

TABLE 29. Domestic R&D paid for by others and performed by the company, by industry and company size: 2012  
(Millions of U.S. dollars)

Industry	NAICS code	Company size (domestic employees)											
		All companies	5-9 <sup>a</sup>	10-24	25-49	50-99	100-249	250-499	500-999	1,000-4,999	5,000-9,999	10,000-24,999	25,000 or more
All industries	21-23, 31-33, 42-81	54,970	959 i	1,930 i	1,476	1,894 i	2,581	1,733	1,257	7,666	6,662	6,373	22,440 i
Manufacturing industries	31-33	38,218	84 i	326 i	317 i	331	671	778	439	5,637	2,687	5,918	21,030 i
Food	311	171	0	* i	1 i	13 i	53	4	5	61	1	*	34
Beverage and tobacco products	312	D	D	0	0	0	D	D	0	0	3	0	0
Textile, apparel, and leather products	313-16	23	0	D	1 i	1 i	3 i	D	0	12	0	0	0
Wood products	321	9	0	* i	0	0	0	0	4	0	0	5	0
Paper	322	9	0	0	* i	D	6	D	0	2	0	0	0
Printing and related support activities	323	3 i	D	D	* i	* i	* i	D	0	*	0	0	0
Petroleum and coal products	324	14	0	2	* i	6	0	0	0	0	0	6	*
Chemicals	325	6,359	6	58 i	65	92	208	107	35 i	2,510	1,946	1,192	140
Basic chemicals	3251	380 i	0	1	3	15 i	21 i	2	24 i	245 i	67	0	4
Resin, synthetic rubber, fibers, and artificial synthetic fibers and filaments	3252	102	1 i	* i	D	2 i	1 i	D	1	D	*	D	0
Pesticide, fertilizer, and other agricultural chemical	3253	D	0	0	D	0	0	2	0	D	0	D	0
Pharmaceuticals and medicines	3254	5,552	5	48 i	54	63	183	96	10 i	1,950	1,879	1,129	136
Soap, cleaning compound, and toilet preparation	3256	4 i	0	2 i	* i	* i	* i	* i	0	0	0	*	*
Paint, coating, adhesive, and other chemicals	3255, 3259	D	1 i	6 i	D	12 i	3	D	*	D	0	D	*
Plastics and rubber products	326	338 i	* i	3 i	8 i	12 i	21	16 i	16	1	1 i	261 i	0
Nonmetallic mineral products	327	34	0	0	1 i	2 i	6 i	0	*	22	0	2	0
Primary metals	331	55	0	D	D	2 i	1 i	D	1	4	1	41	0
Fabricated metal products	332	114 i	10 i	12 i	43 i	15 i	14 i	17 i	2	* i	0	1	0
Machinery	333	960	2 i	D	34 i	56 i	40	64 i	33	110	2	111	D
Agricultural implement	33311	43	0	1 i	* i	2	0	3	0	4	0	15	18
Semiconductor machinery	333295	73	0	1	0	15	17	3	4	33	0	0	0
Engine, turbine, and power transmission equipment	3336	579	0	D	D	*	1 i	2	D	1	0	95	D
Other machinery	other 333	265 i	2 i	D	D	39 i	23 i	56 i	D	73	2	0	D
Computer and electronic products	334	8,391	59 i	174	120	83	133	167	177	1,440	456	1,820 i	3,762
Communications equipment	3342	1,440 i	9	1	32	1	17	51	6 i	621	0	703 i	0
Semiconductor and other electronic components	3344	1,375	D	57	46	50	47	101	115	514	414	D	0
Navigational, measuring, electromedical, and control instruments	3345	5,345	34 i	113 i	34 i	30	62	15	23	294	18	1,042 i	3,681
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	230	1	5	11 i	6 i	2	2 i	22	22	5	3	152
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	4,927	0	44	19 i	21	50	10	0	215	0	1,039 i	3,528
Other measuring and controlling device	other 3345	188 i	32 i	64 i	4 i	4	10 i	3	1	58	13	0	0
Other computer and electronic products	other 334	231	D	3 i	7	2	7	0	34	11	24	D	82 i
Electrical equipment, appliances, and components	335	187	2 i	16 i	5 i	13	16	7	1	55	3	69	0
Transportation equipment	336	20,961 i	0	D	D	D	51 i	265	128	1,387	275	2,204	16,598 i
Automobiles, bodies, trailers, and parts	3361-63	D	0	D	1	D	D	245	D	984	112	131	D
Aerospace products and parts	3364	17,677 i	0	D	D	* i	D	19	D	402	162 i	2,073	14,936 i
Aircraft, aircraft engine, and aircraft parts	336411-13	16,702 i	0	1	* i	0	D	D	D	33	D	D	14,936 i

