R&D Tax Incentives: Czech Republic, 2020

Design of R&D tax relief provisions
The Czech Republic provides R&D tax relief through a hybrid R&D tax allowance, which has both a volume-based and incremental component.

Table 1. Main design features of R&D tax incentives in Czech Republic, 2020

<table>
<thead>
<tr>
<th>R&amp;D tax allowance</th>
<th>Eligible expenditures</th>
<th>Type of instrument</th>
<th>Eligible expenditures</th>
<th>Headline rates (%)</th>
<th>Refund</th>
<th>Carry-over (years)</th>
<th>Thresholds</th>
<th>Ceilings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current* and depreciation of movable fixed assets</td>
<td>Hybrid (volume-based and incremental)</td>
<td>Current* and depreciation of movable fixed assets</td>
<td>Volume: 100</td>
<td>No</td>
<td>3 (carry-forward)</td>
<td>Base amount</td>
<td>R&amp;D expenditure or R&amp;D tax relief</td>
</tr>
</tbody>
</table>


Key features:
- The base amount above which R&D expenditure qualify for the incremental tax allowance of 10% is defined as the amount of qualifying R&D expenditures in the previous year.
- In case of insufficient tax liability, unused allowances can be carried-forward for three years.
- No upper ceiling applies on the amount of qualifying R&D expenditure or value of R&D tax relief.

Generosity of R&D tax support in 2020
Differences in the design of R&D tax incentives drive significant variation in the expected generosity of tax relief per additional unit of R&D investment. In 2020, the marginal tax subsidy rate for profit-making (loss-making) SMEs in the Czech Republic is estimated at 0.21 (0.15), above (below) the OECD median of 0.20 (0.18). The implied tax subsidy rate for large firms is equal to 0.21 (0.15) in the profit (loss)-making scenario, well above (equal to) the OECD median of 0.17 (0.15).

Figure 1. Implied tax subsidy rates on R&D expenditures: Czech Republic, 2020

Note: Implied marginal tax subsidy rates, presented for different firm size and profitability scenarios, are calculated based on headline tax credit/allowance rates (see methodology and country-specific notes), providing an upper bound value of the generosity of R&D tax support, not reflecting the effect of thresholds and ceilings that may limit the amount of qualifying R&D expenditure or value of tax relief. Source: OECD, R&D Tax Incentives Database, http://oe.cd/rdtax, March 2021.
Recent developments in R&D tax relief provisions

Regular reforms of R&D tax incentives lead to continuous changes in the availability, scope and generosity of R&D tax incentives. Such reforms relate to the launch of new tax incentives, the R&D definition adopted for tax purposes, changes in tax credit and allowance rates, adjustments of thresholds or upper ceilings on qualifying R&D expenditure or tax relief amounts, or changes in the terms and availability of refunds.

In 2020, changes in the availability and scope of R&D tax incentives represented the most frequent type of policy reform (OECD, 2020), along with adjustments to the headline R&D tax credit/allowance rates and adjustments of thresholds or upper ceilings on qualifying R&D expenditure or tax relief amounts. In response to the COVID-19 pandemic, several countries increased the generosity of R&D tax relief or introduced modifications to the administration of R&D tax incentives to facilitate and accelerate R&D funding.

In 2020, Czech Republic did not undertake changes in its R&D tax relief provisions. The latest change in the design of the R&D tax allowance in Czech Republic occurred in 2014, when the R&D tax allowance became hybrid, including an incremental allowance of 10% for eligible R&D expenditure above the base amount (level of previous year R&D spending).

Trends in the generosity of R&D tax support

Since the introduction of R&D tax support in the Czech Republic in 2005, implied marginal R&D tax subsidy rates have declined over time with a slight upturn in more recent years.

In 2005, the R&D tax subsidy rate for profitable (loss-making) SMEs and large firms was 0.30 (0.21) and reached 0.20 (0.15) in 2010. This decline is mainly attributable to the step-wise reduction in the corporate income tax rate between 2005 and 2010, whose magnitude directly affects the value of tax deductions.

A slight increase in implied tax subsidy rates is observable for profit-making firms in 2014, when the R&D tax allowance was extended to incorporate an incremental component and include machinery and equipment depreciation as eligible expenses.

