



**TESTIMONY OF THE STAFF OF THE JOINT COMMITTEE ON TAXATION
BEFORE THE HOUSE COMMITTEE ON WAYS AND MEANS
REGARDING ECONOMIC MODELING**

SEPTEMBER 21, 2011

My name is Thomas A. Barthold. I am the Chief of Staff of the Joint Committee on Taxation. It is my pleasure this morning to describe some of the economic modeling that the Joint Committee staff uses to estimate the effects on Federal revenues from proposed changes in the nation's tax laws.

The Joint Committee staff is nonpartisan and serves the entire Congress. One of the Joint Committee staff's key responsibilities is to provide revenue estimates. These are estimates of the change in Federal receipts that would result from proposed tax legislation. The Joint Committee staff's objective is to produce accurate, consistent, and impartial revenue estimates that can be relied upon by Members of Congress in making legislative decisions.

A. Conventional Analysis

What is a revenue estimate?

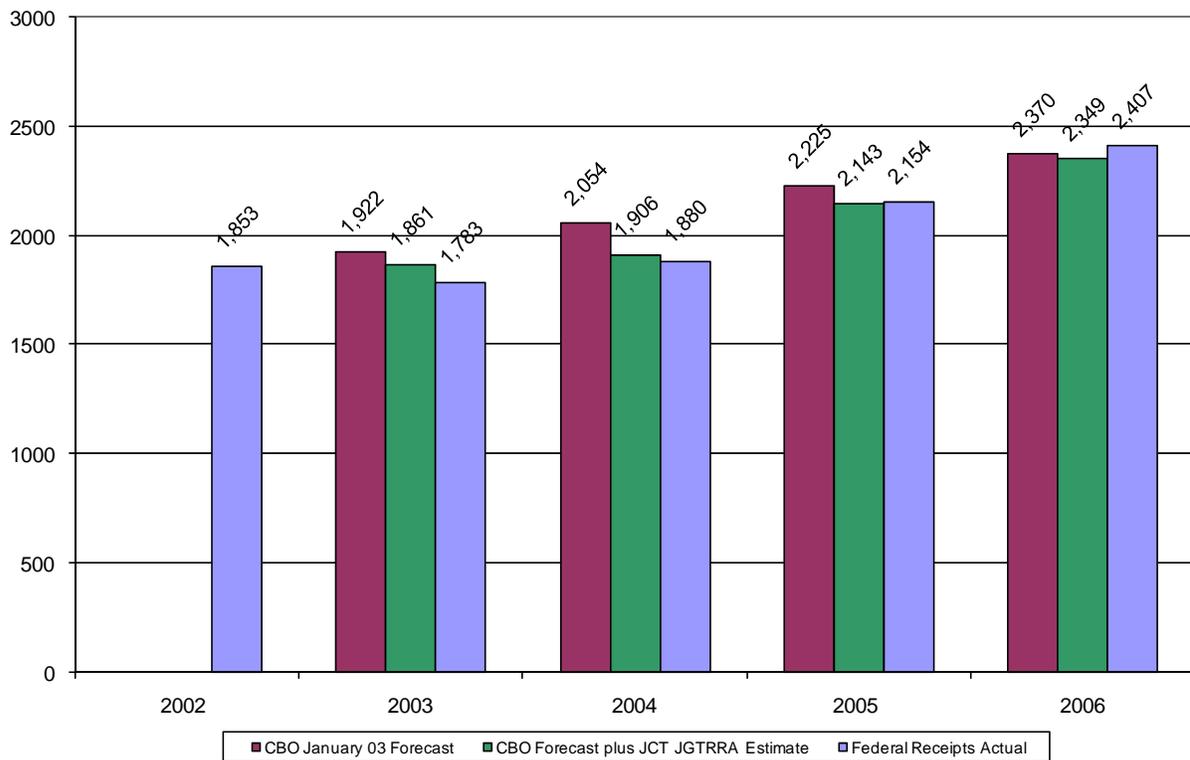
What is a revenue estimate? A revenue estimate is an estimate of the change in projected Federal baseline receipts that would result from a change in law. The reference point for a revenue estimate prepared by the Joint Committee staff is the Congressional Budget Office ("CBO") 10-year projection of Federal receipts, referred to as the "receipts baseline." The receipts baseline serves as the benchmark for measuring the effects of proposed tax law changes. The baseline assumes that present law remains unchanged during the 10-year budget period. Thus, the receipts baseline is an estimate of the Federal receipts that would be collected over the next 10 years in the absence of statutory changes. The Joint Committee staff is required to estimate the revenue effects of proposals relative to the projected CBO receipts baseline.

A common misunderstanding that arises in reporting revenue estimates to policy makers is the distinction between a revenue estimate and receipts forecast. Generally, when the economy is growing, the CBO forecast of baseline receipts is growing. A negative revenue estimate of a tax proposal does not mean that the Joint Committee is predicting receipts will fall. It means that receipts are predicted to grow more slowly if the proposal is enacted than they are projected to grow under present law in the baseline receipts forecast. Receipts would only decline if the revenue estimate were for a loss in revenues that was greater than the underlying growth in baseline receipts.

For example, consider the Joint Committee staff’s estimates of the overall revenue effects of the Jobs and Growth Tax Relief Reconciliation Act of 2003 (“JGTRRA”). Figure 1 provides a comparison of CBO’s January 2003 forecast of receipts (the red bars), the CBO’s forecasted receipts as modified by the Joint Committee staff’s estimates for JGTRRA (the green bars), and actual receipts (the blue bars) for fiscal years 2002 through 2006. The green bars show that after adjusting the CBO’s receipts forecast for the Joint Committee staff’s estimate of JGTRRA, receipts were estimated to continue to increase. However, the estimated increase is slower than in the CBO’s original baseline forecast (the red bars). In fact, actual receipts (the blue bars) for 2003 through 2006 totaled \$35 billion less than total receipts estimated by the Joint Committee staff (the green bars).

Figure 1.—Receipts Forecast versus Revenue Estimates

Fiscal Year Federal Receipts in Billions of Current Dollars



Enactment of legislation in 2004 makes comparison using 2005 and 2006 receipts problematic. However, Figure 1 shows that, while the combined CBO/Joint Committee estimates of receipts for 2005 and 2006 are slightly less than actual receipts, it reflects a projected overall increase in receipts for these years relative to receipts prior to enactment of the legislation.

Conventional analysis includes taxpayer behavior

Another frequently expressed misconception about conventional revenue estimates provided by Joint Committee staff is the notion that they assume taxpayers will not change their behavior in any way in response to tax policy changes.

One of the conventions that is followed for both revenue estimates prepared by the Joint Committee staff and expenditure estimates prepared by the Congressional Budget Office is that they are done against a fixed forecast of aggregate economic activity; the Joint Committee staff generally assumes that a proposal will not change total aggregate production and therefore holds forecasted Gross National Product (“GNP”) fixed. However, conventional revenue estimates prepared by the Joint Committee staff should not be confused with “static” revenue estimates. Joint Committee staff revenue estimates always take into account many likely behavioral responses by taxpayers to proposed changes in tax law. Such behavioral effects include shifts in the timing of transactions and income recognition, shifts between business sectors and entity form, shifts in portfolio holdings, shifts in consumption, and tax planning and avoidance strategies.

