

# R&D Tax Incentives: United Kingdom, 2020

## Design of R&D tax relief provisions

The **United Kingdom** provides R&D tax relief through a volume-based R&D tax allowance which, in the case of large companies, was replaced by a volume-based tax credit (RDEC) in 2016.

**Table 1. Main design features of R&D tax incentives in United Kingdom, 2020**

	Corporate Tax Credit for Research & Development	Research and Development Expenditure Credit Scheme (RDEC)
<b>Tax incentive*</b>	Tax allowance	Tax credit
<b>Type of instrument</b>	Volume-based	Volume-based
<b>Eligible expenditures†</b>	Current, intangibles	
<b>Headline rates (%)</b>	130	13
<b>Refund</b>	Yes	
<b>Carry-over (years)</b>	Indefinite (carry-forward)	
<b>R&amp;D tax relief</b>	EUR 7.5 million per project (SMEs)	No
<b>Ceilings</b>	<ul style="list-style-type: none"> <li>If connected subcontractor, lower of:                             <ul style="list-style-type: none"> <li>- payment made to subcontractor;</li> <li>- relevant expenditure of subcontractor</li> </ul> </li> <li>If unconnected subcontractor, 65% of total subcontracted R&amp;D costs</li> </ul>	No
<b>Refund-specific</b>	14.5% of surrenderable loss	No

\* The United Kingdom also offers an accelerated depreciation (research and development allowance - RDA scheme) of machinery and equipment, buildings and intangibles used in the process of R&D (immediate write-off). In addition, the UK provide an income-based tax incentive for outcomes of R&D activities. This 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:

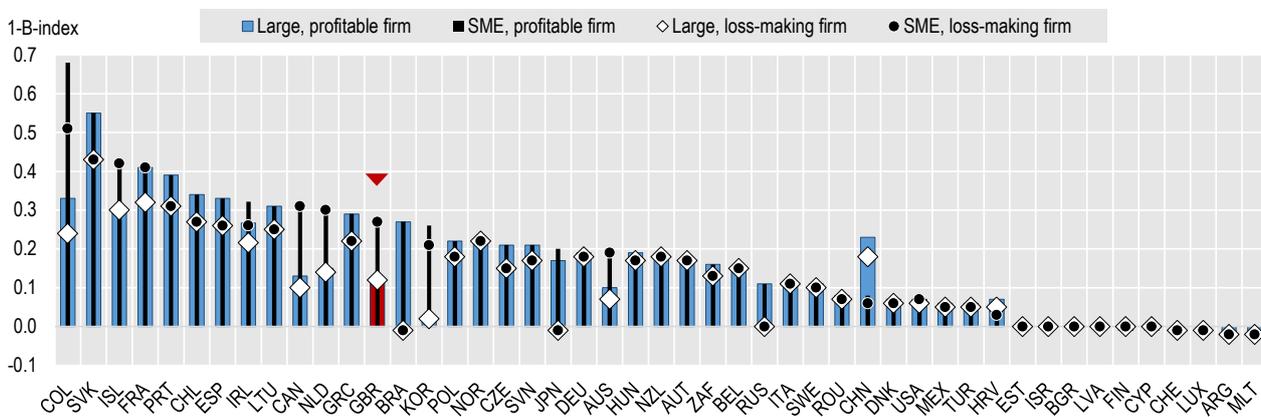
- Under the R&D tax allowance, eligible subcontracted expenditures are limited to 65% of total costs (uncapped). A refund is available to SMEs for up to 14.5% of the period's surrenderable loss.
- There is no upper limit to the amount of refundable credits in the case of the RDEC scheme.

## Generosity of R&D tax support in 2020

Differences in the design of R&D tax incentives drive a 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 the **United Kingdom** is estimated at 0.27 (0.27), well above the OECD median of 0.20 (0.18). The tax subsidy rate for large enterprises is equal to 0.12 (0.12) in the profit (loss)-making scenario, below the OECD median of 0.17 (0.15).

**Figure 1. Implied tax subsidy rates on R&D expenditures: United Kingdom, 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, the **United Kingdom** undertook **two changes** in its R&D tax relief provisions.

- The R&D Expenditure Credit has been increased from 12% to 13% with effect from April 1, 2020.
- The proposed introduction of the cash credit cap for the SME tax allowance regime which was expected to come into effect from 1 April 2020 has been delayed until 1 April 2021.

Neither of these policy changes are related to **the COVID-19 crisis**.

