

**Economic Benefits of Extending the Fifteen Percent Tax Rate
on Dividends and Capital Gains and the Other Pro-Growth Elements
of the 2001 and 2003 Tax Acts**

**Stephen J. Entin
President & Executive Director
Institute for Research on the Economics of Taxation**

Several provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001, as amended by the Jobs and Growth Tax Relief Reconciliation Act of 2003, helped to end the recession by turning around a severe slump in investment. Three key provisions either have expired, or soon will expire, if not extended by the Congress. The 15% top tax rates on dividends and capital gains, enacted in 2003, will expire at the end of 2008. The marginal income tax rate cuts enacted in 2001, and accelerated to full effect in 2003, will expire at the end of 2010. The 50% expensing provision in the 2003 Act was billed as a temporary jump start for investment and the recovery, and was allowed to expire at the end of 2004.

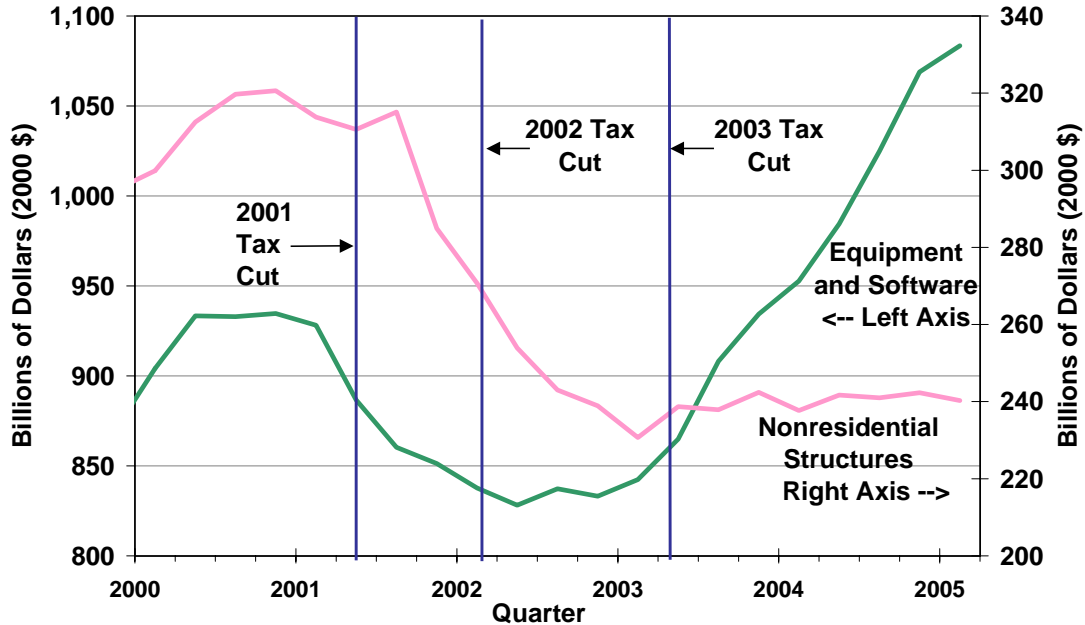
The expected future tax treatment of saving and investment affects saving and investment being done today. Allowing the remaining investment-related provisions to expire would jeopardize the economic recovery. Extending them now, rather than waiting until the last minute, would reduce uncertainty as to whether the more favorable tax treatment will be available for investments whose lives extend beyond the sunset dates of the tax provisions. Immediate extension would boost investment spending, employment, and wages starting now, not three to five years down the road.

All of these provisions are consistent with proposals for a fundamental reform of the tax system. Full reform would go even further in reducing tax biases against saving and investment, and the economic gains from a fundamental reform would be correspondingly larger.

Recent swings in the economy have mirrored swings in investment.

The main cause of the 2001 recession was a sharp drop in investment. The decline in spending on equipment and software, and in non-residential structures, is shown in Chart 1. The chart also shows the response of investment to subsequent tax changes.

**Chart 1 Real Private Investment
And 2001, 202, and 2003 Tax Cuts**



Data Source: BEA, National Income and Product Accounts, Table 5.3.6, accessed via www.bea.gov.

