

THE ECONOMIC AND BUDGET EFFECTS OF PERMANENTLY EXTENDING THE 2001 AND 2003 TAX CUTS*

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INTRODUCTION

THE PRESIDENT'S BUDGET FOR FISCAL YEAR 2008 included a number of now familiar proposals to extend expiring tax provisions enacted under the 2001 Economic Growth and Tax Relief Reconciliation Act (EGTRRA) and the 2003 Jobs and Growth Tax Relief Reconciliation Act (JGTRRA). We use a microsimulation model of the federal individual income tax and the Global Insight (GI) short-term U.S. Macroeconomic Model¹ (combined with calibration procedures) to analyze the economic and budget effects of permanently extending several of EGTRRA's and JGTRRA's expiring provisions. The plan that we analyze permanently extends JGTRRA's preferential tax rates on individual capital gains and dividends, EGTRRA's lower marginal tax rates on ordinary income, EGTRRA's repeal of the estate tax, and provisions of EGTRRA raising after-tax income.² All of these provisions are currently set to expire in 2010.

The economic and budget effects of this extension plan are measured against the Congressional Budget Office's (CBO) January 2007 baseline projections.³ CBO's baseline projections assume current-law tax policy (Williams, 2005). Thus, they project gross domestic product (GDP), prices, individual and corporate incomes, net federal saving, and other economic and budget variables over the 10-year budget period assuming that EGTRRA's and JGTRRA's expiring provisions are not extended. Because of its current-law assumptions, CBO projects a sharp rise in federal income tax revenues. This contributes to some slowdown in economic activity after 2010.

When compared to CBO's baseline, our results indicate that permanently extending EGTRRA and JGTRRA produces modest economic gains. Between 2011 and 2017, real (inflation-

adjusted) GDP is on average 0.8 percent higher while total employment is on average 0.6 percent higher. Individual incomes and the federal personal income tax base also expand, helping to reduce the cost of the extension plan to the federal government.

The remainder of the paper is organized as follows. The second and third sections discuss the extension plan and our procedures for simulating its economic and budget effects. The fourth section reviews the conventional revenue and marginal rate effects of the extension plan. The fifth and sixth sections consider its macroeconomic and dynamic revenue effects. We estimate the dynamic revenue effects using both the Global Insight model and the microsimulation model.

THE EXTENSION PLAN

The extension plan that we analyze includes four broad components.

Permanently Extend JGTRRA's Preferential Tax Rates on Capital Gains and Dividends

Under current law, capital gains tax rates for individuals will revert to 10 percent or 20 percent and individual dividend income will be taxed at ordinary income tax rates beginning in 2011. Under the extension plan, the maximum capital gains tax rate will be permanently lowered to 15 percent.⁴ In addition, qualified dividend income will be taxed at the same rates applying to capital gains.

Permanently Extend EGTRRA's Lower Marginal Tax Rates on Ordinary Income

Under current law, ordinary income tax rates revert to their pre-EGTRRA levels in 2011. Pre-EGTRRA law includes five regular marginal tax rates—15 percent, 28 percent, 31 percent, 36 percent, and 39.6 percent. Table 1 shows our projections of the tax rate structure for single filers and for married couples filing a joint return assuming no extension of EGTRRA's lower marginal rates.

*We would like to thank Robert Dietz and participants of the 2007 NTA fall conference for their comments. All errors are solely those of the authors. The analysis and conclusions presented here are strictly those of the authors. They do not necessarily reflect the views of the U.S. Department of the Treasury.

Table 1
Projected 2011 Ordinary Income Tax Schedules for the Pre-EGTRRA Baseline and the Extension Plan

Taxable Income	Single Filers			Married Couples Filing a Joint Return		
	Pre-EGTRRA	Tax Rate (%)		Pre-EGTRRA	Tax Rate (%)	
		Extension Plan	Difference		Extension Plan	Difference
\$1-8,475	15	10	5	15	10	5
\$8,476-34,450	15	15	0	15	15	0
\$34,451-83,400	28	25	3	28	15	13
\$83,401-174,000	31	28	3	28	25	3
\$174,001-378,350	36	33	3	31	28	3
Over \$378,350	39.6	35	4.6	36	33	3
				39.6	35	4.6

Notes: EGTRRA = Economic Growth and Tax Relief Reconciliation Act. Taxable income bracket amounts are based on tax provisions and projected inflation under current law and the extension plan.

