■ Table 1.3.1 1/2

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	Other national sources and abroad	Business enterprise sector	Government sector	Higher education sector ³	PNP sector
							Share in %			
Germany ⁵	2018	142,320.2	3.11	66.0	27.8	6.1	68.9	13.5	17.6	У
	2019	153,293.2	3.17	64.5	27.8	7.7	68.9	13.7	17.4	У
	2020	150,788.8	3.13	62.6	29.7	7.7	66.6	14.6	18.7	У
	2021	161,232.5	3.13	62.8	30.0	7.3	66.9	14.8	18.3	У
	2022	174,857.3	3.13	-	-	-	67.4	12.1	18.1	2.4
Finland ⁶	2018	7,540.5	2.76	55.8	28.3	15.9	65.7	8.3	25.2	0.8
	2019	8,126.4	2.80	54.3	27.8	17.9	65.6	8.1	25.4	0.9
	2020	8,643.1	2.91	56.0	27.7	16.4	67.0	7.6	24.6	0.8
	2021	9,569.5	2.99	58.1	25.6	16.3	68.8	7.3	23.1	0.8
	2022	10,311.4	2.96	-	-	-	68.0	7.3	24.0	0.7
France	2010	50.554.0	2.20		21.5	11.7		12.4	20.4	1.0
	2018	68,654.0	2.20	56.6	31.5	11.7	65.5	12.4	20.4	1.6
	2019	75,681.7	2.19	56.7	31.4	11.9	65.9	12.3	20.1	1.6
	2020	76,072.6	2.27	56.4	31.8	11.8	65.7	11.8	20.5	2.0
	2021	80,917.1	2.22	55.4	32.5	12.1	65.7	11.7	20.5	2.1
	2022	85,167.2	2.18	-	-	-	65.8	11.6	20.6	2.0
Italy	2018	37,039.9	1.42	54.5	32.8	12.7	63.1	12.5	22.8	1.6
	2019	40,568.1	1.46	55.9	32.3	11.7	63.2	12.6	22.5	1.8
	2020	39,583.4	1.51	52.8	33.7	13.5	61.8	13.2	23.1	1.9
	2021	42,096.1	1.43	53.9	35.1	10.9	60.2	14.0	24.0	1.9
	2022	43,506.6	1.32	-	-	-	58.6	14.8	24.6	2.0
Sweden ⁷	2018	18,086.3	3.32	_			71.0	3.6	25.3	0.1
	2019	19,927.7	3.39	62.4	24.2	13.1	71.7	4.5	23.7	0.1
	2020	20,843.2	3.49	-	-	-	72.3	4.4	23.1	0.1
	2021	22,457.7	3.40	60.7	23.3	15.8	72.3	4.4	23.1	0.1
	2022	24,336.0	3.41	-	-	-	73.7	4.2	22.0	0.1
United Kingdom	2018	84,852.3	2.71	58.2	18.2	23.6	70.2	4.5	23.9	1.3
	2019	89,094.8	2.67	59.0	18.0	23.1	70.7	4.5	23.5	1.4
	2020	94,639.0	2.94	57.4	19.6	23.0	71.1	5.0	22.4	1.5
	2021	102,609.1	2.90	58.5	19.4	22.1	70.9	5.1	22.5	1.5
	2022	-	-	-	-	-	-	-	-	-

■ Table 1.3.1 2/2

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	Other national sources and abroad	Business enterprise sector	Government sector	Higher education sector ³	PNP sector	
				Share in %							
Japan ⁸	2018	172,035.8	3.22	79.1	14.6	6.4	79.4	7.8	11.6	1.3	
	2019	173,928.4	3.22	78.9	14.7	6.4	79.2	7.8	11.7	1.3	
	2020	174,926.4	3.26	78.3	15.2	6.5	78.7	8.3	11.7	1.4	
	2021	183,467.4	3.28	78.1	15.5	6.5	78.6	8.4	11.9	1.2	
	2022	200,769.8	3.41	78.5	15.1	6.4	79.4	7.9	11.5	1.2	
Canada	2018	32,190.0	1.74	44.3	31.3	24.4	53.7	7.0	38.9	0.4	
	2019	33,354.4	1.76	43.9	31.5	24.6	54.0	6.7	38.9	0.5	
	2020	35,739.7	1.93	44.6	31.1	24.4	55.1	7.4	37.0	0.4	
	2021	39,767.3	1.86	46.4	29.0	24.6	58.1	6.0	35.4	0.4	
	2022	41,351.0	1.71	46.7	28.8	24.5	58.6	6.1	34.9	0.4	
South Korea	2018	100,282.6	4.52	76.6	20.6	2.8	80.3	10.1	8.2	1.4	
	2019	105,064.4	4.63	76.9	20.7	2.4	80.3	10.0	8.3	1.4	
	2020	112,221.2	4.80	76.6	22.4	1.0	79.1	10.1	9.0	1.8	
	2021	123,459.9	4.91	76.1	22.8	1.1	79.1	9.8	9.1	2.0	
	2022	138,995.2	5.21	76.3	22.6	1.1	79.4	9.4	9.1	2.1	
United States ⁹	2018	617,722.0	2.99	64.1	22.3	13.6	74.1	9.7	12.1	4.0	
	2019	677,286.0	3.15	65.7	21.1	13.2	75.1	9.6	11.5	3.8	
	2020	730,241.0	3.42	66.3	21.3	12.4	76.0	9.2	11.1	3.7	
	2021	821,811.0	3.48	68.9	18.8	12.3	77.9	8.3	10.4	3.3	
	2022	923,243.0	3.59	70.0	18.1	11.9	79.0	8.2	9.9	3.0	

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 July 2024").
- 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 Until 2021, the PNP sector is included in the performance data of the government sector. Differences in the R&D ratio compared to Table 1.1.1 are due to methodological reasons, as recalculations by the Federal Statistical Office resulting from a GDP revision could not yet be taken into account by the OECD.
- **6** Funds received by the state research institutes from external sources are excluded from government allocations.
- 7 Excluding funding by public research foundations.
- 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 business enterprise and government sector only).

Last update: September 11, 2024

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

Source: OECD (Main Science and Technology Indicators July 2024) and calculations of the German Centre for Higher Education Research and Science Studies

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