

■ Table 1.3.3 1 / 2

Government expenditure on research and development in selected european countries, by various criteria

| Budget appropriations | | | | | | | |
|--|-------------------|----------|---------|----------|---------|----------|--------------|
| Government expenditure on R&D | Year ¹ | Germany | Finland | France | Ireland | Italy | Nether-lands |
| 1.a) Total R&D expenditure in Millions of US-\$ PPP ⁵ | 2018 | 43,184.5 | 2,285.2 | 20,577.9 | 966.5 | 13,224.4 | 7,107.7 |
| | 2019 | 46,680.4 | 2,396.1 | 22,591.3 | 995.5 | 14,975.8 | 7,237.6 |
| | 2020 | 51,270.3 | 2,778.3 | 23,943.9 | 1,088.8 | 17,013.8 | 7,942.9 |
| | 2021 | 54,940.7 | 2,704.3 | 24,573.1 | 1,198.4 | 18,030.1 | 8,892.7 |
| | 2022 | 59,157.8 | 2,962.3 | 25,534.6 | 1,272.2 | 20,233.6 | 10,144.5 |
| 1.b) Civil R&D expenditure in Millions of US-\$ PPP ⁵ | 2018 | 41,780.2 | 2,229.6 | 19,192.0 | 966.5 | 13,143.8 | 7,024.1 |
| | 2019 | 44,649.3 | 2,336.8 | 20,901.3 | 995.5 | 14,887.8 | 7,147.4 |
| | 2020 | 49,117.4 | 2,723.4 | 21,893.7 | 1,088.8 | 16,932.4 | 7,789.4 |
| | 2021 | 52,631.7 | 2,646.7 | 21,953.3 | 1,198.4 | 17,928.5 | 8,613.6 |
| | 2022 | 56,023.6 | 2,905.2 | 23,286.0 | 1,272.2 | 20,115.3 | 9,866.8 |
| 2. Average annual growth of R&D expenditure (in %) ⁶ | | | | | | | |
| a) Total expenditure | 2018 to | | | | | | |
| | 2022 (2021) | 8.2 | 6.7 | 5.5 | 7.1 | 11.2 | 9.3 |
| b) Civil R&D expenditure | 2018 to | | | | | | |
| | 2022 (2021) | 7.6 | 6.8 | 5.0 | 7.1 | 11.2 | 8.9 |
| 3. Total R&D expenditure per capita in US-\$ PPP ⁵ | 2018 | 520.9 | 414.3 | 305.1 | 198.8 | 220.9 | 412.5 |
| | 2019 | 561.8 | 433.9 | 333.4 | 202.0 | 250.7 | 417.3 |
| | 2020 | 616.5 | 502.3 | 352.1 | 218.6 | 286.2 | 455.4 |
| | 2021 | 660.4 | 488.0 | 360.1 | 238.8 | 304.9 | 507.2 |
| | 2022 | 706.0 | 533.1 | 373.0 | 248.7 | 343.3 | 573.0 |
| 4. Total R&D expenditure as a percentage of the nominal gross domestic product | 2018 | 0.94 | 0.84 | 0.66 | 0.23 | 0.51 | 0.71 |
| | 2019 | 0.98 | 0.84 | 0.66 | 0.23 | 0.55 | 0.69 |
| | 2020 | 1.09 | 0.96 | 0.74 | 0.23 | 0.66 | 0.76 |
| | 2021 | 1.12 | 0.89 | 0.71 | 0.22 | 0.65 | 0.79 |
| | 2022 | 1.11 | 0.90 | 0.68 | 0.20 | 0.66 | 0.81 |
| 5. Average annual growth of the nominal gross domestic product ⁶ | 2018 | | | | | | |
| | to 2022 | 3.9 | 4.8 | 4.8 | 12.0 | 4.1 | 5.9 |