Under the extension plan, EGTRRA's 10 percent tax bracket is made permanent for a portion of income that would otherwise be taxed at the 15 percent rate. The 10 percent taxable income bracket is projected to end at \$8,475 for singles and \$16,950 for married couples filing a joint return in 2011. The endpoint for the 15 percent bracket remains the same for singles but increases slightly for married couples, thus reducing the marginal tax rate for income at the top of the bracket. The width of the 28 percent bracket for married couples filing a joint return narrows. The widths of the remaining three brackets do not change. However, the top four marginal tax rates are reduced to 25 percent, 28 percent, 33 percent, and 35 percent, respectively.

Permanently Extend EGTRRA's Repeal of the Estate Tax

Under current law, the maximum estate tax rate is 45 percent through 2009. The exempt amount of the taxable estate (the applicable exclusion amount) is \$2 million in 2008 and \$3.5 million in 2009. The estate tax is repealed for those dying in 2010. However, the step-up in basis is replaced with a modified carryover basis for assets transferred at death, making capital gains on those assets during the period of the decedent's ownership taxable. The estate tax is reinstated in its pre-EGTRRA form in 2011. Thus, for those dying after 2010, the maximum estate tax rate is 55 percent while the applicable exclusion amount is \$1 million. Under the extension plan, the estate tax is repealed for those dying after 2010, and the step-up in basis is replaced with a modified carryover basis.⁵

Permanently Extend Provisions of EGTRRA Raising After-Tax Income

Those provisions primarily raising after-tax income include the \$1,000 child tax credit, marriage penalty relief, and the phase-out of itemized deductions and personal exemptions.

Child Tax Credit

Under current law, the child tax credit will fall to \$500 in 2011 for each qualifying child under the age of 17. It will generally not be refundable except for families with three or more qualifying children. Under the extension plan, the child tax credit is \$1,000 per child, and the credit is partially refundable.

Marriage Penalty Relief

Under current law, the basic standard deduction and the regular 15 percent tax bracket revert to their pre-EGTRRA levels in 2011. Thus, the standard deduction for married couples filing a joint return will be about 1.67 times the standard deduction for an individual filing a single return. Similarly, the top of the 15 percent tax bracket for married couples filing a joint return will be about 1.67 times the top of the 15 percent bracket for a single filer. EGTRRA raises the standard deduction and the top of the 15 percent bracket for married couples filing a joint return to two times those amounts applying for a single filer (see Table 1). The extension plan makes this increase in the standard deduction and the 15 percent bracket permanent.

Phase-out of Itemized Deductions and Personal Exemptions

Under current law, the phase-out of itemized deductions and personal exemptions will be reinstated in 2011. We project that in 2011 most taxpayers with adjusted gross income (AGI) exceeding \$169,200 will have to reduce their itemized deductions. Single filers with AGI greater than \$169,200 and married couples filing a joint return with AGI exceeding \$253,800 will also have to reduce their personal exemptions. Under the extension plan, itemized deductions and personal exemptions do not phase out.

MODEL CALIBRATION AND TAX POLICY SIMULATIONS

We analyze the effects of the extension plan using two models. The first is the Global Insight short-term U.S. Macroeconomic Model. The second is a microsimulation model of federal individual income tax returns. We calibrate both models to CBO's January 2007 baseline economic and budgetary projections.⁶

A CBO-like baseline forecast is first constructed using the Global Insight model and the details that CBO publishes about its baseline projections. We use the resulting CBO-like forecast to infer the likely implications of CBO's current-law assumptions for key economic variables like consumption, employment, and the components of national income and product accounts (NIPA) personal income. In combination with Statistics of Income data, the microsimulation model then uses

price, income, and some NIPA budget variables from the CBO-like forecast, along with estimated relationships between NIPA personal income and non-NIPA taxable income, to project individual income tax data. These data are consistent with CBO's published baseline projections.

Simulating the Economic and Budget Effects of a Change in Tax Policy

Calibrating the Global Insight model and the microsimulation model to a common baseline provides a consistent starting point for dynamic policy analysis. We apply additional calibration procedures to ensure that revenue estimates from the GI model and the microsimulation model are broadly consistent.

