

Statistical bulletin

Research and development expenditure by the UK government: 2018

Research and development and related expenditure by UK government departments, research councils and higher education funding councils. Formerly released as UK government expenditure on science, engineering and technology (SET).

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Release date:
15 June 2020

Next release:
10 June 2021

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1 . Main points

- The UK government's net expenditure on research and development (R&D) grew by £0.7 billion to £12.6 billion in 2018, an increase of 5.7%; this followed a similar growth of 5.9% in 2017.
- Total net expenditure on R&D and knowledge transfer activities reached £12.9 billion in 2018 and represented 0.6% of gross domestic product (GDP), unchanged since 2017.
- UK Research and Innovation (UKRI), which includes the UK's seven research councils, contributed the most to net expenditure on R&D and knowledge transfer activities in 2018, at £4.9 billion, 38% of the total.
- In constant prices (adjusted for inflation), civil net expenditure on R&D and knowledge transfer activities (excluding EU R&D budget contributions) increased by 21.0% to £10.4 billion in 2018, up from £8.6 billion in 2007.
- Historically, civil departmental R&D has been concentrated in a small number of departments, with the top three spending 82% of the total in 2018, following a similar pattern to recent years.
- Since 2007, defence net expenditure on R&D decreased by 36.6% in constant prices to £1.6 billion in 2018.
- In 2018 UK government departments' net expenditure on R&D into health accounted for 22% of the total and has remained at a similar proportion over the last decade.
- UK contributions to EU R&D expenditure fell to £873 million in 2018, from a peak of £979 million in 2017; this was still nearly double the value of £454 million in constant prices in 2007.

2 . Research and development expenditure by the UK government data

[Research and development expenditure by the UK government: 2018](#)

Dataset | Released 15 June 2020

Annual net expenditure by UK government departments, research councils and higher education funding councils on research and development (R&D) and knowledge transfer activities; by current and constant prices (formerly referred to as science, engineering and technology (SET)).

3 . Measuring the data

The main source of estimates for this publication is the annual Government Research and Development survey (GovERD). The data are collected by an annual census survey of UK government departments, research councils and higher education funding councils that perform or fund research and development (R&D).

Estimates should not be confused with the [Gross domestic expenditure on research and development, UK: 2018 \(GERD\)](#) statistical bulletin published on 2 April 2020, which only includes expenditure on R&D performed "in-house", that is, by organisations themselves, by all sectors of the economy. Most estimates in the Research and development expenditure by the UK government: 2018 release are on a net expenditure basis, that is, "in-house" R&D performed, plus purchased or funding provided for R&D, less funding received for R&D. The datasets also include estimates of expenditure on knowledge transfer activities and the UK's contribution to the EU's R&D budget.

The UK government's Industrial Strategy includes a target to "raise investment on R&D to 2.4% of GDP by 2027". UK R&D statistics are needed to assess how sectors of the economy are contributing towards reaching this policy goal. Progress to this target can be seen in the GERD statistical bulletin, which shows that GERD represented 1.71% of GDP in 2018, up from 1.67% in 2017.

This bulletin was formerly called [UK government expenditure on science, engineering and technology](#) (SET). It covers estimates of expenditure by government departments, research councils and higher education funding councils (HEFCs). More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the [Research and development expenditure by the UK government QMI](#).

Coronavirus (COVID-19)

The collection of the data contained in this statistical bulletin has not been affected by the coronavirus (COVID-19) outbreak.

The Office for National Statistics (ONS) has released a [public statement](#) on COVID-19 and the production of statistics. Specific queries must be directed to the [Media Relations Office](#).

4 . Related links

[Gross domestic expenditure on research and development, UK: 2018](#)

Bulletin | Released 2 April 2020

Annual estimates of research and development performed and funded by business enterprise, higher education, government, UK Research and Innovation (UKRI), and private non-profit organisations.

[Business enterprise research and development, UK: 2018](#)

Bulletin | Released 21 November 2019

Annual spending and numbers employed on research and development in the UK broken down by product sector, and civil and defence type of research.