)(F).
[20] American Institute of Certified Public Accountants, Accounting Standards Executive Committee, Statement of Position 93-7, December 29, 1993.

THE ADVERTISING COALITION

Ways and Means regularly look to the accounting profession for guidance in the treatment of business expenses, TAC was pleased that AcSEC affirmed the current deduction of advertising costs.

Conclusion

Decades of legal and policy justifications support the current tax treatment of advertising as an ordinary and necessary business expense, rather than an asset to be capitalized over time. TAC strongly opposes efforts by the Chairman in the Tax Reform Act of 2014 that would amortize 50 percent of advertising costs over 10 years and respectfully urges the Committee not to include this provision in its subsequent work on tax reform. Our coalition includes companies and associations of all sizes that share the common goals of protecting the right of companies to advertise, and securing a fair, affordable business tax rate. However, we are deeply concerned about the disruptions that a significant policy change like this would create, both to our marketplace and to the free flow of ideas and information within in our society.

Thank you for your consideration of our views.

Sincerely,

James H. Davidson
Executive Director, **The Advertising Coalition**

American Advertising Federation
American Association of Advertising Agencies
Association of National Advertisers
Grocery Manufacturers Association
MPA – The Association of Magazine Media
National Association of Broadcasters
National Cable & Telecommunications Association
National Newspaper Association
Newspaper Association of America