



Tax Policy Center
Urban Institute and Brookings Institution

THE TAX POLICY

BRIEFING BOOK

A Citizens' Guide for the 2008 Election and Beyond

BUSH TAX CUTS

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Background: Bush Tax Cuts

This section quantifies the effects of the many tax cuts enacted since 2001 and whom they have benefited.

Description of the Bush Tax Cuts

- How did they change the tax code?
- How did the 2001 tax cuts change the tax code?
- How did the 2002 tax cuts change the tax code?
- How did the 2003 tax cuts change the tax code?
- How did the 2004 tax cuts change the tax code?
- How did the 2005 tax cuts change the tax code?
- How did the 2006 tax cuts change the tax code?

Beneficiaries of the Bush Tax Cuts

- If we account for how the cuts are paid for, who benefits from them?
- If we ignore how the cuts are paid for, who benefits from them?
- Who benefits when their cost and potential economic growth are accounted for?
- How are the distributional effects measured?

Fiscal Effects of the Bush Tax Cuts

- How have they affected tax revenue?
- How big are the cuts?
- How do they compare with the Reagan cuts?
- Did they reduce the size of government?
- Are they justified as part of a "starve the beast" strategy?
- Are tax cuts an effective way to reduce government spending?
- How do the AMT and interest payments affect the cost?
- What is their impact on government borrowing and interest payments?
- What spending and revenue measures would pay for making them permanent?

Economic Effects of the Bush Tax Cuts

- How did they affect corporate investment?
- How did they affect small businesses and entrepreneurs?
- How did they affect incentives to work?
- How did they affect retirement saving?
- Were they well designed to strengthen long-term economic growth?
- Were they well timed to spur economic growth?
- What are the indirect effects on economic growth?
- Did they provide good "bang for the buck?"
- Didn't they help the economy recover from the 2001 recession?

The Bush Tax Cuts: How did they change the tax code?

The tax cuts enacted between 2001 and 2006 contain a host of large and small changes to the tax code that phase in at different rates and expire at different times. The tax cuts of 2001, 2003, 2004, 2005, and 2006 built on one another, with many of the bills passed after 2001 serving to extend provisions in earlier bills. Most provisions are now scheduled to expire at the end of 2010.

- The 2001 tax cut was especially sweeping. Its two most prominent changes were a phased-in reduction in income tax rates and a reduction and eventual repeal (at the beginning of 2010) of the estate tax. It also provided a wide range of tax breaks for education, families with children, married couples, and contributions to certain kinds of savings accounts.
- The 2002 tax cut addressed a different part of the tax code, significantly but temporarily reducing the tax burden on new business investments. Its main provision has already expired.
- The 2003 bill cut taxes on dividends and capital gains and accelerated the schedule for phasing in most of the other tax cuts enacted in 2001.
- The 2004 tax cut extended various provisions from the 2001 and 2003 tax cuts that were scheduled to expire before 2010, so that they remain in force through 2010.
- The 2005 tax cuts indexed the alternative minimum tax for inflation for one year ("patched" it, in tax parlance), eliminated the income restrictions on Roth Individual Retirement Accounts (IRAs) in 2010, and extended the reduced rates on dividend and capital gains income.
- The 2006 tax cuts made certain aspects of the 2001 tax act permanent, including the raised annual contribution limits to IRAs, tax-free withdrawals from qualified tuition savings accounts, and the savers' credit, and permanently extended rules governing education-based tax credits.

See Also

The Bush Tax Cuts: How did the 2001 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2002 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2003 tax cuts change the tax code?

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The Bush Tax Cuts: How did the 2006 tax cuts change the tax code?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

Joint Committee on Taxation, "Estimated Budget Effects of the Conference Agreement for H.R.: 1836[1]," JCX-51-01 (Washington, May 26, 2001).

_____, "Estimated Revenue Effects of the 'Job Creation and Worker Assistance Act of 2002,'" JCX-13-02 (Washington, March 6, 2002).

_____. 2003. "Estimated Budget Effects of the Conference Agreement for H.R. 2: The 'Jobs and Growth Tax Relief Reconciliation Act of 2003,'" JCX-55-03 (Washington, May 22, 2003).

_____, "Estimated Revenue Effects of the Conference Agreement for H.R. 1308, The 'Working Families Tax Relief Act Of 2004,'" JCX-60-04 (Washington, September 23, 2004).

_____, "Estimated Budget Effects of the Conference Agreement for H.R. 4520, The 'American Jobs Creation Act Of 2004,'" JCX-69-04 (Washington, October 7, 2004).

Tax Policy Center, "Major Legislation by Act, 1981-2006" (Washington)

The Bush Tax Cuts: How did the 2001 tax cuts change the tax code?

The 2001 tax cut legislation, titled the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), was the most sweeping of the Bush tax cuts and set the stage for later legislation. Key features were a reduction in the top four income tax rates and the creation of a new 10 percent bracket. EGTRRA also temporarily raised the alternative minimum tax (AMT) exemption, doubled the child tax credit, reduced the estate tax and repealed it in 2010, and reduced taxes on taxpayers filing as married couples.

- Under the 2001 tax cut, the top individual income tax rate was scheduled to decline from 39.6 percent in 2000 to 35 percent by 2006. The 28, 31, and 36 percent rates were scheduled to fall by 3 percentage points each. These reductions were scheduled to occur in stages; the 2003 tax cut bill accelerated these reductions so that the full reductions took place at the start of 2003.
- The 2001 tax act also created a new 10 percent tax bracket, carved out of the 15 percent bracket. The 10 percent bracket applied to the first \$12,000 of taxable income (for married couples filing jointly) through 2007. The limit was scheduled to rise to \$14,000 in 2008 and to be indexed for inflation starting in 2009; later legislation would accelerate the phase-in of this provision and extend it to 2010.
- The AMT exemption was raised to \$49,000 for couples and \$35,700 for singles through 2004; this provision is called a “patch,” since it is temporary and does not address the AMT’s more fundamental problems. Later legislation would further patch the AMT, typically in one-year increments.
- The exemption for estates was set to gradually rise to \$3.5 million in 2009. The top effective tax brackets for estate and gift taxes were also reduced, from 60 percent to 50 percent in 2002 and then gradually to 45 percent in 2009. The estate tax was repealed as of 2010 for one year only; it would then return to its pre-2001 provisions in 2011.
- The 2001 bill enacted a gradual increase in the maximum value of the child credit, reaching \$1,000 in 2010. It also made the credit partly refundable, so that if it reduced a household’s income tax bill below zero, the household could claim a tax refund, at least up to specified levels that depended on the household’s earnings.
- The bill addressed the “marriage penalty” in several ways. Before its enactment, the standard deduction for married couples was 167 percent of the standard deduction for singles. That sometimes created a marriage penalty, because the combined standard deduction for a married couple was less than twice the sum of their individual standard deductions. The 2001 act gradually increased the ratio to 200 percent by 2009, so that two single people who marry can both keep the standard deduction they would have had as single taxpayers. Similarly, the tax brackets were altered so that the maximum taxable income in the 15 percent bracket for married couples rises to double the maximum for singles, again to eliminate this source of the marriage penalty.

- The act increased the contribution limits for tax-preferred retirement saving accounts. Contribution limits for both traditional and Roth Individual Retirement Accounts were gradually increased from \$2,000 under previous law to \$5,000 by 2008 and indexed to inflation after that until 2010, at which point the increases would disappear. These provisions were reformed in later legislation.

See Also

The Bush Tax Cuts: How did the 2002 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2003 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2004 tax cuts change the tax code?

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Further Reading

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

Gale, William G., and Samara R. Potter, "An Economic Evaluation of the Economic Growth and Tax Relief Reconciliation Act of 2001," *National Tax Journal* 55, no. 1 (2002): 133-86.

Joint Committee on Taxation, "Estimated Budget Effects of the Conference Agreement for H.R.: 1836[1]," JCX-51-01 (Washington, May 26, 2001).

Tax Policy Center, "Major Legislation by Act, 1981-2006" (Washington).

The Bush Tax Cuts: How did the 2002 tax cuts change the tax code?

The primary feature of the 2002 tax cut legislation (the Job Creation and Worker Assistance Act of 2002) was to provide for "bonus depreciation." Bonus depreciation allows firms to claim extra deductions for depreciation of a long-term physical capital investment during the early years, which reduces reported corporate profits, and thus taxes owed, in the present. This provision allowed a first-year deduction of 30 percent of the value of qualified investments made after September 10, 2001, and before September 11, 2004. This temporary provision, intended to boost investment spending during a period of economic weakness, was scheduled to expire at the end of 2004 but was extended in 2003.

See Also

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Further Reading

Joint Committee on Taxation, "Estimated Revenue Effects of the 'Job Creation and Worker Assistance Act of 2002,'" JCX-13-02 (Washington, March 6, 2002).

Tax Policy Center, "Major Legislation by Act, 1981-2006" (Washington).

The Bush Tax Cuts: How did the 2003 tax cuts change the tax code?

The 2003 tax cut legislation, titled the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), reduced taxes on dividends and capital gains and accelerated some provisions passed in earlier tax cuts.

- Tax rates on realized capital gains received by individual shareholders were reduced from 10 percent (for taxpayers in tax brackets where the ordinary income tax rate was 15 percent or below) and 20 percent (for all other brackets) to 5 percent and 15 percent, respectively, through 2007 and to 0 and 15 percent in 2008. Tax rates on dividends received by individual shareholders were reduced from the rates that apply to ordinary income to the new capital gains rates.
- The 2001 tax cut had raised the alternative minimum tax exemption to \$49,000 for couples and \$35,700 for singles through 2004. The 2003 tax cut raised the exemption further, to \$58,000 for couples and \$40,250 for singles, but still only through 2004.
- The 2003 tax cut also accelerated and expanded many of the provisions of the 2001 tax act, including the expansion of the child tax credit, the reduction in taxes on married couples, and the lower rates and adjusted brackets on individual income. It also expanded the bonus depreciation provision passed in 2002.

See Also

The Bush Tax Cuts: How did the 2001 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2002 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2004 tax cuts change the tax code?

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Further Reading

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

Joint Committee on Taxation, "Estimated Budget Effects of the Conference Agreement for H.R. 2: The Jobs and Growth Tax Relief Reconciliation Act of 2003," JCX-55-03 (Washington, May 22, 2003).

Tax Policy Center, "Major Legislation by Act, 1981-2006" (Washington).

The Bush Tax Cuts: How did the 2004 tax cuts change the tax code?

Two pieces of tax legislation were passed in 2004: the Working Families Tax Relief Act of 2004 (WFTRA) and the American Jobs Creation Act (AJCA). WFTRA extended certain provisions of the 2001 and 2003 tax cuts to various sunset dates; AJCA primarily involved changes in the taxation of business and corporate income that are largely unrelated to the 2001 and 2003 tax cuts.