Our tax policy simulations proceed in three steps. First, we use the microsimulation model to estimate the revenue effects of a proposed change in tax policy under baseline economic assumptions. The proposed policy can involve a change in current-law federal income tax rates, a change in the federal individual income tax base, or both. The microsimulation model gives the change in federal income tax revenues assuming that personal and business incomes remain at baseline levels. It also produces estimates of marginal tax rates on ordinary income, long-term capital gains realizations, and dividend income under the proposed policy and current law.

Second, we use the Global Insight model to estimate the dynamic revenue effects of the same tax policy change. Inputs into a simulation with the GI model include marginal tax rates and estimated changes in federal income tax revenues from the microsimulation model. They also include Joint Committee on Taxation (JCT) estimates of the revenue effects of estate tax repeal.⁷ The simulation with the GI model produces an alternative to the CBO-like baseline forecast. That alternative (non-baseline) forecast includes the effects of the proposed policy on a large number of economic variables, including GDP, prices, interest rates, and employment.

Third, we update the microsimulation model to reflect the dynamic effects of the proposed tax policy on personal and business incomes. This is done using a slightly different routine from that developed for baseline calibration. Price-level variables and some NIPA budget variables from the alternative forecast continue to be used for projection purposes. In addition, the NIPA components of personal and business income from the alternative

forecast continue to provide a basis for estimating target values for income in the microsimulation model.

However, the weights used to derive population estimates are not changed to hit income targets. Instead, in non-baseline simulations, the aggregate values for several broad measures of income are adjusted on a percentage change basis to scale incomes on tax returns in the microsimulation model.⁸ We refer to the result as an income-adjusted forecast. For this paper, we assume that the changes in incomes on individual returns are proportional across all income classes.

We continue to iterate between the microsimulation model and the Global Insight model. Revenue estimates and marginal rates from the updated microsimulation model are used as inputs into a new simulation with the GI model. The alternative forecast that results provides a new set of income targets for the microsimulation model. Revenue estimates from the GI model and the microsimulation model are compared after each iteration. We consider a tax policy simulation complete when differences between changes in federal tax revenues from the GI model and the microsimulation model are small or can be accounted for by definitional and other differences in the federal income tax bases used in the two models.

We followed this iterative procedure in calibrating estimates from the microsimulation model

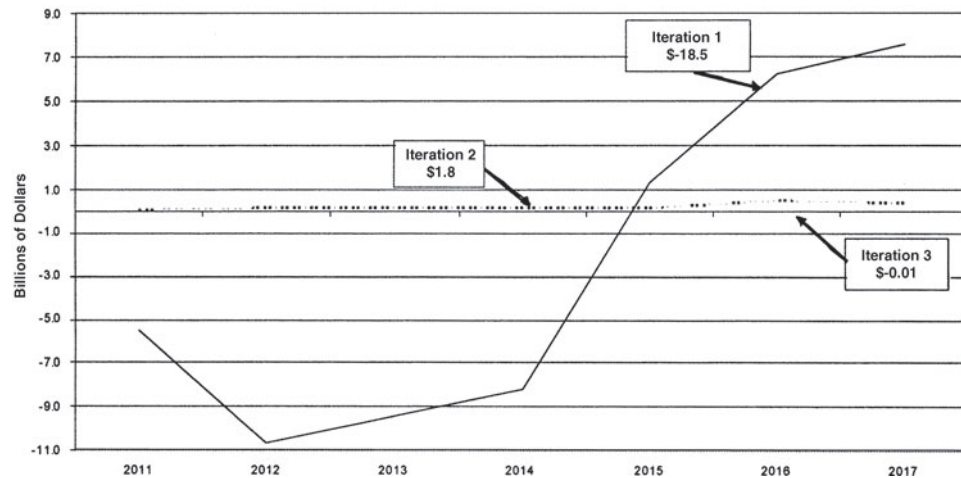
and the Global Insight model to the economic and budget effects of the extension plan. Revenue estimates from the two models converged quickly (see Figure 1). In the first iteration, the total change in personal income tax revenues from the GI model exceeded the total change in individual income tax revenues from the microsimulation model by about \$18.5 billion over 10 years. In the second iteration, roughly \$1.8 billion separated the estimated total changes in income tax revenues from the two models. By the third iteration, the difference between the change in individual income tax revenues from the microsimulation model and the change in personal income tax revenues from the GI model had fallen to \$11 million.