## Trends in the generosity of R&D tax support

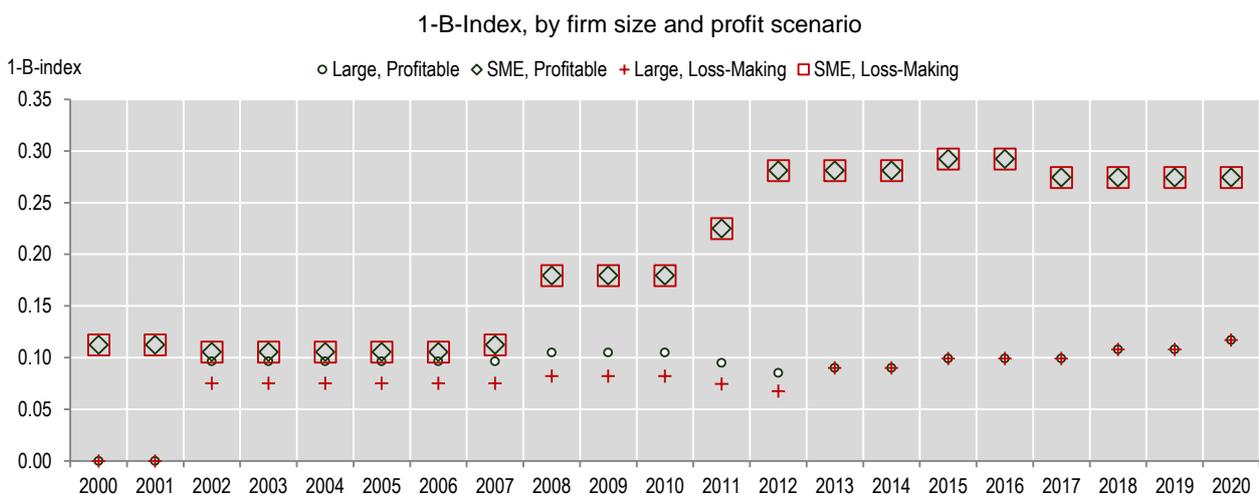
In the **United Kingdom**, implied marginal R&D tax subsidy rates for (profitable and loss-making) SMEs have increased since the introduction of an SME-specific tax allowance in 2000. This increase is directly linked to the step-wise enhancement of SME tax allowance rates, from initially 50% to 75% in 2008, 100% in 2011, 125% in 2012 and 130% in 2015.

In the case of large firms, R&D tax subsidy rates increased in four occasions: 2002, when the tax allowance was extended to large firms, 2008, when the tax allowance rate for large companies was raised from 25 to 30%, 2018, when the rate of the R&D tax credit for large companies (RDEC) was raised from 11% to 12% and finally, 2020, when the RDEC rate was further increased to 13%.

In addition, changes in corporate income tax (CIT) rates led to smaller fluctuation in the R&D tax subsidy rates estimated for SMEs and large firms throughout this period, i.e. in the years 2008, 2011-15 and 2017.

Following the introduction of the refundable R&D tax credit in 2013, tax subsidy rates for profitable and loss-making large firms coincide as do those for profitable and loss-making large SMEs. In 2020, tax subsidy rates for large firms increased when the rate of the refundable R&D tax credit was raised from 12% to 13%.

**Figure 2. Implied tax subsidy rates on R&D expenditures: United Kingdom, 2000-20**



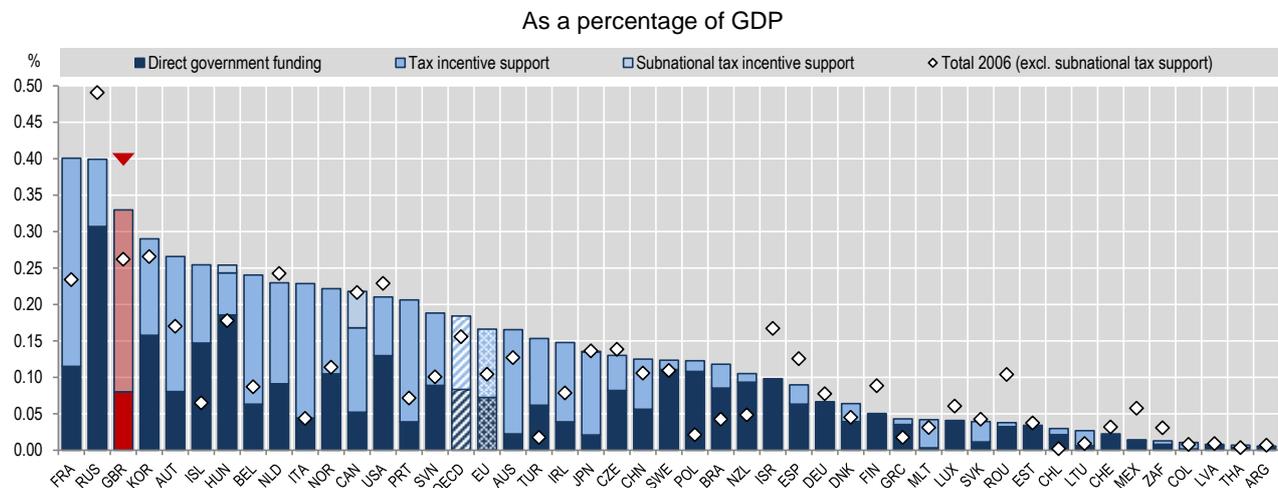
Note: Implied marginal tax subsidy rates, presented for different firm size and profitability scenarios, are calculated based on headline tax credit/allowance rates (see [methodology](#) and [country-specific notes](#)), providing an upper bound value of the generosity of R&D tax support, not reflecting 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