- The primary tax change in WFTRA was to extend provisions introduced three years earlier under the 2001 tax legislation. It extended the 10 percent bracket for joint filers through 2010, the higher standard deduction for married filers through 2009, and the doubled child tax credit through 2009.
- WFTRA also extended the higher alternative minimum tax exemption through 2005 and extended certain ongoing tax provisions, the Work Opportunity Tax Credit and the Welfare to Work Tax Credit, aimed at increasing incentives for business to hire more workers from "vulnerable" populations.
- The most significant provision of AJCA was a change in the tax incentives for U.S. businesses involved in exporting, to make the U.S. tax code compliant with international trade guidelines. AJCA also increased tax credits for business investment abroad and temporarily increased the business "expensing" provision.
- AJCA did also change certain provisions of the individual income tax. One notable provision allowed individuals to claim a deduction for state and local sales taxes paid, in lieu of deducting state income taxes. This provision primarily benefited individuals in states that have a sales tax but no state income tax.

See Also

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The Bush Tax Cuts: How did the 2006 tax cuts change the tax code?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 200

Further Reading

Burman, Leonard E., "An Analysis of the 2004 House Tax Cuts" (Washington: Tax Policy Center, June 2004).

Clausing, Kimberly A., "The American Jobs Creation Act of 2004: Creating Jobs for Accountants and Lawyers," Urban-Brookings Tax Policy Center Issues and Options no. 8 (Washington, December 2004).

Joint Committee on Taxation, "Estimated Revenue Effects of the Conference Agreement for H.R. 1308, The 'Working Families Tax Relief Act of 2004,'" JCX-60-04 (September 23, 2004).

_____, "Estimated Budget Effects of the Conference Agreement for H.R. 4520, The 'American Jobs Creation Act of 2004,'" JCX-69-04 (Washington, October 7, 2004).
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The Bush Tax Cuts: How did the 2005 tax cuts change the tax code?

The Tax Increase Prevention and Reconciliation Act of 2005 (TIPRA) extended lower rates on dividend income and capital gains through 2010, raised the higher exemption amount for the alternative minimum tax for one year, and eliminated income restrictions on high-income taxpayers for converting traditional Individual Retirement Accounts (IRAs) to Roth IRAs. The first two provisions extended provisions of earlier tax legislation, whereas the relaxed restriction on IRA conversions was largely a gimmick used to conform the costs of TIPRA to budgetary rules: taxpayers converting traditional to Roth IRAs pay taxes currently that they otherwise would have paid on withdrawals from their IRAs during retirement; thus the provision raised current revenue at the expense of revenue in later years. This change effectively eliminated the income restriction for participation in a Roth IRA.

See Also

The Bush Tax Cuts: How did the 2001 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2002 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2003 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2004 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2006 tax cuts change the tax code?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Burman, Leonard E., "Roth Conversions as Revenue Raisers: Smoke and Mirrors," *Tax Notes* 111, no. 8 (May 2006).

Joint Committee on Taxation, "Estimated Revenue Effects of the Conference Agreement for the "Tax Increase Prevention and Reconciliation Act of 2005," JCX-18-06 (Washington, May 2006).

Tax Policy Center, "Major Legislation by Act, 1981-2006" (Washington).

The Bush Tax Cuts: How did the 2006 tax cuts change the tax code?

The Pension Protection Act of 2006 (PPA) addressed regulations governing employer-sponsored pensions and included several tax provisions. PPA was the first act to make certain aspects of the 2001 tax law permanent, including the higher annual contribution limits to Individual Retirement Accounts (IRAs) and tax-free withdrawals from qualified tuition savings accounts. PPA also extended certain temporary rules concerning education-based tax credits and added provisions encouraging employer participation in automatic 401(k) pensions.

- Under PPA the limits for contributions to IRAs are \$4,000 in 2006 and 2007, \$5,000 in 2008, and indexed to inflation thereafter. PPA also makes permanent the higher contribution limits to 401(k) plans, which were initially raised under EGTRRA legislation and previously set to expire in 2010. The saver's credit, which increases saving incentives for low-income households, was made permanent as well.
- PPA also made it easier for employers to automatically enroll employees in their defined-contribution pension plans and to set default contributions to these plans. Before PPA, certain states had restricted the ability of employers to automatically deduct such contributions from employee paychecks without written consent; PPA made these automatic deductions universally legal. Also, PPA instituted protections for employers concerned about their legal responsibility when they automatically selected investments for employee pensions.

See Also

The Bush Tax Cuts: How did the 2001 tax cuts change the tax code?

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The Bush Tax Cuts: How did the 2005 tax cuts change the tax code?

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Further Reading

Gale, William G., J. Mark Iwry, and Peter R. Orszag, "The Saver's Credit: Expanding Retirement Savings for Middle- and Lower- Income Americans," Retirement Security Project Policy Brief no. 2005-2 (Washington, March 2005).

Gale, William G., J. Mark Iwry, and Spencer Walters, "Retirement Saving for Middle- and Low-Income Households: The Pension Protection Act of 2006 and the Unfinished Agenda," Retirement Security Project Policy Brief no. 2007-1 (Washington, 2007).

Joint Committee on Taxation, "Estimated Budget Effects of H.R. 4, the 'Pension Protection Act of 2006,' as Introduced in the House of Representatives on July 28, 2006," JCX-36-06 (Washington, July 2006).

_____, "Technical Explanation of H.R. 4, the 'Pension Protection Act of 2006,' as Passed by the House on July 28, 2006, and as Considered by the Senate on August 3, 2006," JCX-38-06 (Washington, August 2006).

Tax Policy Center, "Major Legislation by Act, 1981-2006" (Washington)

The Bush Tax Cuts: If we ignore how the cuts are paid for, who benefits from them?

If the 2001 and 2003 tax cuts were made permanent and the number of taxpayers subject to the alternative minimum tax were held at levels that would have prevailed under pre-2001 law, about 73 percent of tax-filing units would receive a direct tax cut in 2010; that share rises with income, from only 16 percent of units in the bottom income quintile to more than 99 percent in the top quintile. This, however, is not a complete picture of the ultimate impact of the tax cuts, because it does not take into account the tax increases or spending cuts that will eventually be needed to pay for the tax cuts. That accounting is presented in another entry.

- The percentage change in after-tax income, TPC's preferred measure for comparing the benefits of tax cuts across income groups, rises under this scenario as income rises, from an increase of 0.3 percent in after-tax income in the bottom quintile (see table) to a rise of 4.3 percent in the top quintile. It rises even further within the top quintile, with a 6.4 percent increase for the top 1 percent and a 7.5 percent increase for the top 0.1 percent (not shown). Thus the tax cuts would be regressive, raising after-tax income by a greater percentage for high-income households than for all others.

Distributional Effects of Making the Bush Tax Cuts Permanent and Adjusting the AMT, 2010 ^a					
Cash income quintile	Share receiving tax cut (percent)	Change in after-tax income (percent)	Share of total tax cut (percent)	Average change in tax owed (dollars)	Change in average tax rate (percentage points)
Bottom	15.8	0.3	0.3	-26	-0.3
Second	69.0	1.9	4.1	-387	-1.8
Middle	83.9	2.1	7.5	-699	-1.8
Fourth	96.3	2.5	14.9	-1,392	-2.0
Top	99.2	4.3	73.1	-6,826	-3.1
80-99th percentile	99.3	3.5	43.1	-4,236	-2.6
Top 1 percent	98.7	6.4	30.0	-56,051	-4.3
All taxpayers	72.8	3.4	100.0	-1,869	-2.6

Cash income quintile	Change in federal tax payments (percent)	Change in share of total federal taxes (percentage points)	Change in share of after-tax income (percentage points)	Change in share of income tax paid (percentage points)
Bottom	-8.7	0.0	-0.1	-0.3
Second	-18.2	-0.2	-0.1	-1.1
Middle	-10.8	0.0	-0.2	-0.8
Fourth	-9.4	0.3	-0.2	-0.5
Top	-11.1	-0.1	0.5	2.6
80-99th percentile	-10.0	0.5	0.0	1.7
Top 1 percent	-13.3	-0.7	0.5	0.9
All taxpayers	-11.0	0.0	0.0	0.0

Notes:

(a) Changes are from pre-EGTRRA law, evaluated in 2010. The AMT exemption is assumed to be raised to \$54,000 for married couples filing jointly, and to \$38,250 for single filers, to keep the number of AMT taxpayers equal to the number who would have been subject to the AMT under pre-EGTRRA law. The analysis does not take into account the eventual financing of the tax cuts.

Source: Results of the Urban-Brookings Policy Center Microsimulation Model (version 0304-3).

- Several other commonly used measures of the distributional effects also suggest that the benefits of making the tax cuts permanent would be tilted toward high-income households in general and toward households in the top 1 percent of the income distribution in particular. The average effective tax rate would fall more for the top 1 percent than for any other group. Their share of the tax cut (73.1 percent) would exceed their share of tax burdens in the absence of the tax cut (71.7 percent); as a result, their share of total federal taxes paid would decline. And the tax cut in absolute dollars is clearly far larger for high-income than for low-income groups.
- At least two other measures sometimes cited, if taken at face value, suggest that the tax cuts would actually help other households more than high-income households. First, the reduction in federal tax liability that households in the top 1 percent would receive (11.1 percent), although slightly larger than the average reduction (11.0 percent), would be smaller than the reduction for households in the second-lowest income quintile (18.2 percent). Second, households in the top 1 percent would actually pay a greater share of the income tax (but not of total federal tax) after the tax cuts than before. Some have used this finding to conclude that the tax cut is progressive.

See Also

The Bush Tax Cuts: How are the distributional effects measured?

The Bush Tax Cuts: If we account for how the cuts are paid for, who benefits from them?

The Bush Tax Cuts: Who benefits when their cost and potential economic growth are accounted for?

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Further Reading

Burman, Leonard E., "Fairness in Tax Policy," testimony before the Subcommittee on Financial Services and General Government, U.S. House Appropriations Committee (Washington: Urban-Brookings Tax Policy Center, March 2007).

Furman, Jason, "The Effect of the 2001-06 Tax Cuts on After-Tax Incomes," testimony before the U.S. House Committee on Ways and Means (Washington: Brookings Institution, September 2007).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Distributional Effects," *Tax Notes* 104, no. 14 (September 2004).

Leiserson, Greg, and Jeffrey Rohaly, "The Distribution of the 2001-2006 Tax Cuts: Updated Projections, November 2006" (Washington: Urban-Brookings Tax Policy Center).

Urban-Brookings Tax Policy Center, "Measuring the Distribution of Tax Changes" (Washington, 2003).