To summarize Joint Committee staff’s conventional revenue estimating methodology: the Joint Committee staff provide estimates relative to baseline receipts projected for future years under present law, not relative to receipts in years prior to the enactment of the proposal; the Joint Committee staff generally assumes a fixed GNP forecast; and the Joint Committee staff incorporates many types of microeconomic behavioral responses in Joint Committee staff revenue estimates.

A document our staff recently published, JCX-46-11, *Summary of Economic Models and Estimating Practices of the staff of the Joint Committee on Taxation*, provides an overview of the many microsimulation models and data sources that the Joint Committee staff employs in its conventional analysis.

B. Macroeconomic Analysis

As stated above, all Joint Committee estimates are measured relative to the CBO receipts baseline. The CBO develops its receipts baseline from its macroeconomic forecast. That macroeconomic forecast includes projections of GDP growth, investment, employment, and inflation for the 10-year Congressional budget planning period. Beyond raising funds for the Federal Government, Members often intend that their proposed tax policy changes alter microeconomic behavior or alter the future growth prospects of the economy. Conventional analysis generally addresses only microeconomic behavior. Conventional analysis does not account for possible changes in the underlying CBO macroeconomic projections.

Beginning in 2003, House Rule XIII(3)(h)(2) has required the Joint Committee staff to provide a macroeconomic impact analysis of all tax legislation reported by the Ways and Means

Committee.¹ For many tax bills, the expected macroeconomic effects are so small that a brief statement is all that is required. But some legislation requires more detailed analysis. In order to account for the sensitivity of the analysis to different modeling assumptions, and different modeling frameworks, the Joint Committee staff has used several different models to simulate the macroeconomic effects of changes to tax policy.² The Joint Committee staff has used three different general equilibrium models: the Joint Committee macroeconomic equilibrium growth model (“MEG”), an overlapping generations lifecycle model (“OLG”),³ and a dynamic, stochastic general equilibrium growth model with infinitely lived agents (“DSGE”).

I will highlight MEG and OLG and provide an example of this sort of analysis.

Macroeconomic Equilibrium Growth Model (MEG)

In the MEG model the availability of labor and capital determines total national output. Prices adjust so that demand equals supply in the long run. In the short run, resources may be temporarily under-employed or over-employed as people and businesses adjust to outside changes in the economy.

- MEG models household consumption by what is called the life-cycle theory.
- Labor supply responses to changes in after-tax wages (elasticities) are separately modeled for four different groups,
 - High-income primary earners;
 - High-income secondary earners;
 - Low-income primary earners; and
 - Low-income secondary earners.
- Household saving and consumption respond to the after-tax return to saving and after-tax income.
 - For ease of exposition, we refer to this response as the marginal propensity to consume (“MPC”)
- Business production and housing production are modeled separately.

¹ House Rules allowed the Chairman of the Ways and Means Committee to include a supplementary macroeconomic analysis in committee reports beginning in 1997; the analysis became a requirement under House Rules in 2003.

² The Joint Committee staff also contracts for the use of two econometric models to inform our analysis, in particular, of short-run economic responses: Macroeconomic Advisers and IHS Global Insight.

³ The Joint Committee staff currently leases a version of this model from Tax Policy Advisors, LLC.

- Business investment responds to changes in the user cost of capital.
- MEG is an open economy model, cross border capital flows and changes in net exports affect domestic economy outcomes.
- Individuals are myopic. They do not anticipate changes in the economy or government policy.

Overlapping Generations Lifecycle Model (OLG)

Unlike the MEG model, the OLG model assumes that prices adjust to any changes in economic conditions (such as a change in fiscal policy) so that supply equals demand in every period and resources are always fully utilized, after accounting for the cost of adjusting the capital stock. The OLG model is a perfect foresight model. The model does not allow for unemployment. There is no explicit modeling of international trade in goods and services, but international capital flows are modeled through interest rate adjustments.

- Economic decisions are modeled separately for each of 55 adult-age cohorts.
- OLG model has separate production sectors for business and housing.
- Key parameters (as in MEG)
 - Responsiveness of labor supply to changes in the after-tax wage rate.
 - Responsiveness of saving and consumption to the after-tax return to saving and after-tax income.
 - Responsiveness of investment to the user cost of capital.
- OLG is a perfect foresight model
 - Responsiveness of individuals to expected future changes in after-tax rates of return are important.

Summary

The Joint Committee staff uses our detailed microsimulation models, starting from the conventional estimates of a proposed tax change, to calculate changes in after-tax wages, after-tax rates of return to saving, and the user cost of capital. These calculated changes become inputs to the macroeconomic models to determine the possible effects that a proposed change in tax law may have on macroeconomic outcomes. Generally, if a tax policy significantly changes GNP, that change would affect the taxable base, and thus tax revenues. Taking these effects into account is what many commentators refer to as “dynamic analysis.”

C. Example: The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, (Public Law 110-312)

Conventional Estimate

In December of last year, the Joint Committee staff provided the Congress with conventional estimates of the pending legislation which became the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (“TRUIRJCA 2010”). As Committee members know, that legislation extended the tax rate structure created in 2001 (EGTRRA) and 2003 (JGTRRA) legislation for two additional years (through 2012), temporarily reduced the payroll tax rate and extended temporarily a number of the so-called expiring provisions. Table 1 provides the bottom line result.

**Table 1.—Net Totals on the Estimated Budget Effects of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010
(Millions of Dollars)**

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-15	2011-20
-374,154	-422,910	-119,751	6,551	17,410	13,461	10,070	6,282	3,371	1,859	-892,852	-857,806

