IRET *Congressional Advisory*

INSTITUTE FOR RESEARCH ON THE ECONOMICS OF TAXATION

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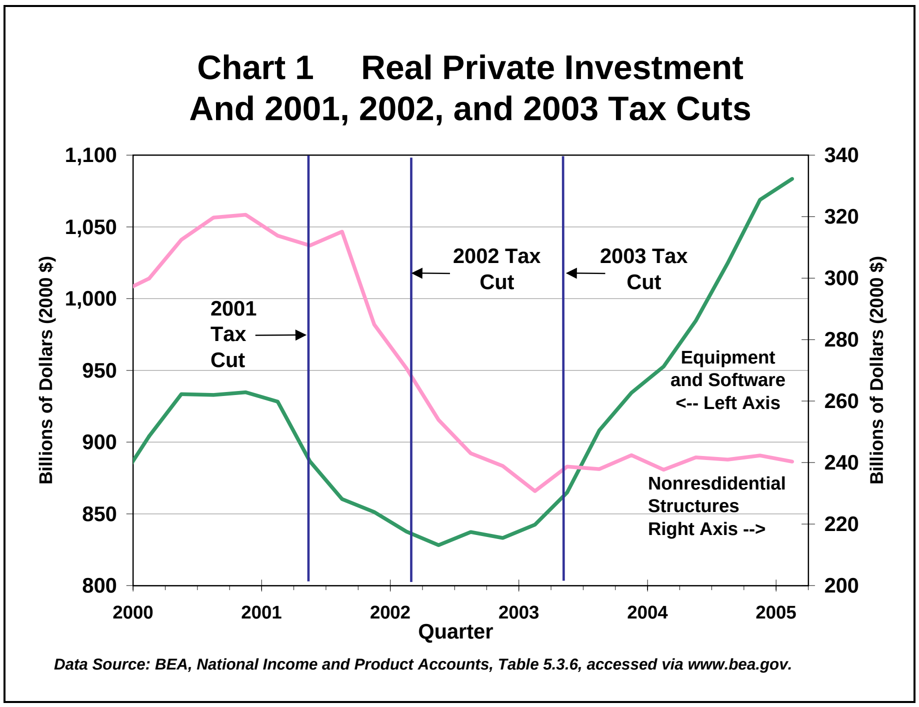
September 14, 2010 **Advisory No. 268**

ADMINISTRATION ADVOCATES EXPENSING: ONE BIG PLUS (AMONG THE MINUSES)

President Obama has proposed that businesses be allowed expensing (immediate write-off) of 100% of qualified investments for the remainder of 2010 through 2011. The intent is to encourage more investment to speed up the sluggish economic recovery.

Expensing has given a lift to investment, GDP, and employment in the past. It could work again. This time around, however, the measure would be less of a net incentive for capital formation, and more of a partial offset to other tax increases the Administration has endorsed on dividends, capital gains, and the two top tax brackets.

As a counter-cyclical tool, temporary expensing would boost investment spending in the near term, but much of that would be investment borrowed from 2012. By contrast, permanent expensing would encourage additional capital formation, and raise labor productivity, wages, and employment thereafter.



The expensing provision covers equipment, software, and specialty structures with tax lives ranging from 3 to 20 years. Buildings (plant and commercial and residential structures) written off over 27.5 or 39 years are not eligible. Some types of structural equipment and machinery integral to buildings are eligible.

Businesses were allowed to expense 50% of qualified investment in 2008 and 2009. The remaining 50% of the cost had to be reported for tax purposes over time, under the usual cost recovery (depreciation) schedules.

The 50% expensing provision lapsed in 2010, but would be reinstated for 2010 under the pending small business bill. The new recommendation would apply to the same investment categories, but cover the entire expense, not merely half.[1]

History

The 2001 Bush tax cut was intended to fight the 2001 recession. Unfortunately, it did next to nothing to reduce the tax burden on capital formation in 2001 and 2002. Investment in equipment and buildings was declining, even after GDP resumed a slow upward movement.[2] These were the years known as the "jobless recovery".

The percentage expensing provision was first enacted in 2002, at a rate of 30%. It was intended to counter the continued slump in spending on equipment. As Chart 1 shows, equipment spending responded by leveling off soon after the provision was enacted. Spending on buildings (business non-residential structures), which were not eligible for the faster write-off, continued to fall.

