

# OECD R&D tax incentives database: Highlights from the April 2024 update

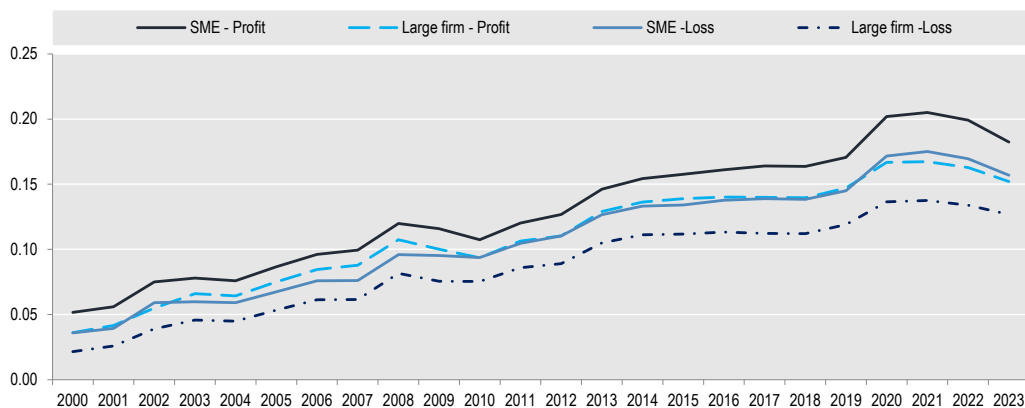
## ***Tax subsidy rates offered to firms investing in R&D experienced a slight decline in 2023***

A total of 33 out of 38 OECD countries offered tax relief for R&D expenditures in 2023, up from 19 in 2000. In the European Union, 23 member states offered R&D tax support in 2023, twice as many as in 2000. OECD estimates of tax subsidy rates for R&D (Figure 1) show that the average and median tax subsidy offered to firms investing in R&D continued to fall in 2023 following the slight decline recorded for 2022. This trend, also observed for the EU27 area, applies across all the modelled scenarios, regardless of business size and profit situation. Profitable SMEs in the OECD area could, on average, expect to receive a 18% subsidy on R&D expenditures in 2023, more than large firms at close to 15%.

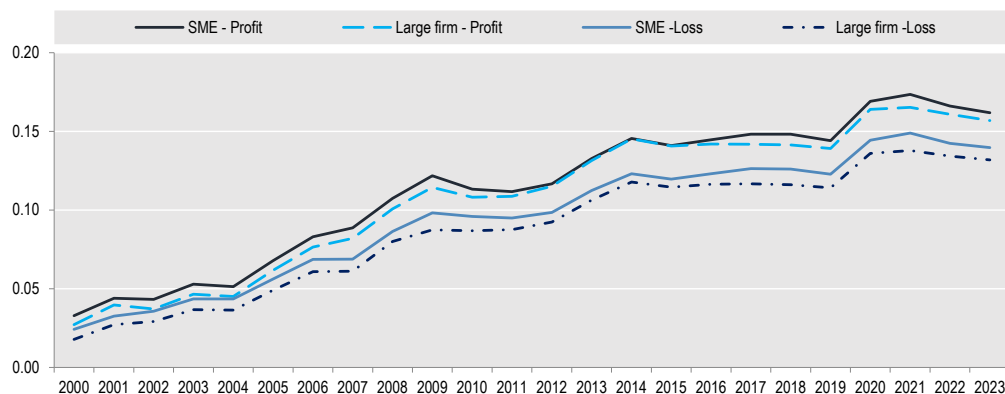
**Figure 1. Trends in tax subsidy rates on R&D expenditures, 2000-2023**

1 minus B-Index, OECD and EU countries (unweighted averages)

