

TABLE 2  
**Worldwide, domestic, and foreign R&D paid for by the company and others and performed by the company, by industry and company size: 2015**  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Worldwide R&D performance			Domestic R&D performance			Foreign R&D performance		
		Total	Paid for by company	Paid for by others	Total	Paid for by company	Paid for by others	Total	Paid for by company	Paid for by others
All industries	21-23, 31-33, 42-81	429,512	364,500	65,012	355,821	296,677	59,144	73,691	67,822	5,868
Manufacturing industries	31-33	288,051	246,408	41,643	236,132	195,792	40,340	51,919	50,616	1,304
Food	311	6,070 i	5,874 i	196	4,838	4,644	194	1,232	1,230	2
Beverages and tobacco products	312	1,525	1,406	119	1,002	885	117	523	521	2
Textiles, apparel, and leather products	313-16	819	786	32	748	715	32	71	71	*
Wood products	321	198	190	8 i	195	188	8 i	3	3	0
Paper	322	867	864	3 i	766	763	3 i	102	102	0
Printing and related support activities	323	198 i	191 i	7 i	196 i	189 i	7 i	2	2	* i
Petroleum and coal products	324	252	238	14	214	200	14	38	38	0
Chemicals	325	81,342	71,688	9,654	68,196	58,769	9,427	13,146	12,919	227
Basic chemicals	3251	3,677	3,206	471	3,042	2,574	467	636	632	4
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,780	1,750	30 i	1,201	1,172	29 i	579	578	1
Pesticides, fertilizers, and other agricultural chemicals	3253	3,405	D	D	D	2,157	D	D	D	16
Pharmaceuticals and medicines	3254	69,266	60,629	8,637	58,675	50,242	8,432	10,591	10,387	205
Soaps, cleaning compounds, and toilet preparations	3256	1,549	1,433	116	1,398	1,283	115	150	149	1
Paints, coatings, adhesives, and other chemicals	3255, 3259	1,665	D	D	D	1,339	D	D	D	0
Plastics and rubber products	326	2,899	2,746	153 i	2,541	2,390	152 i	358	356	1
Nonmetallic mineral products	327	1,487	1,463	24	1,259	1,239	20	228	224	4
Primary metals	331	715	666	49	628	579	49	87	86	1
Fabricated metal products	332	2,454 i	2,232	223 i	2,261 i	2,039	223 i	193	193	0
Machinery	333	16,718	15,745	973 i	13,426	12,544	881 i	3,292	3,201	92 i
Agricultural implements	33311	2,152	2,133	19 i	1,531	1,516	15 i	621	617	4
Semiconductor machinery	333242	3,812	3,439	373 i	3,214	2,917	297 i	599	523	76 i
Engines, turbines, and power transmission equipment	3336	2,945	2,789	156	2,535	2,381	154	410	408	2
Other machinery	other 333	7,809	7,384	425	6,146	5,731	416	1,663	1,653	10
Computer and electronic products	334	92,783	84,126	8,657	72,110	63,765	8,345	20,674	20,362	312
Communications equipment	3342	23,049	21,614	1,435 i	19,424	17,999	1,426 i	3,625	3,615	10
Semiconductors and other electronic components	3344	40,348	38,415	1,933	30,451	28,597	1,855	9,896	9,818	78
Navigational, measuring, electromedical, and control instruments	3345	16,943	11,904	5,038	14,128	9,218	4,910	2,814	2,686	128
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	3,681	3,445	236	2,758	2,525	233	923	920	3
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	8,033	3,444	4,589	7,360	2,881	4,480	673	563	110
Other measuring and controlling devices	other 3345	5,228	5,016	213	4,011	3,813	197	1,218	1,203	15
Other computer and electronic products	other 334	12,444	12,193	251	8,106	7,951	154	4,338	4,242	96 i
Electrical equipment, appliances, and components	335	5,687	5,201	485 i	4,335	3,852	483 i	1,351	1,349	2 i
Transportation equipment	336	57,687	37,001	20,686 i	49,274	29,224	20,050 i	8,413	7,777	636 i

