R&D Tax Incentives: United States, 2019

Design features

The United States federal government provides R&D tax relief through an incremental R&D tax credit with 4 components: two main modalities – RRC and ASC – which are mutually exclusive in their use and two additional specific schemes, which only apply to certain expenses for basic research and energy research.

- In the case of insufficient tax liability, unused tax credits can be carried-forward for 20 years. Since 2016, certain start-ups may elect to apply a portion of their research credit (up to USD 250 000) against their payroll tax liability, instead of their income tax liability.
- A ceiling applies to the amount of R&D tax relief that can be claimed in the reporting period.

Table 1. Main design features of R&D tax incentives in United States, 2019

<table>
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<tr>
<th>Tax incentive</th>
<th>Federal research and experimentation (F&amp;E) tax credit</th>
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<tbody>
<tr>
<td>Type of instrument</td>
<td>Regular research credit (RRC)</td>
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<td>Eligible expenditures†††</td>
<td>Incremental</td>
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<td>Headline rates (%)</td>
<td>20</td>
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<td>Carry-over (years)</td>
<td>20 (carry-forward), 1 (carry-back)</td>
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<td>Thresholds</td>
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<td>Ceilings</td>
<td>R&amp;D tax relief</td>
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<td>Refund-specific</td>
<td>USD 250 000 (certain start-ups only)</td>
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</table>
| PWHT: Payroll withholding tax; TMT: Tentative Minimum Tax liability. The corporate Alternative Minimum Tax (AMT) was repealed in the beginning of 2018.
| * A taxpayer that claims a research credit must reduce the business deduction for research expenditures by the amount of the credit claimed or take a reduced credit that equals the gross credit times (1 – tc), where tc equals the highest statutory corporate tax rate.

Recent developments and trends

Differences in the design of R&D tax incentives drive a significant variation in the expected generosity of tax relief per additional unit of R&D investment. In 2019, the R&D tax subsidize rate for profit-making (loss-making) SMEs in the United States is estimated at 0.05 (0.04), well below the OECD median of 0.19 (0.17). The tax subsidy rate for large enterprises is 0.05 (0.04) in the profit (loss)-making scenario, below the OECD median of 0.14 (0.10). These estimates focus on modelling the provisions for the RRC and ASC.

The generosity of R&D tax incentives declined slightly in the United States over the 2000-19 period. This decline is associated to changes in the weights attached in the modelling exercise to each of the R&D tax credits during 2000-2019 (RRC, ASC/AIRC). On the one hand, with a weighting based on qualifying R&D expenditure, more weight is attached over time to RRC claims subject to the 50% current R&D expenditure limitation (10% marginal tax credit rate) vs. excess base limitation (20% marginal tax credit rate). On the other hand, in the computation of the overall R&D tax subsidy across the two tax credits considered (RRC and ASC), a larger weight is assigned over time to the ASC, which entails a smaller subsidy rate than the RRC subject to either limitation. In 2016, tax credits became payable for SMEs, leading to an increase in the SME tax subsidy rate estimated for the loss case. Implied subsidy rates increased in 2018 as a result of the corporate income tax rate reduction, reducing the amount of taxes payable by &E tax credit recipients in the United States.

Figure 1. Implied subsidy rates on R&D expenditures: United States, 2000-2019

1-B-index, by firm size and profit scenario

Note: Implied marginal tax subsidy rates, presented for different firm size and profitability scenarios, are calculated (see methodology and country-specific notes) based on headline tax credit/allowance rates. Headline tax credit/allowance rates provide an upper bound value of the generosity of R&D tax incentives, not reflecting the effect of thresholds and ceilings that may limit the amount of qualifying R&D expenditure or value of R&D tax relief.

* Disclaimer: http://oe.cd/disclaimer
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For more information, please visit: http://oe.cd/rdtax
Contact us at: RDTaxStatsContact@oecd.org
Public support for business R&D: the policy mix in the United States

The United States is above the OECD median in terms of total government support to business R&D as a percentage of GDP, at a rate equivalent to 0.22% of GDP in 2014 - the most recent year for which estimates of the cost of R&D tax incentive support are available.

Figure 2. Direct government funding of business R&D and tax incentives for R&D, 2017 (nearest year)
As a percentage of GDP

- Between 2006 and 2014, government support for BERD as a percentage of GDP remained constant in the United States, while the OECD median increased (2006-17) by 0.015 pp.
- From 2006 to 2014, business R&D intensity in the United States increased from 1.79% to 1.94%.
- In 2014, tax incentives accounted for 32% of total government support for BERD in the United States.

Trends in government support for business R&D

Between 2000 and 2014, government support for BERD in the United States was largely skewed towards direct funding. An increase in the importance of R&D tax incentives is noticeable from 2009 onwards, both in absolute and relative terms.

Figure 3. Direct government funding of business R&D and tax incentives for R&D, United States*, 2000-14
As a percentage of GDP, 2010 prices (right-hand scale)

- The cost estimate of tax incentive support for the US covers the F&E tax credit
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- The cost of tax support rose (in 2010 prices) from USD 8.8 billion in 2000 to USD 11.7 billion in 2014 (1 USD = 0.8997 EUR, Q3 2019).
- As percentage of GDP, tax support remained practically unchanged at 0.07% of GDP over this period.
- Direct funding of BERD decreased from 0.17% of GDP in 2000 to 0.15% of GDP in 2014.
- The share of R&D tax incentives in total government support declined from 29% in 2000 to 16% in 2009 at the peak of the global financial crisis, and steadily increased thereafter to 32% in 2014.


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