

TABLE 11. Worldwide R&D paid for by others and performed by the company and others, by industry and company size: 2013
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Performed by the company	Performed by others
All industries	21-23, 31-33, 42-81	75,011	63,588	11,423
Manufacturing industries	31-33	50,647	41,936	8,711
Food	311	245	236	9
Beverage and tobacco products	312	105 i	100 i	5
Textile, apparel, and leather products	313-16	21	21 i	* i
Wood products	321	12	11	1 i
Paper	322	14	13 i	1
Printing and related support activities	323	39	28 i	11 i
Petroleum and coal products	324	7	5	1
Chemicals	325	11,867	7,629	4,238
Basic chemicals	3251	332	321	11
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	179	163	16
Pesticide, fertilizer, and other agricultural chemicals	3253	379	379	1
Pharmaceuticals and medicines	3254	10,917	6,715	4,201
Soap, cleaning compound, and toilet preparation	3256	11	11 i	* i
Paint, coating, adhesive, and other chemicals	3255, 3259	50	40	10
Plastics and rubber products	326	172	158 i	14
Nonmetallic mineral products	327	32	27 i	4 i
Primary metals	331	19	19	*
Fabricated metal products	332	364	278 i	86 i
Machinery	333	670	589	81
Agricultural implement	33311	49	36	13
Semiconductor machinery	333295	104	98	7
Engine, turbine, and power transmission equipment	3336	164	118	47
Other machinery	other 333	352	337	15
Computer and electronic products	334	10,816	10,265	551
Communications equipment	3342	D	1,999 i	D
Semiconductor and other electronic components	3344	2,445	2,389	56
Navigational, measuring, electromedical, and control instruments	3345	5,966	5,600	366
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	180	165	15
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	5,496	5,155	341
Other measuring and controlling device	other 3345	290	281	10
Other computer and electronic products	other 334	D	277	D
Electrical equipment, appliances, and components	335	520	507 i	14 i
Transportation equipment	336	25,329 i	21,677 i	3,653 i
Automobiles, bodies, trailers, and parts	3361, 3362, 3363	3,430	3,110	319
Aerospace products and parts	3364	20,767 i	17,438 i	3,329 i
Aircraft, aircraft engine, and aircraft parts	336411-13	D	D	3,328 i
Guided missile, space vehicle, and related parts	336414-15, 336419	D	D	1
Military armored vehicle, tank, and tank component	336992	2 i	2 i	0
Other transportation	other 336	1,131	1,127	4
Furniture and related products	337	1	1 i	* i
Miscellaneous manufacturing	339	413	373	40
Medical equipment and supplies	3391	358	327	32
Other miscellaneous manufacturing	3399	54	46 i	8 i
Nonmanufacturing industries	21-23, 42-81	24,364	21,652	2,712
Mining, extraction, and support activities	21	D	D	D
Utilities	22	65	50	15
Wholesale trade	42	19	18 i	1
Electronic shopping and electronic auctions	454111-12	1	1 i	0
Transportation and warehousing	48-49	D	D	*

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Information	51	D	1,244	D
Publishing	511	D	1,109	D
Newspaper, periodical, book, and directory publishers	5111	1	1 i	* i
Software publishers	5112	D	1,107	D
Telecommunications	517	4	4 i	* i
Data processing, hosting, and related services	518	124	117	7 i
Other information	other 51	15	15	* i
Finance and insurance	52	10	10	0
Real estate and rental and leasing	53	*	* i	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	0	0	0
Other real estate and rental and leasing	other 53	*	* i	0
Professional, scientific, and technical services	54	21,961	D	D
Architectural, engineering, and related services	5413	2,056	1,878	178
Computer systems design and related services	5415	1,289	1,178 i	111 i
Scientific research and development services	5417	17,464	15,538	1,927
Biotechnology research and development	541711	4,615	4,516	99
Physical, engineering, and life sciences (except biotechnology) research and development	541712	11,909	10,263	1,646
Social sciences and humanities research and development	541720	941	759	182
Other professional, scientific, and technical services	other 54	1,152	D	D
Health care services	621-23	100	96	4
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	D	D	32
All companies (number of domestic employees)	-	75,011	63,588	11,423
Small companies ^a				
5-499	-	12,939	11,166	1,773
5-99	-	7,425	6,370 i	1,056
5-49	-	5,347	4,609 i	739
5-9	-	1,381	1,207 i	174 i
10-24	-	1,890	1,660 i	230 i
25-49	-	2,076	1,741	335
50-99	-	2,078	1,761	317
100-249	-	3,243	2,802	442
250-499	-	2,271	1,995	276
Medium and large companies				
500-999	-	2,200	1,888	312
1,000-4,999	-	13,877	11,327	2,550
5,000-9,999	-	11,723	9,987	1,736
10,000-24,999	-	8,378	7,330	1,048
25,000 or more	-	25,893 i	21,890 i	4,004 i

* = 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.

^a Upper bound based on U.S. Small Business Administration's definition of a small business; 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. 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 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, 2013.