With no additional changes in the design of the R&D tax allowance or CIT rates since 2014, the estimated implied R&D tax subsidy rate has remained stable ever since, looking at each of the four scenarios considered.

Figure 2. Implied tax subsidy rates on R&D expenditures: Czech Republic, 2000-20

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 based on headline tax credit/allowance rates (see methodology and country-specific notes), providing an upper bound value of the generosity of R&D tax support, not reflecting the effect of thresholds and ceilings that may limit the amount of qualifying R&D expenditure or value of tax relief.

Policy support for business R&D: the policy mix

In 2018, the Czech Republic is placed below the OECD average in terms of total government support to business R&D as a percentage of GDP, at a rate equivalent to 0.13% of GDP.

Figure 3. Direct government funding of business R&D and tax incentives for R&D, 2018 (nearest year)

As a percentage of GDP

Note: Data on subnational tax support are only available for a group of countries.

Key points:
- From 2006 to 2018, total government support for BERD as a percentage of GDP in the Czech Republic declined by 0.01 percentage point (pp), while the OECD average increased by 0.03 pp.
- During this period, business R&D intensity in the Czech Republic increased from 0.72% to 1.18%.
- In 2018, tax incentives accounted for 37% of government support for BERD in the Czech Republic.

Distribution of R&D tax relief recipients and government tax relief for R&D

The distribution of R&D tax relief recipients and government tax relief for R&D expenditures (GTARD) provide insights into what types of firms claim and benefit from tax relief.

Figure 4. Number of R&D tax relief recipients and value of government tax relief for R&D, 2018

By firm size*, share in percent

By industry**, share in percent

Note: Figures refer to the R&D tax allowance. *SMEs are defined as firms with 1-249 employees. **Economic activity is classified based on NACE C (manufacturing), NACE G-T (services) and NACE A,B,D,E,F (other sectors).

Key points:
- In the Czech Republic, SMEs accounted for 74% of R&D tax relief recipients in 2018, while the share of R&D tax relief accounted for by SMEs amounted to around 23% in this year. 77% of R&D tax benefits were allocated to large firms, comprising 26% of the population of R&D tax relief recipients in 2018.
- In 2018, firms in manufacturing represented around 57% of R&D tax relief recipients in the Czech Republic, followed by firms in services with a share of 39%. The share of R&D tax benefits accounted for by the latter amounted to 28% in that year, while this share amounted to 70% in the case of firms in manufacturing.
Trends in the uptake of R&D tax incentives

Over the period 2005-2018, the number of R&D tax relief recipients increased in the Czech Republic, reaching a peak of 1,311 recipients in 2015. From 2015 onwards, the number of R&D tax relief recipients declined, dropping to around 1,045 in 2018. The changes observed over the 2007-18 period are primarily attributable to SMEs. Throughout these years, SMEs accounted for around 75-80% of R&D tax relief recipients in the Czech Republic. From 2007 to 2018, the number of SMEs receiving R&D tax support increased from around 460 to 780, while the number of large firms receiving tax support increased from around 115 to 270.

Figure 5. Number of R&D tax relief recipients, Czech Republic, 2005-2018

Note: Figures refer to the R&D tax allowance.

Trends in government support for business R&D

Since the introduction of an R&D tax allowance in 2005, the importance of R&D tax incentives has increased significantly in the Czech Republic, both in absolute and relative terms.

Figure 6. Direct funding of business R&D and tax incentives for R&D, Czech Republic, 2000-18

As a percentage of GDP, 2015 prices (right-hand scale)


- In the Czech Republic, the cost of government tax relief for R&D rose (in 2015 prices) from CZK 986 million in 2005 to CZK 2,464 million in 2018 (1 CZK= 0.038 EUR, Q3 2020).
- As percentage of GDP, R&D tax support increased from 0.026% to 0.05% of GDP during this period.
- Direct funding of BERD increased from 2005 to 2011, declined to reach 0.06% of GDP in 2016 but then reverted to 0.08% of GDP in 2018.
- Total government support for BERD in 2018 (0.13%) coincides with its 2005 level.
- The share of R&D tax incentives in total government support effectively doubled over the 2005-18 period, increasing from 20% in 2005 to 37% in 2018.