

OECD R&D Tax Incentive Database^{1,2,3}

General and country-specific notes

OECD time-series estimates of government tax relief for R&D expenditures (GTARD)

General notes

- For Belgium, Brazil, Canada, Colombia, Denmark, France, Italy, Latvia, Portugal, Romania, and the United Kingdom, preliminary R&D tax incentive estimates are reported for 2016 (or closest year). Figures are rounded to the second decimal unless rounding would result in a value of zero.
- For Australia, Brazil, Bulgaria, Croatia, Cyprus, Finland, France, Greece, Israel, Luxembourg, Malta, New Zealand, Slovenia, Switzerland and the United Kingdom, latest available figures refer to 2015 instead of 2016. For Iceland, South Africa and Sweden, latest available figures refer to 2014, and for the United States, figures refer to 2013 instead of 2016.
- In Austria and South Africa, R&D tax incentive support is included in official estimates of direct government funding of business R&D. It is removed from direct funding estimates to avoid double counting. In the case of South Africa, where the overlap of estimates cannot be identified based on available budget data, this transformation was not undertaken.
- In 2016 (or closest year), Bulgaria, Croatia, Estonia, Finland, Germany, Mexico and Switzerland did not provide expenditure-based R&D tax incentives. For Israel, the R&D component of incentives cannot be identified separately at present.
- Estimates do not cover sub-national and income-based R&D tax incentives and are limited to the business sector (excluding tax incentive support to individuals). Data refer to estimated initial revenue loss (foregone revenues) unless otherwise specified.
- Estimates refer to the cost of incentives for business expenditures on R&D, both intramural and extramural, unless otherwise specified.
- R&D tax benefits are taxable in Australia, Canada, Chile, the United Kingdom (Above-the-line tax credit for large enterprises) and the United States. Exemptions of payroll withholding tax and social security contributions (Belgium, Netherlands, Hungary, Sweden and Turkey) are effectively taxable as they reduce the amount of expenditure deductible from taxable income. In some of these countries, estimates of government R&D tax relief may be presented gross of tax and thus overstate the actual cost of R&D tax support.

¹ This database provides a set of indicators that reflect the level and structure of central government support for business R&D in form of R&D tax incentives and direct funding across OECD member countries and eleven non-member economies (Argentina, Brazil, Bulgaria, Colombia, Croatia, Cyprus, Malta, People's Republic of China, Romania, Russian Federation, and South Africa). This includes [time-series indicators of tax expenditures for R&D](#), based on the latest 2018 OECD data collection on tax incentive support for R&D expenditures that was completed in September 2018.

² This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

³ The Statistical data for Israel are supplied by an under the responsibility of the relevant Israeli authorities or third party. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Country specific notes

Country	Details
Argentina	Estimates, based on data provided by MINCyT (Ministerio de Ciencia, Tecnología e Innovación Productiva), refer to the tax credit for R&D projects and exclude non-R&D-specific tax credits awarded as part of the same call (i.e. "Technological modernization", "Technological services" or "Advisory services"). Estimates reflect the value of tax credits of R&D projects approved by Fondo Tecnológico Argentino (FONTAR), and may thus potentially overstate the actual cost of R&D tax support.
Australia	Estimates, on an accrual basis, refer to R&D Tax Incentive, as published in the Taxation Expenditures Statement. The R&D Tax Incentive replaced the previous R&D Tax Concession from July 2011 onwards. The key elements of the R&D Tax Concession were: (1) a 125% Tax Concession (for investment in R&D which is 'Australian-owned') introduced in 1986; (2) an R&D Tax Offset for small companies, enabling them to cash out any tax losses (in relation to Australian-owned R&D only) introduced in 1986; (3) an R&D incremental (175% Premium) Tax Concession for additional investment in Australian-owned R&D (available as of 1 July 2001); and (4) a 175% International Premium incremental tax concession for additional investment in 'foreign-owned' R&D (available as of 1 July 2007).
Austria	Estimates, on a cash basis, refer to the refundable research premium introduced in 2002. Until 2011, estimates also include the cost of an R&D tax allowance which was abolished in that year.
Belgium	Estimates, on an accrual basis, refer to the R&D tax credit and the payroll withholding tax credit for young innovative companies, private companies and partnership agreements with universities. They exclude the investment deduction for environmental projects as the R&D component cannot be identified.
Brazil	Estimates, based on data from the Ministry of Science, Technology, Innovation and Communications (MCTIC), refer to the R&D tax allowance. Direct funding estimates for Brazil based on national sources.
Bulgaria	No R&D tax incentives in 2016.
Canada	Estimates, on a cash basis, refer to the scientific research and experimental development tax credit for current R&D expenditures (expenditures of a capital nature or expenditures for the right to use capital property (lease) do not qualify for SR&ED tax incentives if incurred after 2013). They do not reflect the cost of

