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INSIGHT

Tax Treatment of Research Expenses: Current Law and Policy Issues

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Companies are allowed to deduct the ordinary and necessary expenses they pay or incur in determining their taxable income. Under Section 162(a) of the federal tax code, current expenses (e.g., wages and salaries) are written off in full in the year when they are paid or incurred; capitalized expenses (e.g., cost of equipment or patents) are recovered over longer periods under Sections 167 and 168, as the economic value of the underlying assets lasts longer than one year.

This Insight discusses the current federal tax treatment of expenses companies pay or incur in investing in research and development (R&D) and some of the policy issues this treatment raises.

Tax Treatment of Research Expenses

Before 1954, the federal tax treatment of business R&D expenses was characterized by numerous disputes between companies and the Internal Revenue Service (IRS) concerning whether the expenses should be regarded as current or capitalized.

Congress clarified this treatment in 1954 by creating Section 174. The provision gave companies two options for recovering their "research and experimental expenses" (REEs). One option was to deduct the entire amount of such expenses in the year when they were paid or incurred under Section 174(a), a treatment known as expensing. The second option was to capitalize REEs and amortize them over a period of five or more years under Section 174(b). Congress added a third option in 2004 when it established Section 59(e), which allowed companies to amortize REEs over 10 years.

REEs are defined as R&D costs in the "experimental or laboratory sense." The following expenses qualify for Section 174 treatment: (1) the wages and salaries of researchers, (2) the cost of materials and supplies used in qualified research, and (3) the cost of operating and maintaining research facilities (e.g., rent, utilities, and property insurance). Excluded from qualified expenses is the cost of equipment and buildings used to perform research, which must be capitalized and recovered through applicable depreciation allowances.

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Impact of P.L. 115-97

Congress made no significant changes to Section 174 until it passed P.L. 115-97, also known as the Tax Cuts and Jobs Act or TCJA, in 2017. The TCJA repealed the option to expense REEs, effective with tax years beginning after December 31, 2021. Consequently, companies are now required to capitalize those costs and amortize them over a minimum of 5 years for domestic research and over a minimum of 15 years for foreign research.

The Joint Committee on Taxation (JCT) estimated in 2017 that repealing REE expensing would yield a revenue gain of $119.7 billion between FY2022 and FY2027. The gain largely reflected timing differences in the deduction of REEs under full expensing and five-year amortization.

Economic Implications of Current Law

REE expensing holds several advantages for firms. It lowers the tax burden on returns to R&D investment, relative to 5-year amortization of REEs. Expensing increases a company's short-term cash flow, but at the cost of a reduced cash flow from the same investments in future years. Expensing also simplifies a firm's tax accounting.

The loss of REE expensing starting in 2022 reduces a firm's tax incentive to invest in R&D. From 1981 to 2021, that incentive depended on the combined stimulus effect of Section 174 expensing and the Section 41 research tax credit.

A widely used measure of an investment's tax burden is the effective marginal tax rate (EMTR) for its returns. The rate indicates the share of pretax returns from another dollar of new investment that goes to pay income taxes on those returns. It takes into account a firm's top marginal tax rate and any applicable tax preferences (e.g., credits and exclusions) that affect that rate.

A 2021 analysis by the Tax Policy Center (TPC) illustrated the disincentive effect of switching from REE expensing to amortization. The authors estimated that corporations claiming the Section 41 federal tax credit for increases in qualified research expenses under two scenarios would realize an increase in their EMTR for R&D investments from -48% (with expensing) to -20% with 5-year amortization. They also calculated that the loss of REE expensing would raise the present-value cost of an additional dollar of R&D investment from $0.52 (with expensing) to $0.80.

Policy Issues

Numerous companies and lawmakers favor a restoration of IRC Section 174(a) expensing. One concern behind their stance is that the loss of expensing may incentivize U.S.-based firms to undertake less R&D in the United States. As the TPC analysis suggested, 5-year REE amortization increases the after-tax cost of domestic business R&D. Such an increase might be sufficient to convince some U.S. multinational companies to shift more of their R&D operations to countries with greater tax benefits for R&D investments. The TCJA tried to discourage such a shift by setting the minimum amortization period for foreign research expenses at 15 years.

Some argue that a 5-year REE amortization boosts a firm's incentive to deduct its research expenses as current expenses under Section 162(a). Although such a practice might be permissible, doing so makes sense only if a company is planning to not claim the Section 41 research tax credit. One requirement for claiming the credit is that a company's research expenses must be eligible for Section 174 treatment. Deducting those costs under Section 162(a) would appear to fail to meet that requirement.

There is support in Congress for reinstating the Section 174 expensing option. In the 117th Congress, H.R. 1304, S. 197, and S. 749 would have permanently extended the option for tax years beginning after December 31, 2021. Section 138516 of the Build Back Better Act (BBBA), as passed by the House in 2022, would have postponed the expiration date for REE expensing from the end of 2021 to the end of 2025. A more recent option has been to restore REE expensing as part of a tax extenders bill.

One concern with reinstating REE expensing is the short-term revenue cost. The JCT has estimated that the BBBA provision would result in a foregone revenue loss of $105.9 billion from FY2022 to FY2026.

Author Information

Gary Guenther
Analyst in Public Finance

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