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

		R&D tax allowance	
Type of instrument		Hybrid (volume-based and incremental)	
Eligible expenditures†		Current* and depreciation of movable fixed assets	
Headline rates (%)		Volume: 100	Increment: 10
Refund		No	
Carry-over (years)		3 (carry-forward)	
Thresholds	Base amount	Qualifying R&D expenditure in the previous year	
Ceilings	R&D expenditure or R&D tax relief	No	

*Effective January 2014, qualifying expenses have been expanded to include external services related to R&D provided by public R&D institutions such as universities and research institutes.

Note: For more details, see OECD R&D Tax Incentive Compendium and Eligibility of current and capital expenditure for R&D tax relief

Source: OECD, R&D Tax Incentives Database, http://oe.cd/rdtax, March 2021.

Key features:

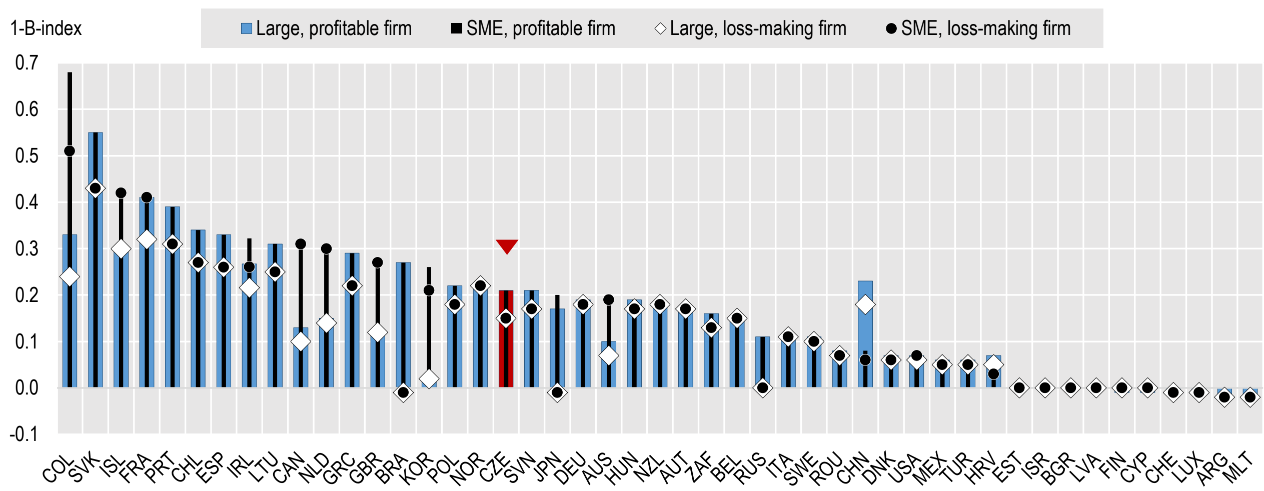
- The base amount above which R&D expenditure qualify for the incremental tax allowance of 10% is defined as the amount of qualifying R&D expenditures in the previous year.
- In case of insufficient tax liability, unused allowances can be carried-forward for three years.
- No upper ceiling applies on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

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.

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.

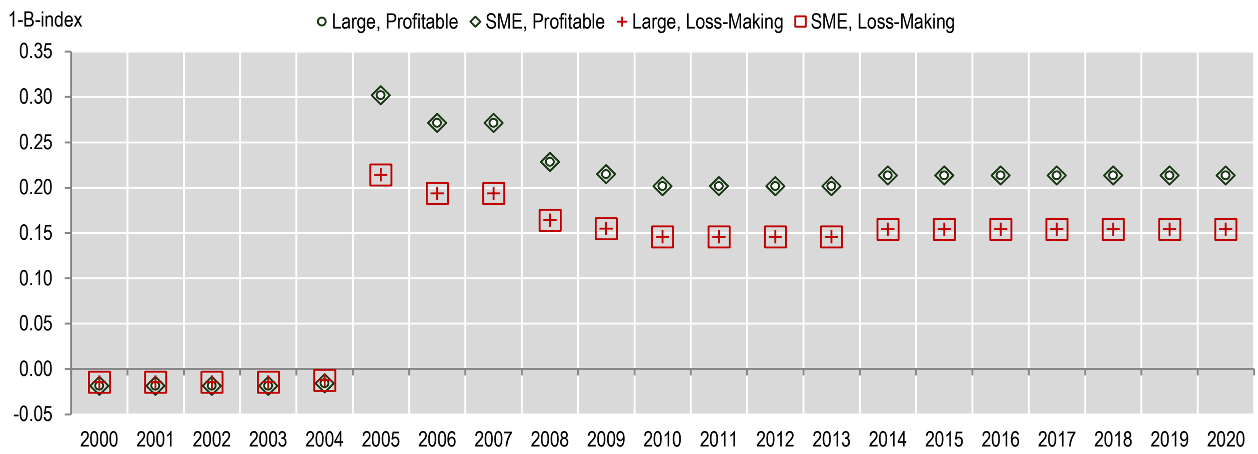
In 2005, the R&D tax subsidy rate for profitable (loss-making) SMEs and large firms was 0.30 (0.21) and reached 0.20 (0.15) in 2010. This decline is mainly attributable to the step-wise reduction in the corporate income tax rate between 2005 and 2010, whose magnitude directly affects the value of tax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