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	provincial governments' R&D tax incentives provided by many Canadian provinces. It is estimated that, on average, provincial R&D tax credits would raise tax support for R&D undertaken by CCPCs from 35% of eligible expenditures to nearly 45%, and would raise support for larger firms from 15% to approximately 22%. Estimates for the cost of accelerated depreciation provisions are not available.
Chile	Estimates, on a cash basis, partially include baseline tax deductions taking a 100% deduction of current R&D expenditure as benchmark (a 65% allowance applies in Chile). The estimate for 2016 refers to the tax credit for intramural and extramural R&D (Law 20.570). The estimate for 2008 refers to the R&D tax credit for extramural R&D (Law 20.241) which was replaced by the former tax credit in September 2012.
China	Estimates are based on responses by firms to the national R&D survey. No further details were provided.
Croatia	No R&D tax incentives in 2016. Croatia offered R&D tax allowances (state aid for research and development) from 2003 to 2006 and 2007 to 2014.
Czech Republic	Estimates are on a cash basis refer ot the R&D tax allowance introduced in 2005.
Denmark	Estimates refer to the cost of accelerated depreciation of R&D capital. From 2012 onward, the estimates further reflect the value of the R&D tax credit for deficit related R&D expenditures.
Estonia	No R&D tax incentives in 2016.
Finland	No R&D tax incentives in 2016.
France	Estimates, on an accrual basis, refer to the Cr�dit d'Imp�t Recherche (CIR) and special provisions for social security contributions by young and innovative firms (JEIs) and young university enterprises (JEU), but exclude the cost of accelerated depreciation incentives for capital R&D. The JEI and JEU status were established in 2004 and 2008 respectively.
Germany	No R&D tax incentives in 2016.
Greece	Estimates, on an accrual basis, refer to the volume-based R&D tax allowance which replaced the previously existing, incremental R&d tax allowance scheme in 2013.
Hungary	Estimates refer to the R&D tax allowance, the innovation contribution related R&D tax allowance (available since 2010) and the payroll withholding tax remission

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	(special provision for social security and vocational training contributions for researchers, including Ph.D. students and doctoral candidates, introduced in 2013), but exclude the local business tax allowance. No figures are available for the R&D component of the tax incentive for capital development. The estimates for 2004-2011 (2005-2014) also include the value of the innovation contribution related R&D tax credit (R&D tax credit on wages of researchers).
Iceland	Estimates refer to the R&D tax credit providing a deduction of eligible R&D expenses from the income tax at an enhanced rate of 20 percent. No further details are available.
Ireland	Estimates, on a cash basis, refer to the R&D tax credit on current, machinery and buildings expenditures, introduced in 2004.
Israel	The R&D component of tax incentives cannot be identified separately at present.
Italy	Cash-based estimate for 2016 (year of accrual) refers to the following tax credits: R&D tax credit for SMEs (Law 449/1997), volume-based tax credit for R&D collaborations with universities and public research consortia (Law 449/1997), 10% volume-based R&D tax credit (Law 296/2006), incremental R&D tax credit for collaboration (L.70/2011), R&D tax credit for research wages (Law 83/2012), and an incremental R&D tax credit of 25-50% (Legge di Stabilit� 2015, Article 1, par 35).
Japan	Estimates are on a cash and final revenue loss basis. The volume-based R&D tax credit (permanent measure) is currently available in addition to the open innovation activity-based R&D tax credit (permanent measure) and high R&D intensity-based tax credit (temporary measure until FY2018: 31 April 2019). The high R&D intensity tax credit was introduced in 2008 as alternative option to the incremental R&D tax credit which was abolished with effect of 1 April 2017.
Korea	Estimates refer to the tax credit for research and human resources development and the R&D investment credit. The tax credit for research and human resources development has a volume and incremental component only the larger one of which applies; a volume-based R&D tax credit is further available for high-growth firms with original technology. No further details available on cost estimates.
Latvia	Estimates refer to the R&D tax allowance on current R&D expenditures introduced in 2014 and abolished with effect from 2018.

