

■ Table 1.1.1 1 / 2

Gross domestic expenditure on R&D (GERD) of the Federal Republic of Germany, by performing sectors

Millions of €						
Performing sectors ^{1 2}	1981	1991	2000	2010	2014	2015
Business enterprise sector³						
financed by						
Business enterprise sector	10,945	22,845	32,333	43,183	52,093	54,704
Government sector	2,260	2,640	2,448	2,096	1,915	2,026
Private non-profit sector	30	76	71	40	112	162
Abroad	159	685	748	1,610	2,876	4,060
Total	13,394	26,246	35,600	46,929	56,996	60,952
Government and private non-profit sector⁴						
financed by						
Business enterprise sector	35	71	151	927	1,384	1,406
Government sector	2,601	5,214	6,444	8,805	10,136	10,262
Private non-profit sector	49	120	137	124	151	157
Abroad	27	53	141	498	649	661
Total	2,712	5,457	6,873	10,354	12,320	12,486
Higher education sector⁵						
financed by						
Business enterprise sector	59	433	986	1,763	2,111	2,129
Government sector	3,255	5,713	7,169	10,360	12,133	12,474
Private non-profit sector	-	-	-	-	-	-
Abroad	-	-	198	609	686	742
Total	3,313	6,145	8,352	12,731	14,930	15,344
Gross domestic expenditure on R&D						
financed by						
Business enterprise sector	11,039	23,348	33,470	45,873	55,589	58,239
Government sector	8,116	13,567	16,061	21,260	24,184	24,762
Private non-profit sector	78	196	208	164	263	319
Abroad	186	738	1,086	2,716	4,211	5,462
Total	19,420	37,848	50,825	70,014	84,246	88,782
GERD as a percentage of GDP ⁶	2.43	2.40	2.41	2.73	2.88	2.93

■ Table 1.1.1 2 / 2

Gross domestic expenditure on R&D (GERD) of the Federal Republic of Germany, by performing sectors

Millions of €						
Performing sectors ^{1,2}	2016	2017	2018	2019	2020	2021
Business enterprise sector³						
financed by						
Business enterprise sector	56,386	62,214	65,204	66,856	62,625	67,023
Government sector	2,088	2,181	2,234	2,421	2,268	2,667
Private non-profit sector	167	88	91	113	106	89
Abroad	4,185	4,305	4,573	6,441	6,034	5,982
Total	62,826	68,787	72,101	75,830	71,032	75,761
Government and private non-profit sector⁴						
financed by						
Business enterprise sector	1,431	1,363	1,401	1,464	1,527	1,328
Government sector	10,459	11,161	11,746	12,463	12,913	14,147
Private non-profit sector	165	257	272	283	292	274
Abroad	665	703	749	811	857	1,012
Total	12,721	13,484	14,168	15,022	15,589	16,761
Higher education sector⁵						
financed by						
Business enterprise sector	2,299	2,307	2,484	2,599	2,584	2,704
Government sector	13,720	14,254	15,169	15,708	16,478	17,101
Private non-profit sector	-	-	-	-	-	-
Abroad	608	721	747	865	901	857
Total	16,627	17,282	18,400	19,173	19,962	20,661
Gross domestic expenditure on R&D						
financed by						
Business enterprise sector	60,116	65,884	69,090	70,919	66,736	71,055
Government sector	26,267	27,596	29,149	30,592	31,658	33,915
Private non-profit sector	332	344	362	396	398	363
Abroad	5,458	5,729	6,069	8,118	7,791	7,851
Total	92,174	99,554	104,669	110,025	106,583	113,184
GERD as a percentage of GDP ⁶	2.94	3.05	3.11	3.17	3.13	3.13

1 Data from surveys of the relevant performing sectors. In 1981, the former Federal Republic of Germany; as of 1991, all of Germany. Due to revision of the calculation method, the data up to 1991 are only partly comparable with data from later publications.

2 Figures for even years are partly estimated.

3 Companies and institutions for co-operative research; intramural R&D expenditures (OECD concept) of business enterprises; in 1981, including non-apportionable government funding; as of 2000, government R&D funding for business enterprises pursuant to figures of funding institutions -- Federal Government and Länder. Until 2010 the funding source data of the Stifterverband Wissenschaftsstatistik, which have been obtained from R&D-performing reporting units, differ from this, since the performing reporting units are not always able to clearly identify the original funding source.

4 Non-university research institutions (e.g., Max Planck Society, Fraunhofer Society). Government: federal, Länder and municipal (research) institutions; as of 1981, Federal Government institutions; as of 1991, Länder institutions with their R&D shares only. As of 2000, modified survey procedure and expanded reporting scope. Until 2010, including external expenditure on research and development.

5 The increase of the expenditure on higher education is partly methodologically conditioned by the recalculation of R&D coefficients from 2016 onwards.

6 Gross Domestic Product (GDP) status: July 2022. For 2021, current calculation by the Federal Statistical Office (August 2023) based on GDP data as of August 2023.

Last update: August 28, 2023

This table also appears in the Federal Report on Research and Innovation as Table 1.

Source: Special evaluation of the Federal Statistical Office, the Stifterverband Wissenschaftsstatistik and the Federal Ministry of Education and Research

This work is licensed under a Data licence Germany attribution non-commercial 1.0.
<https://www.govdata.de/dl-de/by-nc-1-0>