

R&D Tax Incentives: Belgium, 2020

Design of R&D tax relief provisions

Belgium provides R&D tax relief through a payroll withholding tax (PWHT) exemption, an R&D tax credit and R&D tax allowance. Tax credit and allowance are incompatible.

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

Tax incentive*	Tax credit**	Tax allowance	PWHT exemption
Type of instrument	Volume-based	Volume-based	Volume-based
Eligible expenditures†	Machinery and equipment, buildings		Labour
Headline rates (%)	3.38 (5.125***)	13.5****	80 (40 if bachelor degree with effect of January 2018)
Refund	5 years	No	Redeemable against payroll/related taxes
Carry-over (years)	4 (carry-forward)	Indefinite (carry-forward)	n.a.
Ceilings	R&D tax relief	No	No
			PWHT liability

M&E: Machinery and Equipment; PWHT: Payroll withholding tax; SSC: Social Security contributions; TA: Tax allowance; TC: Tax credit; *Belgium also offers an accelerated depreciation of assets (machinery and equipment, intangibles) used in the process of R&D over a period of 3 years; **: Granted for investments in patents and environmentally friendly R&D investments; *** Spread deduction over five years (i.e. 1.025 per year); ****: Spread deduction over five years (i.e. 4.1 per year). Belgium also provides an income-based tax incentive (deduction for innovation and patent income) for outcomes of R&D activities. This type of incentive is beyond the scope of this note.

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:

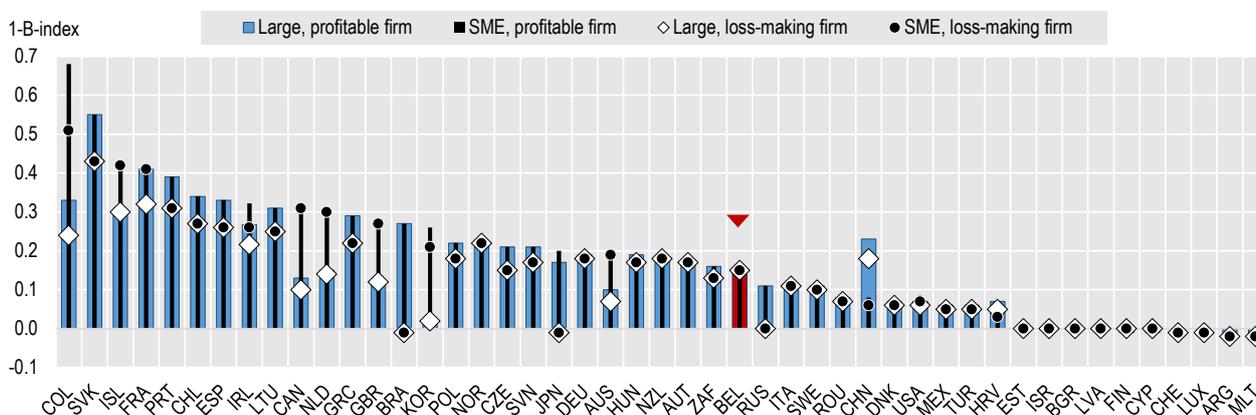
- In case of insufficient income tax liability, the R&D tax allowance scheme allows for an indefinite carry-forward of unused claims. In the case of the R&D tax credit, unused claims are carried forward over 4 years and the unused part is refunded after 5 years.

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 Belgium is estimated at 0.15 (0.15), smaller than the OECD median of 0.20 (0.18). The tax subsidy rate for large enterprises is also equal to 0.15 (0.15) in the profit (loss)-making scenario, smaller than (equal to) the OECD median of 0.17 (0.15). These estimates focus on modelling the provisions for the refundable R&D tax credit (incompatible with but equivalent in terms of the magnitude of the headline tax credit rate to the non-refundable R&D tax allowance), PWHT exemption and accelerated depreciation of R&D capital.

Figure 1. Implied tax subsidy rates on R&D expenditures: Belgium, 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, **Belgium** did not undertake **changes** in its R&D tax relief provisions. The **latest change** in the design of the R&D tax credit (PWHT credit) in **Belgium** occurred in **2018**, when the scope of the payroll tax exemption was extended to additionally apply to researchers with a bachelor degree at a rate of 40%, i.e. half the rate applicable to researchers with a masters or doctoral degree.

