

TABLE 7. Worldwide R&D paid for by others and performed by the company and others, by industry and company size: 2014  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Performed by the company	Performed by others
All industries	21–23, 31–33, 42–81	74,224	64,113	10,111
Manufacturing industries	31–33	49,266	42,003	7,263
Food	311	269	222	47
Beverages and tobacco products	312	102	101	1
Textiles, apparel, and leather products	313–16	15	15 i	* i
Wood products	321	13 i	12 i	1 i
Paper	322	12	12	0
Printing and related support activities	323	3	2 i	1 i
Petroleum and coal products	324	6	5	2 i
Chemicals	325	14,210	10,006	4,203
Basic chemicals	3251	317	309 i	8
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	20	17	2
Pesticides, fertilizers, and other agricultural chemicals	3253	480	476	4 i
Pharmaceuticals and medicines	3254	13,310	9,132	4,179
Soaps, cleaning compounds, and toilet preparations	3256	18	16 i	2 i
Paints, coatings, adhesives, and other chemicals	3255, 3259	64	56	8
Plastics and rubber products	326	165	160	4
Nonmetallic mineral products	327	28	26	2
Primary metals	331	62	62	1 i
Fabricated metal products	332	136	130 i	5 i
Machinery	333	809	694	115
Agricultural implements	33311	51	40	11
Semiconductor machinery	333295	134	130	4
Engines, turbines, and power transmission equipment	3336	D	63	D
Other machinery	other 333	D	461 i	D
Computer and electronic products	334	10,115	9,545	570
Communications equipment	3342	1,582	1,548 i	34 i
Semiconductors and other electronic components	3344	2,372	2,193	179
Navigational, measuring, electromedical, and control instruments	3345	5,857	5,518	339
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	247	236	12
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	5,260	4,955	305
Other measuring and controlling devices	other 3345	350	327	23 i
Other computer and electronic products	other 334	304 i	287 i	17
Electrical equipment, appliances, and components	335	216	197 i	19 i
Transportation equipment	336	22,508 i	20,242 i	2,266 i
Automobiles, bodies, trailers, and parts	3361–63	3,196	D	D
Aerospace products and parts	3364	18,172 i	D	D
Aircraft, aircraft engines, and aircraft parts	336411–13	D	D	D
Guided missiles, space vehicles, and related parts	336414–15, 336419	D	D	D
Military armored vehicles, tanks, and tank components	336992	8	8	* i
Other transportation	other 336	1,132 i	1,131 i	1 i
Furniture and related products	337	5	4 i	* i
Miscellaneous	339	594	568	26
Medical equipment and supplies	3391	525	508	17
Other miscellaneous manufacturing	3399	69	60 i	9 i
Nonmanufacturing industries	21–23, 42–81	24,959	22,110	2,849
Mining, extraction, and support activities	21	D	D	D
Utilities	22	84	52	32
Wholesale trade	42	D	D	D
Electronic shopping and electronic auctions	454111–12	0	0	0
Transportation and warehousing	48–49	4	4	*
Information	51	1,599	1,531	69

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Industry and company size	NAICS code	Total	Performed by the company	Performed by others
Publishing	511	1,379	1,317	62
Newspaper, periodical, book, and directory publishers	5111	0	0	0
Software publishers	5112	1,379	1,317	62
Telecommunications	517	45	45	0
Data processing, hosting, and related services	518	112	108	4
Other information	other 51	64	61	3
Finance and insurance	52	32	32	0
Real estate and rental and leasing	53	*	* i	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	0	0	0
Other real estate and rental and leasing	other 53	*	* i	0
Professional, scientific, and technical services	54	D	19,428	D
Architectural, engineering, and related services	5413	2,049	1,891	158
Computer systems design and related services	5415	2,475	2,419 i	56 i
Scientific R&D services	5417	D	14,583	D
Biotechnology R&D	541711	D	4,170	D
Physical, engineering, and life sciences (except biotechnology) R&D	541712	11,799	9,760	2,039
Social sciences and humanities R&D	541720	782	652	130
Other professional, scientific, and technical services	other 54	D	535	D
Health care services	621-23	69	62 i	7 i
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	85	70	15
All companies (number of domestic employees)	-	74,224	64,113	10,111
Small companies <sup>a</sup>				
5-499	-	14,233	12,179 i	2,054
5-99	-	8,882	7,456 i	1,425 i
5-49	-	5,588	4,783 i	805
5-9	-	1,017	875 i	142 i
10-24	-	1,938	1,680 i	258
25-49	-	2,633	2,227 i	406
50-99	-	3,294	2,674 i	620 i
100-249	-	2,982	2,599	383
250-499	-	2,369	2,123	246
Medium and large companies				
500-999	-	1,797	1,592	206
1,000-4,999	-	13,454	11,071	2,383
5,000-9,999	-	13,011	11,029	1,983
10,000-24,999	-	8,770	7,822	948
25,000 or more	-	22,958 i	20,421 i	2,538 i

\* = amount < \$500,000; 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.

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