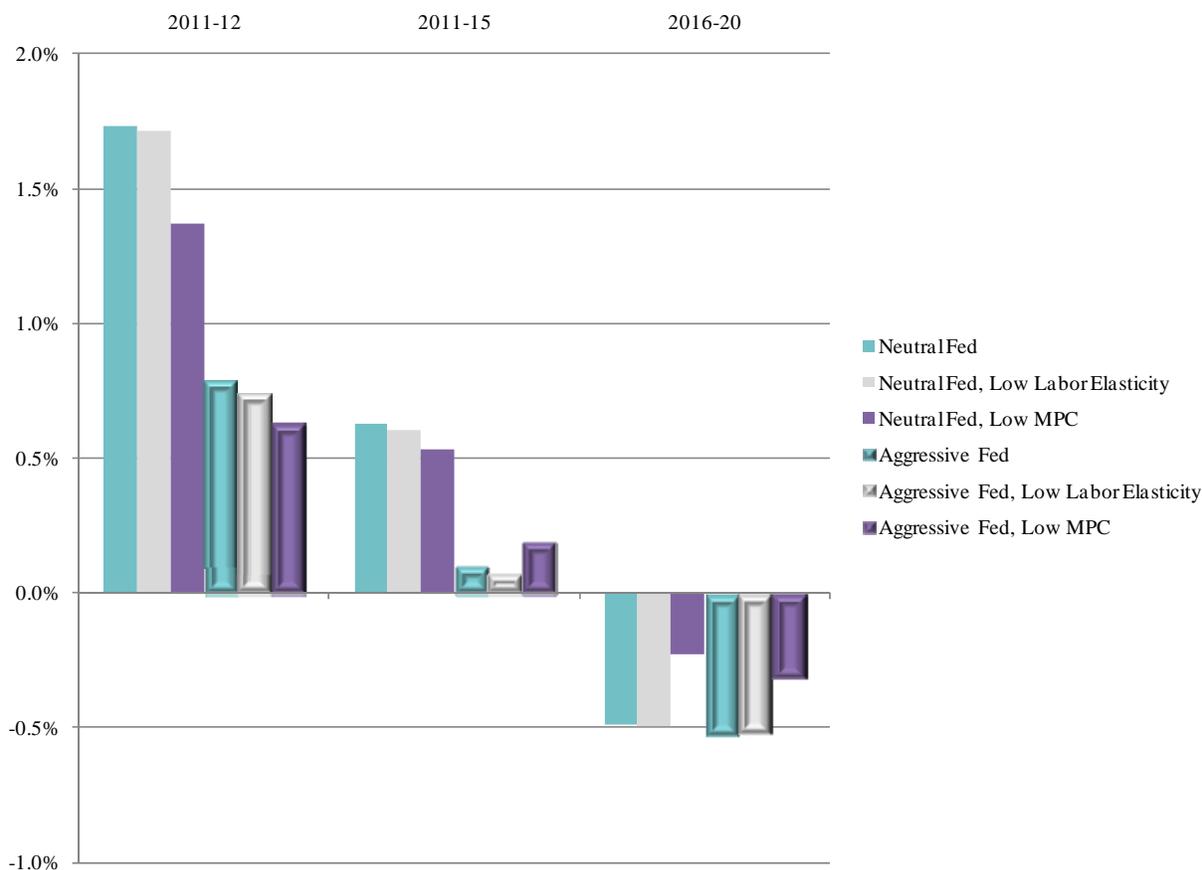
Source: JCX-54-10. The entire table can be found in the appendix.

Macroeconomic Analysis

Concurrent with our conventional analysis, the Joint Committee staff undertook a macroeconomic analysis of the legislation, using the MEG model and varying several assumptions about the responsiveness of the Federal Reserve Board, consumers, and businesses to the tax change. I am going to talk about these results to give you an idea of the type of the information added by our macroeconomic analyses. Figure 2 illustrates key results from that analysis.

The Joint Committee staff estimated that the bill would increase the size of the economy (GDP) by between 0.6 and 1.7 percent during the extension period, primarily because of extra demand that would be generated by the tax cuts. The Joint Committee staff also estimated that lower marginal tax rates on labor and income from capital would provide an incentive for temporarily increased supply of labor and accelerated investment. These effects are expected to be reversed by the end of the budget period, as the tax decreases expire, and increased borrowing by the Federal government crowds out some private investment, with GDP decreasing by 0.2 to 0.5 percent relative to present law in the second half of the budget period.

Figure 2.—Percentage Change in Real GDP of TRUIRJCA 2010



Correspondingly, the Joint Committee staff estimated that there could be a 0.2 to 0.3 percent increase in receipts due to the increase in GDP in 2011-2012, and a 0.3 to 0.6 percent decrease in receipts due to the decrease in GDP in the second half of the budget window.

Macroeconomic Analysis of a Deficit Neutral Bill, as Measured by Conventional Analysis

The December legislation was not deficit neutral. To highlight how tax policy changes might have macroeconomic effects, Ways and Means Committee staff asked the Joint Committee staff if we could analyze the potential macroeconomic effects, if any, had the December legislation conventionally estimated revenue loss been fully offset by reductions in Federal spending. To analyze this alternative policy, the Joint Committee staff simulated the same tax policy assuming that Government transfer payments would be reduced by the amount of the reduction in revenues. We simulated two different time frames for this reduction in Federal spending - adjusting transfer payments to exactly offset revenue changes year-by-year, and reducing transfer payments in the second half of the budget period such that the policy would be deficit neutral over the budget period. Because the tax policy results in revenue increases in the second half of the budget period, the year-by-year offset includes a small increase in transfer payments in the second five years. Figures 3 and 4 illustrate key results from

this analysis. We again present the results of several simulations, this time focusing, in particular, on the range of results that occur under different assumptions about both Federal Reserve Board monetary policy responses and Congressional fiscal policy responses. Labor supply elasticities and marginal propensities to consume are not varied.

Reducing transfer payments to offset tax cuts in 2011 and 2012 decreases the amount of income available to be spent, and thus increases GDP for that period by less than in the non-offset tax rate reductions case, from 1.7 percent to 0.4 percent under the accommodating Federal Reserve Board assumption (0.8 percent to 0.3 percent under the aggressive Federal Reserve Board assumption). In the second half of the budget period, the deficit neutral version of the policy results in an increase in GDP, in contrast to the decrease produced by the non-offset tax reduction. This result is driven both by the increase in transfer payments (offsetting tax increases) providing some stimulus, and by the lack of crowding out of private investment.

In these MEG simulations, reducing transfer payments in the second half of the budget period to make the bill deficit neutral over the full ten-year period preserves the same growth effects as the bill as passed during the non-offset period. These simulations also result in less crowding out of private investment than the as-enacted policy. The reduction in transfer payments in the second five years also reverses the stimulus effects from the first two years, resulting in a larger decline in GDP than in the as-enacted estimate when the Federal Reserve policy response is neutral, and a smaller decline when the Federal Reserve policy response aggressively acts against the contractionary effects. These types of results would be somewhat different when simulated with a perfect foresight model such as OLG, in which people would anticipate the reduction in transfer payments, and adjust labor and consumption in the first five years accordingly.

Revenue feedback from these simulations follows the same patterns. During 2011-12 and 2011-15, in simulations where GDP is expected to be increased by the policy, the revenue loss incorporating macroeconomic effects is slightly less than the conventionally estimated loss. In simulations where GDP is expected to be reduced by the policy, (which occurs in some simulations in the second five years), the macroeconomic revenue estimate generally shows a reduction in the revenue effect relative to the conventional analysis.

