

Statistical bulletin

Business enterprise research and development, UK: 2020

Research and development spending in the UK by businesses, broken down by product sector and civil and defence work, along with numbers employed.



Contact:
Cecil Prescott
RandD@ons.gov.uk
+44 1633 456767

Release date:
19 November 2021

Next release:
17 November 2022

Notice

25 November 2021

The dataset associated with this publication has been updated and now includes tables which were not available at the time of publication on 19 November 2021.

Table of contents

1. [Main points](#)
2. [Business enterprise research and development data](#)
3. [Measuring the data](#)
4. [Related links](#)

1 . Main points

- Expenditure on research and development (R&D) performed by UK businesses (in current prices) grew by £900 million to £26.9 billion in 2020; the increase of 3.5% was similar to recent year-on-year growth.
- The software development product group had the largest growth in expenditure on R&D in 2020; with an increase of £314 million (18.3%) to £2.0 billion.
- The East of England had the largest growth in the value of regional expenditure, increasing by £425 million (7.8%) to £5.8 billion in 2020.
- In 2020, total UK business employment in R&D grew by 18,000 to 283,000 full-time equivalent positions, an increase of 6.8% since 2019.
- In 2020, 75% of business R&D was funded by businesses' own funds (£20.3 billion) followed by overseas funding at 15% (£3.9 billion); businesses' own funds also had the largest growth in the value of funding of R&D in 2020, which increased by £661 million.
- In 2020, business R&D consisted of civil R&D of 93% (£25.0 billion) and defence R&D of 7% (£2.0 billion); the split between civil and defence has changed over time with civil R&D accounting for 88% and defence R&D accounting for 12% in 2009.

2 . Business enterprise research and development data

[Business enterprise research and development](#)

Dataset | Released 19 November 2021

Annual research and development (R&D) spending and employment by UK businesses, including data by product category and industry, civil and defence, and regional spread.

[Business enterprise research and development time series](#)

Dataset | Released 19 November 2021

Annual breakdown of R&D spending and employment by UK businesses across different market sectors.

3 . Measuring the data

The main source of estimates for this publication is the annual business enterprise research and development (BERD) survey. The data are collected by an annual survey of UK businesses that perform research and development (R&D).

In this statistical bulletin, R&D and related concepts follow internationally agreed standards defined by the Organisation for Economic Co-operation and Development (OECD), as published in the [Frascati Manual](#) (2015).

R&D is measured by the expenditure on R&D performed by a business, or the funding received by a business for R&D work. These are often but not always the same. Performance is regarded as a more accurate measure than funding received by a business, as not all funds received may be used as intended. This release reports on R&D expenditure in UK businesses irrespective of the country of residence of the ultimate owner or users of the R&D produced.

All figures quoted are in current prices unless otherwise stated.

Coronavirus (COVID-19)

The response rate for the 2020 BERD survey in Great Britain was 54%, which was lower than usual because of the coronavirus (COVID-19) pandemic. This was the second year the pandemic has affected response; the rate for 2019 was 56%. The pre-pandemic rate for 2018 was 85%. This means that the estimates in this statistical bulletin are subject to more uncertainty than usual because of fewer responses on which to base the survey results.

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.

Datasets

Please note that only tables 1 to 7 of the dataset were available at the time of the publication of this release. This was due to the need to carry out additional quality assurance on the remaining data tables. We will aim to publish the full set of tables by Friday 26 November 2021 and these will be made available within this release.

Quality

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the [Business Enterprise Research and Development Survey QMI](#).

4 . Related links

[Gross domestic expenditure on research and development, UK: 2019](#)

Bulletin | Released 4 August 2021

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

[Research and development expenditure by the UK government: 2019](#)

Bulletin | Released 15 April 2021

R&D 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).