

TABLE 6. Worldwide R&D paid for by the company and others and performed by the company, by industry, company size, and worldwide R&D program size: 2013
(Millions of U.S. dollars)

Industry and company size	NAICS codes	R&D program size					
		All companies	Less than \$1 million	\$1 million–\$9.999 million	\$10 million–\$49.999 million	\$50 million–\$99.999 million	\$100 million or more
All industries	21–23, 31–33, 42–81	395,628	10,015 i	26,908	32,006	18,070	308,630
Manufacturing industries	31–33	272,580	5,769 i	13,125	19,602	12,958	221,126
Food	311	6,343	286 i	614 i	520	572	4,351
Beverage and tobacco products	312	1,358	18 i	40	111	191 i	999
Textile, apparel, and leather products	313–16	760	133 i	177	243	206	0
Wood products	321	222	52 i	53	117	0	0
Paper	322	1,022	80 i	140 i	226	74	504
Printing and related support activities	323	258 i	88 i	130	39 i	0	0
Petroleum and coal products	324	288	82 i	39	35	132	0
Chemicals	325	74,397	504 i	2,236	5,127	3,176	63,354
Basic chemicals	3251	3,373	58 i	290	659	516	1,850
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,570	53 i	145	49	140	1,183
Pesticide, fertilizer, and other agricultural chemicals	3253	1,966 i	34 i	39	74	0	1,818 i
Pharmaceuticals and medicines	3254	62,477	124 i	1,448	3,863	2,179	54,863
Soap, cleaning compound, and toilet preparation	3256	3,393	107 i	94	216	166	2,809
Paint, coating, adhesive, and other chemicals	3255, 3259	1,618	127 i	219	266	175	830
Plastics and rubber products	326	4,580	422 i	630	524	346	2,658
Nonmetallic mineral products	327	1,578	96 i	152	201 i	0	1,130
Primary metals	331	706	123 i	164	209	0	210
Fabricated metal products	332	2,328 i	803 i	744	648	133 i	0
Machinery	333	15,502	888 i	1,413	1,975	1,316	9,909
Agricultural implement	33311	2,243	39 i	90	92	68	1,954
Semiconductor machinery	333295	3,645	41 i	55 i	225	284	3,040
Engine, turbine, and power transmission equipment	3336	1,795	24 i	109	106	186	1,372
Other machinery	other 333	7,819	784 i	1,160	1,552	779	3,544
Computer and electronic products	334	85,480	786 i	3,414	4,927	3,862	72,491
Communications equipment	3342	20,353	98 i	421	906	808	18,120
Semiconductor and other electronic components	3344	40,609	286 i	986	1,811	1,322	36,203
Navigational, measuring, electromedical, and control instruments	3345	16,769	274 i	1,405	1,343	831	12,917
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	2,837	53 i	554 i	625	372	1,232
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	8,753	27 i	128	162	73	8,363
Other measuring and controlling device	other 3345	5,179	193 i	723	555	387	3,321
Other computer and electronic products	other 334	7,748	128 i	602	867	900	5,251
Electrical equipment, appliances, and components	335	5,741	290 i	729	801	528	3,394
Transportation equipment	336	55,191	333 i	985	1,808	1,317	50,747
Automobiles, bodies, trailers, and parts	3361, 3362, 3363	23,605	181 i	597	1,181	819	20,827

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Aerospace products and parts	3364	29,331	87 i	234	517	442	28,051
Aircraft, aircraft engine, and aircraft parts	336411–13	D	D	D	413	D	D
Guided missile, space vehicle, and related parts	336414–15, 336419	D	D	D	104	D	D
Military armored vehicle, tank, and tank components	336992	9 i	2 i	7 i	0	0	0
Other transportation	other 336	2,246	64 i	146	110	56	1,869
Furniture and related products	337	402	98 i	106	198	0	0
Miscellaneous manufacturing	339	16,422	688 i	1,358	1,891	1,106	11,380
Medical equipment and supplies	3391	13,456	247 i	871	1,500	936	9,903
Other miscellaneous manufacturing	3399	2,966	440 i	487	391	170	1,478
Nonmanufacturing industries	21–23, 42–81	123,048	4,245 i	13,784	12,403	5,112	87,504
Mining, extraction, and support activities	21	4,449	21 i	122	103	0	4,203
Utilities	22	317	7 i	63	189	58	0
Wholesale trade	42	554 i	306 i	247 i	0	0	0
Electronic shopping and electronic auctions	454111–12	1,846	69 i	23	34 i	0	1,720
Transportation and warehousing	48–49	D	D	41	83	0	365
Information	51	70,857	824 i	3,491	4,520	2,326	59,696
Publishing	511	47,012	432 i	2,037 i	1,840	1,397	41,306
Newspaper, periodical, book, and directory publishers	5111	348 i	53 i	47 i	248 i	0	0
Software publishers	5112	46,664	379 i	1,990 i	1,592	1,397	41,306
Telecommunications	517	3,104	D	152	423 i	D	2,304
Data processing, hosting, and related services	518	7,077	251 i	1,069	1,629	666	3,461
Other information	other 51	13,665	D	232	628	D	12,625
Finance and insurance	52	5,011	21 i	285 i	334	348	4,025
Real estate and rental and leasing	53	161	12 i	11	137	0	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	D	3 i	2	D	0	0
Other real estate and rental and leasing	other 53	D	9 i	9	D	0	0
Professional, scientific, and technical services	54	37,560	2,541 i	8,913	6,542	2,069 i	17,495
Architectural, engineering, and related services	5413	3,174	316 i	986	835 i	366	671
Computer systems design and related services	5415	10,563 i	1,120 i	2,651 i	2,874	785 i	3,133 i
Scientific research and development services	5417	18,464	527 i	3,807	2,187	622	11,322
Biotechnology research and development	541711	5,899	138 i	1,243	D	0	D
Physical, engineering, and life sciences (except biotechnology) research and development	541712	11,771	373 i	2,413	1,606	622	6,756
Social sciences and humanities research and development	541720	795	15 i	150	D	0	D
Other professional, scientific, and technical services	other 54	5,359	578 i	1,470	645	297	2,369
Health care services	621–23	533 i	79 i	156	146 i	152	0

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Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	D	D	430	315 i	160 i	0
All companies (number of domestic employees)	–	395,628	10,015 i	26,908	32,006	18,070	308,630
Small companies ^a							
5–499	–	57,172	9,811 i	22,986	17,267	3,914	3,195
5–99	–	28,670 i	8,260 i	15,167	5,242	0	0
5–49	–	19,415 i	6,530 i	10,732	2,153	0	0
5–9	–	3,454 i	1,893 i	1,536	26	0	0
10–24	–	7,580 i	2,503 i	4,442	635 i	0	0
25–49	–	8,381 i	2,135 i	4,754	1,492	0	0
50–99	–	9,254	1,730 i	4,434	3,090	0	0
100–249	–	14,941	1,124 i	5,296	6,313	1,479	729
250–499	–	13,562	427 i	2,523	5,711	2,435	2,466
Medium and large companies							
500–999	–	13,658	108 i	1,838	4,333	3,320	4,060
1,000–4,999	–	69,097	72 i	1,650	7,516	7,718	52,141
5,000–9,999	–	42,350	10 i	210	1,423	2,066	38,641
10,000–24,999	–	60,999	12 i	146	811	635	59,396
25,000 or more	–	152,351	1 i	78	656	419	151,198

D = data withheld to avoid disclosing operations of individual companies; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2007 North American Industry Classification System.

^a Upper bound based on U.S. Small Business Administration's definition of a small business; Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2013.