TABLE 29. Domestic R&D paid for by others and performed by the company, by industry and company size: 2012  
(Millions of U.S. dollars)

Industry	NAICS code	Company size (domestic employees)											
		All companies	5-9 <sup>a</sup>	10-24	25-49	50-99	100-249	250-499	500-999	1,000-4,999	5,000-9,999	10,000-24,999	25,000 or more
Guided missile, space vehicle, and related parts	336414-15, 336419	975	0	D	D	* i	D	D	0	369	D	D	0
Military armored vehicle, tank, and tank component	336992	D	0	0	0	4	D	1	0	0	0	0	0
Other transportation	other 336	D	0	D	* i	D	*	* i	3 i	1	0	0	D
Furniture and related products	337	* i	0	0	0	0	* i	0	*	0	0	0	0
Miscellaneous manufacturing	339	D	D	D	D	D	D	D	38	34	0	206	D
Medical equipment and supplies	3391	431	2 i	D	19 i	5 i	85	30 i	34	29	0	206	D
Other miscellaneous manufacturing	3399	D	D	D	D	D	D	D	4	5	0	0	0
Nonmanufacturing industries	21-23, 42-81	16,752	875 i	1,604 i	1,160	1,562 i	1,910	955	817	2,029	3,975	456	1,410
Mining, extraction, and support activities	21	372	0	1 i	*	0	0	0	* i	0	*	362	8
Utilities	22	103	10 i	0	24	*	1 i	0	1	2 i	1	34	30
Wholesale trade	42	245 i	29 i	10 i	19 i	24 i	26 i	25 i	101 i	12 i	0	0	0
Electronic shopping and electronic auctions	454111-12	6 i	0	2 i	D	0	0	0	0	0	D	0	0
Transportation and warehousing	48-49	1	0	0	0	0	0	* i	0	0	0	0	*
Information	51	954	43 i	55 i	10	71	57	44	17 i	34	303	* i	321
Publishing	511	734	12 i	26 i	6	44	19	27	12 i	0	303	0	284
Newspaper, periodical, book, and directory publishers	5111	1 i	0	1 i	0	* i	0	0	0	0	0	0	0
Software publishers	5112	733	12 i	26 i	6	44	19	27	12 i	0	303	0	284
Telecommunications	517	56	0	1 i	* i	0	20	1	0	34	0	* i	0
Data processing, hosting, and related services	518	112	31 i	3 i	3 i	9 i	14 i	15	0	0	0	0	37
Other information	other 51	52 i	0	25 i	1	17	4	0	5 i	0	0	0	0
Finance and insurance	52	12	0	0	* i	0	4	0	0	8	0	0	0
Real estate and rental and leasing	53	4	0	* i	0	0	4	0	0	0	0	0	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	4	0	* i	0	0	4	0	0	0	0	0	0
Other real estate and rental and leasing	other 53	0	0	0	0	0	0	0	0	0	0	0	0
Professional, scientific, and technical services	54	14,143	611 i	1,519 i	1,086	1,461 i	1,801	822	644	1,952	3,667	48	533
Architectural, engineering, and related services	5413	1,390 i	8 i	129 i	128 i	320 i	314 i	89	38	251	66	48	0
Computer systems design and related services	5415	2,088	78 i	264 i	318	280	525 i	28	20	62	0	0	512
Scientific research and development services	5417	9,756	389 i	1,055 i	563	763	852	641	467	1,638	3,369	0	19
Biotechnology research and development	541711	3,017	121 i	248 i	154	243	267	105	163	469	1,228	0	19
Physical, engineering, and life sciences (except biotechnology) research and development	541712	6,161	D	789 i	D	510	581	536	304	D	2,141	0	0
Social sciences and humanities research and development	541720	578	D	18 i	D	10	4	0	0	D	0	0	0

TABLE 29. Domestic R&D paid for by others and performed by the company, by industry and company size: 2012  
(Millions of U.S. dollars)

Industry	NAICS code	Company size (domestic employees)											
		All companies	5-9 <sup>a</sup>	10-24	25-49	50-99	100-249	250-499	500-999	1,000-4,999	5,000-9,999	10,000-24,999	25,000 or more
Other professional, scientific, and technical services	other 54	909	137 i	72 i	77	97	110	64	119	0	232	0	1
Health care services	621-23	259 i	182 i	3 i	*	5	15 i	30	3	9 i	0	12	0
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	653	* i	14	D	1 i	2 i	34	52	14	D	0	517

\* = 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 = 2007 North American Industry Classification System.

<sup>a</sup> 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. The 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, 2012.