

TABLE 101. Worldwide R&D paid for by others and performed by the company and by others, by industry and company size: 2010  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Worldwide	Performed by company	Performed by others
All industries	21-23, 31-33, 42-81	74,975	61,134	13,841
Manufacturing industries	31-33	48,459	38,302	10,157 i
Food	311	D	D	17
Beverage and tobacco products	312	D	D	1
Textiles, apparel, and leather products	313-316	14	12	3
Wood products	321	20	18	1
Paper	322	29	28	2
Printing and related support activities	323	31	31	1
Petroleum and coal products	324	D	D	2
Chemicals	325	7,171	4,857	2,315
Basic chemicals	3251	123	114	9
Resin, synthetic rubber, fibers, and filaments	3252	21	21	*
Pesticide, fertilizer, and other agricultural chemical	3253	D	D	*
Pharmaceuticals and medicines	3254	6,643	4,358	2,285
Soap, cleaning compound, and toilet preparation	3256	5	4	2
Paint, coating, adhesive, and other chemical	3255, 3259	D	D	18
Plastics and rubber products	326	347 i	318 i	29
Nonmetallic mineral products	327	35	32	3
Primary metals	331	85	75	10
Fabricated metal products	332	344	239	105
Machinery	333	627	590	37
Agricultural implement	33311	29	D	D
Semiconductor machinery	333295	136	128	8
Engine, turbine, and power transmission equipment	3336	121	117	4
Other machinery	other 333	341	D	D
Computer and electronic products	334	9,398	8,972	427
Communications equipment	3342	1,764	1,713	52
Semiconductor and other electronic components	3344	724	703	21
Navigational, measuring, electromedical, and control instruments	3345	6,253	5,953	301
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	219	200	19
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	5,888	5,616	272
Other measuring and controlling instruments	other 3345	146	137	9
Other computer and electronic products	other 334	656	604	53
Electrical equipment, appliances, and components	335	201	183	18
Transportation equipment	336	29,404 i	22,258 i	7,146 i
Automobiles, bodies, trailers, and parts	3361-3363	D	D	D
Aerospace products and parts	3364	26,533 i	19,935 i	6,598 i
Aircraft, aircraft engine, and aircraft parts	336411-336413	21,469 i	D	D
Guided missile, space vehicle, and related parts	336414, 336415, 336419	5,064	D	D
Military armored vehicle, tank, and tank components	336992	D	D	0
Other transportation	other 336	D	D	D
Furniture and related products	337	4	3	1
Miscellaneous manufacturing	339	445	405	40
Medical equipment and supplies	3391	362	333	29
Other miscellaneous manufacturing	3399	83	72	11
Nonmanufacturing industries	21-23, 42-81	26,516	22,832	3,684
Mining, extraction, and support activities	21	312	299	13
Utilities	22	131	54	77
Construction	23	375	375	*
Wholesale trade	42	254	233	20
Retail trade	44, 45	*	*	0
Electronic shopping and electronic auctions	454111, 454112	0	0	0
Other retail trade	other 44, 45	*	*	0
Transportation and warehousing	48, 49	8 i	7 i	1 i
Information	51	811	790	22

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Publishing	511	623	616	7
Newspaper, periodical, book, and directory publishers	5111	*	*	*
Software publishers	5112	623	616	7
Telecommunications	517	118	113	5
Data processing, hosting, and related services	518	48	47	1
Other information	other 51	22	13	9
Finance and insurance	52	2	1 i	1 i
Real estate and rental and leasing	53	16	2	14
Professional, scientific, and technical services	54	24,409	20,897	3,513
Architectural, engineering, and related services	5413	3,300 i	2,776	524 i
Computer systems design and related services	5415	1,770	1,669	101
Scientific R&D services	5417	17,282	14,458	2,824
Biotechnology R&D	541711	5,588	4,586	1,002
Physical, engineering, and life sciences (except biotechnology) R&D	541712	11,040	9,339	1,701
Social sciences and humanities R&D	541720	654	533	121
Other professional, scientific, and technical services	other 54	2,058	1,994	64
Health care services	621–623	141	121	21
Other nonmanufacturing	55, 56, 624, 71, 72, 81	56	53	3
All companies (number of employees)	–	74,975	61,134	13,841
Small companies (number of employees) <sup>a</sup>				
5–499	–	13,707	11,656	2,050
5–99	–	8,474	7,201	1,273
5–49	–	5,556	4,705	851
5–9	–	1,243	970	273
10–24	–	2,275	2,021	255
25–49	–	2,038	1,714	323
50–99	–	2,917	2,495	422
100–249	–	2,975	2,476	500
250–499	–	2,258	1,980	277
Medium and large companies (number of employees)				
500–999	–	1,685	1,495	190
1,000–4,999	–	12,042	9,548	2,495
5,000–9,999	–	8,355	7,542	813
10,000–24,999	–	6,535	5,512	1,023
25,000 or more	–	32,651 i	25,382 i	7,270 i

\* = 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 = 2007 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.

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, 2010.