

TABLE 72. Worldwide R&D paid for by the company and performed by others, by type of performer, industry, and company size: 2009
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	U.S. companies	Foreign companies	U.S. federal government	State governments	Foreign governments	U.S. universities or colleges	Foreign universities or colleges	All other	Undistributed ^a
All industries	21-23, 31-33, 42-81	36,259	22,368	7,226	212	14	6	1,116	234	235	4,849
Manufacturing industries	31-33	29,007	18,931	6,486	D	13	6	874	206	219	D
Food	311	379	166	56	*	2	0	D	2	D	-
Beverage and tobacco products	312	144	34	D	D	0	0	1	*	*	-
Textiles, apparel, and leather products	313-316	21	6	*	0	0	0	*	0	0	-
Wood products	321	102	2	1	0	0	0	0	0	0	-
Paper	322	61	D	D	0	0	0	D	2	0	-
Printing and related support activities	323	10	*	0	0	0	0	0	0	0	-
Petroleum and coal products	324	D	D	13	*	0	*	D	1	0	-
Chemicals	325	18,155	12,918	3,871	D	3	1	587	133	156	-
Basic chemicals	3251	105	36	21	*	0	1	6	D	D	-
Resin, synthetic rubber, fibers, and filaments	3252	96	17	D	*	0	0	1	1	0	-
Pesticide, fertilizer, and other agricultural chemical	3253	D i	161 i	D	0	0	0	25 i	D	D i	-
Pharmaceuticals and medicines	3254	17,255	12,408	3,660	D	3	* i	549	123	152	-
Soap, cleaning compound, and toilet preparation	3256	364	264	78	0	0	0	3 i	D i	0	-
Paint, coating, adhesive, and other chemical	3255, 3259	D	31	51	0	0	0	3	1	D	-
Plastics and rubber products	326	217	87	52	0	0	0	8	3	0	-
Nonmetallic mineral products	327	202	10	1	*	0	0	0	0	0	-
Primary metals	331	65	20	7	*	0	0	2	2	*	-
Fabricated metal products	332	64	12	3 i	0	0	0	0	0	0	-
Machinery	333	638	237	203	D	0	*	8	*	1	-
Agricultural implements	33311	293	D	136	5	0	0	1	0	0	-
Semiconductor machinery	333295	26	16	5	0	0	0	1	0	0	-
Engine, turbine, and power transmission equipment	3336	48	1	*	D	0	0	*	0	0	-
Other machinery	other 333	272	D	62	* i	0	*	6	*	1	-
Computer and electronic products	334	2,645	1,827	418	5	4	4	41 i	27 i	D i	-
Communications equipment	3342	894	718	124	4	4	4	4	4	0	-
Semiconductor and other electronic components	3344	579	375	119	*	0	0	*	*	0	-
Navigational, measuring, electromedical, and control instruments	3345	587	262	121	1	0	*	32 i	22 i	D i	-
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	310 i	139	65	0	0	0	D i	D i	D i	-
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	167	98	39	*	0	*	D	D i	*	-
Other measuring and controlling instruments	other 3345	109	24	16	*	0	0	*	*	0	-
Computer and peripheral equipment and other computer and electronic products	other 334	586	471 i	55 i	0	0	0	5 i	1 i	0	-
Electrical equipment, appliances, and components	335	192	74	23	24	1	0	2	0	0	-
Transportation equipment	336	2,850	1,607	1,038	8	3	*	D	23	D i	-
Automobiles, bodies, trailers, and parts	3361-3363	1,753	815	822	D	3	*	D	D	*	-
Aerospace products and parts	3364	1,079	785	215	D	*	*	26	D	D i	-
Aircraft, aircraft engine, and aircraft parts	336411-336413	D	717	D	D	*	*	D	D	0	-
Guided missile, space vehicle, and related parts	336414, 336415, 336419	D	67	D	D	0	0	D	0	D i	-

