

TABLE 10. Worldwide R&D paid for by others and performed by the company, by location of R&D performance, industry, and company size: 2008  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Worldwide	Domestic	Foreign
All industries	21-23, 31-33, 42-81	62,752	58,176	4,576
Manufacturing industries	31-33	40,666	39,368	1,298
Food	311	37	37	*
Beverage and tobacco products	312	3	3	0
Textiles, apparel, and leather products	313-316	12	12	0
Wood products	321	3	3	0
Paper	322	11	11	0
Printing and related support activities	323	37	37	*
Petroleum and coal products	324	D	D	0
Chemicals	325	3,648	3,207	441
Basic chemicals	3251	66	62	4
Resin, synthetic rubber, fibers, and filaments	3252	35	35	0
Pesticide, fertilizer, and other agricultural chemical	3253	D	D	1
Pharmaceuticals and medicines	3254	3,345	2,962	383
Soap, cleaning compound, and toilet preparation	3256	9	9	0
Paint, coating, adhesive, and other chemical	3255, 3259	D	D	53
Plastics and rubber products	326	106	104	2
Nonmetallic mineral products	327	46	46	*
Primary metals	331	42	42	*
Fabricated metal products	332	57	57	1
Machinery	333	269	258	11
Agricultural implement	33311	3	3	0
Semiconductor machinery	333295	63	59	4
Engine, turbine, and power transmission equipment	3336	63	63	0
Other machinery	other 333	140	133	7
Computer and electronic products	334	7,906	7,551	355
Communications equipment	3342	1,431	1,419	12
Semiconductor and other electronic components	3344	909	736	173
Navigational, measuring, electromedical, and control instruments	3345	5,102	4,997	105
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	1,123	1,119	4
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	D	3,739	D
Other measuring and controlling instruments	other 3345	D	139	D
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	464	399	65
Electrical equipment, appliances, and components	335	206	196	10
Transportation equipment	336	27,984	27,513	471
Automobiles, bodies, trailers, and parts	3361-3363	1,040	906	134
Aerospace products and parts	3364	26,907	26,570	337
Aircraft, aircraft engine, and aircraft parts	336411-336413	D	21,163	D
Guided missile, space vehicle, and related parts	336414, 336415, 336419	D	5,407	D
Military armored vehicle, tank, and tank components	336992	7	7	0
Other transportation	other 336	30 i	30 i	0
Furniture and related products	337	*	*	0
Miscellaneous manufacturing	339	D	D	7
Medical equipment and supplies	3391	126	121	5
Other miscellaneous manufacturing	3399	D	D	3
Nonmanufacturing industries	21-23, 42-81	22,085	18,807	3,278
Mining, extraction, and support activities	21	D	24	D
Utilities	22	35	35	*
Construction	23	D	D	0
Wholesale trade	42	151	140	11
Retail trade	44, 45	2	2	0
Electronic shopping and mail-order houses	4541	1	1	0
Other retail trade	other 44, 45	1	1	0
Transportation and warehousing	48, 49	*	*	0
Information	51	828	772	55

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Publishing	511	603	556	46
Newspaper, periodical, book, and directory publishers	5111	0	0	0
Software publishers	5112	603	556	46
Telecommunications	517	83	83	0
Internet service providers, Web search portals, and data processing services	518	84	75	9
Other information	other 51	58	58	0
Finance and insurance	52	9	8	1
Real estate and rental and leasing	53	7 i	7 i	0
Professional, scientific, and technical services	54	20,611	17,415	3,196
Architectural, engineering, and related services	5413	2,126	2,044	83
Computer systems design and related services	5415	3,665	3,577	88
Scientific R&D services	5417	12,185	9,205	2,980
Other professional, scientific, and technical services	other 54	2,635	2,590	45
Health care services	621–623	282	282	0
Other nonmanufacturing	55, 56, 61, 624, 71, 72, 81	D	D	D
All companies	21–23, 31–33, 42–81	62,752	58,176	4,576
Small companies (number of employees) <sup>a</sup>				
5–499	–	12,131	11,741	389
5–99	–	8,577	8,366	210
5–49	–	6,453	6,263	190
5–24	–	4,076	3,947	130
25–49	–	2,377	2,317	61
50–99	–	2,123	2,103	20
100–249	–	1,842	1,729	113
250–499	–	1,712	1,646	66
Medium and large companies (number of employees)				
500–999	–	2,286	2,213	73
1,000–4,999	–	8,049	7,327	722
5,000–9,999	–	6,842	4,406	2,435
10,000–24,999	–	6,250	5,688	562
25,000 or more	–	27,194	26,800	394

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

NAICS = 2002 North American Industry Classification System.

<sup>a</sup> 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.