

TABLE 33

## Domestic R&amp;D paid for by others and performed by the company, by industry and company size: 2015

(Millions of U.S. dollars)

Industry	NAICS code	Company size (domestic employees)												
		All companies	5-9 <sup>a</sup>	10-19	20-49	50-99	100-249	250-499	500-999	1,000-4,999	5,000-9,999	10,000-24,999	25,000 or more	
All industries	21-23, 31-33, 42-81	59,144	1,016 i	1,246 i	2,316 i	2,706 i	2,566	2,185	2,023 i	9,830	4,178	10,878	20,201	
Manufacturing industries	31-33	40,340	206 i	404 i	690 i	663	928	1,314	870	7,410	3,092	7,941	16,823 i	
Food	311	194	0	1 i	* i	3 i	56	5	2 i	121	*	*	6	
Beverages and tobacco products	312	117	0	* i	* i	1 i	0	D	0	D	2	0	0	
Textiles, apparel, and leather products	313-16	32	* i	* i	21	3	1 i	4	0	3	0	0	0	
Wood products	321	8 i	0	0	1 i	3 i	* i	* i	4	0	*	0	0	
Paper	322	3 i	0	0	1 i	D	1 i	D	0	0	0	0	0	
Printing and related support activities	323	7 i	0	D	4 i	D	* i	D	* i	0	0	0	0	
Petroleum and coal products	324	14	D	* i	D	0	0	0	*	4 i	0	D	0	
Chemicals	325	9,427	D	255 i	251 i	331	253	554	300 i	3,456	1,910	1,954	D	
Basic chemicals	3251	467	* i	D	D	30	D	231	6	D	13	D	0	
Resins, synthetic rubber, fibers, and artificial synthetic fibers and filaments	3252	29 i	D	D	D	D	D	1 i	*	0	0	D	*	
Pesticides, fertilizers, and other agricultural chemical	3253	D	0	0	D	* i	0	0	0	D	0	D	0	
Pharmaceuticals and medicines	3254	8,432	D	223 i	224 i	298	233	322 i	294 i	2,990	1,898	1,791	D	
Soaps, cleaning compounds, and toilet preparations	3256	115	D	D	D	D	D	0	0	*	0	D	0	
Paints, coatings, adhesives, and other chemicals	3255, 3259	D	* i	D	D	D	D	*	0	0	0	D	*	
Plastics and rubber products	326	152 i	D	D	10 i	8 i	24 i	14 i	55	28	0	D	0	
Nonmetallic mineral products	327	20	0	D	0	3 i	9	D	1 i	5	0	1	0	
Primary metals	331	49	0	* i	8 i	5 i	3 i	1 i	2	24	1	6	0	
Fabricated metal products	332	223 i	3 i	30 i	66 i	27 i	71 i	16 i	10 i	*	0	0	0	
Machinery	333	881 i	4 i	18 i	126 i	51	65	87	56	318 i	151	2 i	3	
Agricultural implements	33311	15 i	0	0	2 i	* i	* i	7 i	0	6	0	0	0	
Semiconductor machinery	333242	297 i	* i	2 i	0	1	33	0	0	260 i	0	0	0	
Engines, turbines, and power transmission equipment	3336	154	0	0	4	8	1	72	7	2	57	0	3	
Other machinery	other 333	416	4 i	15 i	119 i	42	30 i	9	49	50	95	2 i	0	
Computer and electronic products	334	8,345	51 i	52 i	105 i	135	371	331	262	1,218	587 i	2,984	2,249	
Communications equipment	3342	1,426 i	5 i	1 i	D	12 i	117	D	13	D	0	D	0	
Semiconductors and other electronic components	3344	1,855	7 i	6 i	D	83	166	190	158	523	D	D	D	
Navigational, measuring, electromedical, and control instruments	3345	4,910	38 i	42 i	D	40	78	118	81	301	D	D	D	
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	233	27 i	17 i	1	2	39	97	28	14	0	7	0	
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	4,480	2	D	D	2	D	4	0	249	D	D	D	
Other measuring and controlling devices	other 3345	197	9 i	D	D	36	D	17 i	53	38	0	0	0	
Other computer and electronic products	other 334	154	1 i	2 i	8	* i	9 i	D	11	D	0	D	0	
Electrical equipment, appliances, and components	335	483 i	1 i	6 i	21 i	3 i	17 i	5	3	83	0	344 i	0	
Transportation equipment	336	20,050 i	D	D	36 i	63	18 i	192	120	2,009	440	2,631	14,511 i	
Automobiles, bodies, trailers, and parts	3361-63	2,441	D	D	D	D	D	173	78	1,199	D	234	D	