REVENUE ESTIMATES AND THE MARGINAL RATE EFFECTS OF THE EXTENSION PLAN

Table 2A includes two sets of revenue estimates.⁹ Revenue estimates from the *baseline* forecast start from CBO’s January 2007 baseline income projections and give the revenue effects of the extension plan under conventional assumptions. This means that the revenue estimates assume that changes in tax policy do not affect baseline projections of GDP, prices, incomes, and other economic and budget variables.

Revenue estimates from the *income-adjusted* forecast include the macroeconomic (“dynamic”)

Figure 1: Differences Between Individual Income Tax Receipts after Calibration of the Microsimulation and Global Insight Models, Calendar Years 2011-17



Note: Estimated changes are compared to the Congressional Budget Office’s January 2007 baseline economic and budgetary projections.

Table 2A
**Change in Federal Individual Income Tax Revenues from Current Law
 under the Extension Plan, Billions of Dollars**

	<i>2008-17 (Fiscal Year Totals)</i>	
	<i>Change in Federal Income Tax Revenues^a</i>	<i>Change in Alternative Minimum Tax</i>
Estimate from the Baseline Forecast	-1,294.1	744.4
As a Share of Federal Tax Revenues (%) ^b	6.0	3.5
Estimate from the Income-Adjusted Forecast	-1,100.3	763.5
As a Share of Federal Tax Revenues (%) ^b	5.1	3.6

^aEstimated changes in federal individual income taxes include net refundable credits.

^bFederal tax revenues equal the sum of the Congressional Budget Office's January 2007 baseline projections of individual income tax, corporate income tax, and federal estate and gift tax revenues.

effects of the extension plan on CBO's baseline projections. They do so because the income-adjusted forecast updates the federal individual income tax base in the baseline forecast to reflect the economic and budget effects of the extension plan. For the same change in tax policy, revenue estimates from the income-adjusted forecast can differ substantially from those from the baseline forecast.

Our revenue estimates using the baseline forecast put federal income tax revenues \$1,294.1 billion below CBO's baseline revenue projections over the 10-year budget period (see "Estimate from the Baseline Forecast" in Table 2A).¹⁰ In comparison, JCT (2007, 301-305) estimated that extending EGTRRA's lower tax rates on ordinary income, JGTRRA's preferential tax rates on capital gains and dividend income, and EGTRRA's \$1,000 child tax credit and marriage penalty relief would reduce federal tax revenues by about \$1,335.7 billion.¹¹ The income-adjusted forecast implies a smaller reduction in federal income tax revenues (see "Estimate from the Income-Adjusted Forecast" in Table 2A). It puts federal income taxes \$1,100.3 billion below CBO's baseline federal revenue projections over 10 years.

The estimated reduction in federal income tax revenues would be roughly 70 percent greater in the income-adjusted forecast if not for the change in revenues from the AMT. The extension plan includes no additional increases in the AMT exemption amount and no indexing of the AMT brackets to inflation.¹² Without one of these, an ever larger number of middle-income to upper-income taxpayers will become subject to the AMT. For example, the U.S. Department of the Treasury (2007) estimates that, with permanent extension of EGTRRA

and JGTRRA and no additional AMT relief beyond 2007, the number of individual AMT taxpayers will jump from 4 million in 2007 to almost 30 million in 2008 and over 56 million in 2017.

Many more taxpayers would be subject to the AMT because the tax cuts under the extension plan effectively put the regular income tax liability below the minimum tax liability. The increased difference between the minimum tax liability and the regular income tax liability has been characterized as a "claw back."¹³ The estimated change in federal income tax revenues is less than it otherwise would be because the AMT takes back tax reductions from the extension plan.

The Extension Plan's Marginal Rate Effects

The extension plan dramatically lowers marginal tax rates on capital gains, dividend income, and ordinary income (see Table 2B). For example, between 2011 and 2017, current-law marginal tax rates on capital gains and dividend income fall by an average of around 28 percent and 58 percent, respectively. The drop in the marginal tax rate on ordinary income is not as steep. However, between 2011 and 2017, marginal tax rates on ordinary income are on average 7 percentage points below baseline levels.

