

TABLE 76

Domestic R&D paid for and performed by the company, depreciation, capital expenditures, and adjusted domestic R&D, by industry and company size: 2015

(Millions of U.S. dollars and percent change)

Industry and company size	NAICS code	Domestic R&D paid for and performed by the company	Depreciation		Capital expenditures related to R&D		Adjusted domestic R&D paid for by the company and others	Change	
								Amount	Percent
All industries	21-23, 31-33, 42-81	296,677	11,348		23,923	309,252	12,574	4.2	
Manufacturing industries	31-33	195,792	8,268		14,782	202,305	6,513	3.3	
Food	311	4,644	207	i	371	4,808	164	3.5	
Beverage and tobacco products	312	885	37		73	921	36	4.1	
Textile, apparel, and leather products	313-16	715	17		43	741	26	i 3.6	
Wood products	321	188	2		19	205	17	i 9.3	
Paper	322	763	8	i	174	929	166	i 21.8	
Printing and related support activities	323	189	9	i	61	242	53	i 28.0	
Petroleum and coal products	324	200	7		44	237	37	18.7	
Chemicals	325	58,769	2,646		3,997	60,120	1,352	2.3	
Basic chemicals	3251	2,574	206		422	2,790	216	8.4	
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,172	77		147	1,242	70	i 6.0	
Pesticide, fertilizer, and other agricultural chemicals	3253	2,157	210		200	2,148	-9	-0.4	
Pharmaceuticals and medicines	3254	50,242	2,050		2,965	51,157	915	1.8	
Soap, cleaning compound, and toilet preparation	3256	1,283	54		212	1,441	158	i 12.3	
Paint, coating, adhesive, and other chemicals	3255, 3259	1,339	49		52	1,342	3	0.2	
Plastics and rubber products	326	2,390	60		479	2,809	419	17.5	
Nonmetallic mineral products	327	1,239	54	i	298	1,483	245	i 19.8	
Primary metals	331	579	29		135	686	106	i 18.3	
Fabricated metal products	332	2,039	36	i	169	2,172	133	i 6.5	
Machinery	333	12,544	475		619	12,688	143	i 1.1	
Agricultural implement	33311	1,516	52		63	1,526	10	0.7	
Semiconductor machinery	333242	2,917	191		52	2,778	-139	i -4.8	
Engine, turbine, and power transmission equipment	3336	2,381	105		68	2,345	-37	i -1.5	
Other machinery	other 333	5,731	127		436	6,039	309	i 5.4	
Computer and electronic products	334	63,765	3,295		5,456	65,926	2,161	3.4	
Communications equipment	3342	17,999	1,018		1,592	18,573	575	i 3.2	
Semiconductor and other electronic components	3344	28,597	1,521		2,510	29,585	989	3.5	
Navigational, measuring, electromedical, and control instruments	3345	9,218	233		603	9,589	370	4.0	
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	2,525	73		185	2,637	112	4.5	
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	2,881	63		206	3,024	143	5.0	
Other measuring and controlling device	other 3345	3,813	98		212	3,927	114	3.0	
Other computer and electronic products	other 334	7,951	523		750	8,179	228	2.9	
Electrical equipment, appliances, and components	335	3,852	114		283	4,021	169	4.4	
Transportation equipment	336	29,224	716		1,805	30,313	1,089	3.7	
Motor vehicles, bodies, trailers, and parts	3361-63	16,636	503		1,089	17,223	586	3.5	
Aerospace products and parts	3364	11,138	178		597	11,558	419	3.8	