Figure 3.—Percentage Change in Real GDP of TRUIRJCA 2010

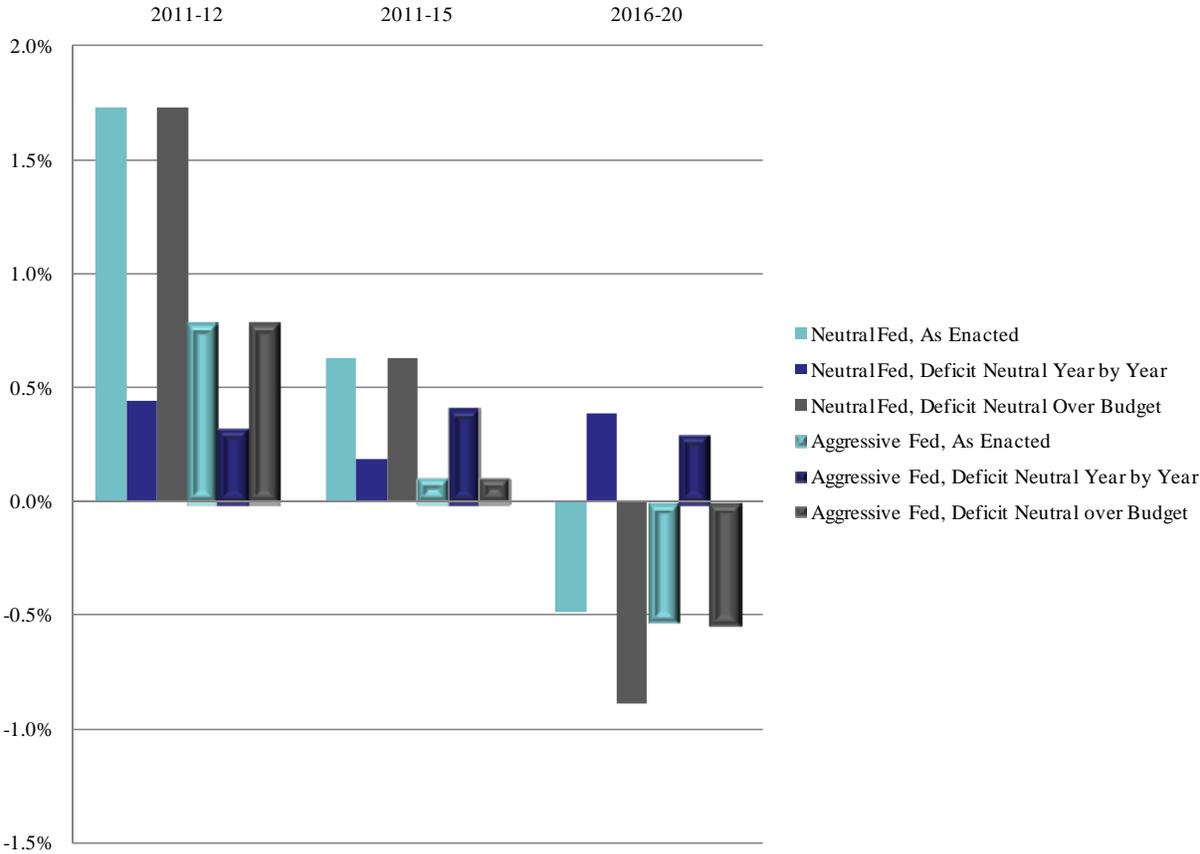
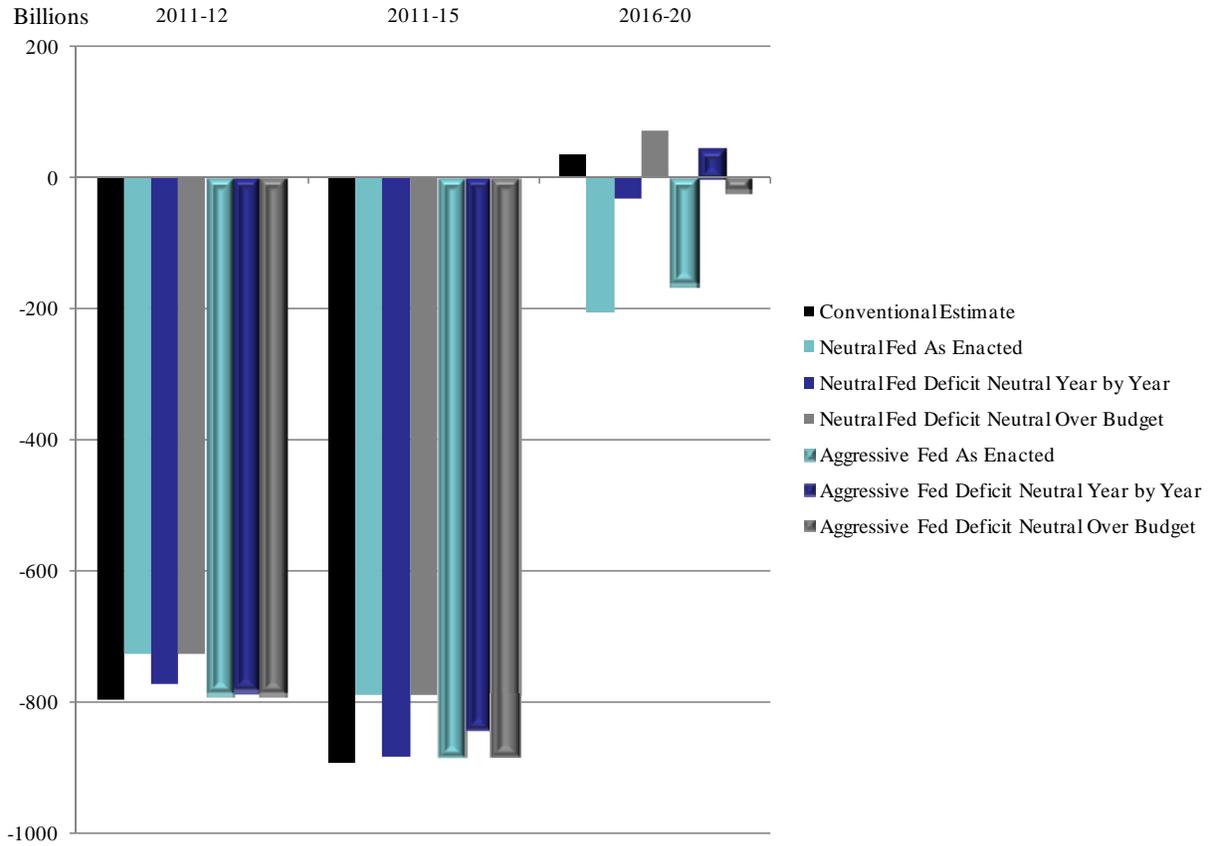


Figure 4.—Conventional and Macro-Economic Revenue Effects of TRUIRJCA 2010



Conclusion

The Joint Committee staff continuously works to make sure that our models reflect the most recent possible data and economic research. For example, we are exploring adding a more detailed international trade sector to the OLG model, and adding another business investment sector to the MEG model. I appreciate the opportunity to discuss our models with you, and look forward to answering your questions.