Trends in the generosity of R&D tax support

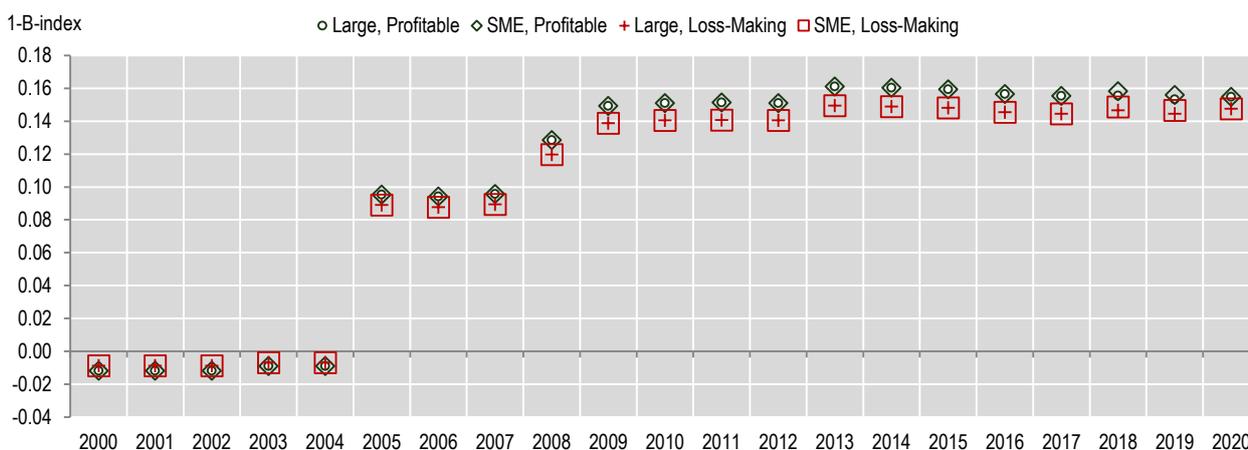
Across the four scenarios considered, the generosity of R&D tax incentives has increased steadily in Belgium over the 2000-20 period. The implied R&D tax subsidy rate for profitable SMEs and large firms rose from 0.10 in 2005, when the PWHT credit was introduced, to 0.15 in 2020. In the case of loss-making firms, the tax subsidy rate per unit of R&D outlay similarly increased from 0.09 in 2005 to 0.15 in 2020.

The stepwise increases in implied R&D tax subsidy rates, observable in the years 2008, 2009 and 2013, are linked to increases in the rate of the PWHT credit from initially 50% to 65%, 75% and 80% respectively.

From 2018 to 2019, the R&D tax subsidy rates estimated for SMEs slightly exceed those for large firms. Over these two years, the normal investment deduction is modelled for SMEs instead of the R&D tax credit. For SMEs, the normal investment deduction rate was temporarily raised from 8% to 20% for investments made between 1 January 2018 and 31 December 2019, and more favourable to taxpayers during these years. With the expiry of this temporary provision, the tax subsidy rates for SMEs and large firms coincide again in 2020, looking at both profitability scenarios.

Figure 2. Implied tax subsidy rates on R&D expenditures: Belgium, 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.

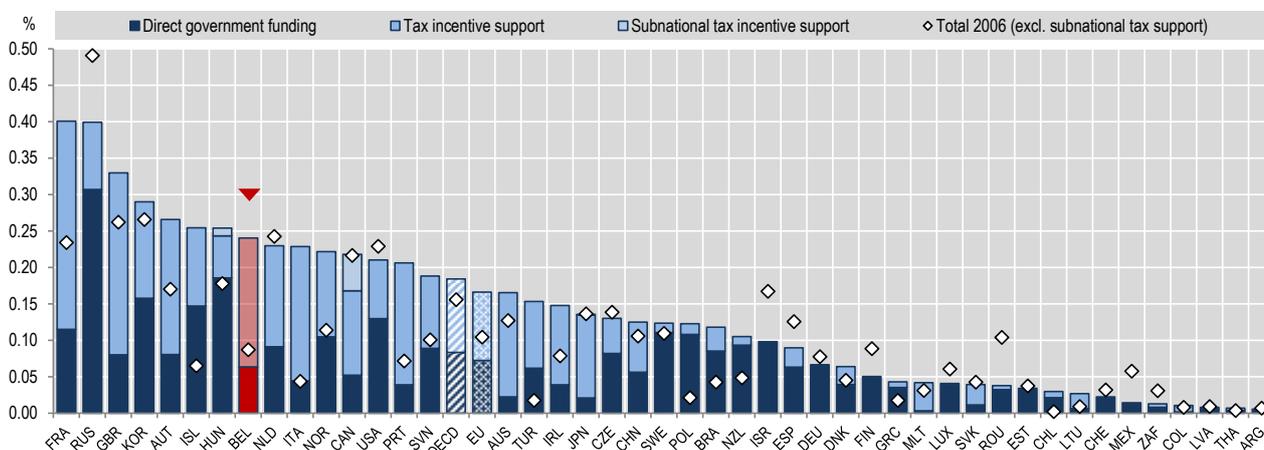
Source: OECD, R&D Tax Incentives Database, <http://oe.cd/rdtax>, March 2021.