The 2001 Tax Act cut passed the Congress on May 26, 2001, but investment spending continued to slip for the rest of the year. That tax reduction did very little to encourage additional investment spending in the short run, giving out money mainly for social policies that are not related to economic growth. The bill's marginal tax rate reductions on small business owners, corporate shareholders, and other savers, which would have reduced the service price of capital and encouraged investment, were largely deferred until later years, with only half a percentage point effective in 2001. There was nothing else in the bill that directly lowered the cost of business investment.

The early stages of the economic recovery in 2002 were weak because investment remained weak. The Jobs Creation and Worker Assistance Act of 2002 was signed into law on March 9, 2002. It contained a special 30% "bonus expensing" provision for investment in equipment and software (but not for most structures). Also, the second half-point step in the phased income tax rate reduction became effective in 2002. Investment in equipment and software (but not structures) began to recover, modestly, over the next four quarters.

The 2003 Tax Act was signed into law on May 28, 2003. It upped the special expensing provision to 50%, directly cutting the cost of equipment and software (but not most structures) for

corporate and non-corporate businesses. More importantly, it also brought forward to 2003 the remaining 2 to 3.6 percentage points marginal income tax rate reductions on small business owners, shareholders, and savers scheduled for 2004 and 2006. Most importantly, for taxpayers in the top four brackets, it cut the top tax rates on dividends and capital gains from 20% to 15% through 2008. For taxpayers in the 10% and 15% brackets, the rates were set at 5% through 2007, and zero in 2008.

Investment in equipment and software shot up almost at once. Investment in non-residential structures, which was helped by the capital gains, dividend, and marginal tax rate cuts, but got no direct depreciation relief, abruptly stopped its decline and rose by a slight amount. Investment and growth remained strong throughout 2004. Employment and wage growth advanced. The expensing provision expired at the end of 2004. Investment growth seems to have slowed a bit since.

The tax cuts lowered the service price of capital. Failure to extend them would raise the service price and reduce GDP.

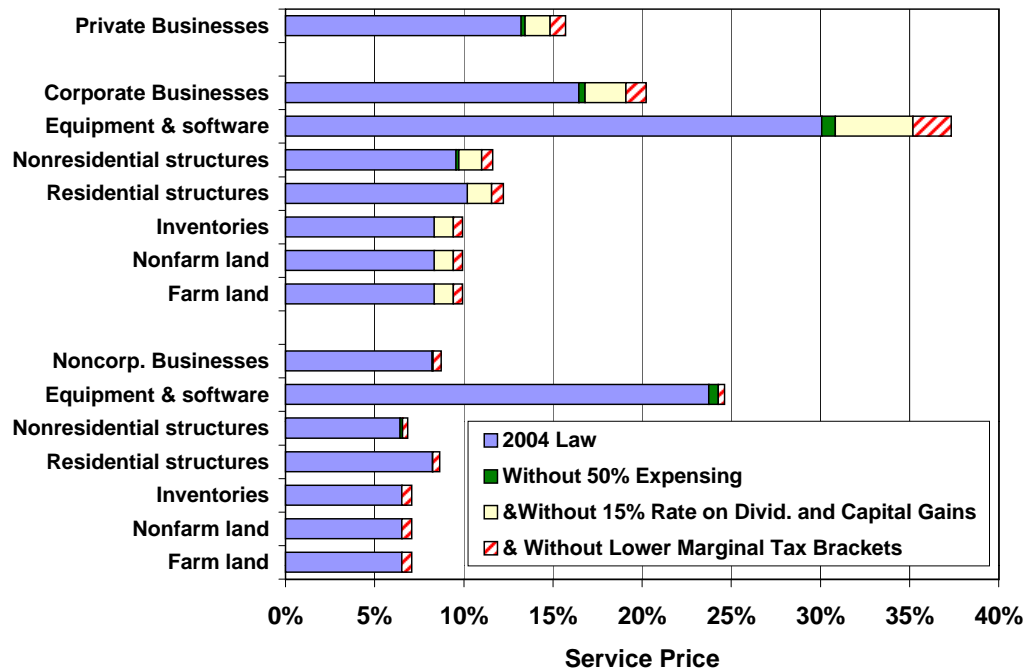
The size of the capital stock and the level of investment depend on the service price of capital. The service price is the rate of return that an investment must earn to pay the taxes owed, cover its cost (depreciation), and yield a normal after-tax return to its owner. A tax increase on capital income raises the service price, and renders impractical any investment projects that cannot meet the higher service price. A tax reduction on capital income lowers the service price, and makes additional investment projects possible.

