TABLE 41. Domestic R&D paid for by the company and performed by others, by type of performer, industry, and company size: 2014 (Millions of U.S. dollars)

			Companies in the United	Companies outside the United States		U.S. federal	U.S. state	Foreign	All other		
				Company's		government	government	government	In the United	Outside the	
Industry and company size	NAICS code	Total	States	parent	Other	agencies	agencies	agencies	States	United States	Undistributed ^a
All industries	21-23, 31-33, 42-81	37,019	29,080	675	4,021	77 i	8	1	463	98	2,597 i
Manufacturing industries	31–33	33,412	26,650	620	3,673	45 i	5	*	371	70	1,978 i
Food	311	509 i	442 i	2	20 i	*	*	*	16	1	29 i
Beverages and tobacco products	312	206	198	* i	2	0	*	*	i 4	0	2 i
Textiles, apparel, and leather products	313–16	13	9	1	0	0	*	0	0	0	2 i
Wood products	321	14 i	12 i	0	0	*	*	0	*	1	
Paper	322	25	10	11	*	0	0	0	1	0	2 i
Printing and related support activities	323	7	5	0	1	0	0	0	0	0	2 i
Petroleum and coal products	324	45	31	0	2	0	0	0	8	2	3 i
Chemicals	325	25,016	19,963	28	3,229	15 i	3	*	205	44	1,529 i
Basic chemicals	3251	187	102	5	D	* i	*	*	62	2	D
Resins, synthetic rubber, and artificial											
synthetic fibers and filaments	3252	73	66	0	D	0	*	0	1	0	D
Pesticides, fertilizers, and other agricultural											
chemicals	3253	141 i	107 i	D	D	* i	* i	*	i 1	*	D
Pharmaceuticals and medicines	3254	24,240	19,355	15	3,188	15 i	2	*	132	38	1,494 i
Soaps, cleaning compounds, and toilet											
preparations	3256	346	312	D	9	0	0	0	9	3	D
Paints, coatings, adhesives, and other											
chemicals	3255, 3259	29	20	*	*	* i	*	*	1	1	7 i
Plastics and rubber products	326	163	62	6	36	*	*	0	29	7	22 i
Nonmetallic mineral products	327	170 i	24	141 i	0	0	*	0	2	1	3 i
Primary metals	331	49	9	* i	*	* i	*	0	33	*	6 i
Fabricated metal products	332	31 i	18	0	1	0	*	0	1	0	12 i
Machinery	333	588	447	7	56	3 i	*	0	6	10	60 i
Agricultural implements	33311	267	222	0	30	0	0	0	0	10	5 i
Semiconductor machinery	333295	3	2	0	0	0	0	0	0	0	1 i
Engines, turbines, and power transmission											
equipment	3336	47	41	0	2	* i	0	0	4	*	i 1 i
Other machinery	other 333	271	181	7	24	3 i	*	0	2	*	i 54 i
Computer and electronic products	334	1,505	1,201	5	178 i	*	*	0	22	*	99 i
Communications equipment	3342	593	466 i	* j	90 i	*	*	0	*	*	37 i
Semiconductors and other electronic											
components	3344	383	332	3	33	0	0	0	5	*	11 i
Navigational, measuring, electromedical,											
and control instruments	3345	392	308	1	42	*	*	0	17	0	24 i
Electromedical, electrotherapeutic,											
and irradiation apparatus	334510, 334517	156	114	1	29 i	0	0	0	8	0	5 i
Search, detection, navigation,											
guidance, aeronautical, and nautical											
systems and instruments	334511	123	112		8	0	0	0	1	0	2 i

TABLE 41. Domestic R&D paid for by the company and performed by others, by type of performer, industry, and company size: 2014 (Millions of U.S. dollars)