The Bush Tax Cuts: If we account for how the cuts are paid for, who benefits from them?

The Bush tax cuts will be financed in the future by some combination of tax increases and spending cuts, but it is impossible to say today what the mix will be. TPC has estimated changes in tax burdens across income groups under a variety of assumptions about how the tax cuts will eventually be paid for. In all of these hypothetical scenarios, two common conclusions emerge: a majority of households are made worse off by the tax cuts, and the net effect of the tax cuts is a transfer of wealth from lower-income households to wealthier households.

- We examine here two of these hypothetical scenarios. In both, for ease of comparison, the financing is set so that the cost of the tax cuts (that is, the revenue lost) in a given year is fully paid in that same year. The first scenario assumes that the cost is divided equally among all households, so that each pays the same dollar amount to finance the tax cuts. In this scenario each tax unit "pays" \$1,869 (in 2010 dollars) in some combination of reductions in benefits from government spending or increases in taxes other than income tax. Something close to this "lump-sum" or "equal-dollar" financing scenario could occur if the tax cuts were financed largely or entirely through spending cuts that affected all households equally. The second scenario assumes that each household pays the same percentage of its income to finance the tax cuts. In this case the cost per household is 2.6 percent of its income. Something close to this "proportional financing" scenario could occur if the tax cuts were financed through a combination of spending cuts and progressive tax increases.
- Under equal-dollar financing, every measure of the distributional effects shows that high-income taxpayers would gain and all other taxpayer groups would lose if the tax cuts were made permanent (see table 1). Those made worse off include almost every household in the bottom 40 percent of the income distribution, 94 percent in the middle quintile, and even 80 percent in the fourth quintile; in all, 76 percent of taxpayers would be made worse off. In sharp contrast, 89 percent of taxpayers in the top quintile and 95 percent of households in the top 1 percent end up better off, receiving average benefits of more than \$54,000.

Table 1. Distributional Effects of Making the Bush Tax Cuts Permanent and Adjusting the AMT, with equal-dollar financing, 2010 ^a

Cash income quintile	Share receiving tax cut (percent)	Change in after-tax income (percent)	Average change in tax owed (dollars)	Change in average tax rate (percentage points)
Bottom	0.0	-21.7	1,843	21.0
Second	1.3	-7.5	1,482	6.7
Middle	6.2	-3.5	1,170	3.0
Fourth	19.8	-0.9	477	0.7
Top	89.5	3.1	-4,958	-2.3
80-99th percentile	89.2	2.0	-2,367	-1.5
Top 1 percent	95.3	6.2	-54,182	-4.2
All taxpayers	23.4	0.0	0	0.0

Cash income quintile	Change in federal tax payments (percent)	Change in share of total federal taxes (percentage points)	Change in share of after-tax income (percentage points)	Change in share of income tax paid (percentage points)
Bottom	626.0	2.2	-0.7	3.9
Second	69.9	1.8	-0.5	3.2
Middle	18.1	1.4	-0.4	2.4
Fourth	3.2	0.6	-0.2	0.7
Top	-8.1	-5.9	1.8	-10.2
80-99th percentile	-5.6	-2.7	0.8	-4.6
Top 1 percent	-12.9	-3.2	1.0	-5.5
All taxpayers	0.0	0.0	0.0	0.0

Notes:

(a) Changes are from pre-EGTRRA law, evaluated in 2010. The AMT exemption is assumed to be raised to \$54,000 for married couples filing jointly, and to \$38,250 for single filers, to keep the number of AMT taxpayers equal to the number who would have been subject to the AMT under pre-EGTRRA law. The tax cuts are assumed to be financed by all tax units paying an equal amount (\$1,869).

Source: Results of the Urban-Brookings Policy Center Microsimulation Model (version 0304-3).

- The assumption of proportional financing yields similar results (table 2): again, all of the measures indicate that high-income households would be better off, while other households as a group (and about 80 percent of all households, including a majority in every quintile) would be worse off. The top quintile is the only group to receive a net tax cut, but even within that group almost two-thirds of all households in the 80th to the 99th percentile would face net tax increases. In addition, both of the measures that did not show greater gains for the highest-income households when financing was ignored—the reduction in total federal tax liability and the share of income tax paid—now also show that households in the bottom 80 percent of the income distribution would be worse off on average, while those in the top quintile would be better off.

Table 2. Distributional Effects of Making the Bush Tax Cuts Permanent and Adjusting the AMT, with proportional financing, 2010^a

Cash income quintile	Share receiving tax cut (percent)	Change in after-tax income (percent)	Average change in tax owed (dollars)	Change in average tax rate (percentage points)
Bottom	0.3	-2.4	202	2.3
Second	19.9	-0.9	184	0.8
Middle	23.5	-1.0	325	0.8
Fourth	20.5	-0.8	433	0.6
Top	36.0	0.7	-1,128	-0.5
80-99th percentile	34.7	0.0	-12	0.0
Top 1 percent	60.9	2.5	-22,335	-1.7
All taxpayers	20.1	0.0	0	0.0

Cash income quintile	Change in federal tax payments (percent)	Change in share of total federal taxes (percentage points)	Change in share of after-tax income (percentage points)	Change in share of income tax paid (percentage points)
Bottom	68.5	0.2	-0.1	0.5
Second	8.7	0.2	-0.1	0.4
Middle	5.0	0.3	-0.1	0.6
Fourth	2.9	0.3	-0.2	0.6
Top	-1.8	-1.0	0.4	-2.1
80-99th percentile	0.0	0.0	0.0	0.1
Top 1 percent	-5.3	-1.0	0.4	-2.2
All taxpayers	0.0	0.0	0.0	0.0

Notes:

(a) Changes are from pre-EGTRRA law, evaluated in 2010. The AMT exemption is assumed to be raised to \$54,000 for married couples filing jointly, and to \$38,250 for single filers, to keep the number of AMT taxpayers equal to the number who would have been subject to the AMT under pre-EGTRRA law. The tax cuts are assumed to be financed by all tax units paying an equal share (2.6 percent) of their cash income.

Source: Results of the Urban-Brookings Policy Center Microsimulation Model (version 0304-3).

See Also

The Bush Tax Cuts: If we ignore how the cuts are paid for, who benefits from them?

The Bush Tax Cuts: Who benefits when their cost and potential economic growth are accounted for?

The Bush Tax Cuts: How are the distributional effects measured?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Burman, Leonard E., "Fairness in Tax Policy," testimony before the Subcommittee on Financial Services and General Government, U.S. House Appropriations Committee (Washington: Urban-Brookings Tax Policy Center, March 2007).

Furman, Jason, "The Effect of the 2001-06 Tax Cuts on After-Tax Incomes," testimony before the U.S. House Committee on Ways and Means (Washington: Brookings Institution, September 2007).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Distributional Effects," *Tax Notes* 104, no. 14 (September 2004).

Leiserson, Greg, and Jeffrey Rohaly, "The Distribution of the 2001-2006 Tax Cuts: Updated Projections, November 2006" (Washington: Urban-Brookings Tax Policy Center).

Urban-Brookings Tax Policy Center, "Measuring the Distribution of Tax Changes" (Washington, 2003).

The Bush Tax Cuts: Who benefits when their cost and potential economic growth are accounted for?

Distributional analysis of the Bush tax cuts often assumes no effect on economic growth. If the tax cuts raised economic growth, could they have raised the incomes of low- and middle-income taxpayers enough to offset the losses they suffer after accounting for the cost of the tax cuts? TPC finds that the answer is no: even with a plausible increase in economic growth, about two-thirds of households would still be worse off. Even a substantial economic growth effect would not be sufficient to rescue most households from being worse off if the tax cuts were made permanent, once the financing of the tax cuts is taken into account.

Distributional Effects of Making the Bush Tax Cuts Permanent and Adjusting the AMT, with economic growth, 2010 ^a						
Cash income quintile	Share with decrease in after-tax income (percent)			Change in after-tax income (percent)		
	No financing	Equal dollar financing	Proportional financing	No financing	Equal dollar financing	Proportional financing
Bottom	0.0	100.0	92.7	1.3	-20.7	-1.3
Second	0.0	98.1	57.6	3.0	-6.4	0.1
Middle	0.0	89.6	64.7	3.2	-2.5	0.1
Fourth	0.0	57.3	57.8	3.6	0.2	0.3
Top	0.0	1.8	28.5	5.4	4.2	1.8
80-99th percentile	0.0	1.9	28.5	4.6	3.0	1.0
Top 1 percent	0.0	0.0	28.2	7.5	7.3	3.7
All taxpayers	0.0	69.0	60.0	4.5	1.1	1.1

Notes:
 (a) The results assume that all components of pretax cash income rise by one percent due to the tax cuts.
 Source: Results of the Urban-Brookings Policy Center Microsimulation Model (version 0304-3).

- If one assumes that the tax cuts raised each component of pre-tax household income by 1 percent, the combination of the direct tax cut and the increase in income would raise after-tax income by 4.5 percent, if the financing of the cuts is ignored. That growth in after-tax income is skewed toward higher-income households, but all groups would obtain some direct benefit. When financing is included, however, the aggregate change in after-tax income falls to 1.1 percent. More important, however, for the distributional analysis is that, in this full accounting, most households would end up worse off, even with a 1 percent increase in pre-tax cash income, than they would have been without the tax cuts. How many would be worse off depends on how the burden of paying for the tax cuts is shared.
- If all households contributed the same dollar amount to paying for the tax cuts (equal-dollar financing), more than two-thirds of households would be made worse off, including almost everyone in the bottom 40 percent of the income distribution, almost 90 percent of those in the middle quintile, and a majority of those in the fourth quintile. The bottom 60 percent of the income distribution would see a decline in after-tax income, even though the economy grew.
- If instead the financing of the tax cuts were proportional to income, 60 percent of households would be made worse off. As a whole, the bottom 20 percent would see a decline in income, and

the next 40 percent would see only a very small increase in average after-tax income. Households in the top quintile receive the vast majority of all benefits in this scenario.

See Also

The Bush Tax Cuts: If we account for how the cuts are paid for, who benefits from them?

The Bush Tax Cuts: If we ignore how the cuts are paid for, who benefits from them?

The Bush Tax Cuts: How are the distributional effects measured?

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Further Reading

Burman, Leonard E., "Fairness in Tax Policy," testimony before the Subcommittee on Financial Services and General Government, U.S. House Appropriations Committee (Washington: Urban-Brookings Tax Policy Center, March 2007).

Furman, Jason, "The Effect of the 2001-06 Tax Cuts on After-Tax Incomes," testimony before the U.S. House Committee on Ways and Means (Washington: Brookings Institution, September 2007).

