

TABLE 3. 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: 2014  
(Millions of U.S. dollars)

Industry	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	416,038	9,407 i	27,013	32,840	20,984	325,794
Manufacturing industries	31–33	286,476	4,681 i	13,387	19,987	14,116	234,305
Food	311	6,532	238 i	1,010	616	539	4,130 i
Beverages and tobacco products	312	1,423	11 i	52	153	187	1,020
Textiles, apparel, and leather products	313–16	734	92 i	148	276	217	0
Wood products	321	368 i	20 i	69 i	279 i	0	0
Paper	322	880	60 i	92	177	110 i	441
Printing and related support activities	323	238	50 i	104	84	0	0
Petroleum and coal products	324	298	20 i	48	78	152	0
Chemicals	325	79,468	570 i	2,506	6,018	2,885	67,489
Basic chemicals	3251	3,633	81 i	324	766	393	2,070
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,842	47 i	194	67	166	1,368
Pesticides, fertilizers, and other agricultural chemicals	3253	2,086 i	38 i	23	111	0	1,914 i
Pharmaceuticals and medicines	3254	66,737	148 i	1,583	4,637	2,004	58,365
Soaps, cleaning compounds, and toilet preparations	3256	3,499	104 i	155	227	167	2,847
Paints, coatings, adhesives, and other chemicals	3255, 3259	1,670 i	154 i	227	210 i	155	925 i
Plastics and rubber products	326	4,457	304 i	568	692	460	2,433
Nonmetallic mineral products	327	1,599	55 i	166	205	0	1,173
Primary metals	331	770	71 i	113	349	0	237
Fabricated metal products	332	2,353	541 i	756	736	319	0
Machinery	333	14,937	796 i	1,714	1,989	1,461	8,978
Agricultural implements	33311	D	D	86	102	D	1,871
Semiconductor machinery	333295	3,434	19 i	93 i	218	314 i	2,791
Engines, turbines, and power transmission equipment	3336	2,883	18 i	D	169	266	D
Other machinery	other 333	D	D	D	1,501	D	D
Computer and electronic products	334	94,910	801 i	2,526	3,476	4,213	83,893
Communications equipment	3342	22,044	170 i	414	512	900	20,048
Semiconductors and other electronic components	3344	42,722	165 i	640	1,304	1,711	38,901
Navigational, measuring, electromedical, and control instruments	3345	19,030	369 i	1,166	1,093	957	15,446
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	4,982	81 i	331	303	684	3,583
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	8,486	8 i	134 i	242	62	8,040
Other measuring and controlling devices	other 3345	5,561	280 i	700	548	210	3,823

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Other computer and electronic products	other 334	11,114	96 i	306	568	646	9,498
Electrical equipment, appliances, and components	335	5,750	272 i	784	1,341 i	718	2,634
Transportation equipment	336	56,359	253 i	1,135	1,594	1,701	51,676
Automobiles, bodies, trailers, and parts	3361–63	D	D	671	873	1,094	23,280
Aerospace products and parts	3364	D	D	304	521	462	26,646 i
Aircraft, aircraft engines, and aircraft parts	336411–13	D	D	D	401	D	D
Guided missiles, space vehicles, and related parts	336414–15, 336419	D	4 i	D	120	D	D
Military armored vehicles, tanks, and tank components	336992	D	D	20	0	0	0
Other transportation	other 336	D	D	140	200	146	1,750 i
Furniture and related products	337	418	106 i	94	219	0	0
Miscellaneous manufacturing	339	14,983	421 i	1,503	1,706	1,152	10,202
Medical equipment and supplies	3391	12,091	191 i	1,074	1,342	1,087	8,397
Other miscellaneous manufacturing	3399	2,892	230 i	429	363	65	1,805
Nonmanufacturing industries	21–23, 42–81	129,562	4,726 i	13,626	12,853	6,868	91,489
Mining, extraction, and support activities	21	D	29 i	311	191	D	4,531
Utilities	22	311	25 i	48	98	140	0
Wholesale trade	42	D	245 i	D	0	0	0
Electronic shopping and electronic auctions	454111–12	D	38 i	5	0	0	D
Transportation and warehousing	48–49	692	35 i	75 i	0	0	582
Information	51	77,341	893 i	4,418	5,378	3,528	63,124
Publishing	511	46,157	475 i	2,120 i	1,746	1,342	40,474
Newspaper, periodical, book, and directory publishers	5111	92 i	21 i	20 i	51 i	0	0
Software publishers	5112	46,065	454 i	2,100 i	1,694	1,342	40,474
Telecommunications	517	3,816	67 i	276 i	293	627 i	2,552
Data processing, hosting, and related services	518	10,322	274 i	1,690	2,956	1,314	4,088
Other information	other 51	17,046	77 i	331	383	244	16,010
Finance and insurance	52	4,748	55 i	91	309	350	3,943
Real estate and rental and leasing	53	268	17 i	8	52	192	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	58	3 i	3	52	0	0
Other real estate and rental and leasing	other 53	210	14 i	5	0	192	0
Professional, scientific, and technical services	54	37,476 i	3,086 i	8,117	6,473	2,364	17,436 i
Architectural, engineering, and related services	5413	3,440	351 i	1,084 i	759	495	751
Computer systems design and related services	5415	12,536 i	1,785 i	3,100 i	2,604 i	1,034	4,012 i
Scientific R&D services	5417	17,329	468 i	3,209	1,967	561	11,123
Biotechnology R&D	541711	4,898	113 i	722	D	0	D

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Physical, engineering, and life sciences (except biotechnology) R&D	541712	11,749	345 i	2,453	1,572	561	6,818
Social sciences and humanities R&D	541720	682	10 i	34	D	0	D
Other professional, scientific, and technical services	other 54	4,172 i	481 i	724	1,143	274	1,549 i
Health care services	621–23	501 i	97 i	127	156	121 i	0
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	D	207 i	D	196	D	D
All companies (number of domestic employees)	–	416,038	9,407 i	27,013	32,840	20,984	325,794
Small companies <sup>a</sup>							
5–499	–	58,967	9,149 i	23,443	18,242	4,792	3,341
5–99	–	30,333 i	7,685 i	15,604	6,694	349 i	0
5–49	–	19,607 i	6,231 i	10,769	2,553 i	54	0
5–9	–	3,390 i	1,588 i	1,802	0	0	0
10–24	–	7,450 i	2,844 i	4,167	440 i	0	0
25–49	–	8,767 i	1,799 i	4,801	2,113 i	54	0
50–99	–	10,726	1,455 i	4,835	4,141	295 i	0
100–249	–	14,984	1,112 i	5,438	6,259	1,738	438
250–499	–	13,650	352 i	2,401	5,289	2,705	2,903
Medium and large companies							
500–999	–	15,526	132 i	1,522	4,596	4,075	5,201
1,000–4,999	–	71,736	74 i	1,669	7,294	8,039	54,660
5,000–9,999	–	51,020	4 i	178	1,462	2,529	46,847
10,000–24,999	–	63,639	44 i	113	796	1,015 i	61,672
25,000 or more	–	155,150	4 i	86	451	535	154,074

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 = 2012 North American Industry Classification System.

<sup>a</sup> Upper bound is based on the U.S. Small Business Administration's definition of a small business; the 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 is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D. R&D program size classifications are based on R&D performance.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2014.