Industry and company size	Industry and company size	NAICS code			Companies outside the United States		U.S. federal	U.S. state	Foreign	All other		
Other computer and electronic products			Total			Other	government	government	government			Undistributed ^a
Define compagner and electronic products	Other measuring and controlling devices	other 3345	114	82	0	6	*	*	0	8	0	18 i
And components	Other computer and electronic products	other 334	136	96	*	13	0	0	0	0	*	27 i
Transportation equipment 336 4, 4101 3,416 407 111 25 1 2 0 22 1 1 Automobiles, bodies, trailers, and parts 3361-63 2,578 1,780 406 77 D 2 0 7 1 1 Automobiles, bodies, trailers, and parts 3361-63 1,505 1,420 1 1 33 D 1 0 D 0 D Automobiles, bodies, and aircraft parts Automobiles, bodies, trailers, and parts 3361-63 1,505 1,420 1 1 33 D 1 0 D 0 D Automobiles, and aircraft parts Guided missiles, space vehicles, and repair related parts 336411-13 D D D D D D D D D D D D D D D D D D D	Electrical equipment, appliances,											
Automobiles, bedies, trailers, and parts 3361-63 2,578 1,980 406 77 D 2 O 7 1 Acrospace products and parts 3361-14 13 0 D D 1 I D D I I D D I I D D I I D D D I I D	and components	335	239	169	2	20	* i	* i	0	2	1	44 i
Aerospace products and parts	Transportation equipment	336	4,101	3,416	407	111	25 i	2	0	22	1	118 i
Alcrant, aircraft engines, and aircraft parts	Automobiles, bodies, trailers, and parts	3361-63	2,578	1,980	406	77	D	2	0	7	1	D
Guided missiles, space vehicles, and related parts 336414–15, 336419 D D D D D O D O O O O O O O O O O O O		3364	1,505	1,420	1 i	33	D	* i	0	D	*	13 i
related parts 336414–15, 336419 D D D O D O D O O O O O O O O O O O O	parts	336411-13	D	D	1 i	D	D	* i	0	D	*	D
Components	· · · · · · · · · · · · · · · · · · ·	336414–15, 336419	D	D	0	D	0	0	0	*	0	D
Furniure and related products 337 26 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		336992	*	*	0	0	0	0	0	0	0	* i
Miscellaneous manufacturing 339 707 616 10 18 2 - 0 21 33 Miscellaneous manufacturing 3399 599 523 10 16 2 - 0 20 3 Medical equipment and supplies 3399 107 94 - 1 1 - 0 0 0 0 - 0 0 Nonmanufacturing industries 21-23,42-81 3,607 2,430 55 348 31 3 1 92 28 6 Mining, extraction, and support activities 21 352 279 D 6 D - 1 23 1 Utilities 22 32 167 0 1 1 - 1 0 44 0 Wholesale trade 42 75 i 13 i - 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Other transportation	other 336	19	16	*	1	0	0	0	D	0	D
Medical equipment and supplies 3391 599 523 10 16 2 * 0 20 3 1 Other miscellaneous manufacturing 3399 107 94 * 1 * 0 0 * 0 Nonmanufacturing industries 21-23, 42-81 3,607 2,430 55 348 31 3 1 92 28 6 Mining, extraction, and support activities 21 352 279 D 6 D * 1 23 1 Utilities 22 232 167 0 1 * 1 0 44 0 Wholesale trade 42 275 i 13 i * 3 0	Furniture and related products	337	26	18	0	0	0	0	0	0	0	8 i
Other miscellaneous manufacturing 3399 107 94 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Miscellaneous manufacturing	339	707	616	10	18	2	*	0	21	3	38 i
Nonmanufacturing industries 21–23, 42–81 3,607 2,430 55 348 31 3 1 92 28 6. Mining, extraction, and support activities 21 352 279 D 6 D ° 1 23 1 Utilities 22 332 167 0 1 ° 1 0 44 0 Wholesale trade 42 75 i 13 i ° 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Medical equipment and supplies	3391	599	523	10	16	2	*	0	20	3	25 i
Mining, extraction, and support activities 21 352 279 D 6 D 1 23 1 Utilities 22 232 167 0 1 1 1 1 0 44 0 Wholesale trade 42 75 i 13 i 1 3 3 0 0 0 0 0 0 0 Wholesale trade 44 75 i 13 i 1 3 3 0 0 0 0 0 0 0 Electronic shopping and electronic auctions 454111-12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Transportation and warehousing 48-49 21 i 18 0 0 0 0 0 0 0 0 0 0 0 0 Information 51 1,761 1,247 213 1 i 1 0 17 27 2 Publishing 511 1,181 886 180 0 0 0 0 0 13 22 Publishing 511 1,181 886 180 0 0 0 0 0 0 0 0 0 0 Software publishers 511 1 10 i 6 0 i 10 0 0 0 0 0 0 0 0 Software publishers 5112 1,172 879 179 0 0 0 0 0 0 0 0 Software publishers 5112 1,172 879 179 0 0 0 0 0 0 0 0 0 0 Data processing, hosting, and related services 518 174 128 0 16 1 0 0 0 0 0 0 0 0 0 Finance and insurance 52 90 49 16 24 i 0 0 0 0 0 0 0 Lessors of nonfinancial intangible assets (except copyrighted works) 533 1 6 i 0 0 0 0 0 0 0 0 0 Other real estate and rental and leasing 0 other 53 8 i 6 i 0 0 0 0 0 0 0 0 0 0 0 Other real estate and rental and leasing 0 other 53 8 i 6 i 0 0 0 0 0 0 0 0 0 0 0 Other real estate and rental and leasing 0 other 53 8 i 6 i 0 0 0 0 0 0 0 0 0 0 0 0 Other real estate and rental and leasing 0 other 53 8 i 6 i 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Other miscellaneous manufacturing	3399	107	94	*	1	*	0	0	*	0	12 i