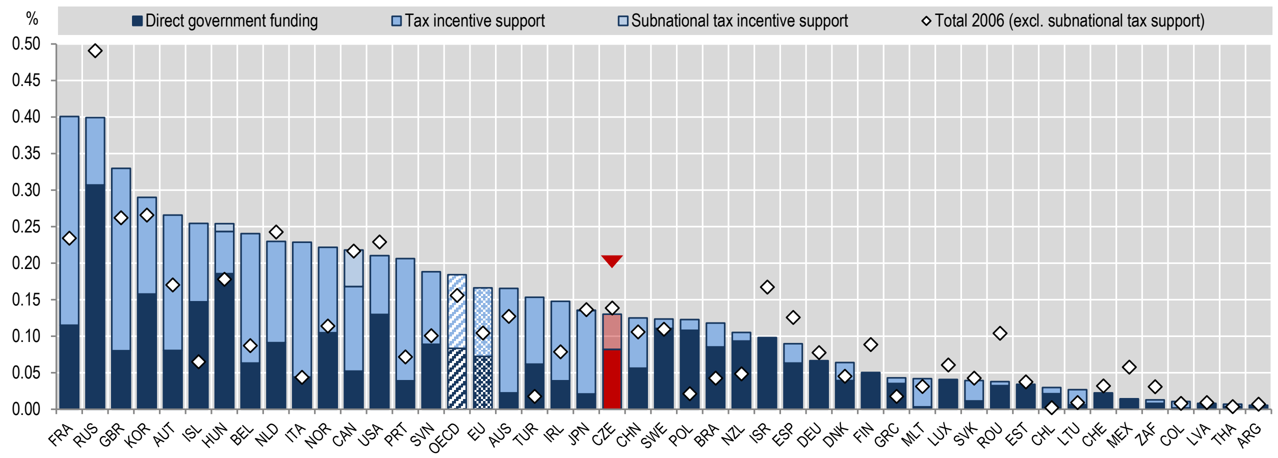
Source: OECD, R&D Tax Incentives Database, http://oe.cd/rdtax, March 2021.

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.

Source: OECD, R&D Tax Incentives Database, http://oe.cd/rdtax, March 2021.

Key points:

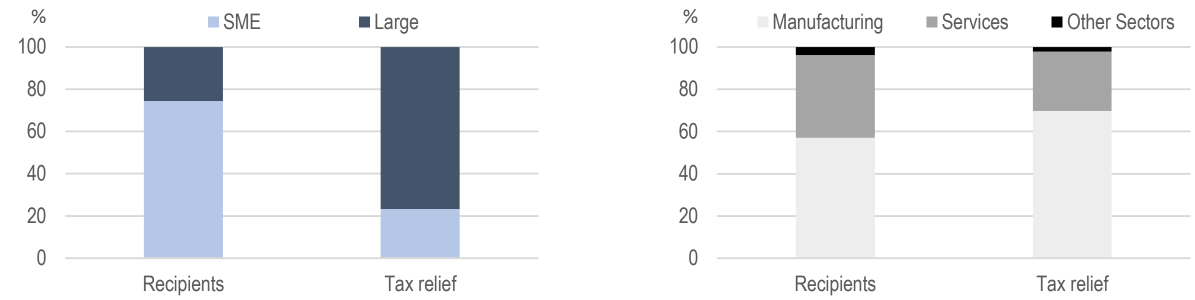
- From 2006 to 2018, total government support for BERD as a percentage of GDP in the **Czech Republic** declined by 0.01 percentage point (pp), while the OECD average increased by 0.03 pp.
- During this period, business R&D intensity in the **Czech Republic** increased from 0.72% to 1.18%.
- In 2018,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

Source: OECD, R&D Tax Incentives Database, http://oe.cd/rdtax, March 2021.