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Aircraft, aircraft engine, and aircraft parts	336411-13	10,754	177		595	11,172	418	3.9	
Guided missile, space vehicle, and related parts	336414-15, 336419	385 i	1 i		2 i	386 i	1 i	0.3	
Military armored vehicle, tank, and tank component	336992	5	0		2	6	2	39.3	
Other transportation	other 336	1,445	36		117	1,526	82 i	5.6	
Furniture and related products	337	443	8		52	487 i	44	10.0	
Miscellaneous	339	13,365	549		701	13,517	152	1.1	
Medical equipment and supplies	3391	11,211	485		606	11,332	121	1.1	
Other miscellaneous manufacturing	3399	2,154 i	65 i		96 i	2,185 i	31 i	1.4	
Nonmanufacturing industries	21-23, 42-81	100,885	3,080		9,141	106,947	6,061	6.0	
Mining, quarrying, oil and gas extraction, and support activities	21	3,393	97		1,298 i	4,594	1,201 i	35.4	
Utilities	22	446	142		519 i	822 i	377 i	84.5	
Wholesale trade	42	1,684 i	78 i		375 i	1,982 i	298 i	17.7	
Electronic shopping and electronic auctions	454111-12	1,517 i	187 i		156 i	1,486 i	-31 i	-2.0	
Transportation and warehousing	48-49	403	10		144 i	538 i	135 i	33.4	
Information	51	64,578	1,808		3,325	66,095	1,517	2.3	
Publishing	511	32,598	739		1,433	33,292	694	2.1	
Newspaper, periodical, book, and directory publishers	5111	98 i	6 i		25 i	117 i	19 i	19.2	
Software publishers	5112	32,500	732		1,408	33,175	675	2.1	
Telecommunications	517	3,537	33 i		485 i	3,989 i	452 i	12.8	
Data processing, hosting, and related services	518	9,314	221		769	9,862	547	5.9	
Other information	other 51	19,129	815		639	18,952	-176	-0.9	
Finance and insurance	52	5,329	47		536	5,817 i	488	9.2	
Real estate and rental and leasing	53	301	7		42 i	336 i	35 i	11.8	
Lessors of nonfinancial intangible assets (except copyrighted works)	533	68	1		2 i	69	1	0.8	
Other real estate and rental and leasing	other 53	232	6		40 i	267 i	35 i	15.0	
Professional, scientific, and technical services	54	21,915	682		2,368	23,601	1,686	7.7	
Architectural, engineering, and related services	5413	2,247 i	28 i		52	2,272 i	24 i	1.1	
Computer systems design and related services	5415	12,418	409		1,472	13,481	1,063	8.6	
Scientific research and development services	5417	3,896	114		569	4,351 i	455 i	11.7	
Research and development in biotechnology	541711	1,536 i	46		271 i	1,762 i	225 i	14.7	
Research and development in the physical, engineering, and life sciences (except biotechnology)	541712	2,348	68		290	2,570	222	9.5	
Research and development in the social sciences and humanities	541720	12 i	* i		8	19 i	8	65.7	
Other professional, scientific, and technical services	other 54	3,354	131 i		275	3,498 i	144	4.3	
Health care services	621-23	460	12 i		132 i	580 i	119 i	25.9	

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									Amount	Percent		
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	861	10		246	i	1,096	i	236	i	27.4	
All companies (number of domestic employees)	–	296,677	11,348		23,923		309,252		12,574		4.2	
Micro companies ^a												
5–9	–	1,972	i	58	i	208	i	2,122	i	150	i	7.6
Small companies												
10–19	–	4,434	i	132	i	883	i	5,185	i	751	i	16.9
20–49	–	7,933	i	232	i	563	i	8,265	i	331	i	4.2
Medium companies												
50–99	–	8,803		231	i	683		9,255	i	452	i	5.1
100–249	–	11,037		288		1,004	i	11,753		716	i	6.5
Large companies												
250–499	–	11,368		375		1,321	i	12,314		946	i	8.3
500–999	–	13,194		468		1,300		14,027		832	i	6.3
1,000–4,999	–	48,264		1,852		4,038		50,450		2,186		4.5
5,000–9,999	–	34,660		1,472		3,146		36,333		1,673		4.8
10,000–24,999	–	48,450		2,224		3,575		49,801		1,351		2.8
25,000 or more	–	106,562		4,015		7,201		109,748		3,186		3.0

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a The Business R&D and Innovation Survey (BRDIS) did not include companies with fewer than 5 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. To enable comparisons between U.S. BRDIS statistics and those of other nations, in this table an internationally comparable adjusted domestic R&D estimate is calculated by subtracting depreciation relating to R&D operations, which was *included* in U.S. BRDIS domestic R&D, and adding capital expenditures relating to R&D operations, which was *excluded* from U.S. BRDIS domestic R&D.

Source(s):

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