Utilities	Nonmanufacturing industries	21-23, 42-81	3,607	2,430	55	348	31	3	1	92	28	620 i
Wholesale trade 42 75 i 13 i 3 0 0 0 0 0 1 Electronic shopping and electronic auctions 454111-12 0	Mining, extraction, and support activities	21	352	279	D	6	D	*	1	23	1	D
Electronic shopping and electronic auctions 454111–12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Utilities	22	232	167	0	1	*	1	0	44	0	19 i
Transportation and warehousing 48-49 21 i 18 0 0 0 0 0 0 0 0 0 0 0 17 27 22 18 18 0 0 0 0 0 0 0 0 0 17 27 22 18 18 17,761 1,1247 27 18 18 0 0 0 0 0 0 0 17 27 22 18 18 18 18 18 18 18 18 18 18 18 18 18	Wholesale trade	42	75 i	13 i	*	3	0	0	0	0	0	58 i
Information	Electronic shopping and electronic auctions	454111–12	0	0	0	0	0	0	0	0	0	0
Publishing 511 1,181 886 * 180 0 0 0 13 22 18 Newspaper, periodical, book, and directory publishers 5111 10 i 6 0 * i 0	Transportation and warehousing	48–49	21 i	18	0	0	0	0	0	0	0	3 i
Newspaper, periodical, book, and directory publishers 5111 10 i 6 0 ° i 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Information	51	1,761	1,247	*	213	* i	* i	0	17	27	257 i
directory publishers 5111 10 i 6 0 * i 0 0 0 0 Software publishers 5112 1,172 879 * 179 0 0 0 13 22 Telecommunications 517 274 i 107 0 16 0 0 0 0 0 0 Data processing, hosting, and related services 518 174 128 0 16 * i * i 0 0 0 0 0 0 0 0 1 5 1 5 1 1 0<	Publishing	511	1,181	886	*	180	0	0	0	13	22	80 i
Telecommunications 517 274 i 107 0 16 0 0 0 0 0 0 0 0 11 Data processing, hosting, and related services 518 174 128 0 16 *i *i 0 1 5 Other information 0ther 51 132 126 0 1 0 0 0 0 0 0 0 0 Finance and insurance 52 90 49 16 24 i 0 0 0 0 0 0 0 Real estate and rental and leasing 53 8 i 6 i 0 * 0 * 0 0 0 0 0 0 Lessors of nonfinancial intangible assets (except copyrighted works) 533 * 0 0 0 0 0 0 0 0 Other real estate and rental and leasing 0ther 53 8 i 6 i 0 0 * 0 0 0 0 0 0 0 Professional, scientific, and technical services 54 957 588 D 95 D 2 0 7 1 Architectural, engineering, and related	, , ,	5111	10 i	6	0	* i	i 0	0	0	0	0	3 i
Telecommunications 517 274 i 107 0 16 0 0 0 0 0 1 Data processing, hosting, and related 518 174 128 0 16 * i * i * i 0 1 5 5 Other information other 51 132 126 0 1 0 0 0 3 0 Finance and insurance 52 90 49 16 24 i 0 0 0 0 0 Real estate and rental and leasing 53 8 i 6 i 0 * 0 0 0 0 0 Lessors of nonfinancial intangible assets (except copyrighted works) 533 * 0 0 0 0 0 0 0 Other real estate and rental and leasing other 53 8 i 6 i 0 0 0 0 0 0 Professional, scientific, and technical services 54 957 588	Software publishers	5112	1,172	879	*	179	0	0	0	13	22	77 i
related services 518 174 128 0 16 * i * i * i 0 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	·	517	274 i	107	0	16	0	0	0	0	0	151 i
Other information other 51 132 126 0 1 0 0 0 3 0 5 1 0 0 5 1 0 0 0 0 0 0 0 0 0 0 0 0 0	Data processing, hosting, and											
Finance and insurance 52 90 49 16 24 i 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	related services	518	174	128	0	16	* i	* i	0	1	5	23 i
Real estate and rental and leasing 53 8 i 6 i 0 * 0 0 0 0 0 0 Lessors of nonfinancial intangible assets (except copyrighted works) 533 * 0 0 * 0 <td>Other information</td> <td>other 51</td> <td>132</td> <td>126</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>3</td> <td>0</td> <td>3 i</td>	Other information	other 51	132	126	0	1	0	0	0	3	0	3 i
Lessors of nonfinancial intangible assets (except copyrighted works) 533 * 0 0 * 0 0 0 0 0 0 Other real estate and rental and leasing other 53 8 i 6 i 0 0 0 0 0 0 0 Professional, scientific, and technical services 54 957 588 D 95 D 2 0 7 1 Architectural, engineering, and related	Finance and insurance	52	90	49	16	24 i	i 0	0	0	0	0	1 i
(except copyrighted works) 533 * 0 0 * 0 <td< td=""><td>Real estate and rental and leasing</td><td>53</td><td>8 i</td><td>6 i</td><td>0</td><td>*</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1 i</td></td<>	Real estate and rental and leasing	53	8 i	6 i	0	*	0	0	0	0	0	1 i
Other real estate and rental and leasing other 53 8 i 6 i 0 0 0 0 0 0 0 0 0 0 Professional, scientific, and technical services 54 957 588 D 95 D 2 0 7 1 Architectural, engineering, and related		533	*	0	0	*	0	0	0	0	0	* j
Professional, scientific, and technical services 54 957 588 D 95 D 2 0 7 1 Architectural, engineering, and related			8 i		-	0		_			-	1 i
Architectural, engineering, and related	9										-	D
services 5413 50 j 26 * j 2 * j * 0 * 0	Architectural, engineering, and related	5413			* i		* i	*		*	·	20 i