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Leiserson, Greg, and Jeffrey Rohaly, "The Distribution of the 2001-2006 Tax Cuts: Updated Projections, November 2006" (Washington: Urban-Brookings Tax Policy Center).

Urban-Brookings Tax Policy Center, "Measuring the Distribution of Tax Changes" (Washington, 2003).

The Bush Tax Cuts: How are the distributional effects measured?

A number of methodological choices have to be made in estimating the distributional impact of a tax cut. These decisions include determining who actually bears the burden of a tax, how to count the income of households, and which metric of the distributional impact itself to use. Different choices can lead to quite different results.

- Identifying who is made worse off by a tax is more complicated than it may initially appear, since the person or entity who pays the tax to the government may not be the one who ultimately bears the burden. For example, taxes on a business eventually burden some individuals, but that may be the customers, workers, or suppliers rather than the business owners, if the business can shift the cost of the tax on to them.
- Economists have developed some reasonable conventions on these issues. For example, it is assumed that the burden of the individual income tax is borne by the payer and is not shifted to anyone else. By contrast, it is assumed that the corporate income tax is borne by recipients of capital income generally, not just shareholders in the corporations subject to the tax. The reason is that investors can shift their funds to the most profitable venture with relative ease; a tax on one form of capital thus affects the after-tax return to all forms of capital, because investors constantly compare such after-tax returns and reallocate their investments accordingly. The estate tax is assumed to be borne by those whose estates actually have to pay the tax. Workers are assumed to bear the burden of the payroll tax, including the share nominally paid by the employer, since firms are typically able to shift the cost onto workers by depressing wages.
- As a standard, comprehensive measure of income, and thus of a household's well-being, the Urban-Brookings Tax Policy Center (TPC) uses a measure called "cash income," which comprises adjusted gross income (AGI, a measure frequently used for tax purposes) plus a variety of additional forms of income including cash benefits from public programs, interest on tax-exempt bonds, contributions to pension plans, the component of Social Security benefits not included in AGI, and some other items. It is important that the measure of income include not just wages and salaries, but also capital gains, dividends, interest, and business income, because these categories account for far more of the incomes of high-income than of low-income households. Excluding such capital income could thus lead to a biased result.
- Another important choice is the metric used to assess the distributional impact of a tax change. TPC's preferred measure is the percentage change in after-tax income. If a tax cut changes everyone's after-tax income by the same percentage, the distribution of after-tax income remains the same as before.
- Another issue is which taxes to include. TPC's estimates include a wide range of federal taxes, including taxes on individual and corporate income, payroll, and estates. It is important to use a broad measure of federal taxes, because different taxes are distributed differently across income levels. The estate tax and the corporate tax, for example, tend to fall more heavily on those with high incomes - that is, they are more progressive. Conversely, the payroll tax that finances Social Security is only paid up to a certain level of income, so it tends to fall more heavily on those with low and moderate incomes and is therefore less progressive than the income tax.

Distributional Effects of Making the Bush Tax Cuts
Permanent and Adjusting the AMT, 2010^a

Cash income quintile	Share receiving tax cut (percent)	Change in after-tax income (percent)	Share of total tax cut (percent)	Average change in tax owed (dollars)	Change in average tax rate (percentage points)
Bottom	15.8	0.3	0.3	-26	-0.3
Second	69.0	1.9	4.1	-387	-1.8
Middle	83.9	2.1	7.5	-699	-1.8
Fourth	96.3	2.5	14.9	-1,392	-2.0
Top	99.2	4.3	73.1	-6,826	-3.1
80-99th percentile	99.3	3.5	43.1	-4,236	-2.6
Top 1 percent	98.7	6.4	30.0	-56,051	-4.3
All taxpayers	72.8	3.4	100.0	-1,869	-2.6

Cash income quintile	Change in federal tax payments (percent)	Change in share of total federal taxes (percentage points)	Change in share of after-tax income (percentage points)	Change in share of income tax paid (percentage points)
Bottom	-8.7	0.0	-0.1	-0.3
Second	-18.2	-0.2	-0.1	-1.1
Middle	-10.8	0.0	-0.2	-0.8
Fourth	-9.4	0.3	-0.2	-0.5
Top	-11.1	-0.1	0.5	2.6
80-99th percentile	-10.0	0.5	0.0	1.7
Top 1 percent	-13.3	-0.7	0.5	0.9
All taxpayers	-11.0	0.0	0.0	0.0

Notes:

(a) Changes are from pre-EGTRRA law, evaluated in 2010. The AMT exemption is assumed to be raised to \$54,000 for married couples filing jointly, and to \$38,250 for single filers, to keep the number of AMT taxpayers equal to the number who would have been subject to the AMT under pre-EGTRRA law. The analysis does not take into account the eventual financing of the tax cuts.

Source: Results of the Urban-Brookings Policy Center Microsimulation Model (version 0304-3).

See Also

The Bush Tax Cuts: If we account for how the cuts are paid for, who benefits from them?

The Bush Tax Cuts: If we ignore how the cuts are paid for, who benefits from them?

The Bush Tax Cuts: Who benefits when their cost and potential economic growth are accounted for?

Authors: William Gale and Benjamin Harris
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Further Reading

Burman, Leonard E., "Fairness in Tax Policy," Testimony before the Subcommittee on Financial Services and General Government, U.S. House Appropriations Committee (Washington, March 2007).

Furman, Jason, "The Effect of the 2001-06 Tax Cuts on After-Tax Incomes," Testimony before the U.S. House Committee on Ways and Means (September 2007).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Distributional Effects," *Tax Notes* 104, no. 14 (September 2004).

Leiserson, Greg, and Jeffrey Rohaly, "The Distribution of the 2001-2006 Tax Cuts: Updated Projections, November 2006" (Washington: Urban-Brookings Tax Policy Center).

Urban-Brookings Tax Policy Center, "Measuring the Distribution of Tax Changes" (Washington, 2003).

The Bush Tax Cuts: How have they affected tax revenue?

The Bush tax cuts contributed, along with underlying economic conditions, to a historic decline in federal tax revenue. In 2000 total federal tax revenue was as high in proportion to the U.S. economy as it had ever been. By 2004 federal tax revenue in proportion to the economy had fallen to its lowest level in almost fifty years.

- In recent decades the federal tax take has generally fluctuated between 17 and 19 percent of gross domestic product (GDP). By 2000, however, total federal tax receipts had reached 20.9 percent of GDP, their highest level since 1970 and matched only in 1944, when the federal government collected 20.9 percent of GDP in taxes at the height of fighting World War II. By 2004, however, federal tax receipts had fallen to 16.3 percent of GDP, which is not only the lowest level since 1970, but the lowest since 1959.
- Most of the decline in the ratio of federal tax revenue to GDP can be traced to the individual income tax. From 1970 to 2000 these taxes were typically in the range of 8 to 9 percent of GDP. In 2000 individual income taxes were 10.3 percent of GDP, their highest level ever. By 2004 individual income taxes had dropped to 7.0 percent of GDP, their lowest level since 1951. Total federal tax revenue declined by 4.6 percent of GDP from 2000 to 2004; of that total, 3.3 percentage points, or almost three-quarters, was due to the decline in individual income tax revenue.
- Most of the remaining decline in the revenue-to-GDP ratio resulted from a drop in the share in total revenue coming from corporate income taxes, which fell by 0.5 percent of GDP from 2000 to 2004, and a drop in the share coming from the payroll taxes that finance Social Security and Medicare, which declined by 0.4 percent of GDP over that period.

See Also

The Bush Tax Cuts: How big are the cuts?

The Bush Tax Cuts: How do the AMT and interest payments affect the cost?

Data Sources

Tax Policy Center, "Make EGTRRA, JGTRRA, and WFTRA Permanent with No AMT Relief," Table T06-0042 (Washington, February 2006).

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Auerbach, Alan J., William G. Gale, and Peter R. Orszag. 2006. "The Budget: Plus Ça Change, Plus C'est la Même Chose," *Tax Notes* (April 17, 2006).

Congressional Budget Office, "The Budget and Economic Outlook: Fiscal Years 2008 to 2017" (Washington, January 2007).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).
_____, "Bush Administration Tax Policy: Revenue and Budget Effects," *Tax Notes* 105, no. 1 (October 2004).

U.S. Office of Management and Budget, "Historical Tables: Budget of the United States Government" (Washington, 2007)

The Bush Tax Cuts: How big are the cuts?

By any measure, the Bush tax cuts have been extraordinarily expensive. The congressional Joint Committee on Taxation calculated a score, or revenue change, for each of the seven major tax cut bills passed during the Bush administration: their combined cost sums to over \$2.0 trillion from 2001-17. Extending these tax cuts into the future would carry a similar cost: the Congressional Budget Office (CBO) recently estimated the cost of extending them through 2017 at \$1.9 trillion, not counting the costs of debt service, and not counting the cost of indexing the alternative minimum tax (AMT) to inflation to prevent it from undoing much of the cuts.

- In January 2001, at the start of the Bush administration, CBO projected a fiscal surplus of \$5.6 trillion spanning fiscal 2002-11. Today, with over half of those fiscal years completed, the budget is on track to have a deficit of \$2.1 trillion for the fiscal period 2002-11, for a total deterioration of \$7.7 trillion. This drastic reversal is due to a combination of factors including higher government spending and changes in economic conditions, as well as the tax cuts. CBO estimates indicate that about one-third of the fiscal reversal is directly due to the tax cuts.
- If tax cuts are not accompanied by spending cuts, as has been the case during the Bush administration, they will lead to high interest payments on the increased national debt. CBO estimates that the cost of extending the President's tax cuts through 2017 increases by \$340 billion if the cost of extra interest payments is included.
- The future treatment of the AMT has an impact on ("interacts with") the projected cost of extending the Bush tax cuts. Under current law the AMT will revert to pre-2001 levels in 2007 and afterward; given that the AMT is not indexed to inflation, this means it will ensnare many more taxpayers than before, and as a consequence will take back much of tax cuts. CBO estimates that if the AMT were kept at its 2006 level, the cost of extending the Bush tax cuts through 2017 would increase by \$470 billion, plus an additional \$70 billion in extra debt service costs.
- If one takes into account the direct effects of the tax cuts, extra interest payments, and the extra "interaction" cost of reforming the AMT while extending the Bush tax cuts, the combined cost of extending the tax cuts through 2017 adds up to \$2.8 trillion.

See Also

The Bush Tax Cuts: How have they affected tax revenue?

The Bush Tax Cuts: How do the AMT and interest payments affect the cost?

The Bush Tax Cuts: How do they compare with the Reagan cuts?

Data Sources

Tax Policy Center, "Make EGTRRA, JGTRRA, and WFTRA Permanent with No AMT Relief," Table T06-0042 (February 2006).

