

Table 9.3: The global top 50 companies by R&D volume, 2014

Rank in 2014	Company	Country	Field	R&D (€ millions)	Change in rank for R&D 2004-2007	R&D intensity*
1	Volkswagen	Germany	Automobiles & parts	11 743	+7	6.0
2	Samsung Electronics	Korea, Rep.	Electronics	10 155	+31	6.5
3	Microsoft	USA	Computer hardware & software	8 253	+10	13.1
4	Intel	USA	Semiconductors	7 694	+10	20.1
5	Novartis	Switzerland	Pharmaceuticals	7 174	+15	17.1
6	Roche	Switzerland	Pharmaceuticals	7 076	+12	18.6
7	Toyota Motors	Japan	Automobiles & parts	6 270	-2	3.5
8	Johnson & Johnson	USA	Medical equipment, pharmaceuticals, consumer goods	5 934	+4	11.5
9	Google	USA	Internet-related products & services	5 736	+173	13.2
10	Daimler	Germany	Automobiles & parts	5 379	-7	4.6
11	General Motors	USA	Automobiles & parts	5 221	-5	4.6
12	Merck USA	USA	Pharmaceuticals	5 165	+17	16.2
13	BMW	Germany	Automobiles & parts	4 792	+15	6.3
14	Sanofi-Aventis	France	Pharmaceuticals	4 757	+8	14.4
15	Pfizer	USA	Pharmaceuticals	4 750	-13	12.7
16	Robert Bosch	Germany	Engineering & electronics	4 653	+10	10.1
17	Ford Motors	USA	Automobiles & parts	4 641	-16	4.4
18	Cisco Systems	USA	Networking equipment	4 564	+13	13.4
19	Siemens	Germany	Electronics & electrical equipment	4 556	-15	6.0
20	Honda Motors	Japan	Automobiles & parts	4 367	-4	5.4
21	Glaxosmithkline	UK	Pharmaceuticals & biotechnology	4 154	-10	13.1
22	IBM	USA	Computer hardware, middleware & software	4 089	-13	5.7
23	Eli Lilly	USA	Pharmaceuticals	4 011	+18	23.9
24	Oracle	USA	Computer hardware & software	3 735	+47	13.5
25	Qualcomm	USA	Semiconductors, telecommunications equipment	3 602	+112	20.0
26	Huawei	China	Telecommunications equipment & services	3 589	up > 200	25.6
27	Airbus	Netherlands**	Aeronautics	3 581	+8	6.0
28	Ericsson	Sweden	Telecommunications equipment	3 485	-11	13.6
29	Nokia	Finland	Technology hardware & equipment	3 456	-9	14.7
30	Nissan Motors	Japan	Automobiles & parts	3 447	+4	4.8
31	General Electric	USA	Engineering, electronics & electric equipment	3 444	+6	3.3
32	Fiat	Italy	Automobiles & parts	3 362	+12	3.9
33	Panasonic	Japan	Electronics & electrical equipment	3 297	-26	6.2
34	Bayer	Germany	Pharmaceuticals & biotechnology	3 259	-2	8.1
35	Apple	USA	Computer hardware & software	3 245	+120	2.6
36	Sony	Japan	Electronics & electrical equipment	3 209	-21	21.3
37	AstraZeneca	UK	Pharmaceuticals & biotechnology	3 203	-12	17.2
38	Amgen	USA	Pharmaceuticals & biotechnology	2 961	+18	21.9
39	Boehringer Ingelheim	Germany	Pharmaceuticals & biotechnology	2 743	+23	19.5
40	Bristol-Myers Squibb	USA	Pharmaceuticals & biotechnology	2 705	+2	22.8
41	Denso	Japan	Automobile parts	2 539	+12	9.0
42	Hitachi	Japan	Technology hardware & equipment	2 420	-18	3.7
43	Alcatel-Lucent	France	Technology hardware & equipment	2 374	+4	16.4
44	EMC	USA	Computer software	2 355	+48	14.0
45	Takeda Pharmaceuticals	Japan	Pharmaceuticals & biotechnology	2 352	+28	20.2
46	SAP	Germany	Software & computer services	2 282	+23	13.6
47	Hewlett-Packard	USA	Technology hardware & equipment	2 273	-24	2.8
48	Toshiba	Japan	Computer hardware	2 269	-18	5.1
49	LG Electronics	Korea, Rep.	Electronics	2 209	+61	5.5
50	Volvo	Sweden	Automobiles & parts	2 131	+27	6.9

* R&D intensity is defined as R&D expenditure divided by net sales.

** Although incorporated in the Netherlands, Airbus's principal manufacturing facilities are located in France, Germany, Spain and the UK.

Source: Hernández et. al (2014), Table 2.2