Chart 2 and Table 1 show the service prices of various types of capital (equipment and software, structures, inventory, land) in the corporate and non-corporate sectors under 2004 law, with all three investment-related tax provisions in place. They also show the higher service prices that would result from their expirations, first of the expensing provision, then the 15% tax cap (corporate sector only), and then the marginal rate reductions. The numbers are for the private business sector, which is about 80% of GDP. The corporate sector is about 56%, and the non-corporate private sector about 24% of GDP.

The tax changes of 2003 boosted investment and GDP by lowering the service prices of various types of capital to the 2004 levels shown. For the whole private sector, the reduction was 2.5 percentage points, from 15.7% to 13.2%. The biggest reduction was in the corporate sector (a drop of 3.7 points, from 20.2% to 16.5%), where the largest cut was on equipment and software (7.2 points, from 37.3% to 30.1%). All three of the investment-related tax provisions, including the 15% tax rate on dividends, applied to the corporate sector. The non-corporate sector benefitted mainly from the individual marginal income tax rate reductions and the expensing provision. The service price in the non-corporate sector, which fell from 8.7% to 8.2%, is far lower than in the double-taxed corporate sector.

The biggest reduction in the corporate service price on equipment and software (over 4 points) was due to the 15% rate cap on dividends and capital gains, which reduced the double taxation

Chart 2 Service Price Of Private Business Capital



Data Source: Gary Robbins, Heritage Center for Data Analysis

Table 1 Service Price of Private Business Capital

	2004 Law	Without 50% Expensing	Without 15% Rate on Dividends and Capital Gains	Without Lower Marginal Tax Brackets
Private Businesses	0.132	0.134	0.148	0.157
Corporate Businesses	0.165	0.168	0.191	0.202
Equipment & software	0.301	0.308	0.352	0.373
Nonresidential structures	0.096	0.097	0.110	0.116
Residential structures	0.102	0.102	0.115	0.122
Inventories	0.083	0.083	0.094	0.099
Nonfarm land	0.083	0.083	0.094	0.099
Farm land	0.083	0.083	0.094	0.099
Noncorporate Businesses	0.082	0.083	0.087	0.087
Equipment & software	0.237	0.243	0.246	0.246
Nonresidential structures	0.064	0.066	0.069	0.069
Residential structures	0.082	0.082	0.086	0.086
Inventories	0.065	0.065	0.071	0.071
Nonfarm land	0.065	0.065	0.071	0.071
Farm land	0.065	0.065	0.071	0.071

Data Source: Gary Robbins, Heritage Center for Data Analysis

of corporate income. Next in size was the marginal tax rate reductions on shareholders (about 2 points), then the expensing provision (under 1 point). In the non-corporate sector, on all assets together, the marginal tax rate reductions had the bigger impact, with expensing larger for equipment and software.

Allowing the expensing provision to expire eliminated about 8 percent of the cut in the service price available in 2004. Allowing the 15% rate cap on dividends and capital gains to lapse would eliminate about 56% of the cut in the service price. Allowing the marginal tax rate reductions to expire would end the remaining 36%.

Each percentage point reduction in the service price of capital increases the capital stock over time by about 1.5%. The resulting increase in the productivity of labor increases the demand for labor, and raises the total wage bill by a roughly similar percent. Private sector GDP rises by about 1.5%, with about two-thirds going to labor income and about one-third going to capital income, pre-tax. Various layers of government take a bit over 30% of the increase in income as taxes, a revenue gain of about \$40 billion to \$50 billion a year. Increases in the service price have the opposite effect on incomes and tax revenues. Failure to account for the changes in GDP and incomes, particularly labor incomes, seriously distorts the estimated revenue consequence of changes in taxation of capital.