Chart 2 Present Value of Current Law Capital Consumption Allowances per Dollar of Investment Compared to Expensing (First-Year Write-Off)

Asset lives:		3 Yrs	5 yrs	7 yrs	10 yrs	15 yrs	20 yrs	27.5 yrs	39 yrs
Present value of first-year write-off of $1 of investment:		$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00
Present value of current law write-off of $1 if inflation rate is:	0%	$0.96	$0.94	$0.91	$0.88	$0.80	$0.74	$0.65	$0.55
	3%	$0.94	$0.89	$0.85	$0.79	$0.67	$0.59	$0.47	$0.37
	5%	$0.92	$0.86	$0.81	$0.74	$0.60	$0.52	$0.39	$0.30

Assumes a 3.5 percent real discount rate, 3-20 year assets placed in service in first quarter of the year, 27.5 - 39 year assets placed in service in January.

In the 2003 tax cut, the expensing percentage was raised to 50%, and the tax rates on capital gains and dividends were capped at 15%. The bill also brought forward the remaining marginal income tax rate reductions being phased in under the 2001 tax act. As the chart indicates, equipment spending began to soar in the quarter that the 2003 tax cut was enacted. Spending on structures leveled of and rose slightly, spurred by the lower capital gains, dividend, and marginal income tax rates on investors.

Percentage expensing lapsed in 2004-2007. It was reinstated in the 2008 stimulus package, and was probably the only economically beneficial element in that package. In was renewed in 2009. It has lapsed in 2010, awaiting extension in the small business bill.

The real rationale for expensing

Individual and corporate income taxes require businesses to declare the cost of their investment in plant, equipment, and other buildings over many years via capital cost recovery allowances (i.e. tax depreciation), instead of in the year the investment is made. As a result of the delay, tax recognition of costs is deferred, and the income of businesses is overstated and overtaxed. The deferred write-offs lose the time value of money and lose value to inflation during the period of the delay. (See Chart 2.) As a result, over the life of the asset, the write-offs sum to less in present value than the up-front expense.

A dollar spent on a seven-year asset gets a write-off that is only worth $0.91 cents in present value if inflation is zero. A dollar spent on a building (written off over 39 years) gets a deduction worth just $0.55 cents in present value. The cost of the delay rises with inflation. At 5% inflation, the seven-year asset's write-off is worth only $0.81, and the building's write-off drops in value to $0.30. Over the life of the asset, the understatement of cost raises taxable income, and the business pays additional tax equal to the tax rate times the overstatement of its income.

At even modest rates of inflation, the overstatement of business income by depreciation (instead of expensing) can cut the rate of return on business investment in half. (See Chart 3.)

Suppose a machine costs $100 today, and returns $115 in sales in present value over its life. Its profit is $15 in present value. If the firm is allowed an immediate $100 write-off for tax purposes, its taxable profit is also $15. At a tax rate of about a third, its tax is $5 and its after-tax income is $10 (a 10% total return). Suppose the firm is only allowed a slower write-off worth only $85 in present value (depreciation of a 7 year asset at 3% inflation). Its (inflated) income for tax purposes will be $30, its tax $10, and its (true) net real after-tax income (real profit less tax) only $5, a 5% return. Requiring depreciation instead of expensing has cut the return in half.

Chart 3 Expensing Versus Depreciation: Depreciation Overstates Taxable Income and Depresses Return on Capital

Expensing (Full Cost Recovery)		Depreciation	
Revenues from machine, present value	$115	Revenues from machine, present value	$115
Full cost of machine	$100	Full cost of machine	$100
Full cost write-off for tax purposes (expensing)	$100	Allowable depreciation write-off, present value	$85
Real profit = Taxable profit	$15	Taxable "profit" (exceeds real profit)	$30
Tax	$5	Tax	$10
After-tax income	$10	After-tax income	$5
Rate of return	10%	Rate of return	5%

Expensing provides a truer measure of the real earnings of an investment than depreciation, and it avoids the overstatement of income and the increase in the effective tax rate on the investment activity inherent in the income tax. That is why fundamental tax reforms utilize expensing (such as the cash flow tax described by the Bush Panel on Tax Reform and IRET's inflow-outflow tax, the Hall-Rabushka Flat Tax, the VAT, and various national retail sales tax plans).