APPENDIX
**Macroeconomic Effects of the “Tax Relief, Unemployment Insurance
Reauthorization Job Creation Act of 2010,”**
Under Different Macroeconomic Modeling Assumptions

<u>Percent change in real GDP</u>	<u>percent change relative to present law</u>		
	2011-12	2011-15	2016-20
Neutral Fed	1.7%	0.6%	-0.5%
lower labor supply elasticity	1.7%	0.6%	-0.5%
lower marginal propensity to consume	1.4%	0.5%	-0.2%
Aggressive Fed	0.8%	0.1%	-0.5%
lower labor supply elasticity	0.7%	0.1%	-0.5%
lower marginal propensity to consume	0.6%	0.2%	-0.3%

<u>Percent change in employment</u>	<u>relative to present law</u>		
	2011-12	2011-15	2016-20
Neutral Fed	2.1%	0.8%	0.0%
lower labor supply elasticity	2.0%	0.8%	0.0%
lower marginal propensity to consume	1.6%	0.6%	0.1%
Aggressive Fed	0.9%	0.3%	0.1%
lower labor supply elasticity	0.8%	0.2%	0.1%
lower marginal propensity to consume	0.6%	0.3%	0.1%

<u>Percent change in labor force</u>	<u>relative to present law</u>		
	2011-12	2011-15	2016-20
Neutral Fed	0.4%	0.2%	0.0%
lower labor supply elasticity	0.3%	0.1%	0.0%
lower marginal propensity to consume	0.4%	0.2%	0.0%
Aggressive Fed	0.4%	0.2%	0.0%
lower labor supply elasticity	0.3%	0.1%	0.0%
lower marginal propensity to consume	0.4%	0.2%	0.0%

<u>Percent change in business capital</u>	<u>relative to present law</u>		
	2011-12	2011-15	2016-20
Neutral Fed	0.9%	0.3%	-1.7%
lower labor supply elasticity	0.9%	0.3%	-1.7%
lower marginal propensity to consume	1.1%	0.6%	-1.0%
Aggressive Fed	0.7%	-0.2%	-2.1%
lower labor supply elasticity	0.7%	-0.2%	-2.1%
lower marginal propensity to consume	0.9%	0.3%	-1.3%

<u>Percent change in consumption</u>	<u>relative to present law</u>		
	2011-12	2011-15	2016-20
Neutral Fed	2.5%	1.4%	-0.3%
lower labor supply elasticity	2.5%	1.4%	-0.3%
lower marginal propensity to consume	1.8%	1.1%	0.0%
Aggressive Fed	1.9%	1.0%	-0.3%
lower labor supply elasticity	1.8%	0.9%	-0.3%
lower marginal propensity to consume	1.3%	0.8%	-0.1%

<u>Percent change in receipts</u>	<u>relative to present law</u>		
	2011-12	2011-15	2016-20
Neutral Fed	1.3%	0.8%	0.0%
lower labor supply elasticity	1.3%	0.7%	0.0%
lower marginal propensity to consume	1.1%	0.6%	0.0%
Aggressive Fed	0.3%	0.2%	0.0%
lower labor supply elasticity	0.2%	0.2%	0.0%
lower marginal propensity to consume	0.3%	0.2%	0.0%

**Macroeconomic Effects of the
"Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010,"
(percent change from CBO baseline levels, except for revenue effect)**

	As enacted			Deficit neutral, year- by-year			Deficit neutral, over the Deficit horizon		
	2011-12	2011-15	2016-20	11-12	11-15	16-20	11-12	11-15	16-20
"Neutral Fed"									
Real GDP	1.7%	0.6%	-0.5%	0.4%	0.2%	0.4%	1.7%	0.6%	-0.9%
Real Producer's capital	0.9%	0.3%	-1.7%	1.4%	1.6%	1.2%	0.9%	0.3%	-1.2%
Real Residential capital	-1.1%	-1.6%	-1.8%	-0.9%	-1.0%	-0.4%	-1.1%	-1.6%	-1.6%
Real Consumption	2.5%	1.4%	-0.3%	-0.1%	0.0%	0.4%	2.5%	1.4%	-1.2%
Employment	2.1%	0.8%	0.0%	0.4%	-0.1%	0.2%	2.1%	0.8%	-0.7%
Labor force	0.4%	0.2%	0.0%	0.4%	0.2%	0.0%	0.4%	0.2%	0.0%
Nominal Revenue Effect									
Conventional	-797	-893	35	-797	-893	35	-797	-893	35
Macroeconomic	-727	-791	-205	-773	-884	-33	-727	-791	72
	As enacted			Deficit neutral, year- by-year \1			Deficit neutral, over the Deficit horizon \2		
	11-12	11-15	16-20	11-12	11-15	16-20	11-12	11-15	16-20
"Aggressive Fed"									
Real GDP	0.8%	0.1%	-0.5%	0.3%	0.4%	0.3%	0.8%	0.1%	-0.5%
Real Producer's capital	0.7%	-0.2%	-2.1%	1.3%	1.6%	1.3%	0.7%	-0.2%	-1.4%
Real Residential capital	-1.2%	-2.0%	-2.6%	-0.9%	-0.9%	-0.1%	-1.2%	-2.0%	-2.2%
Real Consumption	1.9%	1.0%	-0.3%	-0.2%	0.2%	0.3%	1.9%	1.0%	-0.8%
Employment	0.9%	0.3%	0.1%	0.2%	0.2%	0.0%	0.9%	0.3%	-0.1%
Labor force	0.4%	0.2%	0.0%	0.4%	0.2%	0.0%	0.4%	0.2%	0.0%
Nominal Revenue Effect									
Conventional	-797	-893	35	-797	-893	35	-797	-893	35
Macroeconomic	-786	-883	-164	-781	-842	46	-786	-883	-18

\1 Deficit neutral policy implemented cutting untaxed transfers to individuals. Reduction in transfers leave the baseline deficit unchanged in each year.

\2 Deficit neutral policy is implemented by cutting untaxed transfers to individuals. Reduction in transfers in the final five years leave the baseline deficit unchanged over the deficit horizon.

Following is our publication, JCX 54-10, *The Estimated Budget Effects of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010*.

**ESTIMATED BUDGET EFFECTS OF
THE "TAX RELIEF, UNEMPLOYMENT INSURANCE REAUTHORIZATION, AND JOB CREATION ACT OF 2010,"
SCHEDULED FOR CONSIDERATION BY THE UNITED STATES SENATE**

Fiscal Years 2011 - 2020

[Millions of Dollars]

Provision	Effective	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-15	2011-20
I. Temporary Extension of Tax Relief													
A. Temporary Extension of 2001 Tax Relief													
1. Individual income tax rate relief:													
a. Retain 10% income tax bracket (sunset 12/31/12) [1].....	tyba 12/31/10	-30,990	-44,807	-13,511	[2]	---	---	---	---	---	---	-89,308	-89,308
b. Retain the 25% and the 28% income tax brackets (sunset 12/31/12).....	tyba 12/31/10	-12,792	-18,376	-5,526	[2]	---	---	---	---	---	---	-36,693	-36,693
c. Retain the 33% and the 35% income tax brackets (sunset 12/31/12).....	tyba 12/31/10	-19,714	-31,276	-9,783	[2]	---	---	---	---	---	---	-60,774	-60,774
d. Repeal overall limitation on itemized deduction and the personal exemption phaseout (sunset 12/31/12).....	tyba 12/31/10	-4,862	-10,384	-5,489	[2]	---	---	---	---	---	---	-20,735	-20,735
2. Retain the child tax credit at \$1,000; refundable up to greater of 15% of earned income in excess of \$10,000 (indexed from 2001) or the taxpayer's social security tax liability to the extent that it exceeds the taxpayer's earned income credit; allow credit against the AMT; repeal AMT offset of refundable credits (sunset 12/31/12) [1].....	tyba 12/31/10	-7,075	-35,565	-29,056	---	---	---	---	---	---	---	-71,697	-71,697
3. Marriage penalty relief:													
a. Standard deduction and 15% rate bracket set at 2 times single for married filing jointly (sunset 12/31/12) [1].....	tyba 12/31/10	-6,287	-8,962	-2,686	[2]	---	---	---	---	---	---	-17,935	-17,935
b. EIC modification and simplification - increase in joint returns beginning and ending income level for phaseout by \$3,000 indexed after 2008; simplify definition of earned income; use AGI instead of modified AGI; simplify definition of qualifying child and tie-breaker rules; and allow math error procedure with Federal Case registry data beginning in 2004 (sunset 12/31/12) [1].....	tyba 12/31/10	-44	-4,424	-4,469	---	---	---	---	---	---	---	-8,937	-8,937