MACROECONOMIC EFFECTS OF THE EXTENSION PLAN¹⁴

Our simulations indicate that the extension plan has a positive economic impact (see Table 3). Between 2011 and 2017, total employment expands by an average of over 0.6 percent annually, and the unemployment rate drops an average of 0.3 of a

Table 2B
**Change in Federal Individual Income Tax Revenues from Current Law
 under the Extension Plan, Billions of Dollars**

<i>2011-17 (Calendar Year Average)</i>	
Current-Law Marginal Tax Rates (%)	20.1
Capital Gains	29.0
Dividend Income	27.8
Ordinary Income ^b	
Average Percent Change from Current Law ^a	
Capital Gains	27.9
Dividend Income	57.5
Ordinary Income ^b	7.1

^aThe average percent change from current law is calculated using marginal tax rates from the baseline forecast.

^bOrdinary income includes all income that does not qualify as a capital gain.

percentage point. That drop in the unemployment rate occurs despite the increase in the rate of labor force participation spurred by lower marginal tax rates on labor income.¹⁵ Over the same period, real disposable personal income rises by 2.7 percent, and personal saving climbs sufficiently to push the personal saving rate a full percentage point above baseline levels.

Permanently extending JGTRRA's preferential rates on capital gains and dividend income permanently reduces the cost of capital to business. Real

nonresidential fixed investment responds positively, climbing an average of about 0.8 percent annually between 2011 and 2017. The economy's stock of productive capital expands as a result, and real potential GDP increases in every quarter between 2011 and 2017. Reflecting that increase in the economy's productive potential, real GDP exceeds CBO's baseline projections by 0.8 percent by 2017.

Two factors mitigate the economic benefits of the extension plan. First, in the simulations, falling rates of unemployment and a small increase in

Table 3
**Economic Effects of the Extension Plan Relative to the CBO's January 2007 Baseline Projections,
 Fiscal Years 2011-17**

	2011	2012	2013	2014	2015	2016	2017	<i>(Average)</i> 2011-17
Real GDP ^a	0.5	1.0	1.0	0.9	0.8	0.8	0.8	0.8
Total Employment ^a	0.2	0.7	0.9	0.8	0.7	0.6	0.6	0.6
Unemployment Rate ^b	-0.2	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3
Real Disposable Personal Income ^a	1.5	2.6	2.9	2.9	2.9	3.0	3.1	2.7
Real Personal Consumption ^a	0.7	1.6	1.8	1.8	1.8	1.8	1.8	1.6
Personal Saving Rate ^c	0.7	1.0	1.0	1.0	1.1	1.1	1.2	1.0
Real Non-Residential Investment ^a	0.6	1.9	1.4	0.8	0.5	0.5	0.5	0.8
Full-Employment Capital Stock ^a	0.0	0.3	0.4	0.5	0.5	0.5	0.4	0.4
CPI Inflation ^d	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.2

Notes: GDP = gross domestic product; CPI = consumer price index; CBO = Congressional Budget Office. The economic effects of the extension plan are measured relative to the CBO's January 2007 baseline economic and budgetary projections.

^aPercent change from baseline levels.

^bDifference in the percent of the civilian labor force.

^cDifference in the percent of disposable personal income.

^dDifference in the percent change from a year ago.

the rate of consumer price index inflation prompt the Federal Reserve to raise the federal funds rate by roughly half a percentage point (on average) between 2011 and 2017.¹⁶ Yields on Treasury notes and bills and on corporate and other debt rise as a result, increasing the cost of capital to business. Second, increases in the AMT more than halve the tax reduction under the extension plan (see Table 2A), limiting gains in personal disposable income, consumption, and saving. They also boost the average effective marginal tax rate on ordinary income, which might offset incentives for supplying more labor.¹⁷

Incentive Effects of the Extension Plan's Income Tax Provisions

The macroeconomic effects of the extension plan stem primarily from reversing the disincentives to work, save, and invest created by the increase in marginal tax rates in 2011. In our simulations, we consider how labor responds to the permanent extension of EGTRRA's lower marginal tax rates on ordinary income. We also consider how investment responds to the permanent extension of preferential rates on capital gains and dividend income.