Every tax bill relating to capital income and cost recovery that Congress considers should be examined for its effect on the service price of capital. The Joint Committee on Taxation, in conjunction with the Congressional Budget Office, should develop or borrow the software to conduct that calculation, and report the result to the Finance and Ways and Means Committees along with the (static) revenue estimate. If the bill increases the service price, it will reduce investment and GDP, which will reduce or eliminate the expected revenue from the provision. If the bill lowers the service price, it will raise GDP, which will provide some revenue reflow. If you are comparing two tax provisions, and one raises the service price more than the other relative to the amount of revenue expected to be raised, then that bill will do more economic damage, per dollar of revenue raised, than the other.

Current tax system is biased against saving and investment.

The 15% top tax rate on capital gains and dividends is a step toward fundamental tax reform. It may be thought of as mitigating the double taxation of corporate income. Alternatively, it may be viewed as offsetting some of the basic income tax bias against saving, in effect extending to more saving about half of the tax relief given under Roth IRAs.

Federal and state tax systems hit income that is saved harder than income used for consumption. At the federal level there are at least four layers of possible tax on income that is saved.

1) Income is taxed when first earned (the initial layer of tax). If one uses the after-tax income to buy food, clothing, or a television, one can generally eat, stay warm, and enjoy the entertainment with no additional federal tax (except for a few federal excise taxes).

2) But if one buys a bond or stock or invests in a small business with that after-tax income there is another layer of personal income tax on the stream of interest, dividends, profits or capital gains received on the saving (which is a tax on the "enjoyment" that one "buys" when one saves). The added layer of tax on these purchased income streams is the *basic income tax bias against saving*.

3) If the saving is in corporate stock, there is also the corporate tax to be paid before any distribution to the shareholder, or any reinvestment of retained after-tax earnings to increase the value of the business. (Whether the after-tax corporate income is paid as a dividend, or reinvested to raise the value of the business, which creates a capital gain, corporate income is taxed twice — *the double taxation of corporate income*.)

4) If a modest amount is left at death (beyond an exempt amount that is barely enough to keep a couple in an assisted living facility for a decade), it is taxed again by *the estate and gift tax*.

Eliminating the estate and gift tax and the corporate tax would remove two layers of bias. Granting all saving the treatment given to pensions or IRAs, either by deferring tax on saving until the money is withdrawn for consumption (as in a regular IRA), or by taxing income before it is saved and not taxing the returns (as in a Roth IRA), would remove the basic bias. Saving-deferred taxes, the Flat Tax, VATs, and retail sales taxes are examples of saving-consumption neutral taxes.

The tax on capital gains is a double tax even for the non-corporate sector. The current value of a share of stock or a non-corporate business is the present (discounted) value of its future after-tax earnings. If for any reason (reinvested earnings, discovery of a better mousetrap, etc.) future earnings are expected to rise, the current value of the business or price of the stock will rise. If the future income does rise, that added income will be taxed when earned. To also tax the associated increase in the present value of the business is to double tax the future income.

Effects of marginal income tax rates on labor and capital.

Taxes on labor and capital income force up the cost of labor and capital, and reduce the quantity offered and employed. The supply of labor is not very elastic. Consequently, much of any tax imposed on labor is borne by the workers. [Chart 3.] Most people must work to have a satisfactory income, and many must conform their hours of work to the requirements of their employers. Moving across national borders is less of an option for labor than for capital. (Workers have some choices — to take or reject overtime, to contribute a second family earner to the labor force, how long to vacation, and when to retire.)

