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The Economic and Budgetary Effects of a 10 Percent Cut in Federal Individual Income Tax Rates

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Table 1. Conventional Estimate of the Budgetary Costs of Cutting Federal Individual Income Tax Rates by 10 Percent (In Billions of Dollars)

	2004-2008	2009-2013
10% cut in statutory rates (except gains and dividends)	-452	-761
10% cut in dividend and gains rates	-14	-13
Total Revenue Loss (conventional estimate)	-466	-775
Debt service	56	261
Total Effect on the Budget Surplus	-522	-1035

Source: JCT (conventional estimate), CBO (debt service)

NOTE: Estimate against January 2003 Baseline, adjusted for the effects of JGTRRA.

Table 2. Effective Marginal Rates on Labor and Capital

Calendar Year	Tax on Labor: Current Law	Tax on Labor: Proposal	Tax on Labor: Change	Tax on Labor: Percent Change	Tax on Capital: Current Law	Tax on Capital: Proposal	Tax on Capital: Change	Tax on Capital: Percent Change
Effective Federal Income Tax Rates (corporate and individual combined)								
2004	18.1%	16.3%	-1.8%	-10%	13.9%	13.4%	-0.4%	-3%
2005	19.0%	17.1%	-1.8%	-10%	13.9%	13.5%	-0.4%	-3%
2006	19.0%	17.2%	-1.8%	-10%	14.0%	13.5%	-0.4%	-3%
2007	19.3%	17.4%	-1.9%	-10%	14.0%	13.6%	-0.4%	-3%
2008	19.5%	17.6%	-1.9%	-10%	13.9%	13.5%	-0.4%	-3%
2009	19.7%	17.8%	-1.9%	-10%	14.9%	14.3%	-0.5%	-4%
2010	20.0%	18.1%	-1.9%	-10%	14.9%	14.3%	-0.5%	-4%
2011	21.8%	19.7%	-2.1%	-10%	15.5%	14.9%	-0.6%	-4%
2012	22.0%	19.8%	-2.2%	-10%	15.5%	14.9%	-0.6%	-4%
2013	22.0%	19.8%	-2.2%	-10%	15.5%	14.9%	-0.6%	-4%
Effective Federal and State Income Tax Rates and Federal Social Insurance Tax Rates								
2004	32.0%	30.3%	-1.7%	-5%	16.8%	16.4%	-0.4%	-3%
2005	32.8%	31.0%	-1.8%	-5%	16.9%	16.4%	-0.4%	-3%
2006	32.9%	31.1%	-1.8%	-5%	16.9%	16.5%	-0.5%	-3%
2007	33.1%	31.3%	-1.9%	-6%	17.0%	16.5%	-0.5%	-3%
2008	33.3%	31.5%	-1.9%	-6%	16.9%	16.5%	-0.4%	-3%
2009	33.6%	31.7%	-1.9%	-6%	17.8%	17.3%	-0.5%	-3%
2010	33.8%	31.9%	-1.9%	-5%	17.8%	17.3%	-0.5%	-3%
2011	35.5%	33.5%	-2.0%	-6%	18.4%	17.8%	-0.6%	-3%
2012	35.8%	33.7%	-2.1%	-6%	18.4%	17.8%	-0.6%	-3%
2013	35.8%	33.6%	-2.2%	-6%	18.4%	17.8%	-0.6%	-3%

Source: Congressional Budget Office

Table 3. Impact on Real GDP of a Deficit-Financed 10 Percent Cut in Federal Income Tax Rates (Average Percent Difference from Baseline)

Model	**2004-2008**	**2009-2013**	**Long Run**
OLG-Closed Economy Model			
Financed by G after 10 years	0.6	0.3	-0.1
Financed by Income Tax after 10 years	0.6	0.5	-1.5
OLG-Open Economy Model			
Financed by G after 10 years	0.8	0.5	0.5
Financed by Income Tax after 10 years	0.9	0.7	0.2
Ramsey Model			
Financed by G after 10 years	0.7	0.7	0.8
Financed by Income Tax after 10 years	0.8	1.1	-1.2
Global Insight Model			
Taylor Rule	0.4	NA	NA
Unemployment Rate at Baseline	0.2	NA	NA
Macroadvisers' Model			
Taylor Rule	0.6	NA	NA
Unemployment Rate at Baseline	0.3	NA	NA
Memo: Effect on Real GNP			
OLG-Open Economy Model			
Financed by G after 10 years	0.5	0.2	-0.4
Financed by T after 10 years	0.6	0.3	-2.1

Source: Congressional Budget Office

NOTE: G=Cuts in government spending

Table 4. The Cumulative Impact on the Budget Surplus of a 10 Percent Cut in Federal Income Tax Rates (In Billions of Dollars)