The effect on the over-all cost of capital

For an investment to be worth doing, it must earn about 3% a year after taxes, inflation, and depreciation. The pre-tax return that clears this hurdle is called the "service price". Taxes are part of the service price, and help determine the size of the capital stock. Lower taxes on investments lower the service prices, and allow more capital to be created and employed. Higher taxes make some capital impractical, and there is less capital formation. Less capital means fewer jobs and lower wages. (See Chart 4.)

Expensing lowers the service price. It makes capital investment several percent cheaper than otherwise. The effect on investment and the economy depends on whether it is permanent or temporary. Permanent expensing would result in a permanent increase in the amount of capital created and employed in the economy, and permanently raise employment and wages.

Temporary expensing makes it worthwhile for businesses to move investment forward a few months to take advantage of the better tax treatment. That means less investment in the year after the provision expires. There is no permanent reduction in the tax on capital income, and no permanent increase in the quantity of capital created and employed.

Two views of taxes and GDP

The temporary nature of the Administration's expensing proposal indicates that the Administration views it only as a counter-cyclical measure, not a fix for a distortion in the tax system. The Administration thinks that the economy is like a racehorse that has stumbled. If helped back to its feet, it will run fine on its own.

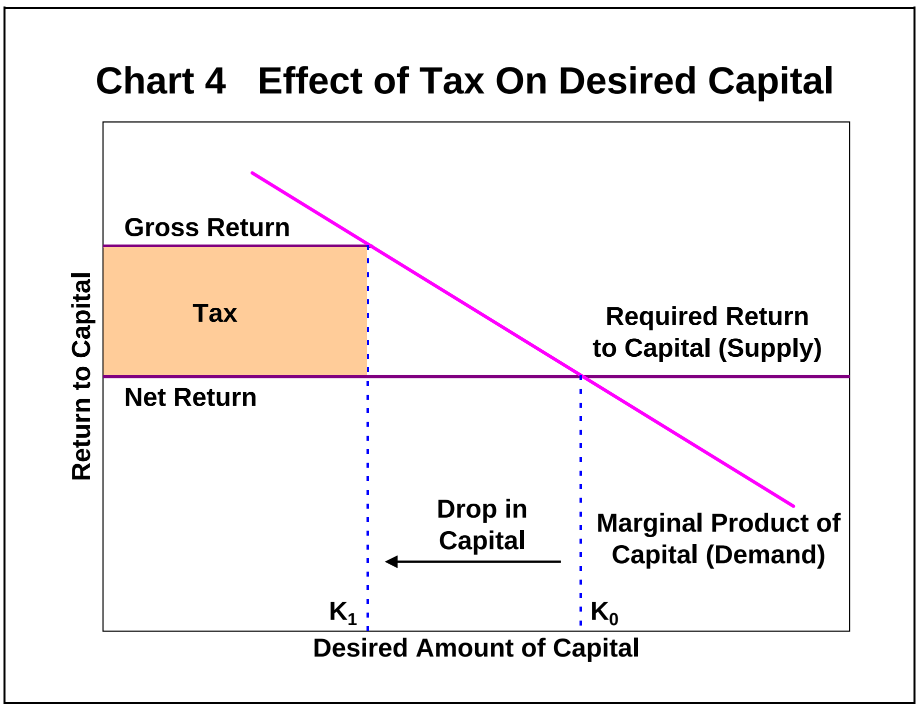
A better analogy is that of a racehorse with too heavy a load of penalty weights. It is running slow and always will. Reduce the weights permanently, and it can run faster in all future races. Take the weight off for only one race, and it will run one fast race, but it will revert to the slow pace again when the weights are added back on.

The economy is laboring under an excessive tax burden on capital formation. It will continue to create a sub-optimal level of capital, and leave workers with sub-optimal productivity and wages, as long as current tax treatment is in place.

Slow pace of borrowing and investment need a tax fix

Investment spending has been sluggish in spite of record low interest rates and enormous levels of excess reserves in the banking system. The banks have been criticized for not lending enough. The real problem in that there are not enough businesses wanting to borrow, because the expected after-tax returns on added capital are too low to make adding to the capital stock worthwhile. Consequently, the Federal Reserve has been pushing on a string. Instead of easier money, we need higher after-tax returns to capital to create investment and growth.