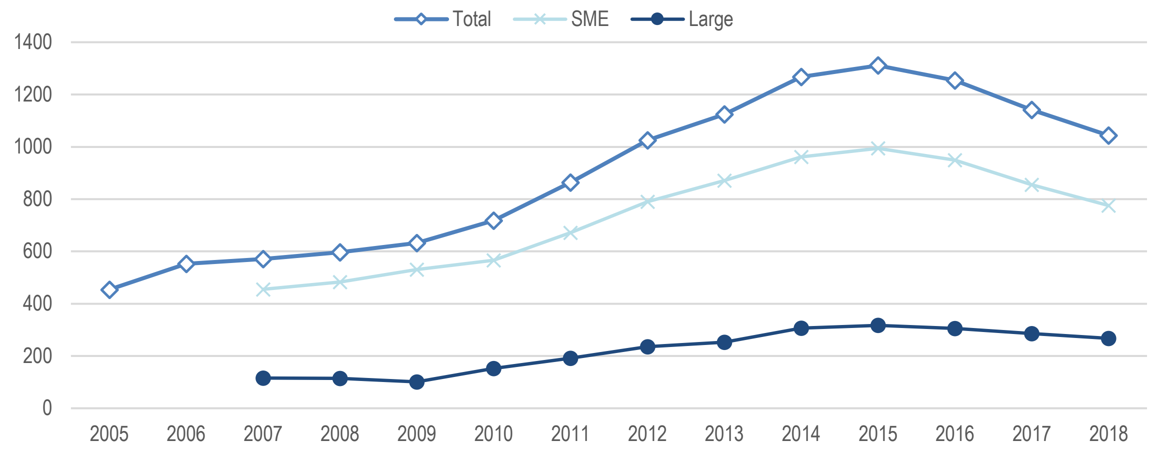
Key points:

- 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.

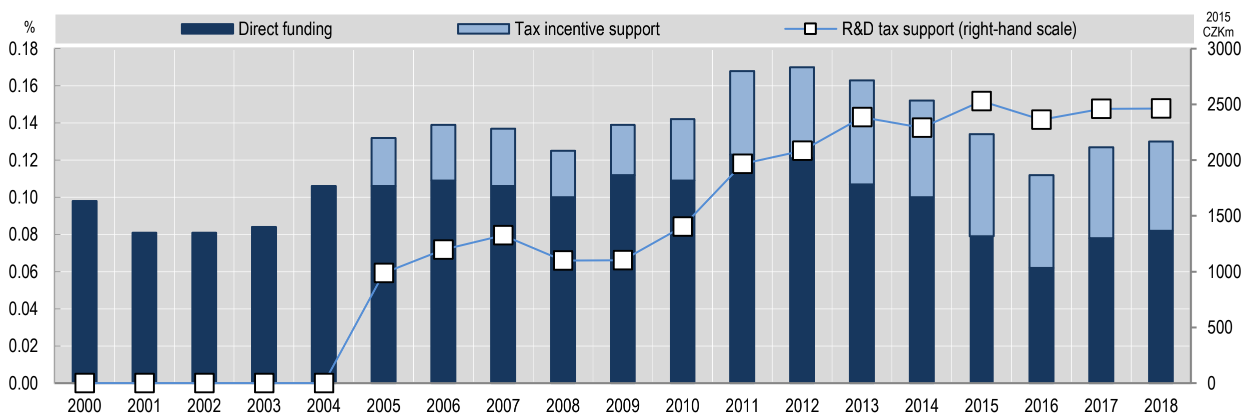
Source: OECD, R&D Tax Incentives Database, http://oe.cd/rdtax, March 2021.

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)



Source: OECD, R&D Tax Incentives Database, http://oe.cd/rdtax, March 2021.

- 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.

Please cite this note as: OECD (2021). “R&D Tax Incentives: Czech Republic, 2020”, www.oecd.org/sti/rd-tax-stats-czech-republic.pdf, Directorate for Science, Technology and Innovation, March 2021.