	2004-2008	2009-2013	2004-2013
Conventional Estimate	-466	-775	-1241
Additional Debt Service on Conventional Estimate	56	261	317
Conventional Estimate plus Debt Service	-522	-1035	-1557
Macroeconomic Feedbacks from Various Models			
OLG-Closed Economy Model			
Financed by G after 10 years	77	107	184
Financed by Income Taxes after 10 years	82	132	214
OLG-Open Economy Model			
Financed by G after 10 years	98	142	240
Financed by Income Taxes after 10 years	104	154	258
Ramsey Model			
Financed by G after 10 years	82	158	240
Financed by Income Taxes after 10 years	100	245	345
Global Insight Model (Taylor Rule)	62	NA	NA
Macroadvisers' Model (Taylor Rule)	67	NA	NA
Macroeconomic Feedbacks (as a Percent of the Conventional Estimate)[1]			
OLG-Closed Economy Model			
Financed by G after 10 years	17%	14%	15%
Financed by Income Taxes after 10 years	18%	17%	17%
OLG-Open Economy Model			
Financed by G after 10 years	21%	18%	19%
Financed by Income Taxes after 10 years	22%	20%	21%
Ramsey Model			
Financed by G after 10 years	18%	20%	19%
Financed by Income Taxes after 10 years	21%	32%	28%
Global Insight Model (Taylor Rule)	13%	NA	NA
Macroadvisers' Model (Taylor Rule)	14%	NA	NA

Source: CBO (macroeconomic feedbacks and debt service), JCT (conventional estimate)

NOTES: Totals may not add due to rounding.
G=Cuts in government spending

1. Excludes debt service on the conventional estimate

Table 5. Effects of a 10 Percent Cut in Income Tax Rates on Real GDP: Estimates from GE Models (Percent Change from Baseline)

Source of Financing	2004-2008	2009-2013	Long Run
OLG Model--Closed Economy--Financed by G			
Real GDP	0.6	0.3	-0.1
Labor Input	0.8	0.6	0.3
Capital Stock	0.1	-0.2	-1.1
Consumption	0.9	1.2	1.7
OLG Model--Closed Economy--Financed by Income Taxes			
Real GDP	0.6	0.5	-1.5
Labor Input	0.9	0.7	-0.3
Capital Stock	0.1	0.0	-4.3
Consumption	0.8	1.1	-0.9
OLG Model--Open Economy--Financed by G			
Real GDP	0.8	0.5	0.5
Labor Input	0.8	0.5	0.5
Capital Stock	0.8	0.5	0.5
Consumption	1.1	1.3	1.7
OLG Model--Open Economy--Financed by Income Taxes			
Real GDP	0.9	0.7	0.2
Labor Input	0.9	0.7	0.2
Capital Stock	0.9	0.7	0.2
Consumption	1.1	1.3	-0.9
Ramsey Model--Financed by G			
Real GDP	0.7	0.7	0.8
Labor Input	1.0	1.1	0.3
Capital Stock	0.1	0.0	1.5
Consumption	0.9	1.2	3.4
Ramsey Model--Financed by Income Taxes			
Real GDP	0.8	1.1	-1.2
Labor Input	1.2	1.4	-0.5
Capital Stock	0.2	0.7	-2.3
Consumption	0.7	1.0	-1.1

Source: Congressional Budget Office
G = Cuts in Government Spending

Table 6. Effects of a 10 Percent Cut in Income Tax Rates on Real GDP: Estimates from a Closed-Economy Stochastic OLG Model
(Percent Change from Baseline)

Source of Financing	2004-2008	2009-2013	Long Run	Comments
Financed contemporaneously by lumpsum taxes (no deficit)				
Real GDP	0.8	1.2	1.7	**Incentive to work and save more.**
Labor Input	0.9	0.9	1.1	**Higher GDP raises consumption**
Capital Stock	0.5	1.8	3.1	**over time.**
Consumption	0.8	1.1	1.6	
Financed contemporaneously by reductions in government waste (no deficit)				
Real GDP	0.6	0.7	1.0	**Compared to case #1, reducing waste means**
Labor Input	0.7	0.5	0.5	**more resources for consumption and leisure.**
Capital Stock	0.3	1.0	2.3	**Also, workers do not have to save to pay for the**
Consumption	1.1	1.4	2.2	**lumpsum tax in retirement so K is lower.**
Deficit finance for 10 years then phased-in lumpsum taxes				
Real GDP	0.8	0.7	0.8	**Compared to case #1, K is crowded out.**
Labor Input	1.0	0.8	1.0	
Capital Stock	0.2	0.4	0.2	
Consumption	0.8	1.0	1.1	
Deficit finance for 10 years then phased-in reductions in government waste				
Real GDP	0.6	0.3	-0.1	**Compared to case #3, reducing waste**
Labor Input	0.8	0.6	0.3	**means more resources for consumption and**
Capital Stock	0.1	-0.2	-1.1	**leisure.**
Consumption	0.9	1.2	1.7	
Deficit finance for 10 years then phased-in income tax hikes				
Real GDP	0.6	0.5	-1.5	**In LR, K,L, & GDP are down b/c of higher**
Labor Input	0.9	0.7	-0.3	**tax rates. Compared to case #3, higher**
Capital Stock	0.1	0.0	-4.3	**SR consumption and leisure by older**
Consumption	0.8	1.1	-0.9	**workers who pay less tax in retirement**