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Aerospace products and parts	3364	16,326	i	D	D	D	D	2	D	32	798	i	D	2,396	12,761	i						
Aircraft, aircraft engines, and aircraft parts	336411-13	15,063	i	D	D	D	D	2	D	26	D	D	D	D	12,761	i						
Guided missiles, space vehicles, and related parts	336414-15, 336419	1,263	i	D	D	D	*	0	0	6	D	0	D	0	0							
Military armored vehicles, tanks, and tank components	336992	12		0	0	D	0	D	0	0	0	0	0	0	0	0						
Other transportation	other 336	1,271		D	0	D	D	D	D	9	11	0	*	D								
Furniture and related products	337	9	i	*	i	D	3	i	D	3	i	D	0	*	0	0						
Miscellaneous manufacturing	339	326	i	D	D	D	D	36	D	56	D	*	i	9	D							
Medical equipment and supplies	3391	171		D	26	i	12	i	6	17	i	3	i	50	41	0	9	D				
Other miscellaneous manufacturing	3399	155	i	D	D	D	D	20	D	5	D	*	i	0	0							
Nonmanufacturing industries	21-23, 42-81	18,804		811	i	843	1,625	2,043	1,638	871	1,152	i	2,419	i	1,086	2,938	3,378					
Mining, extraction, and support activities	21	619		*	i	0	0	0	D	2	i	0	D	0	416	D						
Utilities	22	34		0	0	D	0	*	i	0	0	0	1	D	26							
Wholesale trade	42	84	i	17	i	11	i	21	i	8	i	10	i	15	i	*	3	0	0			
Electronic shopping and electronic auctions	454111-12	16	i	1	i	1	i	14	i	*	i	*	i	0	0	0	0	0				
Transportation and warehousing	48-49	*	i	0	0	D	0	0	0	0	0	D	0	0	0	0	0					
Information	51	935		D	D	67	i	74	i	40	35	i	85	i	53	0	D	209				
Publishing	511	747		0	D	16	15	18	15	i	82	i	51	0	D	D						
Newspaper, periodical, book, and directory publishers	5111	*	i	0	0	0	0	*	i	0	0	0	0	0	0	0	0					
Software publishers	5112	747		0	D	16	15	17	15	i	82	i	51	0	D	D						
Telecommunications	517	70	i	*	i	*	i	16	44	i	0	9	i	0	0	0	0					
Data processing, hosting, and related services	518	102		D	0	35	i	1	22	11	3	i	2	0	0	0	D					
Other information	other 51	16		0	2	0	14	0	0	0	0	0	0	0	0	0	0					
Finance and insurance	52	38		0	0	0	0	3	i	0	0	3	i	0	0	0	32					
Real estate and rental and leasing	53	1	i	0	0	*	i	0	0	*	i	0	0	0	0	0	0					
Lessors of nonfinancial intangible assets (except copyrighted works)	533	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Other real estate and rental and leasing	other 53	1	i	0	0	*	i	0	0	*	i	0	0	0	0	0	0					
Professional, scientific, and technical services	54	16,710		789	i	813	1,510	1,921	1,364	789	1,066	i	2,125	i	1,085	2,155	3,093					
Architectural, engineering, and related services	5413	1,881		138	i	132	i	237	131	i	250	i	89	66	58	i	2	81	695			
Computer systems design and related services	5415	1,915	i	223	i	43	i	68	i	412	i	130	i	191	i	39	53	i	5	i	0	751
Scientific research and development services	5417	12,433		406	i	580	1,162	1,260	929	413	886	i	2,003	i	1,077	2,074	1,645					
Biotechnology research and development	541711	4,157	i	138	189	i	248	40	221	*	i	725	i	951	i	0	0	1,645				
Physical, engineering, and life sciences (except biotechnology) research and development	541712	7,583		263	i	387	893	1,196	708	413	160	828	662	2,074	0							
Social sciences and humanities research and development	541720	693		5	i	3	21	24	0	0	0	225	415	0	0							
Other professional, scientific, and technical services	other 54	481		21	i	58	43	118	56	96	75	11	1	i	0	2						
Health care services	621-23	298	i	*	i	D	8	27	i	24	i	16	1	i	215	i	0	D	D			

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Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	69	D	D	D	13	D	14	* i	D	* i	0	0

\* = 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.

<sup>a</sup> Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

**Note(s)**

Detail may not add to total because of rounding. 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. Statistics are representative of companies located in the United States that performed or funded R&D.

**Source(s)**

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2015.