Authors: William Gale and Benjamin Harris
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Further Reading

Auerbach, Alan J., William G. Gale, and Peter R. Orszag, "The Budget: Plus Ça Change, Plus C'est la Même Chose," *Tax Notes* (April 17, 2006).

Congressional Budget Office, "The Budget and Economic Outlook: Fiscal Years 2008 to 2017" (Washington, January 2007).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

_____, "Bush Administration Tax Policy: Revenue and Budget Effects," *Tax Notes* 105, no. 1 (October 2004)

The Bush Tax Cuts: How do they compare with the Reagan cuts?

One way to gain perspective on the cost of the 2001-04 Bush tax cuts is by comparison with the 1981 Reagan tax cut, embodied in the Economic Recovery Tax Act, or ERTA. Although both tax cuts involved major and sustained reductions in tax rates and in revenue, both the details of the cuts and the circumstances in which they were enacted differed greatly, leading to quite different effects.

- The tax code was not indexed to the price level before 1985, so that even with no change in the tax code, tax collections rose over time as inflation pushed up wages and salaries, which in turn pushed individuals into higher tax brackets. This tended to erode the revenue loss from the Reagan tax cut relatively quickly; the Bush tax cuts are not subject to such erosion.
- Fiscal deficits are a greater economic threat today than they were in the 1980s and early 1990s. The retirement of the baby boomers is twenty-five years closer now than in the early 1980s, giving the budget little time to recover before the fiscal pressures begin in earnest. Private saving was significantly higher in the early 1980s than it is now, public debt was a smaller share of GDP, and the United States was an international creditor then but is a substantial international debtor today.
- The economic benefit of tax cuts was likely higher in the early 1980s, because marginal tax rates were much higher then and thus more likely to have had distortive economic effects than the more moderate rates of the 1990s.
- The Reagan administration proved willing to raise taxes when the ill effects of the 1981 tax cut became apparent—a move the Bush administration shows no interest in considering. The 1981 tax cut was followed a year later by a tax increase, in the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). The revenue costs of ERTA, minus the revenue increase in TEFRA, amounted to about 2.1 percent of GDP. On this basis, the Bush tax cuts are approximately the same size as the Reagan tax cuts.

See Also

The Bush Tax Cuts: How big are the cuts?

The Bush Tax Cuts: How have they affected tax revenue?

Data Sources

Tax Policy Center, "Make EGTRRA Permanent," Table T02-0001 (November 2002)

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Steuerle, C. Eugene, *Contemporary U.S. Tax Policy* (Washington: The Urban Institute Press, 2004).

U.S. Office of Management and Budget, "Historical Tables: Budget of the United States Government" (Washington, 2007)

The Bush Tax Cuts: Did they reduce the size of government?

President Bush and some of his supporters have argued that one purpose of the tax cuts is to "starve the beast," that is, to contain or reduce the size of government by depriving it of revenue. It is true that, in the long run, simple arithmetic dictates that the government's spending must equal its revenue. Thus, if taxes are cut (or at least never increase), government spending must eventually decline. In practice, however, the Bush tax cuts have been accompanied by an acceleration in spending, both in inflation-adjusted dollars and in proportion to the economy, which means that the tax cuts have not led to lower government spending but have instead increased the budget deficit.

- In practice, neither tax cuts in general nor the Bush tax cuts in particular seem especially effective in restraining spending. The data over the past twenty-five years appear much more consistent with the view that once fiscal discipline erodes on the tax side of the budget, it tends to erode on the spending side, too.
- Since the Bush tax cuts were enacted, government spending has increased significantly in all major categories: defense spending, domestic spending, and entitlement spending. As a proportion of the economy, total government spending has gradually increased over President Bush's tenure, from 18.4 percent of GDP in 2000 to 20.3 percent of GDP in 2006.

See Also

The Bush Tax Cuts: Are they justified as part of a "starve the beast" strategy?

The Bush Tax Cuts: Are tax cuts an effective way to reduce government spending?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

_____, "Bush Administration Tax Policy: Starving the Beast?" *Tax Notes* 105, no. 8 (November 2004).

U.S. Office of Management and Budget, "Historical Tables: Budget of the United States Government" (Washington, 2007).

The Bush Tax Cuts: Are they justified as part of a "starve the beast" strategy?

Even if the starve-the-beast strategy had "worked" in the sense that the Bush tax cuts restrained government spending, the result would still not justify the specific tax cuts of President Bush's first term, nor would it justify making those tax cuts permanent. Such an outcome would have been deeply unfair, as the spending cuts probably would have affected less affluent households the most, while the tax cuts went overwhelmingly to the rich. In any case, the strategy has not worked, and, with huge deficits looming, extending the tax cuts in the hope that the strategy will someday work would be a dangerous course.

- Many components of government spending predominantly benefit low- and middle-income households. If the goal (or the effect) was to cut spending on these programs, then, as a matter of fairness, a starve-the-beast strategy should have offset the negative impact on low- and middle-income households by giving them a disproportionately large share of the tax cut. However, the Bush tax cuts did just the opposite—they tilted the benefits toward high-income households.
- Whatever resonance "starve the beast" had in 2001, when the government had been running surpluses for several years, the government is now running substantial deficits that are on course to continue and grow. In this budgetary context, a "starve the beast" strategy becomes quite risky. After all, if such a strategy is vigorously pursued over many years but does not result in lower spending, the eventual outcome will be much larger budget deficits, with their growth-reducing drag - and even the risk of a full-blown fiscal crisis.
- There are ways to encourage fiscal discipline and reduce government spending (if that is the goal) other than cutting taxes sharply and hoping that spending falls into line. One approach would be to draw up new budget rules, perhaps somewhat similar to those in place in the late 1980s and into the 1990s, which would place more emphasis in the budget process on the long-term fiscal imbalance facing the nation. An emphasis on the long-term imbalance would make the deficits appear larger, which, in the spirit of the "starve the beast" hypothesis, should create political pressure to hold down spending. Reforming budget procedures to focus on the long-run budget picture would provide a more accurate picture of the government's true finances while not encouraging unaffordable tax cuts or unaffordable spending increases. Even if an altered set of budget rules failed to restrain spending, it is at least highly unlikely to create deeper fiscal problems, unlike the "starve the beast" strategy. Budget reforms thus seem likely to be at least as effective at restraining government spending—and significantly less risky—than making the Bush tax cuts permanent.

See Also

The Bush Tax Cuts: Did they reduce the size of government?

The Bush Tax Cuts: Are tax cuts an effective way to reduce government spending?

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Further Reading

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_____, "Bush Administration Tax Policy: Starving the Beast?" *Tax Notes* 105, no. 8 (November 2004).

Gale, William G. and Peter R. Orszag, "Bush Administration Tax Policy: Distributional Effects," *Tax Notes* 104, no. 14 (September 2004).

The Bush Tax Cuts: Are tax cuts an effective way to reduce government spending?

The "starve the beast" theory relies on the intuition that if government has less revenue, it will be pressured to reduce spending. We offer an alternative theory that we call "coordinated fiscal discipline," which holds that policymaking institutions go through alternating periods of fiscal largesse and fiscal restraint. Periods of largesse see both tax cuts and spending increases, whereas periods of restraint involve both tax increases and spending cuts. One mechanism by which this might happen is that granting large tax cuts to some groups makes it less politically feasible to rein in the desires of other constituencies for increases in their preferred spending programs. Several suggestive pieces of evidence favor the "coordinated fiscal discipline" view over the "starve the beast" view.

- Budget rules and legislative agreements have proved effective at reducing spending and balancing the budget in the past only when restrictions were placed on both tax cuts and spending increases at the same time. For example, a series of budget rules were imposed first in 1990 and then extended in 1993 and 1997 in an attempt to reduce budget deficits. These rules imposed restraints on both sides of the budget. Tax cuts and increases in mandatory spending (that is, spending obligated by virtue of previously enacted laws, often on entitlement programs such as Medicare or Social Security, rather than enacted by laws in the current year) had to be paid for with tax increases or cuts in other mandatory spending. Discretionary spending (that is, spending set by annual appropriation) was made subject to caps. Likewise, the budget deals that were enacted to reduce deficits in 1990 and 1993 involved both spending cuts and revenue increases. This series of policies helped contribute to the budget surpluses that emerged starting in 1998.
- Many in Congress who voted for the Bush tax cuts have also voted for substantial increases in government spending. One study examined the voting records of members who had signed a "no new taxes" pledge. The signers voted overwhelmingly in favor of the Bush administration's tax cuts and have committed themselves not to vote for future tax increases. Yet 86 percent of signers also voted for the extremely expensive Medicare Modernization Act of 2003, which extended Medicare to cover prescription drugs, despite estimates that it would increase federal spending by \$395 billion over 2004 to 2013 and substantially more thereafter. Almost three-quarters of those who had taken the no-new-taxes pledge supported the pork-laden 2004 highway bill, which would have spent about \$300 billion over six years had it passed. Thus many of the same people who voted for tax cuts also voted for large permanent spending increases, at a time when budget deficits were large and growing-hardly behavior consistent with a strategy of "starving the beast."
- The "starve the beast" theory suggests that lower revenue should be accompanied by lower spending, and higher revenue by higher spending. Conversely, the coordinated fiscal discipline view implies that lower revenue will accompany higher spending, and higher revenue will accompany lower spending. The data over the past twenty-five years generally display a pattern consistent with the latter view.
- Testing these alternative hypotheses empirically requires that the spending and revenue data must be "standardized" to remove the effects of the business cycle on the federal budget. The reduced economic activity in a recession tends to lower tax revenue automatically, without any policy intervention, while spending on welfare, unemployment insurance, and related programs rises automatically as well. An economic upswing has the opposite effects. Thus the movements of the business cycle will make taxes and spending move in ways that appear to favor the coor-

dinated fiscal discipline hypothesis. Taking out these spurious effects is thus necessary for a fair test of whether taxes and spending tend to rise and fall together or to move in opposite directions.