Chart 3 Effect of Tax On Labor

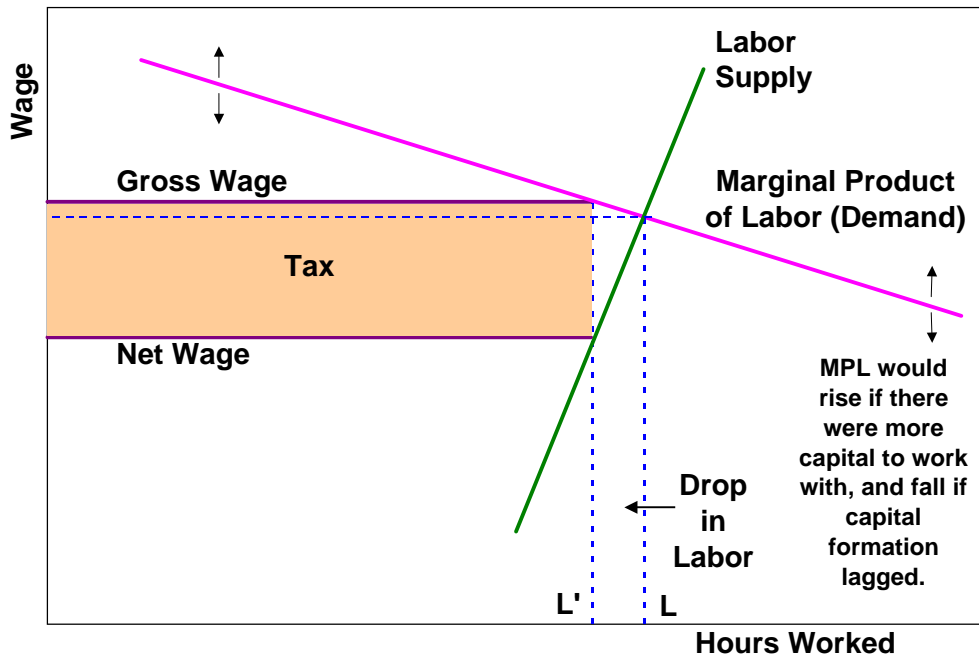
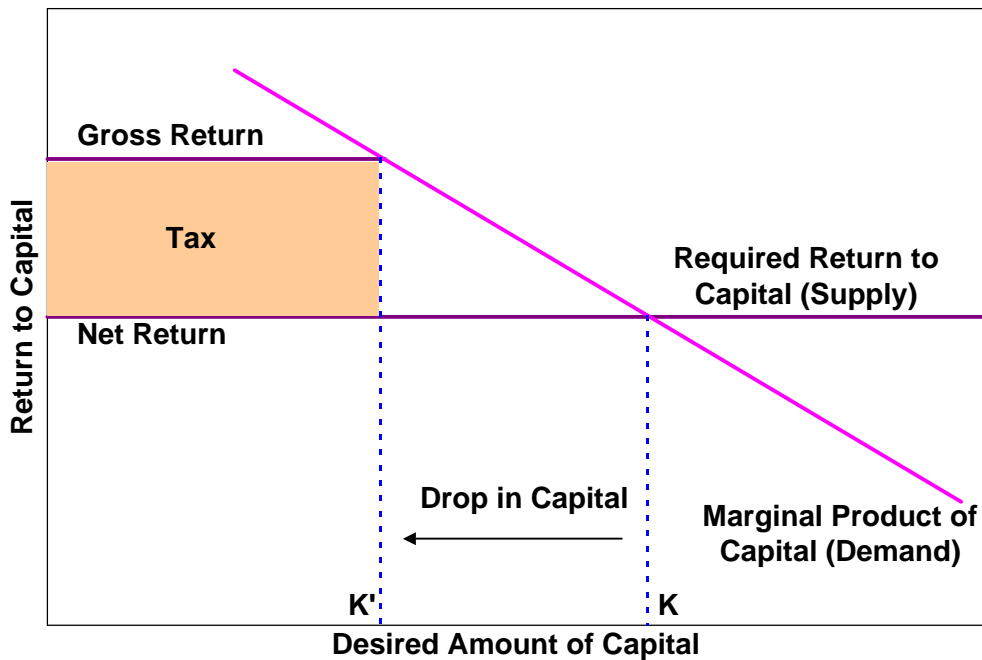


Chart 4 Effect of Tax On Desired Capital Stock



The quantity of capital is more sensitive to taxes than is the quantity of labor. When a tax is imposed on capital, the quantity of capital employed falls until the rate of return rises to cover the tax, leaving the after-tax return about where it was before the tax. The tax is largely shifted to users of capital and those who work with it. [Chart 4.] Capital is easily reproduced (elastic supply) and it takes a large change in the quantity to make a large change in its rate of return. As for people's willingness to finance capital formation, people can always consume instead of save, or invest abroad instead of in the United States, if the rate of return on saving and investment is driven down by rising taxes.

The differences in the elasticities of supply and demand for labor and capital suggest that there is an economic advantage to moving away from the so-called broad-based income tax, which taxes income used for saving and capital formation *more heavily* than income used for consumption, to various taxes that are saving-consumption neutral.¹

The tax treatment of capital hurts labor.