Panel A. OECD



Panel B. EU-27



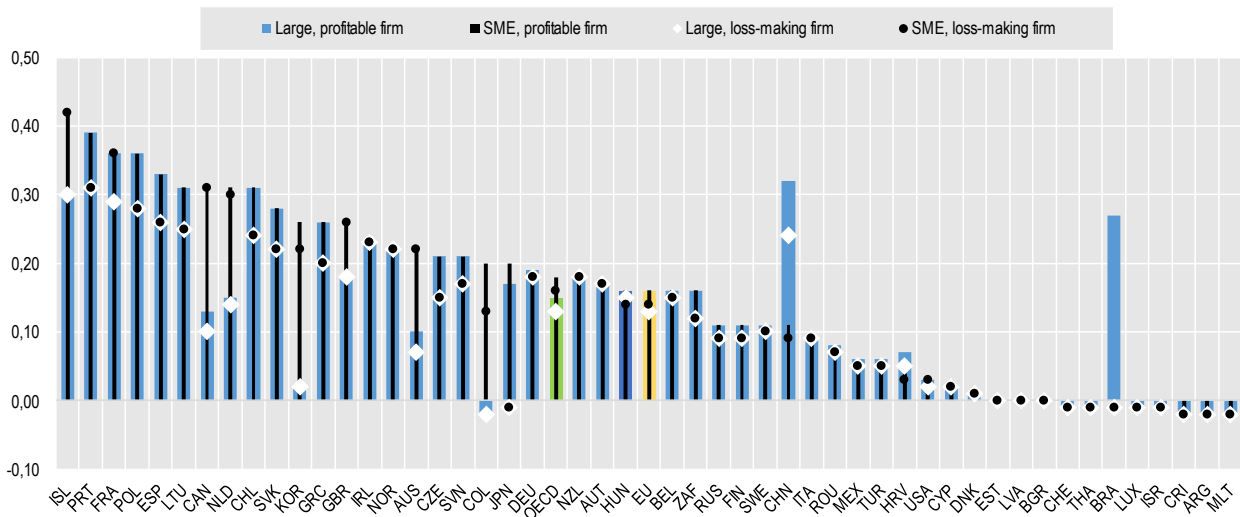
Note: Figures reflect the tax treatment of R&D expenditure for SMEs and large enterprises in OECD member state and EU countries, most of which but not all, offer tax incentive support for business R&D expenditure. For general and country-specific notes on the time-series estimates of implied marginal tax subsidy rates on R&D expenditures (based on the B-index), see [rd-tax-stats-bindex-notes.pdf](https://www.oecd.org/rdtax/rd-tax-stats-bindex-notes.pdf)

Source: OECD R&D Tax Incentives Database, <https://oe.cd/rdtax>, April 2024

The latest OECD estimates of Implied marginal R&D tax subsidy rates (Figure 2) highlight the notional levels of tax support (before tax) per additional unit of R&D to which firms with defined characteristics are in principle entitled to in 2023. In 2023, Iceland, Portugal and France offer the most generous R&D tax incentives for SMEs regardless of they turn out a profit. In the case of large profitable (loss-making) firms, R&D tax subsidy rates are highest in Portugal, France and Poland (Portugal, Iceland and France).

**Figure 2. Tax subsidy rates on R&D expenditures, 2023**

1 minus B-Index, by firm size and profit scenario



Note: The marginal R&D tax subsidy rate presented for the group of 38 OECD countries and group of 27 EU countries represent unweighted averages. For general and country-specific notes on the time-series estimates of implied marginal tax subsidy rates on R&D expenditures (based on the B-index), see [rd-tax-stats-bindex-notes.pdf](https://www.oecd.org/tax/rd-tax-stats-bindex-notes.pdf)

Source: OECD R&D Tax Incentives Database, <https://oe.cd/rntax>, April 2024

### ***The cost of providing tax relief for R&D resumed growth in 2021 as demand for support from business recovered after briefly falling in 2020***

The latest OECD estimates of government tax relief for R&D expenditure (Figure 3) show that tax incentives resumed growth in 2021 after a decline in 2020. As tax subsidy rates tended to stabilise, government tax expenditures on these incentives have been mainly driven by business R&D investment adjustments in response to the COVID-19 crisis. The cost of tax support resumed growth following the recovery in business R&D expenditures in 2021. In contrast, the 2020 increase in direct government support for business R&D – after over a decade of real cuts – turned out to be short-lived since this form of support fell in 2021. As a result, total measured support for business R&D, combining both direct funding and tax support elements, increased at a smaller rate than business R&D in 2021.

