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

Country	Year <sup>1</sup>	R&D expenditure		Financed by			Performed by			
		Millions of US-\$ <sup>2</sup>	Share of GDP in %	Business enterprise sector	Government sector	Other national sources and abroad	Business enterprise sector	Government sector	Higher education sector <sup>3</sup>	PNP sector <sup>4</sup>
Share in %										
Germany <sup>5</sup>	2017	133,668.0	3.05	66.2	27.7	6.1	69.1	13.5	17.4	y
	2018	142,320.2	3.11	66.0	27.8	6.1	68.9	13.5	17.6	y
	2019	151,082.1	3.17	64.5	27.8	7.7	68.9	13.7	17.4	y
	2020	147,010.6	3.13	62.6	29.7	7.7	66.6	14.6	18.7	y
	2021	153,724.2	3.13	62.8	30.0	7.3	66.9	14.8	18.3	y
Finland <sup>6</sup>	2017	7,147.7	2.73	58.0	29.0	13.0	65.3	8.5	25.4	0.8
	2018	7,540.5	2.76	55.8	28.3	15.9	65.7	8.3	25.2	0.8
	2019	8,009.2	2.80	54.3	27.8	17.9	65.6	8.1	25.4	0.9
	2020	8,423.5	2.91	56.0	27.7	16.4	67.0	7.6	24.6	0.8
	2021	9,061.6	2.99	58.1	25.6	16.3	68.8	7.3	23.1	0.8
France	2017	65,592.8	2.20	56.2	32.5	11.5	65.4	12.4	20.6	1.6
	2018	68,654.0	2.20	56.6	31.5	11.7	65.5	12.4	20.4	1.6
	2019	74,590.1	2.19	56.7	31.4	11.9	65.9	12.3	20.1	1.6
	2020	74,219.1	2.28	56.4	31.8	11.8	65.7	11.8	20.5	2.0
	2021	77,224.8	2.22	55.4	32.5	12.1	65.7	11.7	20.5	2.1
Italy	2017	34,488.8	1.37	53.7	32.3	14.0	62.4	12.4	23.6	1.7
	2018	37,039.9	1.42	54.5	32.8	12.7	63.1	12.5	22.8	1.6
	2019	39,983.0	1.46	55.9	32.3	11.7	63.2	12.6	22.5	1.8
	2020	38,641.2	1.51	52.8	33.7	13.5	61.8	13.2	23.1	1.9
	2021	40,138.6	1.45	53.9	35.1	10.9	60.2	14.0	24.0	1.9
Sweden <sup>7</sup>	2017	17,569.8	3.36	60.8	25.0	14.1	71.3	3.6	24.9	0.1
	2018	18,086.3	3.32	-	-	-	71.0	3.6	25.3	0.1
	2019	19,640.3	3.39	62.4	24.2	13.1	71.7	4.5	23.7	0.1
	2020	20,283.2	3.49	-	-	-	72.3	4.4	23.1	0.1
	2021	21,402.3	3.40	60.7	23.3	15.8	72.4	4.4	23.0	0.1
United Kingdom <sup>8</sup>	2017	70,754.9	2.32	-	-	-	77.1	4.6	16.8	1.6
	2018	84,852.3	2.70	58.2	18.2	23.6	70.2	4.5	23.9	1.3
	2019	87,809.7	2.67	59.0	18.0	23.1	70.7	4.5	23.5	1.4
	2020	90,204.8	2.93	57.4	19.6	23.0	71.1	5.0	22.4	1.5
	2021	97,792.6	2.91	58.5	19.4	22.1	70.9	5.1	22.5	1.5

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

Country	Year <sup>1</sup>	R&D expenditure		Financed by			Performed by			
		Millions of US-\$ <sup>2</sup>	Share of GDP in %	Business enterprise sector	Government sector	Other national sources and abroad	Business enterprise sector	Government sector	Higher education sector <sup>3</sup>	PNP sector <sup>4</sup>
Share in %										
Japan <sup>9</sup>	2017	166,621.7	3.17	78.3	15.0	6.7	78.8	7.8	12.0	1.4
	2018	172,035.8	3.22	79.1	14.6	6.4	79.4	7.8	11.6	1.3
	2019	172,269.0	3.22	78.9	14.7	6.4	79.2	7.8	11.7	1.3
	2020	172,047.7	3.27	78.3	15.2	6.5	78.7	8.3	11.7	1.4
	2021	177,427.5	3.30	78.1	15.5	6.5	78.6	8.4	11.9	1.2
Canada	2017	29,788.7	1.69	43.1	32.4	24.5	52.7	7.0	39.8	0.5
	2018	32,190.0	1.74	44.3	31.3	24.4	53.7	7.0	38.9	0.4
	2019	32,898.2	1.76	43.9	31.5	24.6	54.0	6.7	38.9	0.5
	2020	34,011.3	1.89	43.3	31.7	25.0	54.1	7.6	37.9	0.4
	2021	34,402.0	1.70	44.0	30.9	25.1	55.0	6.9	37.7	0.4
South Korea	2017	90,289.9	4.29	76.2	21.6	2.2	79.4	10.7	8.5	1.4
	2018	100,282.6	4.52	76.6	20.6	2.8	80.3	10.1	8.2	1.4
	2019	103,975.2	4.63	76.9	20.7	2.4	80.3	10.0	8.3	1.4
	2020	111,107.4	4.80	76.6	22.4	1.0	79.1	10.1	9.0	1.8
	2021	119,582.8	4.93	76.1	22.8	1.1	79.1	9.8	9.1	2.0
United States <sup>10</sup>	2017	565,685.0	2.90	63.4	22.8	13.8	73.6	9.6	12.6	4.2
	2018	618,066.0	3.01	64.1	22.3	13.6	74.1	9.7	12.1	4.1
	2019	677,881.0	3.17	65.7	21.1	13.3	75.0	9.6	11.5	3.9
	2020	730,329.0	3.47	66.3	21.2	12.5	76.0	9.1	11.1	3.8
	2021	806,013.0	3.46	67.9	19.9	12.2	77.6	8.3	10.4	3.7

y = data included in another position.

- 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 2023/1").
- 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.
- 6 Funds received by the state research institutes from external sources are excluded from government allocations.
- 7 Excluding funding by public research foundations.
- 8 For the years from 2017 onwards, estimates for R&D expenditure in the Business enterprise sector and in the Higher education sector were significantly revised by the United Kingdom. These changes reflect an uplift recalibration to account for under-sampled businesses performing R&D and the adoption of more comprehensive administrative data on expenditures for higher education institutions.
- 9 Government budget allocations for R&D data represent the budget for science and technology and cover central government only.
- 10 Excludes most or all capital expenditure (included in the business enterprise and government sector only).

Last update: October 12, 2023

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

Source: OECD (Main Science and Technology Indicators 2023/1) 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>