Provision	Effective	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-15	2011-20
4. Education Tax Relief:													
a. Coverdell Education Savings Accounts ("ESAs") - increase the annual contribution limit to \$2,000; allow ESA contributions for special needs beneficiaries above the age of 18; allow corporations and other entities to contribute to ESAs; allow contributions until April 15 of the following year; allow a taxpayer to exclude ESA distributions from gross income and claim the HOPE or Lifetime Learning credits as long as they are not used for the same expenses; repeal excise tax on contributions made to ESA when contribution made by anyone on behalf of same beneficiary to QTP; modify phaseout range for married taxpayers; allow tax-free expenditures for elementary and secondary school expenses; expand the definition of qualified expenses to include certain computers and related items (sunset 12/31/12).....	tyba 12/31/10	-11	-17	-5	---	---	---	---	---	---	---	-32	-32
b. Employer provided educational assistance - extend the exclusion for undergraduate courses and graduate level courses (sunset 12/31/12) [3].....	cba 12/31/10	-707	-964	-243	---	---	---	---	---	---	---	-1,914	-1,914
c. Student loan interest deduction - eliminate the 60-month rule and the disallowance for voluntary payments; increase phaseout ranges to \$50,000-\$65,000 single/ \$100,000-\$130,000 joint, indexed for inflation (sunset 12/31/12).....	ipa 12/31/10	-63	-631	-560	---	---	---	---	---	---	---	-1,254	-1,254
d. Eliminate the tax on awards under the National Health Service Corps Scholarship program and F. Edward Hebert Armed Forces Health Professions Scholarship and Financial Assistance Program (sunset 12/31/12).....	tyba 12/31/10	-9	-35	-27	---	---	---	---	---	---	---	-70	-70
e. Increase arbitrage rebate exception for governmental bonds used to finance qualified school construction from \$10 million to \$15 million (sunset 12/31/12).....	bia 12/31/10	[2]	-1	-2	-3	-3	-3	-3	-3	-3	-3	-9	-24
f. Issuance of tax-exempt private activity bonds for qualified education facilities with annual State volume caps the greater of \$10 per resident or \$5 million (sunset 12/31/12).....	bia 12/31/10	[2]	-1	-3	-5	-5	-5	-5	-5	-5	-5	-14	-39

Provision	Effective	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-15	2011-20
5. Dependent care tax credit - increase the credit rate to 35%, increase the eligible expenses to \$3,000 for one child and \$6,000 for two or more children (not indexed), and increase the start of the phase-out to \$15,000 of AGI (sunset 12/31/12) [1].....	tyba 12/31/10	-76	-302	-222	---	---	---	---	---	---	---	-600	-600
6. Adoption credit - increase the expense limit and the exclusion to \$10,000 for both non-special needs and special needs adoptions, make the credit independent of expenses for special needs adoptions, extend the credit and the exclusion, increase the phase-out start point to \$150,000, index for inflation the expenses limit and the phase-out start point for both the credit and the exclusion, and allow the credit to apply to the AMT (sunset 12/31/12) [1].....	tyba 12/31/10	---	-95	-221	---	---	---	---	---	---	---	-315	-315
7. Employer-provided child care credit of 25% for childcare expenditures and 10% for child care resource (sunset 12/31/12).....	tyba 12/31/10	-11	-33	-15	---	---	---	---	---	---	---	-58	-58
8. Allow electing Alaska Native Settlement Trusts to tax income to the Trust not the beneficiaries (sunset 12/31/12).....	tyba 12/31/10	-2	-5	-2	---	---	---	---	---	---	---	-9	-9
B. Temporary Extension of 2003 Tax Relief													
1. Tax capital gains with a 0%/15% rate structure (sunset 12/31/12).....	tyba 12/31/10	-10,477	2,355	-1,915	-15,840	---	---	---	---	---	---	-25,877	-25,877
2. Tax dividends with a 0%/15% rate structure (sunset 12/31/12).....	tyba 12/31/10	-4,677	-13,555	-9,042	---	---	---	---	---	---	---	-27,274	-27,274
C. Temporary Extension of 2009 Tax Relief													
1. Extension of American opportunity tax credit (sunset 12/31/12) [1].....	tyba 12/31/10	-1,194	-7,094	-9,277	---	---	---	---	---	---	---	-17,566	-17,566
2. Reduce the earnings threshold for the refundable portion of the child tax credit to \$3,000 (sunset 12/31/12) [1].....	tyba 12/31/10	---	-9,826	-9,917	---	---	---	---	---	---	---	-19,743	-19,743
3. Increase in earned income tax credit percentage (sunset 12/31/12) [1].....	tyba 12/31/10	-18	-1,845	-1,822	---	---	---	---	---	---	---	-3,685	-3,685
4. EIC modification and simplification - increase in joint returns beginning and ending income level for phaseout by \$5,000 indexed after 2008 (sunset 12/31/12) [1].....	tyba 12/31/10	-16	-1,553	-1,532	---	---	---	---	---	---	---	-3,101	-3,101
Total of Temporary Extension of Tax Relief.....		-99,025	-187,396	-105,325	-15,848	-8	-8	-8	-8	-8	-8	-407,600	-407,640