- The results of such an analysis show that even after controlling for the business cycle, changes in spending and changes in taxes moved opposite to each other, rather than with each other, over three recent major periods. In the first, between 1981 and 1992, revenue fell and total outlays rose. In the second, between 1992 and 2000, revenue rose and spending fell. Finally, between 2000 and 2004, revenue fell relative to GDP but spending rose. (This period included the September 11, 2001, terrorist attacks and the beginnings of the wars in Afghanistan and Iraq, but only about half of the increase in noninterest spending was due to increased defense and homeland security appropriations.) All of these patterns are inconsistent with the "starve the beast" view.
- It is true that between 1981 and 1992, as revenue fell, standardized noninterest spending fell, too. But this pattern can hardly be taken as strong evidence of effective fiscal discipline. Standardized noninterest spending fell by only 0.4 percent of GDP, while the ratio of public debt to GDP almost doubled, from 26 percent in 1981 to 48 percent in 1992, the largest peacetime growth in the debt-to-GDP ratio in U.S. history aside from the Great Depression. Thus lower revenue has proved to be neither necessary (witness the 1990s) nor sufficient (witness the 1980s and the period since 2000) to reduce federal spending.
- The past several years underscore the questions about the starve-the-beast view. It is hard to believe that spending would have increased by much more than it did between 2000 and 2004 if the tax cuts had not been enacted. Discretionary spending rose from 6.3 percent of GDP in 2000 to 7.8 percent in 2004 (defense spending accounts for 60 percent of that increase). Mandatory spending meanwhile rose from 9.8 percent of GDP in 2000 to 10.7 percent of GDP, and future growth in such spending was ensured by the passage of a large new entitlement program, the Medicare prescription drug benefit.
- The formal econometric evidence on whether tax reductions are followed by spending reductions is mixed: the available studies were mostly done back in the 1980s, and there are results supporting each side. The more recent evidence does suggest that larger budget deficits constrain both spending increases and tax reductions. This evidence, however, does not distinguish between the "starve the beast" and the "coordinated fiscal discipline" theories. The pattern of larger budget deficits leading to higher taxes and lower spending is based on historical experience in which both spending reductions and tax increases were considered jointly as part of fiscal restraint packages. This pattern does not prove (nor does it disprove) that revenue reductions will induce spending reductions. In short, there is simply no compelling evidence that tax cuts constrain spending.

See Also

The Bush Tax Cuts: Did they reduce the size of government?

The Bush Tax Cuts: Are they justified as part of a "starve the beast" strategy?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

_____, "Bush Administration Tax Policy: Starving the Beast?" *Tax Notes* 105, no. 8 (November 2004).

The Bush Tax Cuts: How do the AMT and interest payments affect the cost?

Revenue estimates of the cost of the Bush tax cuts often understate their likely cost, since they make no long-term adjustment for limiting the pending expansion of the alternative minimum tax (AMT). As its reach gradually expands to cover more and more taxpayers, the AMT takes back an increasing share of the tax cuts, reducing their apparent cost. If the AMT exemption were indexed to inflation in 2008 and afterward, as opposed to reverting to its statutory levels of \$45,000 for joint filers and \$33,750 for single filers, the ten-year revenue loss from making the tax cuts permanent would increase from \$1.9 trillion to \$2.4 trillion, not counting the cost of additional debt service.

- There are various ways to estimate the cost of the Bush tax cuts, depending in particular on assumptions about whether the tax cuts will expire on schedule, whether the interest costs from additional borrowing are included, and what is done with the AMT. One comprehensive measure assumes the extension of the tax cuts enacted to date, assumes that the AMT exemption continues to be indexed to inflation, and includes the additional interest costs on the larger public debt. By this measure, the tax cuts reduce revenue between 2008 and 2017 by an estimated \$1.9 trillion and increase the budget deficit over that period by \$3.4 trillion. In 2017 alone, the revenue loss amounts to \$421 billion, or almost 2 percent of projected GDP in that year.

See Also

The Bush Tax Cuts: How big are the cuts?

The Bush Tax Cuts: How have they affected tax revenue?

Data Sources

Tax Policy Center, "Make EGTRRA Permanent," Table T02-0001 (November 2002).

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Congressional Budget Office, "The Budget and Economic Outlook: Fiscal Years 2008 to 2017" (Washington, January 2007).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

_____, "Bush Administration Tax Policy: Revenue and Budget Effects," *Tax Notes* 105, no. 1 (October 2004)

The Bush Tax Cuts: What is their impact on government borrowing and interest payments?

If tax cuts are not offset by either lower government spending or higher taxes elsewhere, the revenue loss from the cuts results in increased government borrowing. The additional borrowing, in turn, increases future interest payments owed by the government. The total budget cost of a tax cut in any future year therefore includes both the revenue loss in that year and the higher interest payments that result from previous revenue losses. Economists estimate these interest costs using projected interest rates generated by the Congressional Budget Office for this purpose. With debt service costs included, the budgetary cost of the Bush tax cuts as legislated for fiscal 2001 to 2010 is almost \$2.2 trillion, or 1.7 percent of GDP.

See Also

The Bush Tax Cuts: What are the indirect effects on economic growth?

The Bush Tax Cuts: How have they affected tax revenue?

The Bush Tax Cuts: How do the AMT and interest payments affect the cost?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Congressional Budget Office, "The Budget and Economic Outlook: Fiscal Years 2008 to 2017" (Washington, January 2007).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

_____, "Bush Administration Tax Policy: Revenue and Budget Effects," *Tax Notes* 105, no. 1 (October 2004)

The Bush Tax Cuts: What spending and revenue measures would pay for making them permanent?

The Congressional Budget Office (CBO) estimates that the Bush tax cuts, if extended beyond 2010, and assuming indexation of the alternative minimum tax (AMT), will reduce tax revenue in 2017 by \$444 billion. Paying for these cuts would require spending cuts or other revenue increases that are well beyond the range of those currently being proposed in any public discussion. In other words, no politically plausible way is in evidence by which the tax cuts could be financed.

- If the tax cuts were financed in 2017 (the last year of the current ten-year budget window) by an across-the-board cut in spending on everything the federal government does, from defense to national parks to Social Security and Medicare, all federal spending would have to be reduced by 12 percent, relative to the CBO's projected baseline, to pay for the Bush tax cuts and AMT indexation (see table).

Changes in Federal Spending or Revenue Required to Offset Making the Bush Tax Cuts Permanent, 2017 ^a			
	Extended tax cuts	Extended tax cuts and index AMT	Memorandum: 2017 baseline spending or revenue (billions of \$)
Revenue loss in 2017 (billions of \$)	444	501	
<i>Required percentage change in^b</i>			
All noninterest outlays	-11.6	-13.1	3,831
Discretionary Spending	-35.5	-40.1	1,250
Defense, homeland security, and international	-59.4	-67.0	748
Other	-88.5	-99.8	502
Mandatory Spending	-17.2	-19.4	2,580
Social Security	-43.4	-49.0	1,024
Medicare	-52.6	-59.3	845
Medicaid	-106.5	-120.2	417
All three	-19.4	-21.9	2,286
All spending except interest, Social Security, Medicare expenditures and offsetting receipts, Medicaid, defense, and homeland security	-46.2	-52.1	962
Revenue			
Payroll tax	32.8	37.0	1,354
Corporate tax	119.1	134.4	373
Notes:			
(a) Percent except where stated otherwise.			
(b) Percentage cuts exceeding 100 are arithmetic artifacts; no program can be cut more than 100 percent.			
Source: Congressional Budget Office (CBO), "The Budget and Economic Outlook: Fiscal Years 2008-2017" (Washington, January 2007); CBO, "An Analysis of the President's Budgetary Proposals for Fiscal Year 2008" (Washington, March 2007); CBO Supplemental Tables; TPC staff calculations.			

- If instead spending cuts were limited to nondefense discretionary spending (a measure that includes all government functions other than Social Security, Medicare, Medicaid, defense, homeland security, and net interest payments), a 46 percent cut relative to the CBO baseline would be required.
- If the cuts were instead targeted in a single specific spending area, either a 43 percent cut in Social Security benefits or a 53 percent cut in Medicare benefits would be required. Except for defense, no other area of federal spending, including the federal component of the Medicaid program, is large enough that even its total elimination would make up for the cost of the tax cuts.
- If, instead of spending cuts, the tax cuts were paid for by increases in other taxes, it would require, as examples, a 33 percent increase in payroll taxes or a 119 percent increase in corporate tax revenue.

See Also

The Bush Tax Cuts: How big are the cuts?

The Bush Tax Cuts: How have they affected tax revenue?

The Bush Tax Cuts: What is their impact on government borrowing and interest payments?

Authors: William Gale and Benjamin Harris
 Last Updated: January 23, 2008

Further Reading

Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, "The 2007 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds" (Washington: U.S. Government Printing Office, May 1, 2007).

Congressional Budget Office, "The Budget and Economic Outlook: Fiscal Years 2008 to 2017" (Washington, January 2007).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

_____, "Bush Administration Tax Policy: Revenue and Budget Effects," *Tax Notes* 105, no. 1 (October 2004).

The Bush Tax Cuts: How did they affect corporate investment?

The Bush tax cuts directly lowered the after-tax user cost of capital. But this reduction must be balanced against the increase in that user cost due to the larger budget deficits and higher interest rates brought about by the tax cuts. Research into the effects of the tax cuts has shown that when the analysis includes even relatively modest effects of the larger deficits on interest rates, the net effect is to raise the user cost of capital under almost all the scenarios considered.

- Traditionally, the effects of tax policy on firms' demand for investment are summarized in estimates of the user cost of capital, which is the minimum return a firm needs to cover depreciation, taxes, and the opportunity costs of the funds used to finance the project. (The opportunity cost can be thought of as the cost of borrowing money to finance the investment, or the returns that are sacrificed when funds are invested in physical equipment rather than in financial instruments.) A lower user cost of capital typically translates into higher investment.
- A number of studies have suggested that lower tax rates, like those enacted in the first term of the Bush administration, generally reduce the user cost of capital and thus boost corporate investment. However, these analyses have either explicitly or implicitly considered tax changes that are revenue-neutral—that is, cuts in tax rates that are paid for either by offsetting increases in other parts of the tax code or by lower government spending. The Bush tax cuts, in contrast, were not immediately offset by other spending cuts or tax increases. Consequently, it is not be appropriate to conclude from an analysis of the direct effects alone that the Bush tax cuts lowered the user cost of capital.
- One study explicitly studied the effects of the provisions of the Bush tax cuts directed toward corporate investment, notably the bonus depreciation provisions, and found that their aggregate impact on investment was just 1 to 2 percent, "far too small to offset the double-digit declines of the early 2000s."

See Also

The Bush Tax Cuts: How did the 2002 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2003 tax cuts change the tax code?

The Bush Tax Cuts: How did the 2004 tax cuts change the tax code?

Further Reading

Desai, Mihir A., and Austan D. Goolsbee, "Investment, Overhang, and Tax Policy," *Brookings Papers on Economic Activity* no. 2 (2004): 285-338.

Gale, William G., and Peter R. Orszag, "Deficits, Interest Rates, and the User Cost of Capital: A Reconsideration of the Effects of Tax Policy on Investment," *Discussion Paper 27* (Washington: Urban-Brookings Tax Policy Center, August 2005).

House, Christopher, and Matthew D. Shapiro, "Temporary Investment Tax Incentives: Theory with Evidence from Bonus Depreciation," *NBER Working Paper 12514* (Cambridge, Mass.: National Bureau of Economic Research, September 2006)

The Bush Tax Cuts: How are small businesses and entrepreneurs affected?

