SEMICONDUCTOR INDUSTRY ASSOCIATION

Investments in U.S. Semiconductor Innovation Hindered by R&D Amortization

Congress must restore the longstanding, immediate deduction of research expenditures critical to U.S. semiconductor leadership

The Importance of R&D

For decades, private sector investments in semiconductor research and development (R&D) propelled rapid innovation in semiconductor technologies, contributing to economic growth, national security, and seismic shifts in computing, 5G, health care, cybersecurity, energy, AI, and more.

The immediate deduction for U.S. R&D expenditures provided a longstanding incentive for chip companies to make those investments, helping to sustain U.S. leadership in this vital technology.

- To maintain global leadership, many U.S. semiconductor companies invest more than 20% of revenue in research, with semiconductors being the #2 industry in R&D spending as a share of revenue. In 2022, U.S. semiconductor R&D investments totaled $58.8 billion.[1]
- R&D costs are rising exponentially, with the most advanced semiconductor node costing more than $500 million to design – double the cost to design the previous leading-edge chips.[2]
- Full and immediate expensing is necessary to spur R&D investments in the U.S. and allows companies to further innovate and expand the domestic R&D workforce. On average, 75% of R&D spending goes toward wages and salaries.[3]

The Challenge

Since 1954, R&D expenditures were treated as an immediate and full deduction. Beginning in 2022, however, U.S. R&D expenses must now be amortized over 5 years, making it less attractive to perform R&D in the U.S. and harming domestic competitiveness in the semiconductor industry.

- As the U.S. incentive for research fails to keep pace with global competitors, other countries continue to offer strong incentives for companies to make domestic R&D investments.
- A taxpayer in China may now claim an additional 100% "super deduction" of eligible R&D expenses. Meanwhile, for a $100 R&D investment made in 2023, a U.S. taxpayer can deduct $10 in the first year, $20 in each year following, until the last $10 can be expensed in 2028.[4] This means that on the same $100 of R&D, a Chinese company may deduct $200, or 20 times as much as the $10 by a U.S. company in the first year of the expense.
- Even prior to the amortization requirement, the U.S. R&D incentive trailed those offered by global competitors. Under the new law, between the impact of inflation and opportunity cost of amortization, the requirement creates an 11 percent tax penalty on R&D.[5] Accordingly, the U.S. ranking is projected to fall to the bottom quarter of OECD countries for R&D incentives. [6]

The Solution

Congress must act immediately to restore the full deductibility of R&D expenditures on a permanent basis, with a retroactive fix to address the harm caused in 2022 and 2023.

- It is essential that Congress act to restore the immediate expensing of R&D to continue U.S. leadership in semiconductors and other research-intensive industries; SIA supports the bipartisan *American Innovation and Jobs Act* (S. 866) and the *American Innovation and R&D Competitiveness Act* (H.R. 2673) to achieve these goals.
- Restoring the immediate deduction for R&D expenditures would put the U.S. back on track as a competitive place to conduct R&D, boost the number of technologies commercialized domestically, attract and retain talented workers, and grow the U.S. economy.

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[1] SIA, State of the Industry, August 2023, at 21
[2] SIA/BCG, The Growing Challenge of Semiconductor Design Leadership, November 2022, at 14
[3] IRS, Statistics of Income, Corporation Income Tax Returns Line Item Estimates 2019, Publication 5108, Rev. 6-2022, Form 6765, at 176
[4] R&D Coalition, Letter from CFOs to Congressional Leaders, November 2022, at 1
[5] WSJ, Why Does the U.S. Tax Code Penalize R&D?, January 2023
[6] ITIF, Enhanced Tax Incentives for R&D Would Make Americans Richer, September 2020, at 1, 6