TABLE 72. Worldwide R&D paid for by the company and performed by others, by type of performer, industry, and company size: 2009
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	U.S. companies	Foreign companies	U.S. federal government	State governments	Foreign governments	U.S. universities or colleges	Foreign universities or colleges	All other	Undistributed ^a
Military armored vehicle, tank, and tank components	336992	*	0	0	0	0	0	0	0	0	-
Other transportation equipment	other 336	17	6	1	0	0	0	*	*	0	-
Furniture and related products	337	96	3	0	0	0	0	0	0	0	-
Miscellaneous manufacturing	339	D	1,803	789	*	0	0	73	13	38	-
Medical equipment and supplies	3391	2,819	1,750	756	*	0	0	72	13	38	-
Other miscellaneous manufacturing	3399	D	54	33	*	0	0	2	0	0	-
Nonmanufacturing industries	21-23, 42-81	7,252	3,437	740	D	1	*	242 i	28	16	D
Mining, extraction, and support activities	21	187	102	37	D	0	0	21	4	D	-
Utilities	22	281	113	9	D	0	0	D	0	D	-
Construction	23	18	D	0	0	0	0	0	0	0	-
Wholesale trade	42	160 i	31 i	31 i	0	0	0	0	0	0	-
Retail trade	44, 45	11	*	2	0	0	0	*	0	0	-
Electronic shopping and mail-order houses	4541	8	*	2	0	0	0	0	0	0	-
Other retail trade	other 44, 45	3	0	0	0	0	0	*	0	0	-
Transportation and warehousing	48, 49	22	14	0	0	0	0	0	0	0	-
Information	51	2,332	1,664	310	0	0	0	D i	0	*	-
Publishing	511	1,347	816	301	0	0	0	4	0	0	-
Newspaper, periodical, book, and directory publishers	5111	9	3	1	0	0	0	0	0	0	-
Software publishers	5112	1,338	813	300	0	0	0	4	0	0	-
Telecommunications	517	808 i	D i	1	0	0	0	D i	0	*	-
Data processing, hosting, and related services	518	120	81	3	0	0	0	*	0	0	-
Other information	other 51	57	D	5	0	0	0	D	0	0	-
Finance and insurance	52	81	57	16	0	0	0	*	*	*	-
Real estate and rental and leasing	53	24	5	0	0	0	0	0	0	0	-
Professional, scientific, and technical services	54	4,050	1,434	318	D	1	*	163 i	24	D	-
Architectural, engineering, and related services	5413	73	14	8	D	0	0	2	*	*	-
Computer systems design and related services	5415	463	54	33	D	0	0	*	0	0	-
Scientific R&D services	5417	3,324	1,360	277	D	*	*	159 i	23	D	-
Biotechnology R&D	541711	2,777	1,255	253	D	0	*	152 i	23	D	-
Physical, engineering, and life sciences (except biotechnology) R&D	541712	398	D	14	0	*	0	6	1	0	-
Social sciences and humanities R&D	541720	148	D	9	0	0	0	0	0	0	-
Other professional, scientific, and technical services	other 54	190	5	* i	D	1	0	2	*	* i	-
Health care services	621-623	25	11	3	0	0	0	4	0	0	-
Other nonmanufacturing	55, 56, 61, 624, 71, 72, 81	62	D	14	0	0	0	0	0	0	-
All companies	-	36,259	22,368	7,226	212	14	6	1,116	234	235	4,849
Small companies (number of domestic employees) ^a											
5-499	-	6,586	1,809	561	1	1 i	*	115	33	D i	-
5-99	-	4,061	575	166	1	0	*	37	29	D	-
5-49	-	3,024	251	74	*	0	*	11	2	2	-
5-24	-	1,918	66	13	*	0	0	3	* i	* i	-
25-49	-	1,105	185	60	*	0	*	8	2	2	-
50-99	-	1,037	325	92	*	0	0	27	27	D	-

TABLE 72. Worldwide R&D paid for by the company and performed by others, by type of performer, industry, and company size: 2009
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	U.S. companies	Foreign companies	U.S. federal government	State governments	Foreign governments	U.S. universities or colleges	Foreign universities or colleges	All other	Undistributed ^a
100-249	-	1,481	714	223	* i	1 i	* i	25	2	5	-
250-499	-	1,044	520	172	*	0	*	53	2	D i	-
Medium and large companies (number of domestic employees)											
500-999	-	1,047	689	185	2	* i	0	18	6	0	-
1,000-4,999	-	6,621	4,466	1,691	D	D	1	109	13	71	-
5,000-9,999	-	1,762	1,179	275	23	3	D	173 i	14	D	-
10,000-24,999	-	10,434	7,306	2,159	D	2	D	465	53	D i	-
25,000 or more	-	9,809	6,919	2,356	124	D	4	235	116	41 i	-

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

NAICS = 2007 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.

NOTES: NAICS 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. Detailed data were not collected on BRDI-1A questionnaire

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics and U.S. Census Bureau, Business R&D and Innovation Survey, 2009.