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

Budget appropriations							
Government expenditure on R&D	Year <sup>1</sup>	Germany	Finland	France	Ireland	Italy	Netherlands
1.a) Total R&D expenditure in Millions of US-\$ PPP <sup>5</sup>	2017	40,496.1	2,183.6	19,150.4	930.6	12,743.8	6,338.9
	2018	43,184.5	2,285.2	20,577.9	966.5	13,224.4	7,107.7
	2019	45,260.4	2,327.2	21,907.0	970.1	14,510.4	7,092.9
	2020	50,343.4	2,706.1	23,385.9	1,081.9	16,601.3	7,834.0
	2021	52,810.6	2,671.6	24,347.6	1,204.7	17,580.8	8,840.4
1.b) Civil R&D expenditure in Millions of US-\$ PPP <sup>5</sup>	2017	38,946.6	2,135.4	17,624.6	930.6	12,666.8	6,268.9
	2018	41,780.2	2,229.6	19,192.0	966.5	13,143.8	7,024.1
	2019	43,291.0	2,269.6	20,268.1	970.1	14,425.2	7,004.5
	2020	48,229.4	2,652.6	21,383.4	1,081.9	16,521.8	7,682.6
	2021	50,518.9	2,614.2	21,751.9	1,204.7	17,491.3	8,701.1
2. Average annual growth of R&D expenditure (in %) <sup>6</sup>							
a) Total expenditure	2017 to						
	2021 (2020)	6.9	5.2	6.2	6.7	8.4	8.7
b) Civil R&D expenditure	2017 to						
	2021 (2020)	6.7	5.2	5.4	6.7	8.4	8.5
3. Total R&D expenditure per capita in US-\$ PPP <sup>5</sup>	2017	489.9	396.4	285.3	193.8	212.4	370.0
	2018	520.9	414.3	305.1	198.8	220.9	412.5
	2019	544.7	421.5	323.3	196.9	242.9	408.9
	2020	605.4	489.3	343.9	217.2	279.3	449.1
	2021	634.8	482.1	356.9	240.0	297.4	504.2
4. Total R&D expenditure as a percentage of the nominal gross domestic product	2017	0.92	0.83	0.64	0.25	0.51	0.67
	2018	0.94	0.84	0.66	0.23	0.51	0.71
	2019	0.98	0.84	0.66	0.22	0.55	0.69
	2020	1.09	0.96	0.74	0.23	0.67	0.76
	2021	1.09	0.88	0.71	0.22	0.65	0.79
5. Average annual growth of the nominal gross domestic product <sup>6</sup>	2017 to						
	2021	2.6	3.7	3.7	9.6	1.9	4.2

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

Budget appropriations							
Government expenditure on R&D	Year <sup>1</sup>	Austria <sup>2</sup>	Portugal	Sweden <sup>3</sup>	Spain	EU27 <sup>4</sup>	United Kingdom
1.a) Total R&D expenditure in Millions of US-\$ PPP <sup>5</sup>	2017	3,728.7	1,270.4	4,034.1	9,505.6	<b>120,369.8</b>	16,000.0
	2018	3,806.3	1,303.7	4,084.4	9,922.0	<b>126,823.6</b>	17,162.8
	2019	3,904.5	1,296.9	4,114.1	10,238.3	<b>135,665.2</b>	17,677.9
	2020	4,302.9	1,303.3	4,397.2	11,098.5	<b>149,198.1</b>	18,209.0
	2021	4,620.2	1,362.8	4,902.2	11,562.3	<b>156,344.6</b>	-
1.b) Civil R&D expenditure in Millions of US-\$ PPP <sup>5</sup>	2017	3,722.4	1,266.4	3,945.5	9,402.6	<b>116,376.2</b>	13,598.0
	2018	3,799.5	1,298.9	3,987.3	9,828.9	<b>123,225.3</b>	14,753.2
	2019	3,897.4	1,293.1	3,998.0	10,085.8	<b>131,068.7</b>	16,184.7
	2020	4,296.6	1,300.1	4,286.4	10,945.7	<b>144,075.4</b>	16,671.0
	2021	4,612.5	1,359.5	4,794.5	11,451.9	<b>150,442.5</b>	-
2. Average annual growth of R&D expenditure (in %) <sup>6</sup>							
a) Total expenditure	2017 to						
	2021 (2020)	5.5	1.8	5.0	5.0	<b>6.8</b>	4.4
b) Civil R&D expenditure	2017 to						
	2021 (2020)	5.5	1.8	5.0	5.1	<b>6.6</b>	7.0
3. Total R&D expenditure per capita in US-\$ PPP <sup>5</sup>	2017	424.0	123.3	401.1	204.3	<b>269.9</b>	242.3
	2018	430.7	126.8	401.4	212.3	<b>283.8</b>	258.3
	2019	439.8	126.1	400.2	217.3	<b>302.9</b>	264.7
	2020	482.6	126.6	424.7	234.4	<b>332.8</b>	271.4
	2021	515.9	132.4	470.7	244.3	<b>349.0</b>	-
4. Total R&D expenditure as a percentage of the nominal gross domestic product	2017	0.78	0.37	0.77	0.52	<b>0.63</b>	0.52
	2018	0.76	0.36	0.75	0.52	<b>0.64</b>	0.54
	2019	0.76	0.35	0.73	0.52	<b>0.66</b>	0.54
	2020	0.87	0.37	0.76	0.62	<b>0.74</b>	0.58
	2021	0.88	0.37	0.78	0.60	<b>0.72</b>	-
5. Average annual growth of the nominal gross domestic product <sup>6</sup>	2017 to						
	2021	2.3	2.1	4.6	1.2	<b>2.2</b>	3.4

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 2022/1").

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 2017.

5 Nominal expenditure converted into US dollar purchasing power parities.

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

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Source: OECD (Main Science and Technology Indicators 2022/1) 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>