Permanently extending the \$1,000 child tax credit, marriage penalty relief, and repeal of the phase-out of itemized deductions and personal exemptions also affects economic activity. However, it tends to do so by increasing after-tax incomes. In the Global Insight model, we lower average effective tax rates to account for the disposable income and consumption effects of marriage penalty relief and changes in itemized deductions and personal exemptions. We model changes in refundable credits as a change in federal transfer payments to persons.

In general, tax relief measures that reduce marginal tax rates on capital and labor income produce larger economic gains. This is because cuts in marginal tax rates both raise the after-tax wage rate and lower the cost of capital. Thus, they tend to encourage individuals to work more and businesses to invest. Increases in labor supply, saving, and the domestic capital stock follow. New or bigger personal deductions and tax credits do little to spur new business investment. And they boost after-tax incomes, not after-tax wage rates. Thus, individuals can increase or even maintain the same level of after-tax income by working the same or fewer hours.

Economic and Budget Effects of Repealing the Estate Tax

The Global Insight model's current-law baseline is adjusted to reflect the impact of estate tax repeal on the federal budget, consumption, the cost of capital, and the cost of business services.¹⁸ Repeal of the federal estate tax affects the cost of capital because we assume that the estate tax acts as an additional levy on capital income.¹⁹ It impacts the cost of business services because we assume that the total cost of estate planning and administration falls by some fraction of the amount now spent complying with, and minimizing, estate tax liabilities.

The macroeconomic effects of eliminating the estate tax are small. In simulations of only estate tax repeal, real GDP rises by an average of about 0.1 percent while the full-employment real capital stock expands by an average of 0.2 percent between 2011 and 2017. Johnson and Joulfaian (2008) report similar real GDP effects in simulations of estate tax repeal.

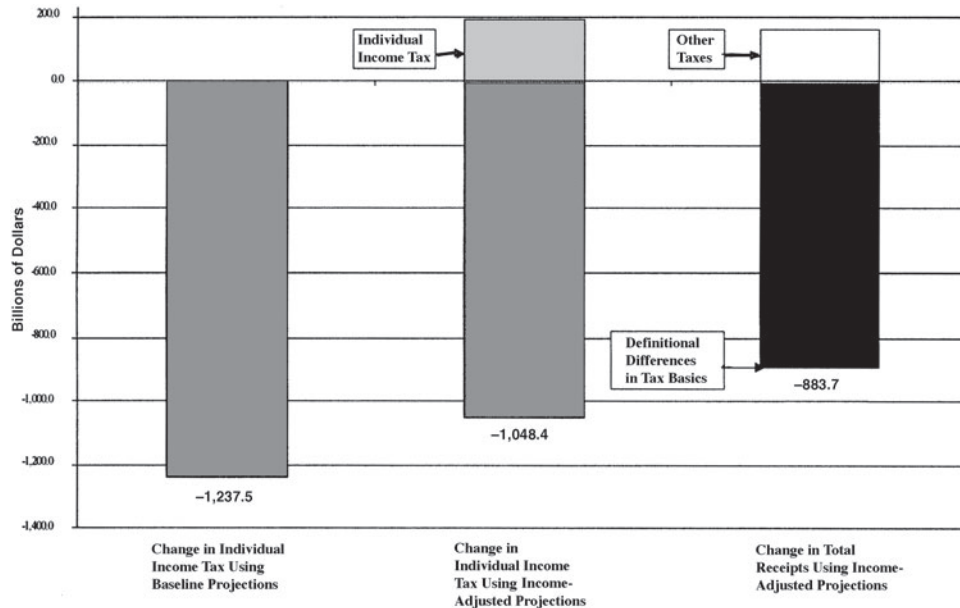
DYNAMIC REVENUE EFFECTS OF THE EXTENSION PLAN

The extension plan puts federal tax revenues \$883.7 billion below CBO's baseline projections ("Change in Total Receipts Using Income-Adjusted Projections" in Figure 2). We estimate that the revenue loss from the income tax provisions alone would be \$1,237.5 billion ("Change in Individual Income Tax Using Baseline Projections" in Figure 2) if not for the dynamic effects of the extension plan on incomes.²⁰

Over 10 years, revenue feedbacks from the income tax provisions equal the difference between -\$883.7 billion and -\$1,237.5 billion. They can be divided into three components—revenue feedbacks from the individual income tax (calculated using the microsimulation model), an adjustment for differences in the federal income tax bases used in the Global Insight model and the microsimulation model, and revenue feedbacks from other federal taxes not calculated using the microsimulation model.