The more there is of any one type of factor, the higher will be the productivity and incomes of the other factors that work with it and gain from its presence. A tax that reduces the quantity of capital lowers the wages of labor. Labor thus bears much of the burden of the tax on capital. (See Chart 5.) Because capital is more sensitive to taxation than labor, a tax on capital will have a relatively large adverse impact on the quantity of capital, which will then cause a relatively large drop in the marginal product and compensation of labor.

Consider a small trucking company with five vehicles. Suppose that the rules for depreciating trucks for tax purposes change, with the government demanding that the trucks be written off over five years instead of three. The owner has had enough business to run four trucks flat out, and a fifth part time. He is barely breaking even on the fifth truck under old law. It is now time to replace one of the trucks. Under the new tax regime, it does not quite pay to maintain the fifth truck. The owner decides not to replace it, and his income is only slightly affected. But what happens to the wages of the fifth truck driver? If he is laid off, who bears the burden of the tax increase on the capital?

Several studies in the economic literature illustrate that a zero tax rate on capital income would raise the after-tax income of labor, in present value terms, even if labor must pick up the

¹ For a further explanation of the biases against saving in the current income tax, see Stephen J. Entin, "Fixing the Saving Problem: How the Tax System Depresses Saving and What To Do About It," *IRET Policy Bulletin*, No. 85, August 6, 2001, p. 15 ff., Institute for Research on the Economics of Taxation, available at www.iret.org. Also see David F. Bradford and the U.S. Treasury Tax Policy Staff, *Blueprints for Basic Tax Reform*, second edition, revised (Arlington, VA: Tax Analysts, 1985).

Chart 5 A Smaller Stock Of Capital Reduces Wages

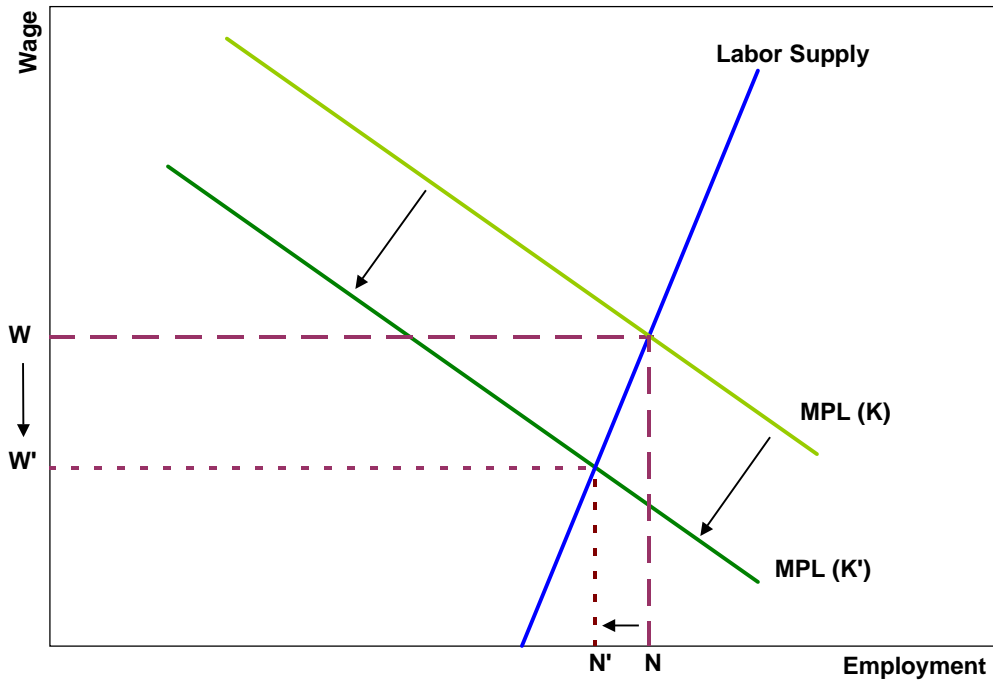
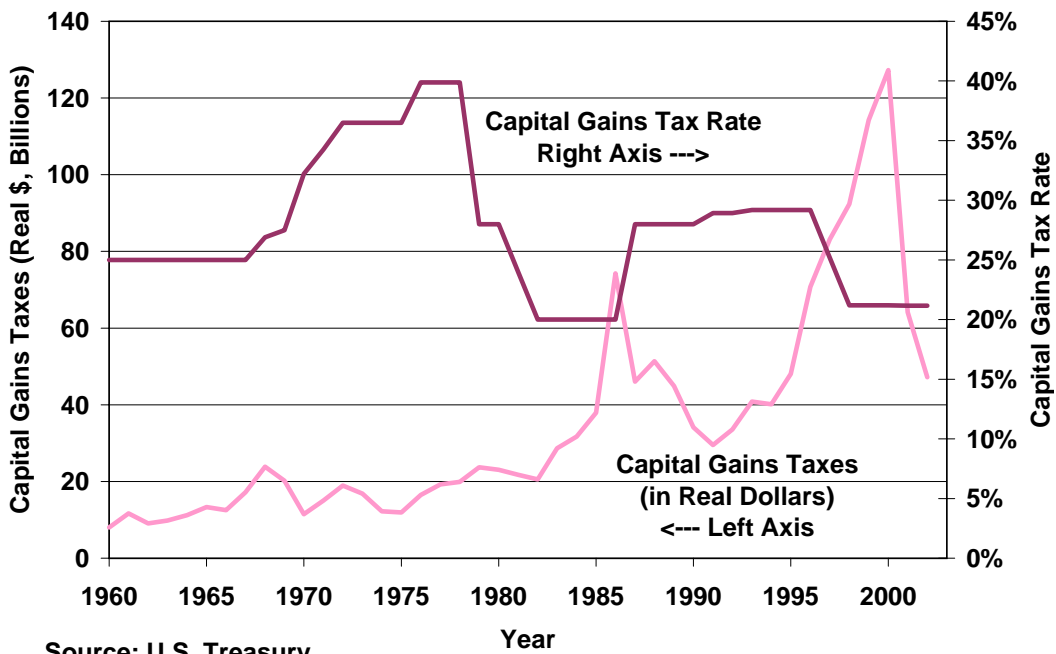