In 2018, the **United Kingdom** is among OECD countries that provide the largest level of government support to business R&D as a percentage of GDP, at a rate equivalent to 0.33% of GDP.

**Figure 3. Direct government funding of business R&D and tax incentives for R&D, 2018 (nearest year)**



Note: Data on subnational tax support are only available for a group of countries. \*For the United Kingdom, the reference year is 2014 instead of 2006 due to a break in-series in government tax relief for R&D, linked to the inclusion of additional claims in the production of HMRC tax relief statistics (HMRC, 2020).

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

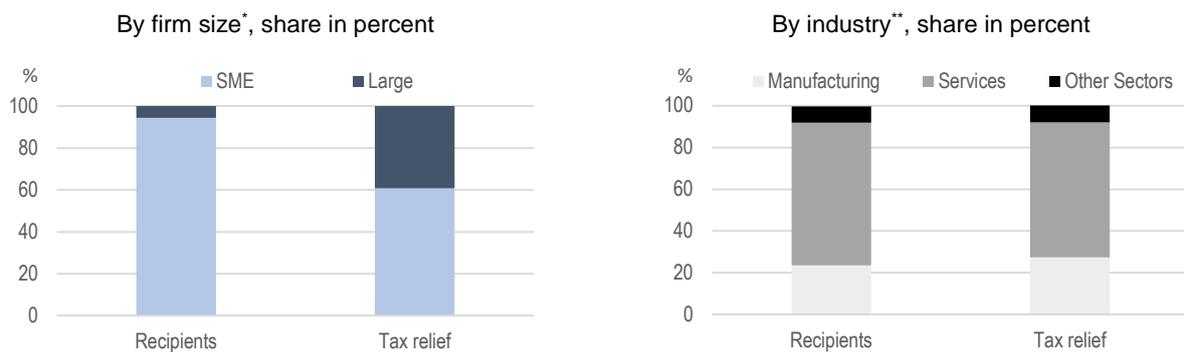
**Key points:**

- From 2014\* to 2018, total government support for BERD as a percentage of GDP increased in the **United Kingdom** by 0.07 percentage point (pp).
- From 2014 to 2018, business R&D intensity in the **United Kingdom** increased from 1.07% to 1.17%.
- In 2018, tax incentives accounted for 76% of government support for BERD in the **United Kingdom**.

### 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, 2018**



Note: Figures refer to the Corporate R&D Tax Credit and RDEC Schemes. Recipient figures are based on claims. \*SMEs meet the conditions specified in the EU SME definition except that can have up to 500 employees, turnover up to EUR 100m and have a balance sheet total of up to EUR 86m. \*\*Economic activity is classified based on SIC 2007 as follows: manufacturing (code C), services (codes G-S), other sectors (codes A,B,D,E,F), not attributable (calculating as remaining difference to total GTARD).

