

Current State R&D Tax Credits

LEGISLATIVE ANALYST'S OFFICE

Presented to:
Assembly Revenue and Taxation Committee
Hon. Henry T. Perea, Chair





Economics of Research and Development (R&D)

- ☑ ***Economic Rationale for a Subsidy.*** Economic theory suggests that without some form of subsidy, overall R&D spending in society would be less than the economically optimal level.
 - Public benefits can be diffuse and even global. Knowledge from R&D in one jurisdiction may thus produce more benefits outside that jurisdiction. Similarly, economic activity in a jurisdiction benefits, to some degree, from previous R&D done elsewhere.
 - Public benefits can be concentrated, for a time. Knowledge from R&D in one jurisdiction may thus disproportionately benefit that jurisdiction before it diffuses more widely.

- ☑ ***R&D May Not Increase Local Economic Activity.*** Goods or services incorporating knowledge from R&D are often made or sold in different places than where the R&D was done.

- ☑ ***Increased R&D May Not Increase Employment.*** R&D employs certain kinds of workers. In some cases and in some periods of time, however, knowledge from R&D may lead to a net decrease in employment.

- ☑ ***Increased Subsidization May Not Increase R&D.*** A limited supply of people able to do R&D, or a low demand for knowledge from R&D, for example, can limit what R&D will be done, even if R&D is favored by government policies.



R&D Subsidies in the Tax Code

- Many Governments Subsidize R&D.** California, other states, the federal government, and many foreign governments use their tax codes to subsidize R&D. The California credit was largely modeled after the federal R&D credit.
- California's Qualified Research Credit.** The California credit for qualified research is available for certain types of research activities conducted by a taxpayer. This credit is available to both personal income tax and corporate income tax taxpayers.

 - The credit is equal to 15 percent of the amount of qualified incremental expenditures over a calculated "base amount" of R&D expenditures.
 - Qualifying spending is for wages, supplies, and certain services.
 - The credit has additional provisions for particular types of businesses that result in making the credit more accessible or generous.
- California's Basic Research Credit.** The credit for basic research is available for certain types of research activities conducted by selected outside entities on behalf of a taxpayer. This credit is available to Subchapter C corporate taxpayers only.

 - The credit is equal to 24 percent of expenditures over a calculated base amount for certain types of research carried out by independent research institutions and universities.



Rules for California's R&D Credit



Requirements. For expenses to qualify for the research credit, taxpayers must meet the following requirements:

- The research must have qualified as a business deduction.
- The research must have been undertaken to “discover information which is technological in nature.”
- The taxpayer must have intended to use the information to develop a new or improved business component.
- The taxpayer must have pursued a “process of experimentation” during substantially all of the research.



Additional Requirements if the Business Component Is Software for Internal Use.

- The software must have been innovative.
- The software development must have involved significant economic risk.
- The software must not have been commercially available for use by the taxpayer.



Rules for California's R&D Credit *(Continued)*



Statute Says Some Activities Are Never Creditable.

Taxpayers may not claim credits for certain activities, including:

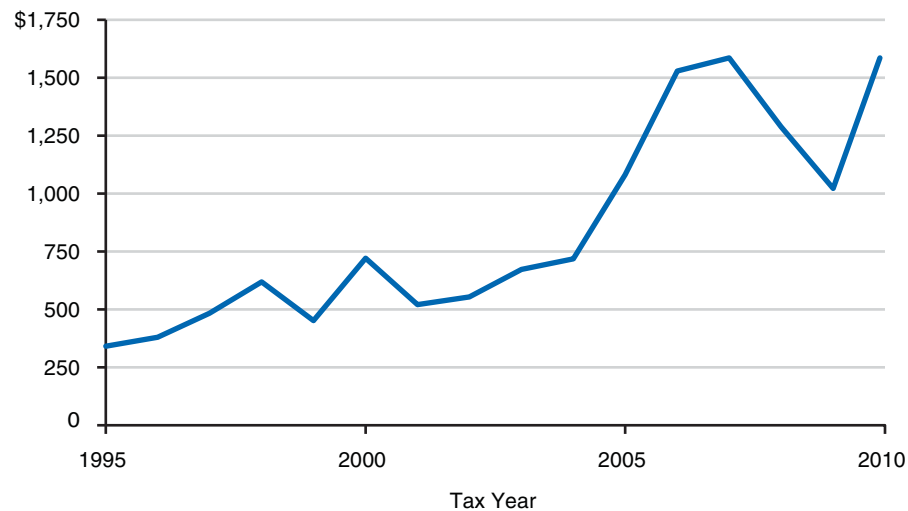
- Research undertaken outside California.
- Research conducted in the social sciences, arts, or humanities.
- Ordinary testing or inspection of materials or products for quality control.
- Market and consumer research.
- Research conducted after the beginning of commercial production.
- Research related to adaptation of an existing business component.
- Any research funded by any grant, contract, or otherwise by another person or governmental entity.



Costs of California's R&D Tax Credit

Corporations' Use of R&D Tax Credits

2011 Dollars (In Millions)



Source: Franchise Tax Board.

- R&D Credit Is Largest Corporate Tax Credit.** Around \$1.6 billion worth of credits were claimed by corporations in 2010. Personal income tax taxpayers claimed around \$65 million in 2010.
 - Use has trended upwards, like corporate profits.
 - Since its inception, the credit has been expanded dramatically.
- No Expiration Dates.** R&D credits do not expire under current law.
- Massive Level of Credits Available for Use.** Credits have accumulated for many years, perhaps suggesting they are overly generous. Over \$11 billion worth of credits, for example, could have been claimed in 2009, had incomes and tax liabilities been higher.



Pattern of Use of California's R&D Tax Credit



A Few Sectors Dominate. Each of the five industries recently claimed more than \$100 million per year worth of credits.

- ***Computer and Peripheral Equipment Manufacturing.*** Credits go to establishments manufacturing or assembling electronic computers and computer peripheral equipment.
- ***Communications Equipment Manufacturing.*** Credits go to establishments manufacturing telephone equipment and other communications equipment.
- ***Semiconductor and Other Electronic Component Manufacturing.*** Credits go to establishments manufacturing semiconductors and other components for electronic applications.
- ***Pharmaceuticals & Medicine Manufacturing.*** Credits go to establishments manufacturing biological and medicinal products.
- ***Software Publishers.*** Credits go to establishments engaged in computer software design, publishing, reproduction, or providing support services to software purchasers.



Some Claimants Not Obvious Candidates for Credit. Minor categories in the Franchise Tax Board's database include:

- Real Estate.
- Advertising and Related Services.
- Retail and Wholesale Trade.



LAO Findings

- ☑ ***Lack of Data Makes It Hard to Value the Benefits of R&D.*** Beneficiaries—and the R&D projects credited—are generally unknown to the Legislature or the public.
- ☑ ***“Correct” Level of State Credit Unknown.*** Very little is known about what the appropriate level is for the state’s R&D credit, including whether the state’s current credit rate is too high or too low—especially considering the federal R&D credit is also in place. This uncertainty is due largely to the inherent difficulties associated with measuring the public and private benefits of whatever additional research is induced by the state’s credit, compared to alternative uses of funds.
- ☑ ***No Justification for Further Expansion of Current Credit.*** In a 2003 report to this committee, we recommended that the Legislature not expand the current R&D credit unless convincing evidence was found indicating that this is warranted. Furthermore, we recommended that the Legislature consider reducing the credit or phasing it out over time, given the substantial direct revenue losses associated with the program and its uncertain benefits. We noted that direct research-related spending (such as through the University of California) may well be a more cost-effective means of subsidizing R&D.