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Lithuania	Estimates, on an accruals basis, refer to the R&D tax allowance on current R&D expenditures, available since 2008. Estimates for the cost of accelerated depreciation provisions are not available.
Mexico	No R&D tax incentives in 2016. From 2000 to 2008, estimates reflect the value of the R&D tax credit available in Mexico from 1995-2008 and converted into direct assistance in 2009.
Netherlands	Estimates, on a cash basis, refer to the WBSO payroll tax credit for R&D labour and to the R&D tax allowance (RDA) for non-labour related R&D expenditures which was introduced in January 2012 and merged with the WBSO scheme in 2016.
New Zealand	Estimates refer to the tax credit for research and development tax losses, effective as of April 2015. The estimate for 2008 refers instead to the temporary R&D tax credit introduced by New Zealand in 2008 and repealed in 2009.
Norway	Estimates for the fully refundable SKATTEFUNN R&D tax credit, available to SMEs since 2002 and extended to large firms in 2003, cover current and machinery costs.
Poland	The figure for 2016 refers to the R&D tax allowance introduced in that year. Estimates for the cost of accelerated depreciation provisions and tax deductions for R&D Centres are not available. New Technology Tax Relief scheme for the acquisition of intangible assets is excluded as it does not necessarily apply to R&D.
Portugal	Estimates, on an accrual basis, for the SIFIDE-II tax credit which includes current and R&D-related capital expenditures. Following the temporary suspension of the tax credit in 2004-05, the tax credit was reintroduced in 2006, at the same volume-based and incremental rate.
Romania	Figures refer to the R&D tax allowance on current and depreciation related R&D expenditures, available since 2010. Estimates for the cost of accelerated depreciation provisions are not available.
Russian Federation	Figures for 2000-16, based on data published by the Ministry of Finance of the Russian Federation, refer to the R&D tax allowance, accelerated depreciation provision for R&D capital and the R&D tax credit. The R&D tax credit covers value-added tax exemptions on R&D and property tax credits for national R&D centres and organisations implementing state-approved R&D projects. R&D tax allowance estimates were adjusted to reflect only the value of the enhanced 50% tax deduction and avoid the inclusion of baseline tax deductions. The estimates for the VAT

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	exemption, available to business and non-business entities performing R&D, were adjusted, based on the average percentage of GERD performed by business in the Russian Federation from 2010 to 2016, to reflect only tax relief to business.
Slovak Republic	Estimates, on an accrual basis, refer to the R&D tax allowance scheme restricted to grant recipients (Tax relief for subsidy recipients: Income Tax Act §30b). From 2015 onward, estimates also include the R&D super deduction introduced that year.
Slovenia	Estimates, on an accrual basis, refer to the R&D tax allowance scheme introduced in 2005.
South Africa	Figures, on a cash basis, refer to the volume-based R&D tax allowance scheme and are based on the National Budget Review.
Spain	Figures refer to the R&D and innovation tax credit, including support for technological innovation. According to data from a non-random subset of firms, this instrument (Informes Motivados) accounts for around 40% of qualifying expenditures and deductions for R&D and technological innovations. Estimates do not include the cost of the accelerated depreciation provision for R&D capital. The estimates for 2014-2016 also refer to allowances for employers' social security contributions introduced through Royal Decree 475/2014 of 13 June.
Sweden	Figures refer to the partial exemption of social security contributions for R&D employees introduced in Sweden in 2014.
Switzerland	No R&D tax incentives in 2016.
Turkey	Estimates, on a cash basis, refer to allowances for current R&D and machinery expenditures in eligible R&D centres and companies (R&D discount under Corporate Tax Law and Law No 5746) and to partial relief on social security contributions, available since 2008. Figures may include the cost of standard deductions for current R&D expenditures and may therefore overstate tax support in relation to other countries. Estimates were calculated by Turkstat based on data from the Turkish Ministry of Finance.
United Kingdom	Estimates, on an accrual basis, refer to the Research & Development Relief for Corporation Tax, and the Research and Development Expenditure Credit (RDEC) Scheme for large companies introduced for expenditure incurred on or after 1 April 2013. The RDEC scheme was initially optional, running alongside the Large Company enhanced-deduction scheme which it replaced in April 2016. Estimates for the cost

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United States	of accelerated depreciation provisions are not available. Enhanced R&d tax deductions were first introduced for SMEs in 2000 and extended to large companies from 2002. Estimates refer to the federal research and experimentation tax credit (only corporations), based on SOI corporate tax return data. For international comparability, the cost of allowing for the expensing of research expenditures is not included.

Source: OECD, R&D Tax Incentive Indicators, <http://oe.cd/rdtax>, November 2018.