

## R&D Tax Incentives<sup>1</sup>: Belgium, 2019

### Design features

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.

- 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 part not used is refunded after 5 years.

**Table 1. Main design features of R&D tax incentives in Belgium, 2019<sup>†</sup>**

Tax incentive*	Tax credit**	Tax allowance	PWHT exemption
Type of instrument	Volume-based	Volume-based	Volume-based
Eligible expenditures <sup>†</sup>	Machinery and equipment, buildings		Labour
Headline rates (%)	3.99 (6.06***)	13.5***** (20.5****)	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. 1.21 per year); \*\*\*\*: Spread deduction over five years (i.e. 4.1 per year). \*\*\*\*\*: For SMEs, the normal investment deduction is temporarily raised from 8% to 20% for investment made between 1 January 2018 and 31 December 2019. The normal investment deduction rate of 20% applies when it is more interesting for taxpayers. 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.

<sup>†</sup>For additional information: [OECD R&D Tax Incentive Compendium](#) and [Eligibility of current and capital expenditure for R&D tax relief](#)

Source: OECD, R&D Tax Incentive Database, <http://oe.cd/rdtax>, December 2019.

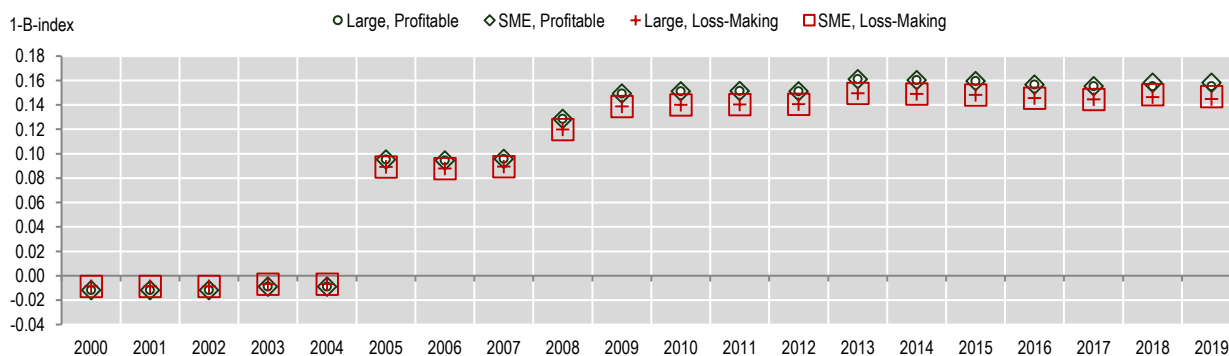
### Recent developments and trends

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 2019, the marginal tax subsidy rate for profit-making (loss-making) SMEs in Belgium is estimated at 0.16 (0.15), smaller than the OECD median of 0.19 (0.17). The tax subsidy rate for large enterprises is equal to 0.16 (0.14) in the profit (loss)-making scenario, larger than the OECD median of 0.14 (0.10). 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.

Across the four scenarios considered, the generosity of R&D tax incentives has increased steadily in Belgium over the 2000-19 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 0.16 in 2019. 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 (0.14 for large firms) in 2019. 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.

**Figure 1. Implied tax subsidy rates on R&D expenditures: Belgium, 2000-19**

<sup>1</sup>-B-Index, by firm size and profit scenario



Source: OECD, R&D Tax Incentive Database, <http://oe.cd/rdtax>, December 2019.

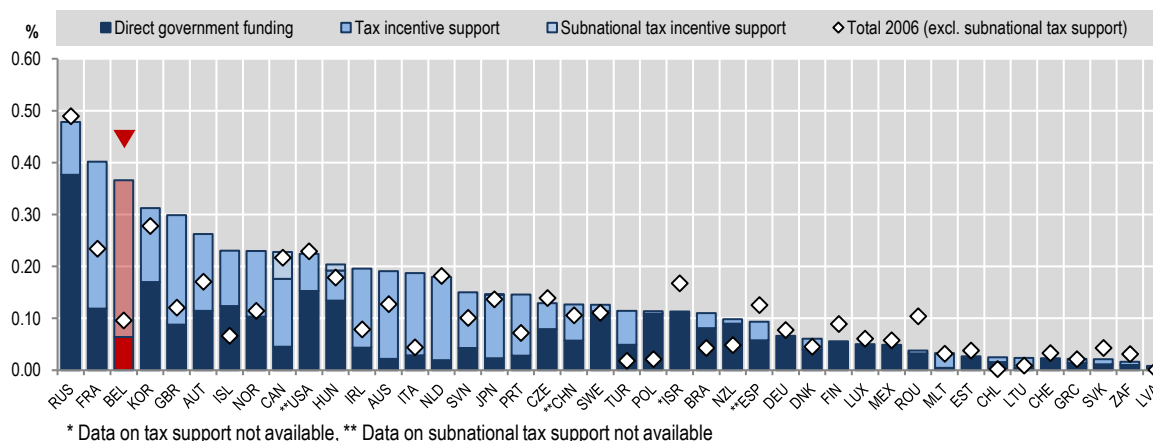
Note: Implied marginal tax subsidy rates, presented for different firm size and profitability scenarios, are calculated (see [methodology](#) and [country-specific notes](#)) based on headline tax credit/allowance rates. Headline tax credit/allowance rates provide an upper bound value of the generosity 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.