Once the financing of the 2001-03 tax cuts is taken into account in plausible ways, a majority of households that report small business income will end up worse off than they would have been without the tax cuts. Small businesses are also hurt in two other ways. First, their cost of capital for new investment will rise as higher budget deficits raise interest rates. Second, some of the tax cuts seek to reduce a bias in the tax code that used to favor small businesses over corporations. The net result is that many small businesses and entrepreneurs are negatively affected by the Bush tax cuts.

- Capital invested in the corporate sector typically faces a higher tax rate than capital invested in the noncorporate sector, which includes most small businesses. The reason is that capital invested in the corporate sector can be taxed twice: once at the level of the corporation, and again when the corporation distributes income to shareholders in the form of dividends or capital gains. The 2003 tax cut provisions that reduce taxes on dividends reduce this bias in the allocation of capital, which should shift investment funds away from noncorporate businesses, which are disproportionately owned by entrepreneurs, and toward corporations.
- While the 2001-2003 tax cuts were described as "pro-entrepreneur," a recent study found that the majority of taxpayers would see their tax burden rise, once the eventual financing of the cuts was taken into account. Specifically, the study found that 72 percent of taxpayers with business income would be worse off if the tax cuts were eventually paid for by proportional financing, and that 58 percent of filers with business income would be worse off if the cuts were eventually paid for with equal-dollar financing.
- Since the Bush tax cuts are not offset by either reduced spending or higher taxes elsewhere, they lead to higher budget deficits. Higher deficits, in turn, typically drive up interest rates, thus increasing the cost of new investment and reducing the amount of investment undertaken. Several studies have determined that the eventual result of the Bush tax cuts is higher interest rates, leading to decreased new investment.

See Also

The Bush Tax Cuts: Were they well designed to strengthen long-term economic growth?

The Bush Tax Cuts: What are the indirect effects on economic growth?

The Bush Tax Cuts: What is their impact on government borrowing and interest payments?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Desai, Mihir A., and Austan D. Goolsbee, "Investment, Overhang, and Tax Policy," *Brookings Papers on Economic Activity* no. 2 (2004): 275-328.

Gale, William G., and Peter R. Orszag, "Deficits, Interest Rates, and the User Cost of Capital: A Reconsideration of the Effects of Tax Policy on Investment," *Tax Policy Center Discussion Paper 27* (Washington: Urban-Brookings Tax Policy Center, August 2005).

_____, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

_____, "Bush Administration Tax Policy: Effects on Long-Term Growth," *Tax Notes* 105, no. 3 (October 2004).

House, Christopher, and Matthew D. Shapiro, "Temporary Investment Tax Incentives: Theory with Evidence from Bonus Depreciation," NBER Working Paper 12514 (Cambridge, Mass.: National Bureau of Economic Research, September 2006).

The Bush Tax Cuts: How did they affect incentives to work?

The Bush tax cuts actually had a surprisingly small effect on the marginal tax rates faced by most Americans. Many households in the bottom half of the income distribution owed little or no federal income tax even before the tax cuts. Others higher up in the income distribution are subject to the alternative minimum tax, which was reduced by the Bush tax cut legislation, but only temporarily. These factors and others meant that the tax cuts did not reduce marginal tax rates for about three-fourths of households, indicating that the tax cuts did not change incentives to work for the majority of workers.

- A study using the tax model at the U.S. Department of the Treasury showed that the 2001 tax cut, when fully phased in, would provide no reduction in marginal tax rates for 76 percent of households. Even among those with positive tax liability, 64 percent would experience no reduction in marginal rates, according to the study.
- Similarly, calculations using the TPC microsimulation model indicate that if both the 2001 and 2003 tax cuts were made permanent, 60 percent of filers, who collectively represent more than 40 percent of taxpayers and report 30 percent of all taxable income, would not see a reduction in marginal tax rates relative to pre-2001 tax law.
- Many provisions of the tax cuts reduced taxes owed but did not increase the incentive to work. For example, the creation of the new 10 percent tax bracket meant lower taxes for those further up the income ladder, but many of those taxpayers continued to face the same marginal tax rates of 15 percent or more. The expansion of the child tax credit reduced taxes for income taxpayers with children but did not alter the marginal tax rate for many of them. Calculations using the TPC microsimulation model indicate that if the tax cuts were made permanent, 44 percent of all filers with an income tax cut, representing 34 percent of taxable income, would receive a net tax cut in the sense of facing a lower total tax bill, but would not experience a reduction in marginal tax rates on wages. (Indeed, this model shows that because of complex interactions in the tax code, the tax "cuts" actually caused 7.7 million filers to face increases in marginal rates!) Thus the tax cuts did reduce taxes for many households, raising their after-tax income in a way similar to receiving a bonus check, but did not reduce their marginal tax rate, which is what matters when deciding whether to earn additional income.
- The standard presumption in economic theory-and the evidence from research-is that when people get more income, but their incentives to earn additional income do not increase, at least some will choose to work less. In effect, they will take some of their tax cut in the form of more hours of leisure.

See Also

The Bush Tax Cuts: How did the 2001 tax cuts change the tax code?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Congressional Budget Office, "Effective Marginal Tax Rates on Labor Income" (Washington, November 2005).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

_____, "Bush Administration Tax Policy: Effects on Long-Term Growth," *Tax Notes* 105, no. 3 (October 2004).

Keifer, Donald, and others, "The Economic Growth and Tax Relief Reconciliation Act of 2001: Overview and Assessment of Effects on Taxpayers." *National Tax Journal* 55, no. 1 (2002): 89-118.

Office of Tax Analysis, "A Dynamic Analysis of Permanent Extension of the President's Tax Relief" (Washington, July 25, 2006)

The Bush Tax Cuts: How did they affect retirement saving?

The Bush tax cuts did little to change saving incentives for low- and middle-income households, focusing instead on providing tax cuts to wealthier households by increasing annual maximum contribution limits to Individual Retirement Accounts (IRAs) and 401(k)s. This reform benefited only the small proportion of households with sufficient wealth to contribute more than the pre-tax cut maximum. Since many of the provisions to encourage retirement saving applied primarily to high-income households whose pension contributions are likely to represent little new saving, the Bush tax cuts were more effective at shifting assets from taxable to tax-preferred accounts than at raising saving. They thus cost the Treasury revenue while doing little to achieve the intended objective.

- The changes in maximum contribution limits to 401(k)s and IRAs were aimed at high-income taxpayers. In 2001 workers were allowed to deposit a maximum of \$10,500 in a 401(k) account. The 2001 tax legislation (known by its legislative acronym EGTRRA) raised the maximum gradually to \$15,000 by 2006. These higher limits benefit only those who would have saved the maximum anyway under pre-EGTRRA law and wished to save more. Similarly, EGTRRA more than doubled the amount that a taxpayer and spouse may contribute each year to an IRA. The vast majority of Americans did not make the maximum contributions to their 401(k)s or IRAs even under the older limits, and therefore they benefit little if at all from the raised limits.
- A 2000 study by an economist at the Department of the Treasury found that only 4 percent of all taxpayers who were eligible to deduct their contribution to traditional IRAs in 1995 made what was then the maximum allowable contribution of \$2,000. The percentage of the population affected by the 401(k) changes was likewise very small. The General Accounting Office (now called the Government Accountability Office) concluded that the increase in the contribution limit for 401(k)s directly benefits fewer than 3 percent of participants. Other recent studies have reached similar conclusions.
- The households who were constrained by the previous limits are disproportionately high-income households, and a variety of empirical evidence shows that these households are likely to respond to the higher limits by shifting other saving into 401(k)s and IRAs to benefit from the tax advantage. In other words, the change is likely to represent an expensive tax subsidy for saving that high-income households would have done in any case. Contributions to tax-advantaged retirement accounts that are financed by shifting other assets into the accounts do not increase private saving. Little new saving is thus likely to result from these retirement saving provisions.

See Also

Retirement Saving: What are defined-benefit retirement plans?

Retirement Saving: What are defined-contribution retirement plans?

Retirement Saving: What types of non-employer-sponsored accounts are available?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Burman, Leonard E., "The IRA Conversion Provision in the 2006 Tax Reconciliation Bill: Smoke and Mirrors" (Washington: Urban-Brookings Tax Policy Center, May 11, 2006) (6).

Burman, Leonard E., William G. Gale, and Peter R. Orszag, "The Administration's Savings Proposals: Preliminary Analysis," *Tax Notes* 20 (March 2003).

Congressional Budget Office, "Utilization of Tax Incentives for Retirement Saving: Update to 2003," CBO Background Paper (Washington, March 2007).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

The Bush Tax Cuts: Were they well designed to strengthen long-term economic growth?

For any tax cut to raise economic growth, it must have a powerful enough direct effect on incentives for work, saving, and investment to overcome the drag on growth from the larger budget deficit (or smaller surplus) it causes. The Bush tax cuts are not well designed to provide strong incentives for additional saving, investment, and work. As a result, after taking the drag from the larger budget deficits into account, the net effect from the tax cuts is likely to be a reduction in long-term growth.

- One study of the long-term effects of making the 2001 tax cut permanent combined estimates of the actual changes in incentives provided by the tax cut with estimates of how a given change in tax incentives affects saving, investment, labor supply, and human capital accumulation. The study found that these "supply-side" effects would indeed, taken alone, increase GDP by almost 1 percent by 2011, but that the increase in the deficit due to the tax cuts would reduce national saving, which would cause GDP to fall by about 1.6 percent by 2011; the net effect of these factors, and others, would be to reduce GDP by about 0.3 percent by 2011.
- The impact of the tax cuts on long-term economic growth depends on how the budget is eventually adjusted to accommodate the reduced revenue due to the tax cuts; that is, tax cuts must eventually be "paid for" either by reducing spending or by raising taxes in the future. A recent Treasury study found that, under either scenario, the tax cuts' long-run impact on the economy would be small and could be either positive or negative, depending on the fiscal response.

See Also

The Bush Tax Cuts: Did they provide good "bang for the buck?"

The Bush Tax Cuts: Were they well timed to spur economic growth?

The Bush Tax Cuts: What are the indirect effects on economic growth?

The Bush Tax Cuts: What is their impact on government borrowing and interest payments?

The Bush Tax Cuts: What spending and revenue measures would pay for making them permanent?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Elmendorf, Douglas W., and David L. Reifschneider, "Short-Run Effects of Fiscal Policy with Forward-Looking Financial Markets," *National Tax Journal* 55 (September 2002): 357-86.