■ Table 1.3.3 2 / 2

Government expenditure on research and development in selected european countries, by various criteria

| Budget appropriations | | | | | | | |
|--|---------------------|----------------------|----------|---------------------|----------|-------------------|----------------|
| Government expenditure on R&D | Year ¹ | Austria ² | Portugal | Sweden ³ | Spain | EU27 ⁴ | United Kingdom |
| 1.a) Total R&D expenditure in Millions of US-\$ PPP ⁵ | 2018 | 3,806.3 | 1,303.7 | 4,084.4 | 9,922.0 | 126,823.6 | 17,184.5 |
| | 2019 | 4,017.5 | 1,337.3 | 4,250.1 | 10,575.8 | 139,840.1 | 17,917.6 |
| | 2020 | 4,404.4 | 1,330.1 | 4,437.5 | 11,206.7 | 152,128.9 | 20,428.3 |
| | 2021 | 4,323.1 | 1,372.2 | 4,895.1 | 11,969.8 | 160,891.2 | 20,730.3 |
| | 2022 | 5,336.9 | 1,441.4 | 4,972.4 | 13,082.2 | 172,065.3 | - |
| 1.b) Civil R&D expenditure in Millions of US-\$ PPP ⁵ | 2018 | 3,799.5 | 1,298.9 | 3,987.3 | 9,828.9 | 123,225.2 | 14,774.9 |
| | 2019 | 4,010.2 | 1,333.4 | 4,130.2 | 10,418.2 | 135,098.6 | 16,405.5 |
| | 2020 | 4,398.0 | 1,326.9 | 4,325.7 | 11,052.4 | 146,900.2 | 18,860.5 |
| | 2021 | 4,316.3 | 1,368.6 | 4,787.5 | 11,835.7 | 154,694.6 | 18,008.8 |
| | 2022 | 5,328.2 | 1,437.6 | 4,851.6 | 12,506.7 | 164,923.7 | - |
| 2. Average annual growth of R&D expenditure (in %) ⁶ | | | | | | | |
| a) Total expenditure | 2018 to 2022 (2021) | 8.8 | 2.5 | 5.0 | 7.2 | 7.9 | 6.5 |
| b) Civil R&D expenditure | 2018 to 2022 (2021) | 8.8 | 2.6 | 5.0 | 6.2 | 7.6 | 6.8 |
| 3. Total R&D expenditure per capita in US-\$ PPP ⁵ | 2018 | 430.7 | 126.8 | 401.4 | 212.3 | 283.9 | 258.7 |
| | 2019 | 452.5 | 130.0 | 413.5 | 224.5 | 312.3 | 268.2 |
| | 2020 | 493.9 | 129.2 | 428.6 | 236.7 | 339.4 | 304.5 |
| | 2021 | 482.9 | 133.4 | 470.0 | 252.9 | 359.2 | 307.0 |
| | 2022 | 589.5 | 140.3 | 474.1 | 274.7 | 383.3 | - |
| 4. Total R&D expenditure as a percentage of the nominal gross domestic product | 2018 | 0.76 | 0.36 | 0.75 | 0.52 | 0.64 | 0.55 |
| | 2019 | 0.76 | 0.35 | 0.73 | 0.52 | 0.66 | 0.54 |
| | 2020 | 0.86 | 0.37 | 0.76 | 0.62 | 0.74 | 0.66 |
| | 2021 | 0.81 | 0.36 | 0.78 | 0.62 | 0.73 | 0.62 |
| | 2022 | 0.87 | 0.34 | 0.73 | 0.60 | 0.71 | - |
| 5. Average annual growth of the nominal gross domestic product ⁶ | 2018 to 2022 | 5.1 | 4.6 | 5.8 | 3.4 | 5.1 | 3.9 |

1 Some figures are revised, provisional, estimated or only partly comparable with figures from previous years (see original edition of "Main Science and Technology Indicators 2023/1").

2 Definition differs.

3 Data exclude funding by public research foundations.

4 Status of EU membership as of February 2020 (excluding the United Kingdom). The results were calculated back to 2018.

5 Nominal expenditure converted into US dollar purchasing power parities.

6 The figures are based on years for that data are available.

Last update: October 12, 2023

Source: OECD (Main Science and Technology Indicators 2023/1) and calculations of the German Centre for Higher Education Research and Science Studies

This work is licensed under a Data licence Germany attribution non-commercial 1.0.

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