R&D tax incentives continue to outpace other forms of government support for R&D in most countries

Close to 55% of total support for business R&D in the OECD area is provided through tax incentives.

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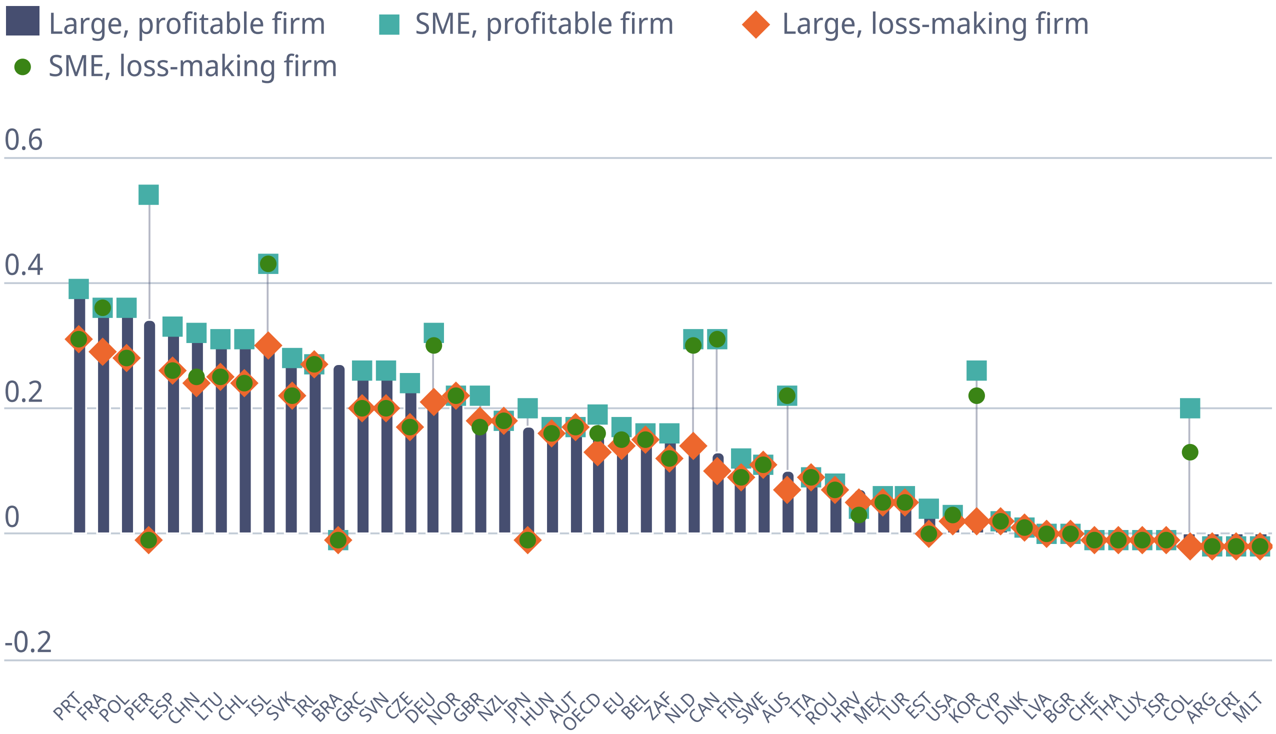
Tax incentives are a widely used and economically significant innovation support policy instrument in most OECD member countries and several other major economies. Thirty-four out of 38 OECD countries granted tax relief for R&D expenditures in 2024, with Estonia introducing a tax incentive for the first time in 2024. Costa Rica, Israel, Latvia and Luxembourg were the four OECD countries that did not provide expenditure-based R&D tax incentives in 2024. OECD estimates of implied marginal R&D tax subsidy rates describe the expected levels of tax support per additional unit of eligible R&D expenditure to which firms with defined characteristics are, in principle, entitled to. Reported tax subsidy rates differentiate between firms of different size (SMEs, large firms) and profitability (profitable, loss-making), accounting for cross-country differences in the availability of preferential provisions for SMEs (e.g. enhanced tax credit/allowance rates) and the treatment of excess claims in the case of insufficient tax liability (e.g. refunds or carry-forward rules for loss-making firms).