Policy support for business R&D: the policy mix

Belgium is placed above the OECD average in terms of total government support to business R&D as a percentage of GDP, at a rate equivalent to 0.24% of GDP in 2017 (latest figure available).

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.

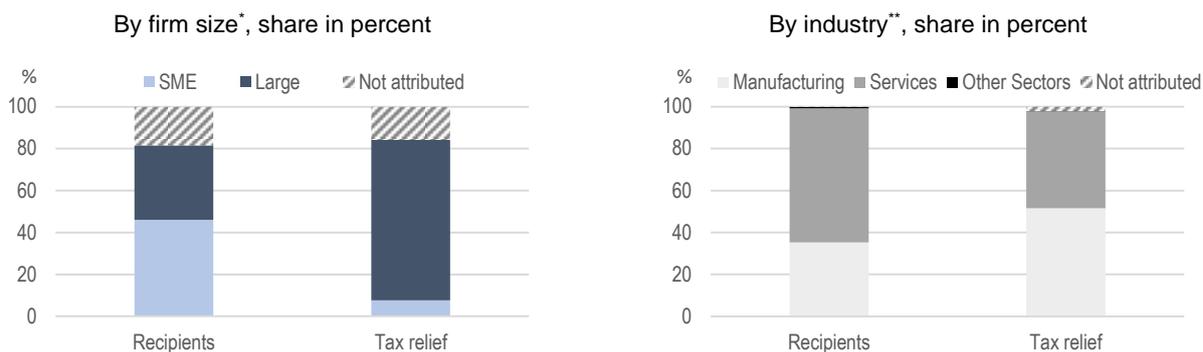
Key points:

- From 2006 to 2017, total government support for BERD as a percentage of GDP increased in **Belgium** by 0.15 percentage point (pp), while the OECD median (2006-2018) increased by 0.03 pp.
- During this period, business R&D intensity in **Belgium** increased from 1.26% to 1.87%.
- In 2017, R&D tax relief accounted for nearly 74% of total government support for BERD in **Belgium**.

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, 2017



Note: Figures refer to the Payroll Withholding Tax Credit and the Refundable tax credit for R&D. *SMEs are defined as enterprises that, in the last two years, do not exceed an average annual number of employees below 50 or a revenue under EUR 9 million or a balance sheet under EUR 4.5 million. **No details on the classification available.

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

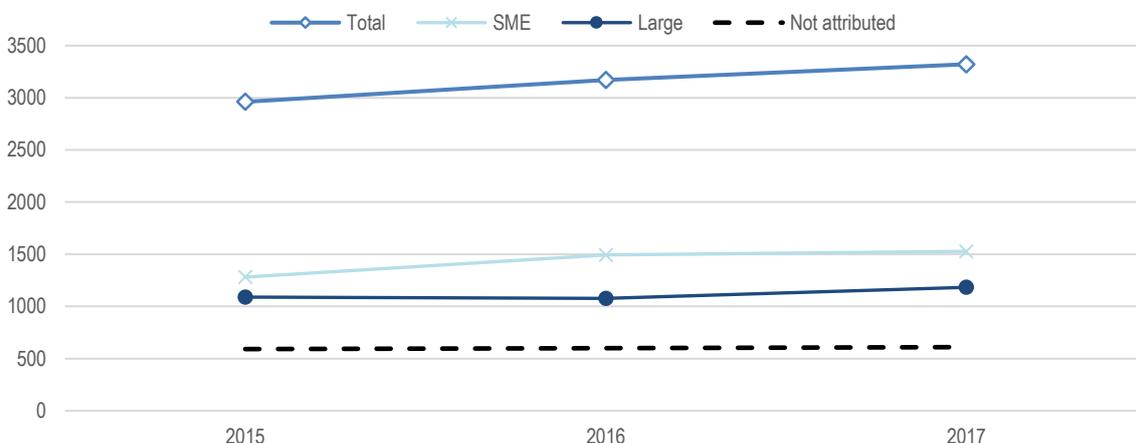
Key points:

