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Gross domestic expenditure on research and development, by funding and performing sectors in selected OECD countries

| Country | Year ¹ | R&D expenditure | | Financed by | | | Performed by | | | |
|----------------------|-------------------|--------------------------------|-------------------|----------------------------|-------------------|--|----------------------------|-------------------|--------------------------------------|-------------------------|
| | | Millions of US-\$ ² | Share of GDP in % | Business enterprise sector | Government sector | Higher education and PNP sector; abroad ^{3 4} | Business enterprise sector | Government sector | Higher education sector ³ | PNP sector ⁴ |
| Share in % | | | | | | | | | | |
| Germany ⁵ | 2015 | 114,097.6 | 2.93 | 65.7 | 27.9 | 6.4 | 68.7 | 14.1 | 17.3 | y |
| | 2016 | 122,472.2 | 2.94 | 65.2 | 28.5 | 6.3 | 68.2 | 13.8 | 18.0 | y |
| | 2017 | 133,668.0 | 3.05 | 66.2 | 27.7 | 6.1 | 69.1 | 13.5 | 17.4 | y |
| | 2018 | 142,080.3 | 3.12 | 66.0 | 27.8 | 6.1 | 68.9 | 13.5 | 17.6 | y |
| | 2019 | 148,149.8 | 3.19 | 64.5 | 27.8 | 7.7 | 68.9 | 13.7 | 17.4 | y |
| Finland ⁶ | 2015 | 6,687.9 | 2.87 | 54.8 | 28.9 | 16.4 | 66.7 | 8.2 | 24.4 | 0.8 |
| | 2016 | 6,727.4 | 2.72 | 57.0 | 28.9 | 14.1 | 65.8 | 8.2 | 25.1 | 0.9 |
| | 2017 | 7,147.7 | 2.73 | 58.0 | 29.0 | 13.0 | 65.3 | 8.5 | 25.4 | 0.8 |
| | 2018 | 7,559.7 | 2.75 | 55.8 | 28.3 | 15.9 | 65.7 | 8.3 | 25.2 | 0.8 |
| | 2019 | 7,956.4 | 2.79 | 54.3 | 27.8 | 17.9 | 65.6 | 8.1 | 25.4 | 0.9 |
| France | 2015 | 61,629.1 | 2.27 | 54.0 | 34.8 | 11.2 | 63.7 | 12.8 | 22.0 | 1.5 |
| | 2016 | 63,651.4 | 2.22 | 56.0 | 32.4 | 11.6 | 65.1 | 12.7 | 20.5 | 1.6 |
| | 2017 | 65,730.1 | 2.20 | 56.1 | 32.4 | 11.5 | 65.3 | 12.5 | 20.7 | 1.6 |
| | 2018 | 68,617.9 | 2.19 | 56.7 | 31.6 | 11.7 | 65.5 | 12.5 | 20.5 | 1.6 |
| | 2019 | 73,286.5 | 2.20 | 56.7 | 32.5 | 10.8 | 65.8 | 12.4 | 20.1 | 1.8 |
| Italy | 2015 | 29,994.8 | 1.34 | 50.0 | 38.0 | 12.0 | 58.2 | 13.1 | 25.5 | 3.2 |
| | 2016 | 33,076.6 | 1.37 | 52.1 | 35.2 | 12.7 | 60.8 | 12.6 | 24.2 | 2.5 |
| | 2017 | 34,488.8 | 1.37 | 53.7 | 32.3 | 14.0 | 62.4 | 12.4 | 23.6 | 1.7 |
| | 2018 | 37,044.5 | 1.42 | 54.6 | 32.7 | 12.7 | 63.3 | 12.4 | 22.8 | 1.5 |
| | 2019 | 39,279.4 | 1.47 | 55.9 | 32.3 | 11.7 | 63.2 | 12.6 | 22.5 | 1.8 |
| Sweden ⁷ | 2015 | 15,489.1 | 3.22 | 57.3 | z | 4.3 | 69.7 | 3.4 | 26.7 | 0.2 |
| | 2016 | 16,250.6 | 3.25 | - | - | - | 69.6 | 3.4 | 26.8 | 0.2 |
| | 2017 | 17,569.8 | 3.36 | 60.8 | 25.0 | 14.1 | 71.3 | 3.6 | 24.9 | 0.1 |
| | 2018 | 18,097.0 | 3.32 | - | - | - | 71.0 | 3.6 | 25.3 | 0.1 |
| | 2019 | 19,269.0 | 3.39 | - | - | - | 71.7 | 4.5 | 23.7 | 0.1 |
| United Kingdom | 2015 | 45,665.9 | 1.65 | 49.0 | 27.7 | 23.4 | 66.0 | 6.6 | 25.3 | 2.0 |
| | 2016 | 48,111.3 | 1.66 | 51.8 | 26.3 | 22.0 | 67.1 | 6.6 | 24.3 | 2.1 |
| | 2017 | 50,845.1 | 1.68 | 53.7 | 26.0 | 20.3 | 68.0 | 6.3 | 23.5 | 2.2 |
| | 2018 | 54,234.3 | 1.73 | 54.8 | 25.9 | 19.3 | 67.6 | 6.6 | 23.6 | 2.2 |
| | 2019 | 56,935.7 | 1.76 | - | - | - | 66.6 | 6.6 | 23.1 | 2.3 |