Estimates of tax subsidy rates on R&D expenditures, 2024
1 minus B-Index, by firm size and profit scenario

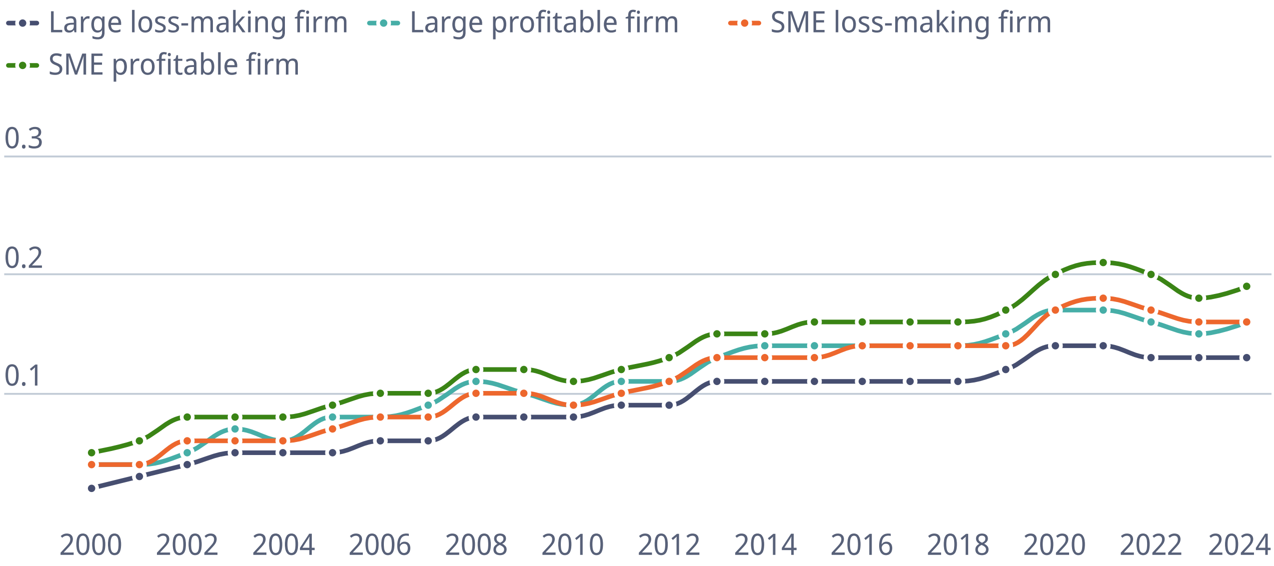


SMEs receive a more favourable tax treatment for R&D expenditure in several OECD countries. For example, as documented in the OECD INNOTAX portal, Australia and Iceland provide enhanced tax credit rates, while Canada and the United States restrict refund provisions to eligible SMEs. In 2024, profitable SMEs in the OECD area can, on average, expect to receive a 19% tax subsidy on R&D expenditures, more than large profitable firms (16%). The average subsidy for SMEs with no profits is lower at 16% on average, compared with 13% for large firms in the same situation. Portugal, France and Poland were the OECD economies offering the most generous R&D tax incentives for large profitable firms in 2024, while R&D tax subsidy rates were highest for profitable SMEs in Iceland, Portugal and France.

The average level of tax subsidy per eligible unit of R&D expenditure across the OECD area has stabilised after decades of sustained growth and a recent short-lived correction. Both the increasing adoption and the generosity of R&D tax incentives in OECD countries contributed to this upward trend over the 2000-24 period. While some of the exceptional tax relief measures introduced following the COVID-19 crisis were withdrawn in 2022 and 2023, estimated R&D tax subsidy rates were up again in 2024 across all modelled scenarios, regardless of business size and profit situation.