Chart 6 The Capital Gains Tax Rate And The Amount The Tax Collects Often Move In Opposite Directions



Source: U.S. Treasury

tab for the lost tax revenue.² Productivity and wages would be higher (Chart 4 in reverse), leaving workers with higher gross wages and more after-tax income.

Budget impact.

The faster economic recovery since the 2003 Tax Act has improved the budget outlook. For fiscal year 2005, federal revenues ran 14.5%, or \$274 billion, ahead of 2004 levels. The deficit for fiscal 2005 ran 22.9%, or \$94 billion, below that of fiscal 2004. There have been large gains in taxes not withheld. These revenues are from non-corporate business income, bonuses and options, and capital gains and dividends. A large part of the improvement in FY 2005 receipts is due to higher capital gains realizations and higher dividend payments.

Dividend payments have risen sharply since the 2003 Act.³ They would rise further if the 15% tax rate were made permanent. More companies are paying dividends. Many are raising dividends. More would do so if the rate reductions on their shareholders were made permanent. Added dividend payouts reduce the revenue loss from lowering the rate on dividends already being paid. Under their revenue estimating rules, the JCT and Treasury try to gauge the increase in dividends due to a tax rate cut. This will be new territory for them, however. Furthermore, they do not go on to calculate the reduction in the service price of capital and the resulting increases in investment, employment, and wages, and so they miss the higher tax revenues resulting from the higher incomes.

Treasury estimates for extending the 15% tax rate cap on dividends beyond 2008 include revenue gains of about half a billion a year from higher dividend payments in 2005-2008. Treasury is acknowledging that some firms have hesitated to raise dividends, or have limited the increases, due to uncertainty about how long the lower rate will last. Extension would boost payouts starting now, adding to short term revenue. Treasury shows losses in the out years from lowering the rates on dividends they assume would have been paid in their baseline. This loss is