- In **Belgium**, SMEs accounted for 46% of R&D tax relief recipients in 2017, while the share of R&D tax support accounted for by SMEs amounted to around 8% in this year. 77% of R&D tax benefits were allocated to large firms, comprising 36% of the population of R&D tax relief recipients in 2017.
- In 2017, firms in services represented around 64% of R&D tax relief recipients in **Belgium**, followed by firms in manufacturing with a share of 35%. The share of R&D tax benefits accounted for the latter amounted to 52% in that year, while this share of firms in services amounted to 46%.

Trends in the uptake of R&D tax incentives

Over the period 2015-2017 (for which relevant data are available), the number of R&D tax relief recipients increased slightly in **Belgium**, from 2 961 in 2015 to 3 321 in 2017. Throughout these years, SMEs accounted for around 45% of corporate R&D tax relief recipients in **Belgium**.

Figure 5. Number of R&D tax relief recipients, Belgium, 2015-2017



Note: Figures refer to the Payroll Withholding Tax Credit and the Refundable tax credit for R&D.

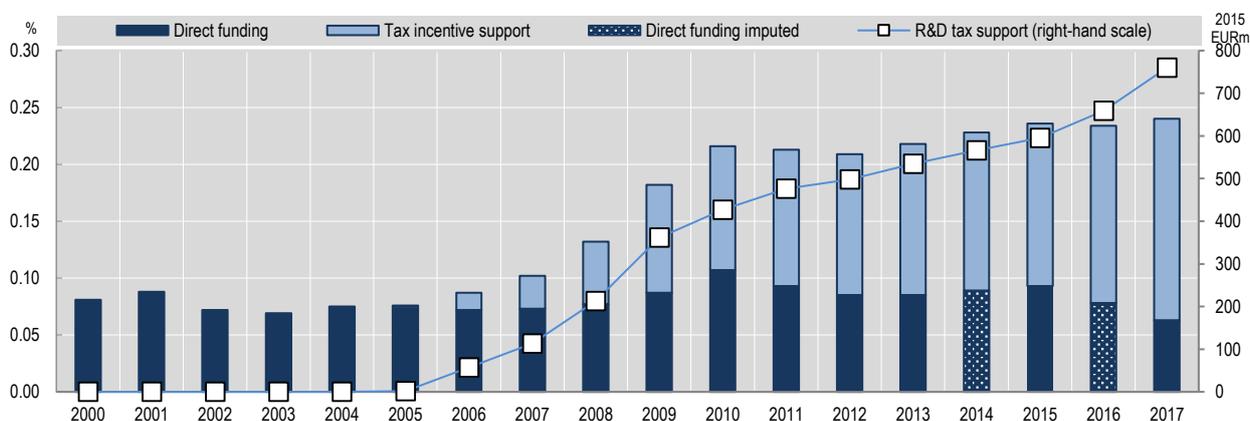
Source: OECD, R&D Tax Incentives Database, <http://oe.cd/rdtax>, March 2021.

Trends in government support for business R&D

Since the introduction of R&D tax support in 2005, the importance of R&D tax incentives has increased significantly in **Belgium**, both in absolute and relative terms.

Figure 6. Direct funding of business R&D and tax incentives for R&D, Belgium, 2000-17

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



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

- The cost of government tax relief for R&D rose (in 2015 prices) from EUR 113 million in 2007 to EUR 760 million in 2017.
- As percentage of GDP, R&D tax support increased from 0.03% to 0.18% of GDP over the 2007-2017 period.
- Direct funding of BERD decreased from 0.07% in 2007 to 0.06% in 2017.
- The share of R&D tax incentives in total government support increased over this period, from 29% in 2007 to 74% in 2017.

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