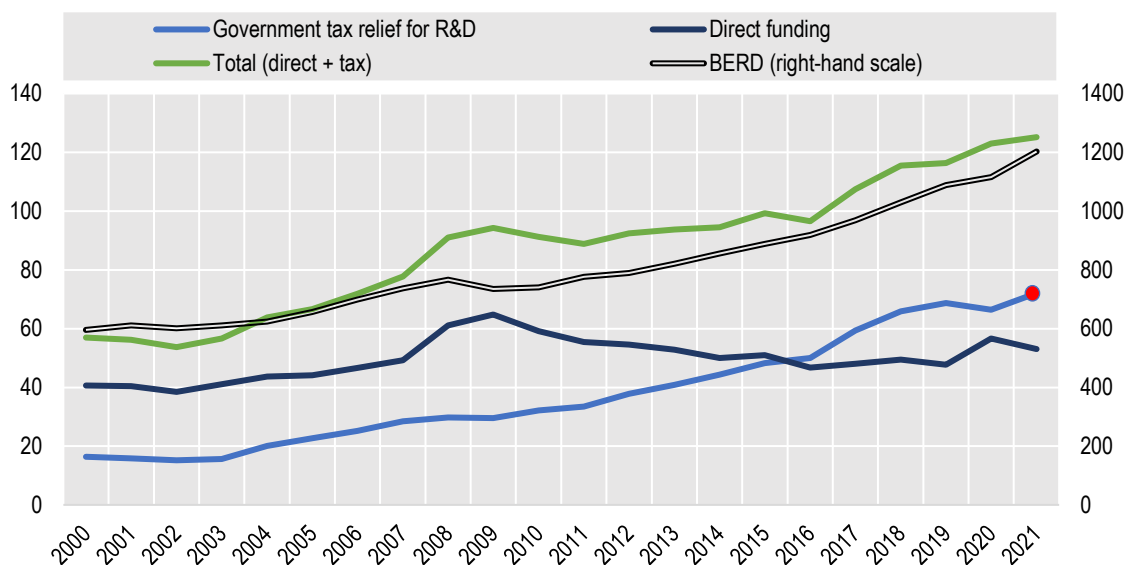
Trends for the EU27 area for tax support for R&D are similar to those for the OECD area. The recovery in business R&D expenditure in 2021 contributed to renewed growth in tax expenditures for R&D relief, while direct funding continued growing at a slower pace than in 2020 but did not fall in real terms as it did in the OECD area.

With a longer-term perspective, total government support for business R&D increased by 50% in the OECD area, from 0.14% of GDP in 2000 to 0.21 % in 2021. This was mostly driven by the steady increase in tax support for R&D, surpassing direct funding for R&D in 2016. In the EU-27 area, total support for business R&D nearly doubled over this period, from 0.10% of GDP to 0.19% of GDP in 2021, with R&D tax incentives surpassing direct funding in 2015.

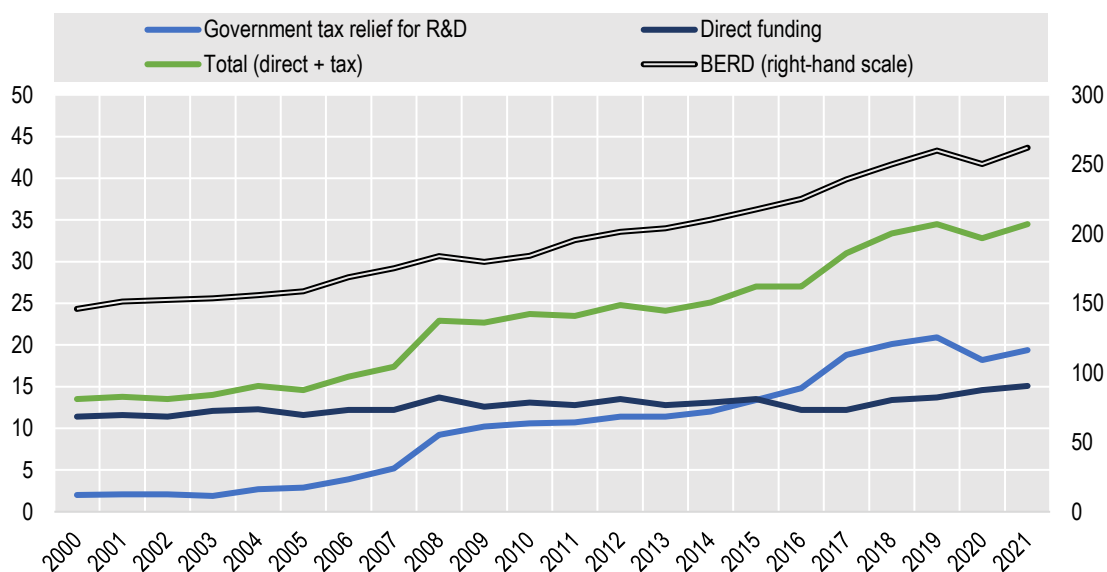
**Figure 3. Trends in government financial support for business R&D, 2000-2021**

Values in constant-price (2015) USD PPP billion

Panel A. OECD



Panel B. EU-27



Note: Direct support estimates include government R&D grants and public procurement of R&D services but exclude loans and other financial instruments that are expected to be repaid in full. Preliminary OECD estimate of government tax relief for R&D expenditures (GTARD) for the OECD area in 2021.