² Martin Feldstein, "Incidence of a Capital Income Tax in a Growing Economy with Variable Savings Rates," *The Review of Economic Studies*, 41(4), 1974, pp. 505-513. Christophe Chamley, "Optimal Taxation of Capital Income in General Equilibrium with Infinite Lives," *Econometrica*, 54, May 1986, pp. 607-22. Kenneth L. Judd, "Redistributive Taxation in a Simple Perfect Foresight Model," *Journal of Public Economics*, 28, October 1985, pp. 59-83. Also, see Kenneth L. Judd, "A Dynamic Theory of Factor Taxation," *American Economic Review*, 77, May 1987, pp. 42-48; H. Greg Mankiw, "The Savers-Spenders Theory of Fiscal Policy," *American Economic Review*, 90(2), 2000, pp. 120-125; and Casey B. Mulligan, "Capital Tax Incidence: First Impressions from the Time Series," NBER Working Paper 9374, National Bureau of Economic Research, Cambridge, MA, December 2002. Andrew Atkeson, V.V. Chari, and Patrick J. Kehoe, "Taxing Capital Income: A Bad Idea," *Federal Reserve Bank of Minneapolis Quarterly Review*, Vol. 23, No. 3, Summer 1999, pp. 3-17.

³ See Daniel Clifton and Elizabeth Karas, "Two Years Later: Tax Cut Still Paying Dividends for American Shareholders", American Shareholders Association, Washington, DC, June 2005, pages 11-12, analyzing Standard and Poors 500 historical dividend data. Also Stephen Moore and Phil Kerpen, "Show Me the Money! Dividend Payouts after the Bush Tax Cut", CATO Institute Briefing Papers No. 88, Washington DC, October 11, 2004.

exaggerated by failure to take account of the economic impact on investment, employment, and wages.

The Treasury, the Congressional Budget Office, and the Joint Committee on Taxation underestimate swings in revenue from tax rate changes on capital gains. A tax rate reduction has three effects: an "unlocking" effect as people choose to realize ("take") more gains at low tax rates; a valuation effect, as the lower tax rate increases the market value of stocks and increases the quantity of gains available to be taken; and an economic effect, as the lower tax rate on capital reduces the service price of capital, and raises the desired capital stock, investment, employment, output, and taxable incomes.

Federal revenue estimators try to account for the unlocking effect under their revenue scoring rules, but they ignore the market effect (stock markets have risen since the 15% capital gains rate was enacted) and, most importantly, they ignore the economic effect of the reduction in the service price of capital. In addition, the unlocking effects have generally been larger than the estimators anticipated. Studies in the mid-1980s at Treasury suggested that the reductions in the capital gains tax rate from nearly 40% to 28% in 1979 and from 28% to 20% in 1981 have raised revenue.⁴ By contrast, the capital gains rate hike, from 20% to 28%, enacted in 1986, was followed by a collapse in realizations. Long term gains as a share of GDP did not recover to 1985 levels for twelve years. [Chart 6.]

Extending the 15% top tax rate on dividends and capital gains now would be excellent insurance against renewed weakness in investment. It would lower the projected service price of capital, and would improve the economic outlook. The revenue consequences would be positive in the short run, and less negative than the static revenue projections from Treasury and the JCT in the long run. More importantly, the effect on the economy, wages, and employment would be sharply positive.

⁴ See the following Treasury Department Papers: the panel study in "Report to Congress on the Capital Gains Tax Reduction of 1978", Office of Tax Analysis, September, 1985; Michael R. Darby, Robert Gillingham, and John S. Greenlees, "The Direct Revenue Effects of Capital Gains Taxation: A Reconsideration of the Time Series Evidence", Research Paper 8801, Office of the Assistant Secretary for Economic Policy, May 24, 1988; Gillingham, Greenlees, and Kimberly D. Zieschang, "New Estimates of Capital Gains Realization Behavior: Evidence from Pooled Cross-Section Data", OTA Paper 66, May 1989, and Gerald E. Auten, Leonard E. Burman, and William C. Randolph, "Estimation and Interpretation of Capital Gains Realization Behavior: Evidence from Panel Data", OTA Paper 67, May 1989, both from the Assistant Secretary for Tax Policy, Office of Tax Analysis; Gillingham and Greenlees, "Evaluating Recent Evidence on Capital Gains Realization Behavior", August 4, 1989; and "The Effect of Marginal Tax Rates on Capital Gains Revenue, Another Look at the Evidence", Research Paper 9003, Dec. 1, 1990, both from the Office of Economic Policy. Also see Gillingham, Greenlees, and Zieschang, "An Econometric Model of Capital Gains Realization Behavior", presented at the 65th Annual Conference of the Western Economic Association, July 1, 1990.