TABLE 41. Domestic R&D paid for by the company and performed by others, by type of performer, industry, and company size: 2014 (Millions of U.S. dollars)

			Companies in the	Companies out United Sta		U.S. federal	U.S. state	Foreign	All other		
			United	Company's		government	government	government	In the United	Outside the	
Industry and company size	NAICS code	Total	States	parent	Other	agencies	agencies	agencies	States	United States	Undistributed ^a
Computer systems design and related											
services	5415	146 i	57	0	17	* i	*	0	*	*	71 i
Scientific R&D services	5417	717	488	0	65	D	2	0	6	1	D
Biotechnology R&D	541711	350	247	0	D	*	1	0	3	*	D
Physical, engineering, and life											
sciences (except biotechnology) R&D	541712	346	237	0	28	D	*	0	3	*	D
Social sciences and humanities R&D	541720	21	4	0	D	0	0	0	0	0	D
Other professional, scientific, and											
technical services	other 54	45	16	D	10	* i	*	0	1	*	D
Health care services	621–23	35 i	15	0	5	0	0	0	*	0	15 i
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624,										
	71–72, 81	76 i	48	0	1	*	0	0	0	0	27 i
All companies (number of domestic employees)	-	37,019	29,080	675	4,021	77 i	8	1	463	98	2,597 i
Small companies ^b											
5–499	-	5,839	4,225	37	440	15	4	*	90	7	1,021 i
5–99	-	3,698	2,732	6	259	14	2	*	i 38	4	644 i
5–49	_	2,303	1,634	2	160	1 i	1	0	26	1	477 i
5–9	_	485 i	347	* i	16	*	0	0	4	1	118 i
10–24	-	873	599	0	51	1 i	i 1	0	4	1	215 i
25–49	_	946	688	2	93	* i	*	0	18	*	i 144 i
50-99	-	1,395	1,098	4	99	13	*	*	i 11	i 3	167 i
100–249	-	1,296	903	2	117	1	2	0	42	2	228 i
250-499	-	845	590	29	64	*	*	*	11	*	i 150 i
Medium and large companies											
500–999	=	1,110	822	30	61	1	1	*	i 12	27	156 i
1,000-4,999	-	6,390	5,666	210 i	84	5	*	*	i 22	2	399 i
5,000–9,999	-	2,401	2,094	1 i	73	10 i	D	*	84	2	D
10,000–24,999	-	10,971	8,651	D	1,955	3 i	*	*	161	45	D
25,000 or more	_	10,308	7,622	D	1,407	42 i	i D	1	92	15	D

^{* =} 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 = 2012 North American Industry Classification System.

NOTES: Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2014.

^a Detailed data were not collected on the BRDI-1(S) questionnaire.

b Upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.