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Gross domestic expenditure on research and development, by funding and performing sectors in selected OECD countries

| Country | Year ¹ | R&D expenditure | | Financed by | | | Performed by | | | |
|----------------------------|-------------------|--------------------------------|-------------------|----------------------------|-------------------|--|----------------------------|-------------------|--------------------------------------|-------------------------|
| | | Millions of US-\$ ² | Share of GDP in % | Business enterprise sector | Government sector | Higher education and PNP sector; abroad ^{3 4} | Business enterprise sector | Government sector | Higher education sector ³ | PNP sector ⁴ |
| Share in % | | | | | | | | | | |
| Japan ⁸ | 2015 | 168,514.0 | 3.24 | 78.0 | 15.4 | 6.6 | 78.5 | 7.9 | 12.3 | 1.3 |
| | 2016 | 160,269.3 | 3.11 | 78.1 | 15.0 | 6.9 | 78.8 | 7.5 | 12.3 | 1.4 |
| | 2017 | 166,621.7 | 3.17 | 78.3 | 15.0 | 6.7 | 78.8 | 7.8 | 12.0 | 1.4 |
| | 2018 | 172,785.9 | 3.22 | 79.1 | 14.6 | 6.4 | 79.4 | 7.8 | 11.6 | 1.3 |
| | 2019 | 173,267.1 | 3.20 | 78.9 | 14.7 | 6.4 | 79.2 | 7.8 | 11.7 | 1.3 |
| Canada | 2015 | 27,004.7 | 1.69 | 44.0 | 31.6 | 24.4 | 53.3 | 7.0 | 39.3 | 0.5 |
| | 2016 | 29,009.7 | 1.73 | 42.7 | 30.9 | 26.4 | 53.5 | 6.6 | 39.4 | 0.4 |
| | 2017 | 29,767.3 | 1.69 | 43.1 | 32.4 | 24.5 | 52.7 | 7.0 | 39.7 | 0.5 |
| | 2018 | 31,268.6 | 1.68 | 42.7 | 32.2 | 25.1 | 52.1 | 7.2 | 40.3 | 0.5 |
| | 2019 | 30,312.7 | 1.59 | 41.7 | 33.0 | 25.3 | 50.6 | 7.5 | 41.5 | 0.4 |
| Korea | 2015 | 76,922.0 | 3.98 | 74.5 | 23.7 | 1.8 | 77.5 | 11.7 | 9.1 | 1.6 |
| | 2016 | 80,816.0 | 3.99 | 75.4 | 22.7 | 1.9 | 77.7 | 11.5 | 9.1 | 1.6 |
| | 2017 | 90,289.9 | 4.29 | 76.2 | 21.6 | 2.2 | 79.4 | 10.7 | 8.5 | 1.4 |
| | 2018 | 99,025.7 | 4.52 | 76.6 | 20.6 | 2.8 | 80.3 | 10.1 | 8.2 | 1.4 |
| | 2019 | 102,521.4 | 4.64 | 76.9 | 20.7 | 2.4 | 80.3 | 10.0 | 8.3 | 1.4 |
| United States ⁹ | 2015 | 495,893.0 | 2.72 | 62.5 | 25.2 | 12.3 | 71.8 | 11.0 | 13.0 | 4.2 |
| | 2016 | 522,652.0 | 2.79 | 63.2 | 23.4 | 13.4 | 72.6 | 10.0 | 13.0 | 4.4 |
| | 2017 | 556,343.0 | 2.85 | 62.5 | 22.9 | 14.6 | 72.9 | 9.7 | 12.8 | 4.6 |
| | 2018 | 607,474.0 | 2.95 | 63.1 | 22.3 | 14.5 | 73.4 | 9.9 | 12.3 | 4.4 |
| | 2019 | 657,459.0 | 3.07 | 63.3 | 22.1 | 14.6 | 73.9 | 9.9 | 12.0 | 4.3 |

y = data included in another position; z = value not stated for reasons of confidentiality, but included in the total.

- 1 Some figures are revised, provisional, estimated or only partly comparable with figures from previous years or include other sectors (see original edition of "Main Science and Technology Indicators 2021/1").
- 2 Nominal expenditures converted into US dollar purchasing power parities.
- 3 Including general funding for higher education research.
- 4 PNP: private non-profit institutions.
- 5 The PNP sector is included in the performance data of the government sector. As of 2016, increases of expenditure on higher education are partly due to an methodological adjustment of the R&D coefficients.
- 6 Funds received by the state research institutes from external sources are excluded from government allocations.
- 7 Excluding funding by public research foundations. 2015 data on GERD financed by the government sector and foreign sources are considered confidential.
- 8 Government budget allocations for R&D data represent the budget for science and technology and cover central government only.
- 9 Excludes most or all capital expenditure (included in the government sector only).

Last update: September 28, 2021

This table also appears in the Federal Report on Research and Innovation as Table 3.

Source: OECD (Main Science and Technology Indicators 2021/1) and calculations of the German Centre for Higher Education Research and Science Studies

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<https://www.govdata.de/dl-de/by-nc-1-0>