

## Expensing

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*System allowing a taxpayer to deduct—expense—the costs of acquiring a depreciable capital asset immediately as these costs are incurred, instead of taking a stream of depreciation deductions over the useful life of the asset.*

The financial effects of allowing investment costs to be expensed are illustrated in table 1 below. In this example, the asset is assumed to have a purchase price of \$8,000 and to provide a stream of economic returns of \$3,800 in the first year, \$3,000 in the second year, and \$2,000 in the third year. At the end of the third year, the asset is assumed to have exhausted its useful economic life, providing no further return and having no scrap or salvage value. Using standard techniques for evaluating investments, it can be shown that an investment with this profile of before-tax cash flows has an internal rate of return of 5.5 percent.

If the tax rate is assumed to be 50 percent and the investment is expensed for tax purposes, the government receives the stream of tax payments shown in column 2, and the investor realizes the stream of after-tax cash flows shown in column 3. In the year in which the asset is acquired, its full cost is deducted in computing taxable income, reducing the investor's tax liability by \$4,000. In effect, the government provides the investor with a tax rebate equal to the tax rate multiplied by the cost of the asset. In subsequent years, no further deductions are

taken, and the full amounts of the cash flows produced by the asset are taxed.

Using the techniques for evaluating pretax cash flows to evaluate the after-tax cash flows, it is easily shown that with expensing, the asset has an after-tax return of 5.5 percent, the same as the before-tax return. In this case, the marginal effective tax rate on the investment is zero.

This occurs because expensing reduces the after-tax returns and costs by the same proportion, determined by the tax rate. If the tax rate is 50 percent, the result under expensing is financially equivalent to one in which the government becomes a 50 percent partner in the investment. Through the tax system, the government shares 50 percent of the initial costs of the investment by allowing a deduction to be taken immediately, and then shares in 50 percent of the investment's proceeds. In other words, through the tax system, the investor keeps only 50 percent of the investment's returns, but also bears only 50 percent of the costs. As a result, per dollar invested, the investor earns the same return from the investment after taxes as before taxes.

Because expensing has the effect of exempting the normal or competitive return on capital assets from taxation, the capital-cost-recovery method is appropriate if the objective is to tax consumption instead of income. Thus, recent proposals for replacing the income tax with a consumption-based flat tax all have allowed outlays for new capital to be expensed. Similarly, a consumption value-added tax would allow outlays for new capital to be deducted in computing taxable value added.

If, however, the objective is to tax income instead of consumption, the appropriate method of capital cost recovery is to require the taxpayer to spread out deductions for the cost of the asset, based

**TABLE 1**

	<i>Pretax Cash Flows (1)</i>	<i>Tax Liability With Expensing (1) × 50% (2)</i>	<i>After-Tax Cash Flow (1) minus (2) (3)</i>
Initial Outlay	(\$8,000)	(\$4,000)	(\$4,000)
Year 1	\$3,800	\$1,900	\$1,900
Year 2	\$3,000	\$1,500	\$1,500
Year 3	\$2,000	\$1,000	\$1,000
Internal Rate of Return	5.5%	N.A.	5.5%

*Notes:* Tax rate is assumed to be 50 percent.

Numbers in parentheses denote negative cash flows (outlays).

on the rate at which the asset depreciates in value over its useful lifetime—its economic depreciation. Under an income tax, allowing expensing of assets thus becomes a form of tax preference or tax expenditure, because it allows the competitive investment return of assets to go untaxed. In this case, opportunities for tax arbitrage can arise if taxpayers are allowed to expense the cost of assets, while at the

same time allowing the interest expense of debt incurred to acquire these assets to be deducted.

*Cross references:* [capital cost recovery](#); [consumption taxation](#); [flat tax](#); [marginal effective tax rate](#); [tax arbitrage](#); [tax expenditures](#); [value-added tax, national](#); [value-added tax, state](#).