Provision	Effective	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-15	2011-20
II. Temporary Alternative Minimum Tax Relief - Set the AMT Exemption Amount at \$47,450 (\$72,450 Joint) in 2010 and \$48,450 (\$74,450 Joint) in 2011 and Allow Personal Credits against the AMT (sunset 12/31/11)...													
	tyba 12/31/09	-85,833	-67,597	16,754	---	---	---	---	---	---	---	-136,676	-136,676
III. Temporary Estate and Gift Tax Relief - \$5 Million Unified and Indexed Exemption Amount; 35% Maximum Rate; Portability of Exemption Amount; and Decedents Dying in 2010 Can Elect into EGTRRA (sunset 12/31/12).....													
	dda/gsta 12/31/09 & gma 12/31/10	-4,546	-28,050	-29,349	-3,483	-2,088	-981	-53	130	135	136	-67,515	-68,149
IV. Temporary Extension of Investment Incentives													
1. Increase additional first-year depreciation to 100 percent (sunset 12/31/11); extend 50 percent additional first-year depreciation for property placed in service after 12/31/11 (sunset 12/31/12)...													
	ppisa 9/8/10	-55,419	-54,422	2,687	25,519	19,778	15,671	11,161	7,071	4,297	2,775	-61,857	-20,883
2. Election to accelerate AMT credit in lieu of additional first-year depreciation (sunset 12/31/12).....													
	[4]	-11	-536	-212	37	29	19	13	9	7	6	-693	-639
3. Section 179 expensing amounts and threshold limits \$125,000/ \$500,000 (sunset 12/31/12).....													
	tyba 12/31/11	---	-3,266	-2,160	1,791	1,131	822	636	401	227	110	-2,504	-307
Total of Temporary Extension of Investment Incentives.....		-55,430	-58,224	315	27,347	20,938	16,512	11,810	7,481	4,531	2,891	-65,054	-21,829
V. Temporary Extension of Unemployment Insurance and Related Matters [1] [5].....													
	various	-34,515	-21,642	-100	-102	-76	-41	-29	-4	---	---	-56,435	-56,510
VI. Temporary Payroll Tax Reduction (Employee Side of OASDI) by 2 Percentage Points (sunset 12/31/11) [6]..													
	tyba 12/31/10	-67,239	-44,414	---	---	---	---	---	---	---	---	-111,653	-111,653
VII. Temporary Extension of Certain Expiring Provisions													
A. Energy													
1. Incentives for biodiesel and renewable diesel (sunset 12/31/11).....													
	fsoua 12/31/09	-1,677	-300	---	---	---	---	---	---	---	---	-1,977	-1,977
2. Placed-in-service date for facilities eligible to claim the refined coal production credit (excluding steel industry fuel) (sec. 45(d)) (sunset 12/31/11).....													
	ppisa 12/31/09	-15	-20	-23	-24	-24	-24	-25	-26	-26	-24	-105	-230
3. Credit for construction of energy efficient new homes (sunset 12/31/11).....													
	haa 12/31/09	-66	-25	-12	-11	-9	-8	-5	-1	---	---	-124	-138

Provision	Effective	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-15	2011-20
4. Incentives for alternative fuel and alternative fuel mixtures (modified to exclude black liquor) (sunset 12/31/11).....	fsoua 12/31/09	-176	-26	---	---	---	---	---	---	---	---	-202	-202
5. Special rule to implement electric transmission restructuring (sunset 12/31/11).....	da 12/31/09	-232	-92	51	51	51	51	51	51	18	---	-171	---
6. Extension of suspension of 100 percent-of-net-income limitation on percentage depletion for oil and natural gas from marginal properties (sunset 12/31/11).....	tyba 12/31/09	-182	-42	---	---	---	---	---	---	---	---	-224	-224
7. Grants for specified energy property in lieu of tax credits (sunset 12/31/11) [1].....	ppisa DOE	-1,941	-1,045	---	---	---	---	---	---	---	---	-2,987	-2,987
8. Extension of provisions related to alcohol used as fuel (extension of present law):													
a. Extension of income tax credits for alcohol fuels; and extension of excise tax credits and outlay payments for alcohol fuel mixtures (sunset 12/31/11).....	pa 12/31/10 & saua 12/31/10	-3,558	-1,311	---	---	---	---	---	---	---	---	-4,869	-4,869
b. Extension of additional duties on ethanol (sunset 12/31/11) [5].....	1/1/11	8	3	---	---	---	---	---	---	---	---	10	10
9. Credit for energy efficient appliances (sunset 12/31/11).....	apa 12/31/10	-7	-17	-14	-9	-8	-6	-5	-4	-4	-3	-55	-78
10. Extension and modification of section 25C nonbusiness energy property (sunset 12/31/11).....	ppisa 12/31/10	-119	-477	---	---	---	---	---	---	---	---	-596	-596
11. Alternative fuel vehicle refueling property (non-hydrogen refueling property) (sunset 12/31/11).....	ppisa 12/31/10	-7	-6	-2	-1	-1	[7]	[7]	[7]	[7]	[7]	-17	-16
B. Individual Tax Relief													
1. Above-the-line deduction of up to \$250 for teacher classroom expenses (sunset 12/31/11).....	tyba 12/31/09	-39	-195	-156	---	---	---	---	---	---	---	-390	-390
2. Deduction of State and local general sales taxes (sunset 12/31/11).....	tyba 12/31/09	-2,829	-2,393	-314	---	---	---	---	---	---	---	-5,536	-5,536
3. Contributions of capital gain real property made for qualified conservation purposes (sunset 12/31/11)...	cmi tyba 12/31/09	-63	-48	---	---	---	---	---	---	---	---	-111	-111
4. Deduction for qualified tuition and related expenses (sunset 12/31/11) [8].....	tyba 12/31/09	-711	-450	---	---	---	---	---	---	---	---	-1,161	-1,161
5. Tax-free distributions from IRAs to certain public charities for individuals age 70 1/2 or older, not to exceed \$100,000 per taxpayer per year; distributions made in January 2011 may count against the 2010 \$100,000 limit and satisfy the 2010 minimum distribution requirement (sunset 12/31/11).....	dmi tyba 12/31/09	-517	-197	-29	-30	-31	-32	-34	-35	-36	-38	-804	-979

Provision	Effective	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-15	2011-20
6. Estate tax look-through for certain RIC stock held by nonresidents (sunset 12/31/11).....	dda 12/31/09	-5	-5	---	---	---	---	---	---	---	---	-10	-10
7. Parity for exclusion for employer-provided mass transit and parking benefits (sunset 12/31/11) [9].....	ma 12/31/10	-102	-34	---	---	---	---	---	---	---	---	-136	-136
8. Refunds disregarded in the administration of Federal programs and federally assisted programs (sunset 12/31/12) [1] [5].....	ara 12/31/09	-4	-4	---	---	---	---	---	---	---	---	-8	-8
C. Business Tax Relief													
1. Tax credit for research and experimentation expenses (sunset 12/31/11).....	apoa 12/31/09	-5,984	-2,055	-923	-813	-715	-631	-575	-547	-530	-501	-10,490	-13,272
2. Indian employment tax credit (sunset 12/31/11).....	tyba 12/31/09	-59	-33	-9	-1	---	---	---	---	---	---	-102	-102
3. New markets tax credit (\$3.5 billion allocation for 2010 and \$3.5 billion allocation for 2011) (sunset 12/31/11).....	cyba 12/31/09	-5	-29	-94	-180	-221	-252	-279	-288	-267	-194	-530	-1,810
4. 50% tax credit for certain expenditures for maintaining railroad tracks (sunset 12/31/11).....	tyba 12/31/09	-232	-99	[2]	---	---	---	---	---	---	---	-331	-331
5. Mine rescue team training credit (sunset 12/31/11)..	tyba 12/31/09	-2	-1	-1	[2]	[2]	[2]	---	---	---	---	-4	-5
6. Employer wage credit for activated military reservists (sunset 12/31/11).....	pma 12/31/09	-2	-1	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	-3	-3
7. 15-year straight-line cost recovery for qualified leasehold, restaurant, and retail improvements and new restaurants (sunset 12/31/11).....	ppisa 12/31/09	-281	-359	-397	-395	-389	-385	-380	-369	-350	-324	-1,821	-3,629
8. 7-year recovery period for certain motorsports racing track facilities (sunset 12/31/11).....	ppisa 12/31/09	-40	-3	-1	---	---	-1	1	3	3	3	-45	-36
9. Accelerated depreciation for business property on Indian reservations (sunset 12/31/11).....	ppisa 12/31/09	-98	-23	5	17	27	22	12	1	-2	-1	-72	-41
10. Enhanced charitable deduction for contributions of food inventory (sunset 12/31/11).....	cma 12/31/09	-92	-42	---	---	---	---	---	---	---	---	-134	-134
11. Enhanced charitable deduction for contributions of book inventories to public schools (sunset 12/31/11).....	cma 12/31/09	-37	-16	---	---	---	---	---	---	---	---	-53	-53
12. Enhanced charitable deduction for corporate contributions of computer inventory for educational purposes (sunset 12/31/11).....	cmd tyba 12/31/09	-245	-105	---	---	---	---	---	---	---	---	-350	-350
13. Election to expense mine safety equipment (sunset 12/31/11).....	ppisa 12/31/09	-20	1	5	4	3	3	2	1	[7]	---	-7	-1
14. Special expensing rules for certain film and television productions (sunset 12/31/11).....	qfatpca 12/31/09	-162	-158	39	45	34	29	23	21	16	12	-202	-101
15. Expensing of "Brownfields" environmental remediation costs (sunset 12/31/11).....	epoa 12/31/09	-493	-536	-66	83	91	86	77	67	57	50	-921	-583