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

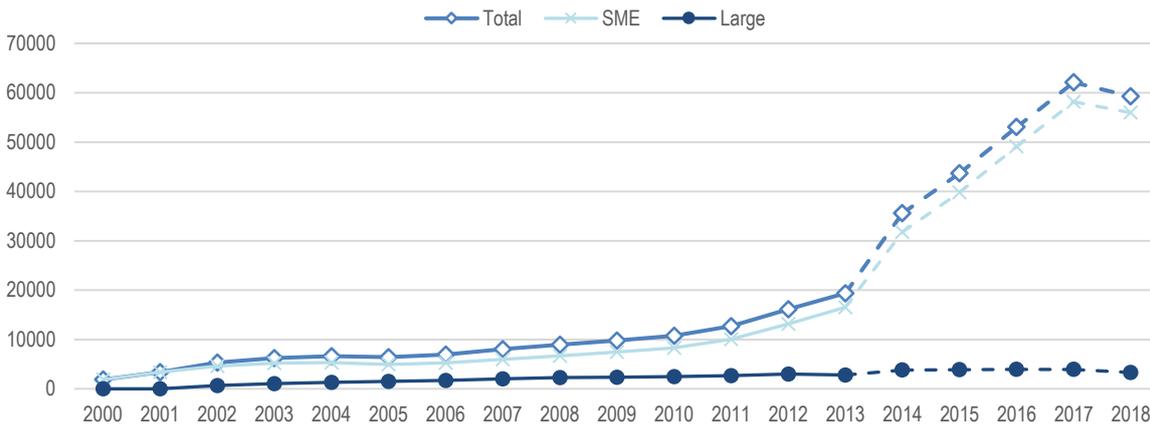
**Key points:**

- In **United Kingdom**, SMEs accounted for 94% of R&D tax relief recipients in 2018, while the share of tax support accounted for by SMEs amounted to around 61%. In the same year, 39% of R&D tax benefits were allocated to large firms, comprising almost 6% of the population of R&D tax relief recipients.
- In 2018, firms in services represented 69% of R&D tax relief recipients in **United Kingdom**, followed by firms in manufacturing with a share of 23%. The share of tax benefits accounted for the latter amounted to around 29% in that year, while this share reached almost 63% in the case of firms in services.

## Trends in the uptake of R&D tax incentives

Over the period 2000-2018, the number of R&D tax relief recipients increased significantly in **United Kingdom**, reaching close to 59 265 in 2018. The sharp increase from 2013 onwards, primarily attributable to SME claims, can be linked to a number of factors which include an increase in SME allowance rates (2012-13, 2015-16) and the payable credit rate (2014-15), the introduction of a new payable tax credit for large companies in 2013 as well as the inclusion of additional claims from 2014 onwards. Between 2014 and 2017, the number of SMEs receiving R&D tax support increased nearly two-fold from around 31 765 to 58 180, while the number of large firms receiving tax support rose by 3%, from 3795 in 2014 to 3910 in 2017. Over the 2000-18 period, SMEs accounted for more than 90% of R&D tax relief recipients in United Kingdom.

**Figure 5. Number of R&D tax relief recipients, United Kingdom, 2000-2018**



Note: Figures refer to the Corporate R&D Tax Credit and RDEC Schemes and correspond to claims rather than recipients. Break in-series in 2014 (see notes for Fig 3). The figures for 2018 are based on incomplete data and are expected to increase.

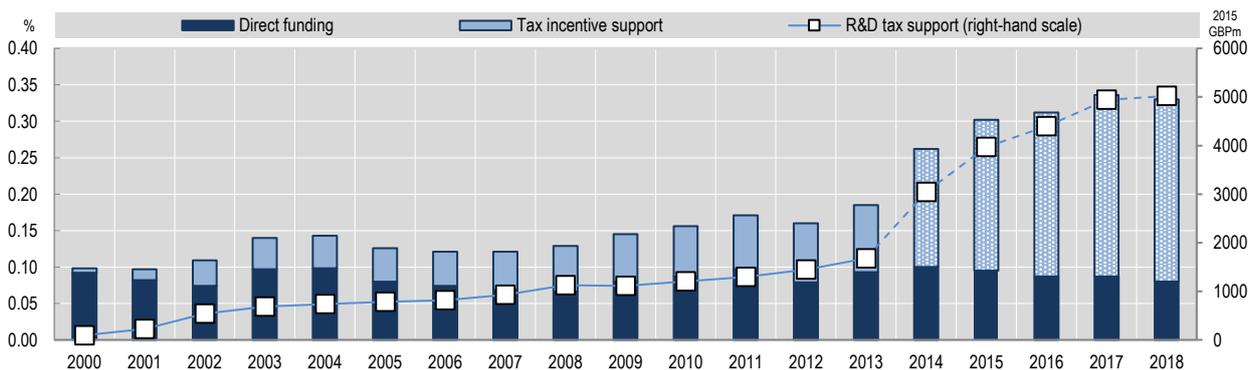
Source: OECD, R&D Tax Incentives Database, <http://oe.cd/rdtax>, March 2021.

## Trends in government support for business R&D

Between 2000 and 2018, the importance of R&D tax support has increased significantly in **United Kingdom**, both in absolute and relative terms. The upward trend from 2013 onwards, mirroring the trend in the number of R&D tax relief recipients, can be attributed to the same set of factors discussed earlier (see Figure 5).

**Figure 6. Direct funding of business R&D and tax incentives for R&D, United Kingdom, 2000-18**

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



Source: OECD, R&D Tax Incentives Database, <http://oe.cd/rdtax>, March 2021. Break-in-series in 2014 (see notes for Fig 3).

- The cost of government tax relief for R&D rose (in 2015 prices) from GBP 816 million in 2006 to GBP 5 020 million in 2018 (1 GBP = 1.105 EUR, Q3 2020).
- As percentage of GDP, R&D tax support increased from 0.05% of GDP in 2006 to 0.25% in 2018.
- Direct funding also increased over this period – from 0.07% in 2006 to 0.08% of GDP in 2018.
- The share of tax incentives in total government support increased from 39% in 2006 to 76% in 2018.

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