<sup>1</sup> Disclaimer: <http://oe.cd/disclaimer>

## Public support for business R&D: the policy mix

In 2017, **Belgium** ranks third among OECD and partner economies in terms of total government support to business R&D as a percentage of GDP, at a rate equivalent to 0.37% of GDP.

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



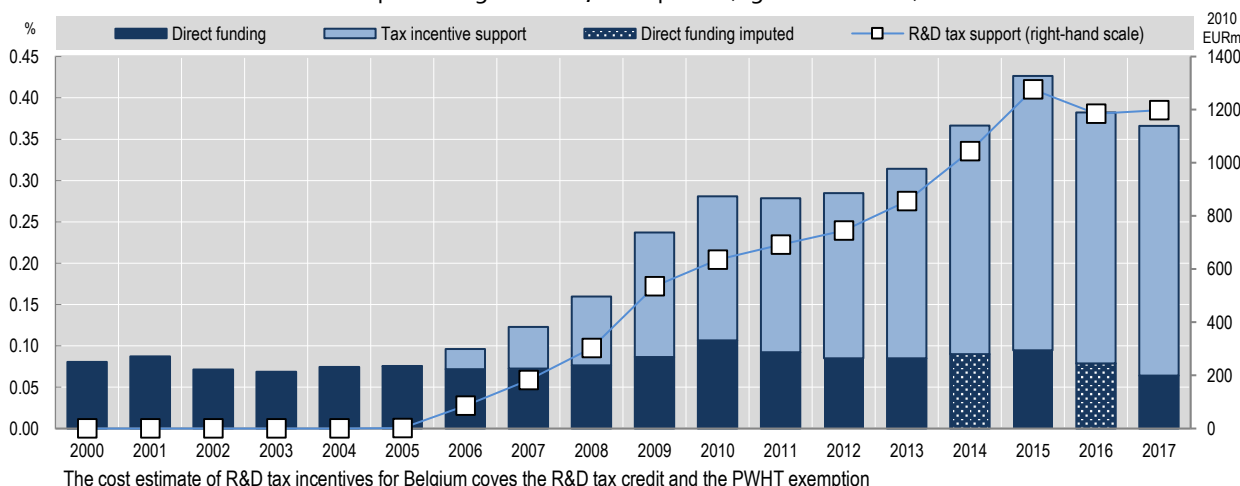
Source: OECD, R&D Tax Incentive Database, <http://oe.cd/rdtax>, December 2019.

- From 2006 to 2017, total government support for BERD as a percentage of GDP increased in **Belgium** by 0.27 pp, while the OECD median increased by 0.015 pp.
- During this period, business R&D intensity in **Belgium** increased from 1.26% to 1.90%.
- In 2017, R&D tax incentives accounted for nearly 83% of total government support for BERD in **Belgium**.

## 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 3. Direct government funding of business R&D and tax incentives for R&D, Belgium, 2000-17**  
As a percentage of GDP, 2010 prices (right-hand scale)



Source: OECD, R&D Tax Incentive Database, <http://oe.cd/rdtax>, December 2019.

- The cost of tax relief rose (in 2010 prices) from EUR 182 million in 2007 to EUR 1 276 million in 2015, dropping to EUR 1 198 million in 2017.
- As percentage of GDP, R&D tax support increased from 0.05% to 0.30% of GDP over the 2007-2017 period, with a peak (0.33% of GDP) in 2015.
- 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 41% in 2007 to 83% in 2017.

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