Source: Congressional Budget Office

Table 7. Effects of a 10 Percent Cut in Income Tax Rates: Results from Private-Sector Macroeconomic Models (Percent Difference from Baseline, except where noted)

	2004	2005	2006	2007	2008	2004-2008
Global Insight Model (Taylor Rule)						
Nominal GDP	0.5	0.7	0.7	0.8	0.8	0.7
Real GDP	0.4	0.5	0.4	0.5	0.4	0.4
Real Gross Private Domestic Investment	0.9	0.8	-0.1	-0.1	-0.4	0.2
Real Consumption	0.6	0.9	0.9	1.0	1.0	0.9
Employment	0.5	0.6	0.6	0.6	0.6	0.6
Full-employment labor force	0.4	0.5	0.5	0.5	0.5	0.5
Unemployment rate (in percentage points)	-0.1	-0.1	-0.1	-0.1	0.0	-0.1
CPI inflation (in percentage points)	0.1	0.1	0.1	0.1	0.1	0.1
3-month T-bill rate (in percentage points)	0.1	0.1	0.1	0.1	0.2	0.1
10-year T-note yield (in percentage points)	0.1	0.1	0.2	0.2	0.3	0.2
Global Insight Model (Unemployment Rate at Baseline)						
Nominal GDP	0.3	0.4	0.5	0.6	0.6	0.5
Real GDP	0.2	0.3	0.3	0.2	0.2	0.2
Real Gross Private Domestic Investment	-0.1	-0.3	-0.8	-0.9	-0.7	-0.6
Real Consumption	0.4	0.7	0.9	1.0	1.0	0.8
Employment	0.5	0.5	0.5	0.5	0.5	0.5
Full-employment labor force	0.4	0.5	0.5	0.5	0.5	0.5
Unemployment rate (in percentage points)	0.0	0.0	0.0	0.0	0.0	0.0
CPI inflation (in percentage points)	0.1	0.1	0.1	0.1	0.1	0.1
3-month T-bill rate (in percentage points)	0.9	0.6	0.4	0.4	0.0	0.4
10-year T-note yield (in percentage points)	0.6	0.4	0.3	0.4	0.1	0.4
MacroAdvisers' Model (Taylor Rule)						
Nominal GDP	0.6	0.9	0.9	1.0	0.9	0.8
Real GDP	0.7	0.8	0.6	0.6	0.3	0.6
Real Gross Private Domestic Investment	2.2	2.4	0.6	0.5	-1.1	0.9
Real Consumption	0.7	0.9	0.8	0.9	0.7	0.8
Employment	0.4	0.8	0.7	0.6	0.5	0.6
Full-employment labor force	0.4	0.5	0.5	0.5	0.5	0.5
Unemployment rate (in percentage points)	0.0	-0.3	-0.1	-0.1	0.0	-0.1
CPI inflation (in percentage points)	-0.2	0.5	0.2	0.2	0.2	0.2
3-month T-bill rate (in percentage points)	0.0	0.5	0.2	0.3	0.2	0.2
10-year T-note yield (in percentage points)	0.0	0.3	0.2	0.2	0.3	0.2
MacroAdvisers' Model (Unemployment Rate at Baseline)						
Nominal GDP	0.4	0.3	0.4	0.3	0.4	0.3
Real GDP	0.5	0.2	0.4	0.3	0.3	0.3
Real Gross Private Domestic Investment	1.5	-0.6	0.2	-0.3	0.0	0.2
Real Consumption	0.6	0.4	0.5	0.6	0.7	0.6
Employment	0.4	0.5	0.5	0.5	0.5	0.5
Full-employment labor force	0.4	0.5	0.5	0.5	0.5	0.5
Unemployment rate (in percentage points)	0.0	0.0	0.0	0.0	0.0	0.0
CPI inflation (in percentage points)	-0.1	0.2	-0.1	0.0	0.0	0.0
3-month T-bill rate (in percentage points)	0.5	0.3	0.4	0.0	0.1	0.3
10-year T-note yield (in percentage points)	0.2	0.3	0.3	0.2	0.2	0.2

Source: Congressional Budget Office