Revenue feedbacks from the microsimulation model total \$189.1 billion over 10 years ("Individual Income Tax" in Figure 2). They are obtained by subtracting the revenue effects from the income-adjusted and baseline forecasts.²¹ The income-adjusted forecast implies a decline in

Figure 2: Revenue Feedback Effects from the Extension Plan, Fiscal Years 2008-17



Note: The microsimulation model is used to estimate the change in federal individual income tax revenues. The “Change in Individual Income Tax Revenues Using Baseline Projections” equals the estimated change in total receipts when the macroeconomic effects are not included. Estimates of federal individual income tax revenues exclude net refundable credits. Federal taxes not calculated using the microsimulation model include corporate income taxes, payroll taxes, and taxes on production and imports. All three are estimated using the Global Insight model.

federal individual income tax revenues of \$1,048.4 billion over 10 years (“Change in Individual Income Tax Using Income-Adjusted Projections” in Figure 2). That \$1,048.4 billion revenue loss is calculated by comparing federal individual income tax revenues from the income-adjusted forecast with the projections of federal tax revenues underlying the baseline forecast.

Revenue feedbacks from the microsimulation model implicitly include a small adjustment for measurement and definitional differences in the baseline levels of personal income used in the GI model and individual income used in the microsimulation model. This adjustment sums to about \$10 billion over 10 years (“Definitional Differences in Tax Bases” in Figure 2).

Combining revenue feedbacks from the microsimulation model with revenue feedbacks from other federal taxes gives total revenue feedbacks of \$353.8 billion over 10 years. These other federal taxes include corporate income taxes, payroll taxes, and taxes on production and imports. Revenue

feedbacks from all three sum to almost \$165 billion over 10 years (“Other Taxes” in Figure 2). They are estimated using the Global Insight model.

Revenue feedbacks of \$353.8 billion account for roughly 29 percent of the change in individual income tax receipts calculated using the baseline forecast. However, the total baseline cost of the extension plan equals the change in individual income tax receipts (from the microsimulation model) plus the revenue effects of permanently repealing the estate tax.²²

Revenue feedbacks of \$353.8 billion offset only around 20 percent the total baseline cost of the extension plan. This is because permanently repealing the estate tax (and modifying the gift tax) contributes \$492.2 billion to the extension plan’s total baseline cost between 2011 and 2017 (JCT, 2007, 301-305). However, it has relatively modest macroeconomic effects. For example, we estimate that estate tax repeal by itself increases real GDP by about 0.2 percent and real disposable personal income by about 0.6 percent in 2017. In

Table 3, this compares to gains in real GDP and real disposable personal income of 0.8 percent and 3.1 percent, respectively.

CONCLUSION

We calibrate a macroeconomic model of the U.S. economy and a microsimulation model of the federal individual income tax to CBO's January 2007 baseline economic and budgetary projections. We then do a separate calibration of the two models to simulate the economic and budget effects of permanently extending some of EGTRRA's and JGTRRA's expiring provisions. In our simulations, the extension plan generates modest gains in GDP and employment. Individual incomes and the federal personal income tax base also expand.

We next plan to test the sensitivity of our results to the distribution of aggregate changes in income. Aggregate changes in income are taken from the alternative macroeconomic forecast and used in the microsimulation model. In this paper, they are distributed proportionally across all income classes and return types. However, alternative assumptions may be needed if income changes arising from a simulated tax policy are likely to vary by income class. This could be particularly important if estimates of marginal tax rate changes are sensitive to distributional assumptions.

Notes

- ¹ The methodologies, assumptions, conclusions, and opinions presented here are entirely the work of the authors. They have not been endorsed by, and do not necessarily reflect the views of, the owners of the Global Insight model.
- ² See U.S. Congress, Joint Committee on Taxation (JCT, 2001) for a description of EGTRRA's expiring provisions.
- ³ See CBO (2007) for details on CBO's January 2007 baseline economic and budgetary projections.
- ⁴ Under the extension plan, the capital gains tax rate is reduced to 0 percent for realizations that would otherwise be taxed at the regular marginal income tax rate of 10 percent.
- ⁵ The simulations include the revenue effects of modifying the gift tax. Under current law, the maximum gift tax rate falls to 35 percent in 2010 and reverts to 55 percent in 2011. Under the extension plan, it remains at 35 percent in 2011. Under both current law and the extension plan, the applicable exclusion amount is \$1 million in 2011. See Noto (2001) for additional details.