That is why the 2001 tax cuts, which did not boost the after-tax returns to capital, were ineffective in the first two years. That is why the 2003 tax cuts worked to boost the economy by raising after-tax returns. However, the gains in capital formation made possible by the 2003 tax cuts had already been put in place by 2008. Without further improvement in the tax treatment of capital, the economy was due to slow its rate of growth by the end of the decade. But instead of enlarging upon the 2003 reforms, the Congress and the Administration are threatening not to extend the existing tax provisions most related to capital formation. That is bound to result in a further economic slowdown.



What policies would work? We have modelled the effect of various tax provisions on the service price of capital. Extending the 15% rate caps on capital gains and on dividends would have the largest total impact on the service price of capital, followed by lifting expensing from 50% to 100%. A sizable cut in the corporate tax rate would do as well. Keeping the marginal tax rate cuts in place for the two top tax brackets, where much of the small business income is found, would reduce the service price for small business owners. Eliminating the estate tax would be a particularly cost-efficient means of lowering the service price, with minimal revenue loss per dollar of additional investment created.

The small business bill would reinstate the 50% expensing at the levels in place in 2008 and 2009. That would be treading water. Raising expensing from 50% to 100% percent would reduce the service price of capital by about 2.5%. By itself, if permanent, that would boost investment. However, the pending tax rate hikes on dividends, capital gains, and the two top tax brackets would increase the service price by over 6% (with 90% of that due to raising the capital gains and dividend taxes) and would depress investment significantly. On balance, even with expensing, the Administration's policies would raise the service price by about 3.5%, and would lower GDP and labor income by about 2.2%.

Is expensing too generous?

Temporary expensing accelerates cost recovery and reduces tax revenue near term, but recoups the revenue in later years as businesses have no further cost to report. Permanent expensing has minimal annual static revenue loss long term, and should raise revenue over time due to added growth.

Some tax analysts contend that expensing can lead to negative tax rates if the equipment is bought with borrowed money. The business would then get a deduction for interest paid on the loan, as well as a deduction for the investment itself. This analysis is wrong because it is incomplete. Tax-deductible interest paid by the borrower is taxable income to the lender. There is no double deduction when one looks at both tax returns. The result is a revenue wash to the Treasury on the financial transaction. The net effect is to leave one deduction for the machine, and one tax on the returns to the business, which is just as it should be, and just as if the business had used its own money for the investment.

Opponents may argue that some lenders are pension plans, which pay no current tax. But payments by the pension fund to its recipients are taxable. The tax is paid eventually on the compounded pension earnings, so there is no net loss to the Treasury. A revenue loss occurs only if the lenders were tax-exempt charities or state or local governments. But Congress has chosen to make those entities tax-exempt, and has already set other tax rates higher than they might otherwise be to make up the difference. There is no justification for misstating incomes of businesses across the board, whether they borrow from such lenders or not, and no reason to curtail investment economy-wide because such things as charities exist.

Conclusion

Permanently higher investment and a larger capital stock require a permanent improvement in tax treatment of capital income. Expensing fits the need, and is consistent with real tax reform. It is critical that it be accompanied by extension of the 15% tax rate caps for dividends and capital gains. This is a case where what is right for the long term would also help in the short run. If a compromise is unavoidable, raising expensing from 50% to 100% in exchange for letting the two top tax rates rise would still provide a net boost to investment.

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Endnotes

1. This percentage expensing provision is for all businesses. It should not be confused with the special small business expensing provision, Section 179 of the tax code. Section 179 permits small businesses to expense a limited dollar amount of investment each year. The dollar amount allowed phases down as the firm's investment exceeds specified limits, and as the size of the business, in terms of annual revenue, exceeds certain thresholds.

2. Most immediate tax relief in the 2001 tax cut was from social policy provisions such as the expanded child credit and marriage penalty relief. A "rebate" was given to reflect the creation of a new lower 10% tax bracket, but there were few people with incomes limited to that bracket, so most earners received no additional incentive at the margin to expand their incomes. The marginal income tax rate cuts in the brackets above 15%, which were of some benefit to small business owners and dividend recipients, were phased in over many years, with little impact in 2001 and 2002.