Estimations of tax subsidy rates on R&D expenditures, 2000-2024

As a percentage of GDP, OECD countries (unweighted average)



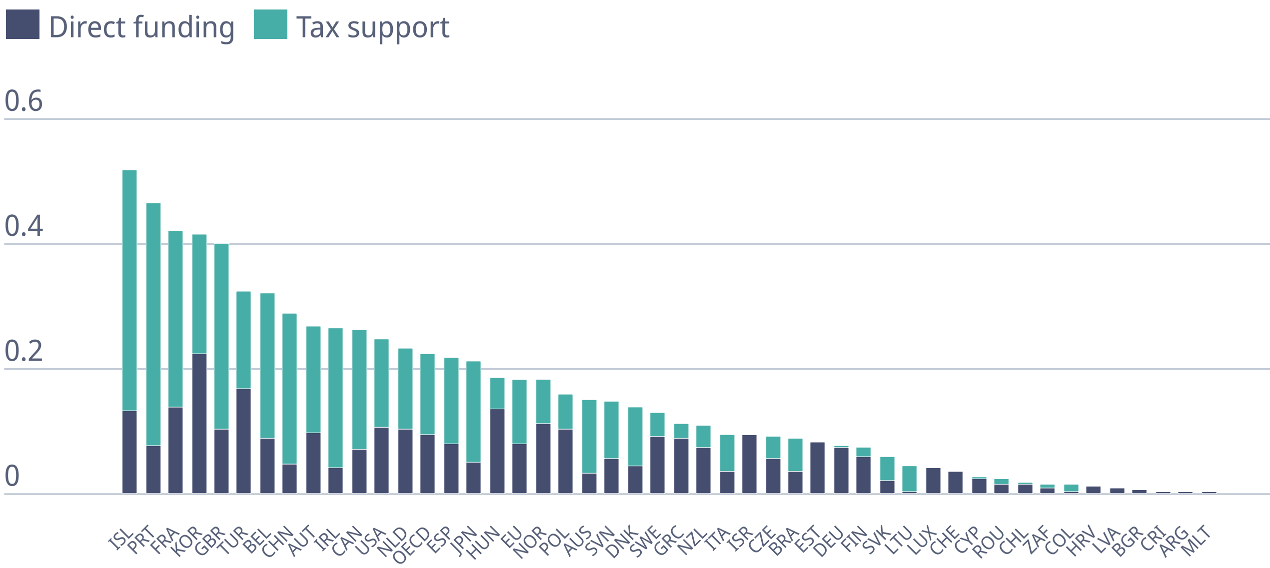
OECD

Twenty-three out of 38 OECD countries provided more support for business R&D through tax incentives than through direct support instruments in 2023. OECD estimates of government tax relief for R&D expenditure reflect the cost of R&D tax support to governments, and they can be compared with and added to estimates of direct government funding for R&D to provide a measure of total financial government support for business R&D (excluding loans and other forms of indirect support). Close to 55% of total support for business R&D in the OECD area was provided through tax incentives, 85% in the case of China. As analysed in related OECD work, these estimates reveal differences in how countries organise financial support for R&D and the objectives they pursue.

In 2023, the economies providing the highest levels of government tax relief for R&D expenditure as a percentage of GDP were Portugal (0.39%), Iceland (0.38%) and the United Kingdom (0.30%), followed by France (0.28%) and China (0.24%). Looking at direct and tax support combined, Iceland (0.52%), Portugal (0.46%) and France (0.42%) provided the most financial support for business R&D relative to GDP.

Government direct funding and tax support for business R&D, 2023

As a percentage of GDP



As a percentage of GDP

Across the OECD area, after increasing for decades, the gap between government tax relief for R&D expenditure and direct support remained stable in 2022 but continued to grow in China. Whilst slowing in 2022, government tax relief for R&D expenditure as percentage of GDP in the OECD area continued its sustained growth trend, reaching 0.13% in 2022 up from 0.05% in 2003. With a slight recovery in 2022, direct funding for R&D remained close to its long-term constant trend of 0.1% of GDP. In China, R&D tax support more than tripled from 0.07% of GDP in 2017 to 0.24% 2022, while direct support (excluding loans from state owned banks) remained constant at 0.05%. This growth appears to be linked to reforms to the R&D tax allowance scheme such as the increase in the rate of R&D tax allowance for all enterprises from 50% to 75% in 2018, and for manufacturing firms from 75% to 100% in 2021.

Trends in government support for business R&D, 2000-2022
As a percentage of GDP

Tax support (OECD), Direct funding (...

As a percentage of GDP

For further information, journalists are invited to contact Elisabeth Schoeffmann in the OECD Media Office (+33 1 45 24 81 18). For further information on the data, please contact RDTaxStatsContact@oecd.org.

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