⁶ See Foertsch and Rector (2006) for details on the baseline calibration procedure.

⁷ JCT (2007, 301-305) estimates that repealing estate and generation-skipping transfer taxes and modifying gift taxes would reduce federal tax revenues by \$492.2 billion between 2011 and 2017. We use JCT's revenue estimate in our simulations. However, we subtract out an approximation of the contribution of the gift tax to the total revenue loss. We calculate that contribution by multiplying CBO's baseline projections of estate and gift tax revenues (CBO, 2007, 81) by the ratio of gift tax revenue to net estate taxes paid. Between 2003 and 2005, gift tax revenue averaged just over 7.1 percent of net estate tax revenue. For total gift taxes in 2005, see U.S. Department of Treasury (2005a). For net estate taxes in 2005, see U.S. Department of Treasury (2005b).

⁸ These include wages and salaries; self-employment gains, losses, and other business income; capital gains, dividends, and other investment income; retirement income; and social security benefits and other transfer payments. Leaving the weights the same allows one to compare levels of income and tax for returns before and after the policy change. Aggregating these effects is problematic if the weights change between simulations.

⁹ In Table 2A, changes in federal income tax revenues include net refundable credits.

¹⁰ Here, baseline revenue projections are the sum of CBO's current-law projections of individual income tax revenues, corporate income tax revenues, and federal estate and gift tax revenues.

¹¹ This total includes outlays for changes in net refundable credits.

¹² The Tax Increase Prevention and Reconciliation Act of 2005 increased the individual AMT exemption amount and continued the AMT's unrestricted use of some nonrefundable personal tax credits through the end of calendar year 2006. A similar AMT patch for calendar year 2007 was signed into law in late December 2007.

¹³ As defined here, "claw back" is the result of a phase-out of the AMT exemption amount for taxpayers with high levels of AMT income. See Esenwein (2005) for additional details.

¹⁴ A detailed methodology appendix is available upon request. It describes adjustments made to the Global Insight model's current-law baseline as part of our simulations.

¹⁵ The labor force participation rate is calculated by dividing the projected civilian labor force by the population aged 16 years and older. The increase in the labor force participation rate is projected to average 0.2 of a percentage point in 2017.

¹⁶ We use an econometrically estimated reaction function in the GI model. This reaction function adjusts the effective interest rate on federal funds in response

to changes in the unemployment rate and the rate of consumer price index (CPI) inflation.

¹⁷ See Brauer (2004) and JCT (2005) for a discussion of the impact of the AMT on average marginal tax rates and labor supply.

¹⁸ We do not assume that eliminating the estate tax increases total labor supply. We do so because the effects of the estate tax on those making bequests and the effects of the bequests on those receiving inheritances are potentially offsetting. For example, Holtz-Eakin (1999) and Marples (2001) use the Health and Retirement Study to show that labor force activity is lower among older workers facing a positive estate tax rate. However, Holtz-Eakin, Joulfaian, and Rosen (1993) find that receiving a large inheritance (defined as \$350,000 in their paper) reduces the labor force participation of those filing a single return by 12 percentage points. For those filing a joint return, receiving an inheritance of \$350,000 reduces the probability of both filers working by 14 percentage points.

¹⁹ Poterba (2000) estimates that federal estate taxes increase economy-wide effective capital income tax rates by an average of 1.3-to-1.9 percentage points. The burden imposed by the estate tax varies with the rate of return and the age of the person making the bequest. For those in their 60s, the federal estate tax raises capital income tax rates by 0.5-to-1 percentage point. For those in their 80s, it raises capital income tax rates by 13.9-to-19 percentage points.

²⁰ In Figure 2, changes in federal individual income tax revenues exclude net refundable credits.

²¹ Thus, this \$189.1 billion is obtained by subtracting -\$1,048.4 billion from -\$1,237.5 billion.

²² Our simulations also include the revenue effects of modifying the gift tax.

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