Gale, William G., "Short-Term Stimulus, Long-Term Growth and JGTRRA," testimony to the United States Senate Democratic Policy Committee (June 9, 2003).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

_____, "Bush Administration Tax Policy: Short-Term Stimulus," *Tax Notes* 105, no. 6 (November 2004).

Gale, William G., and Samara R. Potter, "An Economic Evaluation of the Economic Growth and Tax Relief Reconciliation Act of 2001." *National Tax Journal* 55, no. 1 (2002): 133-86.

Keifer, Donald, and others, "The Economic Growth and Tax Relief Reconciliation Act of 2001: Overview and Assessment of Effects on Taxpayers." *National Tax Journal* 55, no. 1 (2002): 89-118.

Office of Tax Analysis, "A Dynamic Analysis of Permanent Extension of the President's Tax Relief" (Washington, July 25, 2006).

The Bush Tax Cuts: Were they well timed to spur economic growth?

Historically, tax cuts aimed at increasing demand and stimulating the economy out of a recession have not worked especially well. Timing has been a major problem. It takes months for Congress to enact tax cut legislation, and often yet more months for the legislation to have a significant economic impact. Not uncommonly, the recession has ended and the economy is on an upswing by the time the stimulus legislation takes effect. The Bush administration's tax cuts, in contrast, were well timed to address the economic slowdown. The 2001 tax cut (known by its legislative acronym EGTRRA) was enacted while the economy was still in recession, and the 2002 and 2003 tax cuts (the latter known as JGTRRA) were enacted while economic activity remained sluggish. However, as explained in another entry, the tax cuts were designed poorly for the purpose of giving the economy an immediate short-term boost.

See Also

The Bush Tax Cuts: Didn't they help the economy recover from the 2001 recession?

The Bush Tax Cuts: Were they well designed to strengthen long-term economic growth?

The Bush Tax Cuts: What are the indirect effects on economic growth?

Authors: William Gale and Benjamin Harris
Last Updated: January 23, 2008

Further Reading

Gale, William G., "Short-Term Stimulus, Long-Term Growth and JGTRRA," testimony to the United States Senate Democratic Policy Committee (Washington: Brookings Institution, June 9, 2003).

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).

_____, "Bush Administration Tax Policy: Short-Term Stimulus," *Tax Notes* 105, no. 6 (November 2004)

The Bush Tax Cuts: What are the indirect effects on economic growth?

The manner in which tax cuts are financed can affect long-term economic growth, but the effect is tricky to analyze in the case of the Bush tax cuts because their ultimate financing remains unclear. So far the tax cuts have been financed with higher budget deficits. If extended, the tax cuts will increase the accumulated federal debt by \$5 trillion in 2015, or 25 percent of GDP in that year. The accumulation of these deficits will injure long-term economic growth, because budget deficits reduce national saving, which in turn reduces the rate at which the economy accumulates capital.

- Increased budget deficits need not reduce long-term growth if they are fully offset by an increase in private saving. However, history suggests that increased private saving by Americans will suffice to offset only about one-quarter of the increase in public debt. On net, then, national saving is likely to fall by 75 cents for every dollar in deficits. This implies that the capital stock owned by Americans after a decade would be \$3.75 trillion (75 percent of the \$5 trillion in additional public debt) lower than if the tax cuts had never been enacted. If capital earns 6 percent (a reasonable assumption), that "missing" \$3.75 trillion in American-owned capital will reduce national income in 2015 by \$225 billion, or about 1 percent of GDP in that year as projected by the Congressional Budget Office.
- The reduction in the domestic capital stock due to budget deficits is facilitated by an increase in interest rates. A variety of estimates suggest that the rise in budget deficits in the next decade will raise long-term interest rates by about 1 percentage point, or perhaps a little less. Higher interest rates mean that firms will have to pay more to borrow funds for investment in plant and physical equipment, and they will have a greater incentive to use their internally generated funds for financial investments instead of investing in their business. The cost of capital would rise for corporate equipment and structures, noncorporate equipment and structures, and owner-occupied housing. This higher cost of capital would reduce new investment.
- Large and sustained budget deficits would also reduce future national income through increased borrowing from abroad by American households, firms, and government. Such borrowing in effect "mortgages" the income generated by part of the U.S. domestic capital stock. In other words, the future returns to the domestic investments financed by foreign borrowing would accrue to foreign investors rather than U.S. residents. This effect is included in the estimated \$225 billion loss to national income cited above.

See Also

The Bush Tax Cuts: How have they affected tax revenue?

The Bush Tax Cuts: Were they well designed to strengthen long-term economic growth?

The Bush Tax Cuts: Were they well timed to spur economic growth?

The Bush Tax Cuts: What is their impact on government borrowing and interest payments?

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Further Reading

Elmendorf, Douglas W., and David L. Reifschneider, "Short-Run Effects of Fiscal Policy with Forward-Looking Financial Markets," *National Tax Journal* 55 (September 2002): 357-86.

Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).
_____, "Bush Administration Tax Policy: Effects on Long-Term Growth," *Tax Notes* 105, no. 3 (October 2004).

Gale, William G., and Samara R. Potter, "An Economic Evaluation of the Economic Growth and Tax Relief Reconciliation Act of 2001." *National Tax Journal* 55, no. 1 (2002): 133-86.

The Bush Tax Cuts: Did they provide good "bang for the buck?"

The Bush tax cuts of 2001 to 2003 provided much less stimulus to the economy than other policies of equal cost would have. The underlying reason is that although the tax cuts were well-timed to provide a short-run economic stimulus, they were poorly designed for this task.

- The 2001 tax cut phased in reductions in marginal tax rates over a period of years, so that most of their impact came several years after their enactment. Such "backloading" reduces the ability of a tax cut to stimulate the economy in the immediate present. In fact, backloading can even reduce current economic activity, by encouraging people to postpone purchases or increases in work until after the full reduction in taxes has phased in. As the Wall Street Journal editorial board, a staunch advocate of tax cuts, has put it, "Delayed tax cuts are likely to depress the economy."
- The tax cuts provided larger percentage increases in after-tax income for higher-income households than for lower-income households. However, low-income households are more likely to spend any additional income they receive than higher-income households. Evidence from the 2001 tax cuts bears out this tendency. One study, using data from the Consumer Expenditure Survey, shows that households in their low-income category consumed 75 percent of their 2001 rebate, whereas the average household consumed 20 to 40 percent of its rebate. Thus the Bush tax cuts were not aimed at the segments of the population where they would have the greatest impact in stimulating additional purchases of goods and services.
- Many of the provisions of the 2001 and 2003 tax cuts—including the repeal of the estate tax and the expanded provisions for tax-free saving—were ostensibly designed to raise saving. Apart from the question of how effective these provisions were on that score, the appropriate strategy when one wants to provide a short-term stimulus to a weak economy is exactly the opposite: to raise spending, not saving.
- Even some of the provisions of the tax cuts that were ostensibly designed to raise consumption were inefficient ways of doing so. For example, one claim was that cuts in dividend taxes would boost the value of the stock market, raising wealth for many people and therefore raising consumption. But most people adjust their current consumption little in response to changes in the value of the stocks they own. One rough calculation suggests that when the value of stock holdings rises by one dollar, current consumption spending increases by just three to five cents.
- The 2002 tax cut allowed firms to count 30 percent of the value of new investment as an expense in the first year if made before September 11, 2004. These and other bonus depreciation provisions in the 2002 legislation were intended to encourage businesses to increase investment. Temporary investment incentives should indeed encourage a greater surge of investment in the near term, because firms have an incentive to take advantage of such provisions before they expire, and the bonus depreciation provisions were explicitly temporary at least partly for this reason. However, in 2003 Congress and the president extended the expiration date to the end of 2004 and expanded the first-year write-off to 50 percent. Meanwhile the Bush administration repeatedly insisted that the other tax cuts should eventually be made permanent. These actions, and perhaps the general sense that "temporary" tax cuts always get extended, may have led businesses to think that policymakers would continue to extend the bonus depreciation provisions and perhaps make them permanent. That would have undermined their ability to encourage investment in the short term. Indeed, a survey by the National Association of Business

Economists released in January, 2004, found that 62 percent of respondents expected the provisions to be extended. (Interestingly, an even larger share, 73 percent, reported that bonus depreciation had no effect on their firm's investment.) In the end, the provision was not extended when it expired at the end of 2004.

See Also

- The Bush Tax Cuts: How big are the cuts?
- The Bush Tax Cuts: How did they affect corporate investment?
- The Bush Tax Cuts: How did they affect incentives to work?
- The Bush Tax Cuts: Were they well designed to strengthen long-term economic growth?
- The Bush Tax Cuts: How did the 2001 tax cuts change the tax code?
- The Bush Tax Cuts: How did the 2002 tax cuts change the tax code?
- The Bush Tax Cuts: How did the 2003 tax cuts change the tax code?

Authors: William Gale and Benjamin Harris
 Last Updated: January 23, 2008

Further Reading

- Gale, William G., "Short-Term Stimulus, Long-Term Growth and JGTRRA," testimony to the United States Senate Democratic Policy Committee (June 9, 2003).
- Gale, William G., and Peter R. Orszag, "Bush Administration Tax Policy: Introduction and Background," *Tax Notes* 104, no. 12 (September 2004).
- _____, "Bush Administration Tax Policy: Short-Term Stimulus," *Tax Notes* 105, no. 6 (November 2004).

The Bush Tax Cuts: Didn't they help the economy recover from the 2001 recession?

Casual commentary on economic policy is often based on the post hoc ergo propter hoc ("after this, therefore because of this") fallacy. In the case of the Bush tax cuts, it is argued that because an economic recovery followed the tax cuts, the tax cuts must have caused the recovery. In truth the economy recovered from the 2001 recession for a variety of reasons unrelated to the tax cuts, which were poorly designed to deliver a short-term economic stimulus.

- Several factors contributed to the turnaround in economic growth following the 2001 recession. The Federal Reserve reduced interest rates to historic lows, spurring huge amounts of mortgage refinancing; this reduced homeowners' monthly payments, which in turn increased consumer demand for other products. A period of economic and political uncertainty followed the terrorist attacks of September 11, 2001, but by 2003, when the major military campaign in Iraq had begun, at least some of that uncertainty had dissipated. Government spending also increased in these years, including for defense and homeland security. Meanwhile the technology cycle continued to turn: investment went from boom in the late 1990s to a drought in 2001 and 2002, but by 2003 firms were once again willing to invest. Compared with these factors, the Bush tax cuts of 2001, 2002, and 2003 had a small effect in stimulating the economy out of the recession of 2001 and the slow growth of 2002 and 2003.

See Also

The Bush Tax Cuts: How did the 2001 tax cuts change the tax code?

The Bush Tax Cuts: Were they well timed to spur economic growth?

The Bush Tax Cuts: What are the indirect effects on economic growth?

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Further Reading

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