Provision	Effective	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-15	2011-20
16. Deduction allowable with respect to income attributable to domestic production activities in Puerto Rico (sunset 12/31/11).....	tyba 12/31/09	-229	-186	---	---	---	---	---	---	---	---	-415	-415
17. Modify tax treatment of certain payments under existing arrangements to controlling exempt organizations (sunset 12/31/11).....	proaa 12/31/09	-34	-5	---	---	---	---	---	---	---	---	-40	-40
18. Treatment of certain dividends of regulated investment companies ("RICs") (sunset 12/31/11)...	[10]	-108	-66	---	---	---	---	---	---	---	---	-174	-174
19. Extend the treatment of RICs as "qualified investment entities" under section 897 (FIRPTA) (sunset 12/31/11).....	1/1/10	-23	-36	---	---	---	---	---	---	---	---	-59	-59
20. Exception under subpart F for active financing income (sunset 12/31/11).....	tyba 12/31/09	-5,200	-3,957	---	---	---	---	---	---	---	---	-9,157	-9,157
21. Look-through treatment of payments between related CFCs under foreign personal holding company income rules (sunset 12/31/11).....	tyba 2009	-814	-691	---	---	---	---	---	---	---	---	-1,505	-1,505
22. Basis adjustment to stock of S corporations making charitable contributions of property (sunset 12/31/11).....	cmi tyba 12/31/09	-19	-36	-6	-3	-3	-3	-3	-3	-3	-3	-67	-82
23. Empowerment zone tax incentives (sunset 12/31/11).....	pa 12/31/09	-330	-46	3	1	---	-4	-1	-4	-4	-4	-371	-387
24. Tax incentives for investment in the District of Columbia (sunset 12/31/11).....	pa 12/31/09	-88	-21	-2	-1	-4	-7	-4	-4	-4	-4	-116	-138
25. Temporary increase in limit on cover over of rum excise tax revenues (from \$10.50 to \$13.25 per proof gallon) to Puerto Rico and the Virgin Islands (sunset 12/31/11) [11].....	abiUSa 12/31/09	-235	-27	---	---	---	---	---	---	---	---	-262	-262
26. Economic development credit for American Samoa (sunset 12/31/11).....	tyba 12/31/09	-15	-12	---	---	---	---	---	---	---	---	-27	-27
27. Work opportunity tax credit (sunset 12/31/11).....	wpoifibwa 8/31/11	[2]	-131	-16	-8	-5	-2	---	---	---	---	-160	-162
28. Qualified zone academy bonds (\$400 million allocation) (sunset 12/31/11).....	oia 12/31/10	[2]	-3	-8	-16	-21	-22	-22	-21	-19	-19	-48	-151
29. Premiums for mortgage insurance deductible as interest that is qualified residence interest (sunset 12/31/11).....	apoa 12/31/10	-261	-87	---	---	---	---	---	---	---	---	-348	-348
30. Special rules applicable to qualified small business stock (sunset 12/31/11).....	saa 12/31/10	15	6	---	---	-62	-768	-420	-97	-74	-47	-40	-1,445
D. Temporary Disaster Relief Provisions													
1. New York Liberty Zone - tax-exempt bond financing (sunset 12/31/11).....	bia 12/31/09	-8	-12	-12	-12	-12	-12	-12	-12	-12	-12	-56	-116

Provision	Effective	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011-15	2011-20
2. GO Zone:													
a. Increase in rehabilitation credit (sunset 12/31/11).....	apoia 12/31/09	-39	-21	[2]	1	1	1	2	2	2	1	-58	-50
b. Extend the placed-in-service deadline for GO Zone low-income housing credits (sunset 12/31/11).....	ppisa 12/31/10	-8	-34	-34	-34	-34	-34	-34	-34	-34	-34	-144	-314
c. Tax-exempt bond financing (sunset 12/31/11).....	DOE	-5	-18	-26	-26	-26	-26	-25	-25	-25	-25	-100	-226
d. Bonus depreciation for specified GO Zone extension property (sunset 12/31/11).....	ppisa 12/31/09	-171	-61	-4	-1	2	4	6	7	7	7	-234	-202
Total of Temporary Extension of Certain Expiring Provisions.....		-27,566	-15,587	-2,046	-1,363	-1,356	-2,021	-1,650	-1,317	-1,287	-1,160	-47,919	-55,349
NET TOTAL		-374,154	-422,910	-119,751	6,551	17,410	13,461	10,070	6,282	3,371	1,859	-892,852	-857,806

Joint Committee on Taxation

NOTE: Details may not add to totals due to rounding.

Legend for "Effective" column:

abiUSa = articles brought into the United States after
 apa = appliances produced after
 apoia = amounts paid or incurred after
 apoaa = amounts paid or accrued after
 ara = amounts received after
 bia = bonds issued after
 cba = courses beginning after
 cma = contributions made after
 cmd = contributions made during
 cmi = contributions made in
 cyba = calendar years beginning after
 da = dispositions after

dda = decedents dying after
 dda/gsta = decedents dying after and generation-
 skipping transfers after
 dmi = distributions made in
 DOE = date of enactment
 epoia = expenses paid or incurred after
 epoid = expenses paid or incurred during
 fsoua = fuel sold or used after
 gma = gifts made after
 haa = homes acquired after
 ipa = interest paid after
 ma = months after

oia = obligations issued after
 pa = periods after
 pma = payments made after
 ppisa = property placed in service after
 proaa = payments received or accrued after
 qfatpca = qualified film and television
 productions commencing after
 saa = stocks acquired after
 saua = sales and uses after
 tyba = taxable years beginning after
 wpoifibwa = wages paid or incurred for individuals
 beginning work after