Source: OECD R&D Tax Incentives Database, <https://oe.cd/rntax>, April 2024

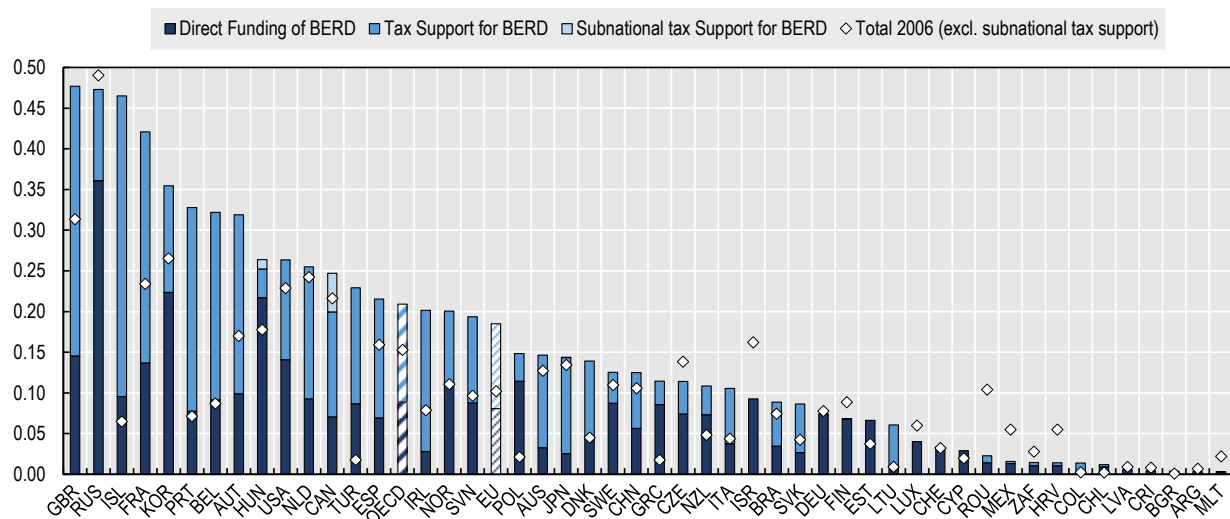
## **R&D tax incentives consolidate their role as key innovation support tool while direct support instruments dwindle in comparison**

Tax incentives for R&D have seen their preeminent role in the business R&D support policy mix in OECD and EU countries reinforced. In 2021, tax incentives accounted for around 55% of total (direct and tax) support for business R&D in the OECD and EU-27 area (Figure 4). For three out of five OECD countries, more than 50% of public support for business R&D was provided in the form of tax relief in 2021.

As a percentage of GDP, tax relief for R&D expenditures in 2021 was largest in Iceland, the United Kingdom, and France, followed by Portugal and Belgium. Combining direct and tax support, the United Kingdom, Iceland, France represented the OECD economies providing the most financial support for business R&D as a percentage of GDP in 2021, followed by Korea and Portugal.

**Figure 4. Direct government funding and government tax support for business R&D, 2021 and 2006**

As a percentage of GDP



Note: For Brazil, Chile, Colombia, Denmark, Romania, South Africa, and the United States, latest available figures of direct and tax support for business R&D refer to 2020 instead of 2021. For the Russian Federation, figures refer to 2019, while those for China and Mexico correspond to 2017. Data on subnational tax support for business R&D is only available for a subgroup of countries (Canada, Japan, Hungary) and not available in the case of China, the Russian Federation, Spain, and the United States. For general and country-specific notes on the estimates of government tax relief for R&D expenditures (GTARD), see [rd-tax-stats-gtard-notes.pdf](https://www.oecd.org/tax/rd-tax-stats-gtard-notes.pdf)

Source: OECD R&D Tax Incentives Database, <https://oe.cd/rntax>, April 2024

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