

TABLE 17. Domestic R&D paid for by others and performed by the company, by source of funds, industry, and company size: 2008
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Companies in United States	Companies outside United States	U.S. federal government agencies	U.S. state government agencies	Foreign government agencies	All other, in United States	All other, outside United States
All industries	21-23, 31-33, 42-81	58,176	12,181	8,877	36,360	306	48	334	70
Manufacturing industries	31-33	39,368	3,444	4,712	31,102	19	D	49	D
Food	311	37	3	32	2	0	0	0	0
Beverage and tobacco products	312	3	*	3	0	0	0	0	0
Textiles, apparel, and leather products	313-316	12	3	1 i	D	D	0	0	0
Wood products	321	3	3	0	0	0	0	0	0
Paper	322	11	D	D	D	D	0	*	0
Printing and related support activities	323	37	5	0	32	0	0	0	0
Petroleum and coal products	324	D	1	D	*	0	0	0	0
Chemicals	325	3,207	814	2,182	197	4	0	9	2
Basic chemicals	3251	62	5	23	33	1	0	*	0
Resin, synthetic rubber, fibers, and filaments	3252	35	D	D	12	*	0	*	0
Pesticide, fertilizer, and other agricultural chemical	3253	D	D	D	1	0	0	0	0
Pharmaceuticals and medicines	3254	2,962	796	2,017	137	2	0	7	2
Soap, cleaning compound, and toilet preparation	3256	9	1	2	6	0	0	0	0
Paint, coating, adhesive, and other chemical	3255, 3259	D	D	*	8	*	0	1	0
Plastics and rubber products	326	104	76	23	4	0	0	*	*
Nonmetallic mineral products	327	46	11	2	33	*	0	*	0
Primary metals	331	42	31	*	9	2	0	0	0
Fabricated metal products	332	57	34	7	16	*	*	0	0
Machinery	333	258	95	97	62	1	1	1	*
Agricultural implement	33311	3	3	0	0	0	0	*	0
Semiconductor machinery	333295	59	1	26	32	0	0	0	0
Engine, turbine, and power transmission equipment	3336	63	22	32	9	0	0	0	0
Other machinery	other 333	133	69	39	21	1	1	1	*
Computer and electronic products	334	7,551	1,520	1,338	4,646	4	11	31	1
Communications equipment	3342	1,419 i	106	D	D	*	0	D	0
Semiconductor and other electronic components	3344	736	D	D	D	3	1	D	*
Navigational, measuring, electromedical, and control instruments	3345	4,997	1,010	326	3,635	1	10	14	1
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	1,119 i	18	1	1,098 i	*	1	*	0
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	3,739	983	323	2,410	*	9	13	1
Other measuring and controlling instruments	other 3345	139	9	2	127	*	*	1	0
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	399	D	286	51	0	0	D	0
Electrical equipment, appliances, and components	335	196	34	66	91	1	4 i	*	0
Transportation equipment	336	27,513	774	768	25,941 i	D	D	1	D
Automobiles, bodies, trailers, and parts	3361-3363	906	D	D	D	*	D	*	D
Aerospace products and parts	3364	26,570	649	D	25,805 i	D	D	1	*
Aircraft, aircraft engine, and aircraft parts	336411-336413	21,163	D	D	D	3	D	1	*
Guided missile, space vehicle, and related parts	336414, 336415, 336419	5,407	D	0	D	D	*	0	0
Military armored vehicle, tank, and tank components	336992	7	D	0	D	0	0	0	0
Other transportation	other 336	30 i	D	2 i	D	0	2 i	*	0

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Furniture and related products	337	*	* i	0	0	0	0	0	0
Miscellaneous manufacturing	339	D	D	D	54	1	*	6	0
Medical equipment and supplies	3391	121	35	62	20	0	*	5	0
Other miscellaneous manufacturing	3399	D	D	D	34	1	0	1	0
Nonmanufacturing industries	21–23, 42–81	18,807	8,737	4,166	5,258	287	D	285	D
Mining, extraction, and support activities	21	24	3	D	5	0	*	D	0
Utilities	22	35	D	0	D	1	0	D	0
Construction	23	D	D	0	0	*	0	0	0
Wholesale trade	42	140	21	72	46	0	0	0	2
Retail trade	44, 45	2	1	0	0	1	0	0	0
Electronic shopping and mail-order houses	4541	1	1	0	0	0	0	0	0
Other retail trade	other 44, 45	1	0	0	0	1	0	0	0
Transportation and warehousing	48, 49	*	0	*	*	0	0	0	0
Information	51	772	217	315	229	1	7	3	*
Publishing	511	556	117	D	176	D	D	3	*
Newspaper, periodical, book, and directory publishers	5111	0	0	0	0	0	0	0	0
Software publishers	5112	556	117	D	176	D	D	3	*
Telecommunications	517	83	11	38	35	0	0	*	0
Internet service providers, Web search portals, and data processing services	518	75	73	1	1	0	*	0	0
Other information	other 51	58	16 i	D	17 i	D	D	* i	0
Finance and insurance	52	8	7	* i	0	0	0	0	0
Real estate and rental and leasing	53	7 i	7 i	0	0	0	0	0	0
Professional, scientific, and technical services	54	17,415	8,221	3,753	4,844	276	D	256	D
Architectural, engineering, and related services	5413	2,044	830	194	928	D	0	D	0
Computer systems design and related services	5415	3,577	1,183	1,490	784	119	0	1	0
Scientific R&D services	5417	9,205	4,726	2,008	2,115	107	D	D	D
Other professional, scientific, and technical services	other 54	2,590	1,481	61	1,016	D	4	D	0
Health care services	621–623	282	237	3	16	4	*	21	0
Other nonmanufacturing	55, 56, 61, 624, 71, 72, 81	D	D	D	D	4	0	*	0
All companies	21–23, 31–33, 42–81	58,176	12,181	8,877	36,360	306	48	334	70
Small companies (number of domestic employees) ^a									
5–499	–	11,741	5,635	1,597	4,117	123	21 i	202	46
5–99	–	8,366	4,459	895	2,667	115	11 i	183	36
5–49	–	6,263	3,474	556	1,972	103	4 i	119	36
5–24	–	3,947	2,415	364	1,086	35	*	44	2
25–49	–	2,317	1,059	191	886	68	3 i	75	34
50–99	–	2,103	985	340	695	12	7 i	64	* i
100–249	–	1,729	681	297	718	3	7	14	8
250–499	–	1,646	496	404	732	6	2 i	5 i	2 i
Medium and large companies (number of domestic employees)									
500–999	–	2,213	399	1,022	747	25	*	20	* i

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1,000–4,999	–	7,327	1,396	3,539	2,162 i	128	D	78	D
5,000–9,999	–	4,406	2,318	912	1,168	1	D	D	0
10,000–24,999	–	5,688	994	1,625	3,024	29	1	15	0
25,000 or more	–	26,800	1,438	182	25,142 i	1	20	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = value > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2002 North American Industry Classification System.

^a Upper bound based on U.S. Small Business Administration's definition of small business; Business R&D and Innovation Survey (BRDIS) does not include companies with fewer than five domestic employees. After 2008 BRDIS sample was selected and surveyed, an error was identified that resulted in excluding 226,884 single-establishment companies with five paid employees from sample frame. Most excluded establishments were classified in industries with low R&D intensities, such as construction, retail trade, and service sectors. Based on available information for these small single-establishment companies, their contribution to 2008 R&D estimates is estimated to be negligible.

NOTES: Detail may not add to total because of rounding. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, classification used for sampling was assigned. Statistics are representative of companies located in 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, 2008.