



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 acquired 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 the policy issues this treatment raises.

Tax Treatment of Research Expenses

Before 1954, the federal tax treatment of the expenses companies incurred or paid in undertaking R&D entailed a multitude of disputes between companies and the Internal Revenue Service (IRS). The disputes mainly concerned whether or not the expenses should be capitalized and amortized over five or more years as the IRS maintained.

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 called 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 with the enactment of 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 materials and supplies used in qualified research, and (3) the costs of operating and maintaining research facilities (e.g., rent, utilities, and property insurance). The cost of equipment and buildings used to perform research, however, must be capitalized and recovered through depreciation allowances.

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Impact of P.L. 115-97

Congress altered Section 174 as part of a tax revision it passed in 2017 (P.L. 115-97, also known as the Tax Cuts and Jobs Act or TCJA). The TCJA repealed the options to expense REEs, effective with tax years beginning after December 31, 2021. Consequently, starting in 2022, companies will be required to capitalize those costs and amortize them over 5 years for domestic research and over 15 years for foreign research.

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

Economic Implications of Current Law

The option to expense REEs holds several advantages for firms. First, it lowers the tax burden on the returns to R&D investments, relative to less accelerated depreciation options. Second, expensing increases a company's short-term cash flow, but at the cost of a reduced cash flow from the same investment in future years. Third, expensing simplifies a firm's tax accounting.

The repeal of REE expensing starting in 2022 reduces a firm's tax incentive to invest in R&D, an incentive that ultimately depends on the combined effect of Section 174 amortization and the Section 41 research tax credit on the after-tax returns to an R&D investment.

One measure of an investment's tax burden is the effective marginal tax rate (EMTR) for its returns. The rate shows the share of pretax returns from another dollar of new investment that goes to pay income taxes, taking into account a firm's top statutory tax rate and any applicable tax preferences (e.g., credits and exclusions).

A 2021 analysis by the Tax Policy Center (TPC) illustrates the disincentive effect of switching from REE expensing to amortization. The authors estimate that five-year amortization for REEs in the case of corporations receiving the Section 41 credit would increase their EMTR for R&D investments from -48% (with expensing) to -20%, and it would also 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 analysts oppose the repeal of IRC Section 174(a) expensing in 2022. One concern is that the loss of expensing will encourage U.S.-based firms to undertake less R&D overall or to conduct more of their R&D abroad. As the TPC analysis suggests, five-year REE amortization increases the after-tax cost of domestic R&D. Such an increase might be sufficient to convince some U.S. multinational companies to shift their R&D operations to countries offering more generous tax benefits for R&D investments. Current law tries to discourage such a shift by setting the amortization period for foreign research at 15 years, or 10 years more than the amortization period for domestic research.

Some argue that a five-year REE amortization gives some companies a stronger incentive to deduct their 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 not planning to claim the Section 41 research tax credit. To qualify for the credit, a company's research expenses must be eligible for Section 174 treatment. Deducting those costs under Section 162(a) may not satisfy that requirement.

There is support in the 117th Congress for reinstating the Section 174 expensing option. H.R. 1304, S. 197, and S. 749 would do so permanently, for tax years beginning on or after January 1, 2022. Section

138516 of the Build Back Better Act (BBBA), as passed by the House, would postpone the expiration date for the repeal of expensing from the end of 2021 to the end of 2025.

A possible objection to reinstating REE expensing is the short-term revenue cost. The JCT has estimated that the BBBA provision would result in a revenue loss of \$105.9 billion from FY2022 to FY2026. The revenue cost drops to \$4 billion if the budget timeline is extended to FY2031. This sharp decline reflects differences in the timing of the aggregate tax savings from expensing REEs between FY2022 and FY2025, and then amortizing them from FY2026 to FY2031.

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