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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 ¹	Germany	Finland	France	Ireland	Italy	Nether-lands
1.a) Total R&D expenditure in Millions of US-\$ PPP ⁵	2019	47,363.6	2,431.1	22,922.0	1,010.1	15,195.0	7,343.6
	2020	52,588.0	2,850.7	24,541.9	1,117.8	17,428.7	8,108.2
	2021	57,624.1	2,855.9	25,748.1	1,260.2	18,909.4	9,334.6
	2022	61,996.1	3,121.4	26,551.9	1,306.0	21,561.3	10,369.2
	2023	62,811.8	-	-	-	-	12,225.5
1.b) Civil R&D expenditure in Millions of US-\$ PPP ⁵	2019	45,302.7	2,371.0	21,207.2	1,010.1	15,105.7	7,252.0
	2020	50,379.8	2,794.4	22,440.5	1,117.8	17,345.3	7,951.6
	2021	55,202.3	2,795.0	23,003.0	1,260.2	18,802.8	9,041.6
	2022	58,708.7	3,061.1	24,213.7	1,306.0	21,437.0	10,093.7
	2023	60,161.8	-	-	-	-	11,874.4
2. Average annual growth of R&D expenditure (in %) ⁶							
a) Total expenditure	2019 to						
	2023 (2022)	7.3	8.7	5.0	8.9	12.4	13.6
b) Civil R&D expenditure	2019 to						
	2023 (2022)	7.3	8.9	4.5	8.9	12.4	13.1
3. Total R&D expenditure per capita in US-\$ PPP ^{5,7}	2019	570.0	440.3	338.3	205.0	254.4	423.4
	2020	632.4	515.4	360.9	224.4	293.2	464.9
	2021	692.6	515.4	377.3	251.1	319.8	532.4
	2022	739.8	561.7	387.8	255.3	365.4	585.8
	2023	-	-	-	-	-	-
4. Total R&D expenditure as a percentage of the nominal gross domestic product ⁷	2019	0.98	0.84	0.66	0.23	0.55	0.69
	2020	1.09	0.96	0.73	0.23	0.66	0.76
	2021	1.12	0.89	0.71	0.22	0.64	0.79
	2022	1.11	0.90	0.68	0.19	0.65	0.79
	2023	-	-	-	-	-	-
5. Average annual growth of the nominal gross domestic product ^{6,7}	2018						
	to 2022	5.1	6.2	5.8	13.5	6.1	7.3

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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	2019	4,076.3	1,356.8	4,312.3	10,730.6	141,888.3	18,179.8
	2020	4,510.3	1,365.1	4,560.0	11,485.1	155,978.9	21,432.5
	2021	4,582.7	1,448.9	5,136.5	12,678.5	169,091.2	21,751.3
	2022	5,174.3	1,531.7	5,202.9	13,825.7	180,653.1	-
	2023	5,850.5	-	5,452.1	-	-	-
1.b) Civil R&D expenditure in Millions of US-\$ PPP ⁵	2019	4,068.9	1,352.9	4,190.6	10,570.6	137,077.5	16,645.6
	2020	4,503.6	1,361.8	4,445.1	11,327.0	150,617.0	19,787.7
	2021	4,576.7	1,445.0	5,023.6	12,536.4	162,590.0	18,895.8
	2022	5,164.6	1,527.6	5,076.5	13,467.7	173,389.5	-
	2023	5,841.2	-	5,233.5	-	-	-
2. Average annual growth of R&D expenditure (in %) ⁶							
a) Total expenditure	2019 to						
	2023 (2022)	9.5	4.1	6.0	8.8	8.4	9.4
b) Civil R&D expenditure	2019 to						
	2023 (2022)	9.5	4.1	5.7	8.4	8.1	6.5
3. Total R&D expenditure per capita in US-\$ PPP ^{5,7}	2019	459.2	131.9	419.5	227.8	316.9	272.2
	2020	505.8	132.6	440.4	242.5	348.0	319.5
	2021	511.9	140.7	493.1	267.9	377.5	324.5
	2022	571.6	148.7	496.1	290.4	402.7	-
	2023	-	-	-	-	-	-
4. Total R&D expenditure as a percentage of the nominal gross domestic product ⁷	2019	0.76	0.35	0.73	0.52	0.66	0.54
	2020	0.86	0.37	0.76	0.62	0.74	0.67
	2021	0.81	0.36	0.78	0.61	0.73	0.61
	2022	0.81	0.33	0.73	0.59	0.70	-
	2023	-	-	-	-	-	-
5. Average annual growth of the nominal gross domestic product ^{6,7}	2018 to						
2022	6.3	3.3	7.0	5.1	6.5	5.3	

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 2023/2").

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 2019.

5 Nominal expenditure converted into US dollar purchasing power parities.

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

7 No data on the population and gross domestic product is yet available for the calculation for 2023.

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Source: OECD (Main Science and Technology Indicators 2023/2) 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>