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Automobiles, bodies, trailers, and parts	3361-63	25,698	22,862	2,837	19,078	16,636	2,441	6,621	6,225	395 i
Aerospace products and parts	3364	29,139	D	D	27,464	11,138	16,326 i	1,674	D	D
Aircraft, aircraft engines, and aircraft parts	336411-13	27,489	D	D	25,817	10,754	15,063 i	1,672	D	D
Guided missiles, space vehicles, and related parts	336414-15, 336419	1,649 i	385 i	1,265 i	1,647 i	385 i	1,263 i	2	0	2
Military armored vehicles, tanks, and tank components	336992	16	5	12	16	5	12	0	0	0
Other transportation	other 336	2,834	D	D	2,716	1,445	1,271	118	D	D
Furniture and related products	337	477	468	9 i	452	443	9 i	25	25	0
Miscellaneous	339	15,873	15,523	350 i	13,690	13,365	326 i	2,183	2,159	24
Medical equipment and supplies	3391	13,170	12,975	195	11,382	11,211	171	1,788	1,764	24
Other miscellaneous manufacturing	3399	2,703 i	2,548 i	155 i	2,309 i	2,154 i	155 i	394 i	394 i	* i
Nonmanufacturing industries	21-23, 42-81	141,461	118,092	23,369	119,690	100,885	18,804	21,771	17,207	4,565
Mining, extraction, and support activities	21	4,348	3,701	646	4,012	3,393	619	336	308	28 i
Utilities	22	483	449	34	480	446	34	3	3	0
Wholesale trade	42	1,793 i	1,709 i	84 i	1,768 i	1,684 i	84 i	25 i	25 i	0
Electronic shopping and electronic auctions	454111-12	D	D	16	1,533 i	1,517 i	16 i	D	D	0
Transportation and warehousing	48-49	416	415	*	403	403	* i	13	13	0
Information	51	78,035	77,085	950	65,513	64,578	935	12,523	12,507	15
Publishing	511	42,187	41,431	756	33,346	32,598	747	8,841	8,833	9
Newspaper, periodical, book, and directory publishers	5111	107 i	107 i	* i	98 i	98 i	* i	9	9	0
Software publishers	5112	42,080	41,324	756	33,248	32,500	747	8,832	8,823	9
Telecommunications	517	3,648	3,577	71 i	3,607	3,537	70 i	41	41	1 i
Data processing, hosting, and related services	518	10,677	10,572	105	9,416	9,314	102	1,261	1,258	3
Other information	other 51	21,523	21,505	18	19,144	19,129	16	2,379	2,376	3
Finance and insurance	52	6,292	6,254	38	5,366	5,329	38	926	925	* i
Real estate and rental and leasing	53	314	313	1 i	301	301	1 i	13	13	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	D	D	0	68	68	0	D	D	0
Other real estate and rental and leasing	other 53	D	D	1 i	233	232	1 i	D	D	0
Professional, scientific, and technical services	54	46,276	25,054	21,222	38,626	21,915	16,710	7,650	3,139	4,511
Architectural, engineering, and related services	5413	4,187 i	2,276 i	1,911	4,128 i	2,247 i	1,881	58	28	30
Computer systems design and related services	5415	17,225	15,130	2,095 i	14,333	12,418	1,915 i	2,892	2,713	180
Scientific research and development services	5417	20,707	3,973	16,734	16,329	3,896	12,433	4,378	77	4,300
Biotechnology research and development	541711	7,211 i	1,561	5,650 i	5,693 i	1,536 i	4,157 i	1,518	25	1,493
Physical, engineering, and life sciences (except biotechnology) research and development	541712	12,787	2,400	10,387	9,931	2,348	7,583	2,856	52	2,804
Social sciences and humanities research and development	541720	708	12 i	697	705	12 i	693	3	0	3
Other professional, scientific, and technical services	other 54	4,157	3,674	483	3,835	3,354	481	322	321	1

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Health care services	621-23	771 i	463	308 i	758 i	460	298 i	12 i	2	10 i
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	D	D	69	930	861	69	D	D	0
All companies (number of domestic employees)	-	429,512	364,500	65,012	355,821	296,677	59,144	73,691	67,822	5,868
Micro companies <sup>a</sup>										
5-9	-	3,107 i	2,085 i	1,022 i	2,988 i	1,972 i	1,016 i	118 i	113 i	5
Small companies										
10-19	-	5,756 i	4,501 i	1,255 i	5,680 i	4,434 i	1,246 i	76	67	8 i
20-49	-	10,624 i	8,279 i	2,344 i	10,249 i	7,933 i	2,316 i	375	346	29
Medium companies										
50-99	-	11,916	9,119	2,797	11,509	8,803	2,706	406	316	91
100-249	-	14,991	12,348	2,643	13,602	11,037	2,566	1,389	1,311	78
Large companies										
250-499	-	14,675	12,451	2,224	13,553	11,368	2,185	1,122	1,083	40
500-999	-	17,643	15,602	2,041 i	15,217	13,194	2,023 i	2,426	2,407	19
1,000-4,999	-	71,610	61,019	10,592	58,094	48,264	9,830	13,516	12,754	762 i
5,000-9,999	-	48,336	43,593	4,743	38,838	34,660	4,178	9,498	8,933	565
10,000-24,999	-	70,870	57,444	13,427	59,328	48,450	10,878	11,543	8,994	2,549
25,000 or more	-	159,984	138,060	21,924	126,763	106,562	20,201	33,221	31,498	1,723

\* = 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> Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

**Note(s)**

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(s)**

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2015.