

TABLE 37

Domestic R&D paid for by others and performed by the company, by source of funds, industry, and company size: 2017

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Companies in the United States	Companies outside the United States		U.S. federal government agencies	U.S. state government agencies	Foreign government agencies	U.S. universities, colleges, and academic researchers	Foreign universities, colleges, and academic researchers	All other									
				Company's parent	Unaffiliated companies						In the United States	Outside the United States								
All industries	21-23, 31-33, 42-81	61,065	17,494	15,426	2,978	24,277	i	121		7	70	i	24	i	521	i	147			
Manufacturing industries	31-33	41,072	6,229	13,315	2,119	18,889	i	27		3	50	i	22	i	293	i	126			
Food	311	244	6	i	232	4		1		0	0		0		1		0			
Beverage and tobacco products	312	107	*		107	*		0		0	0		0		0		0			
Textile, apparel, and leather products	313-16	1	1		0	*	i	*	i	0	0		0		0		0			
Wood products	321	5	*	i	5	*	i	*	i	0	0		0		0		0			
Paper	322	29	28		1	*	i	*	i	*	i		0		0		* i			
Printing and related support activities	323	11	2	i	8	1	i	0-2	i	*	i		0		0-2	i	0-2	i		
Petroleum and coal products	324	15	4		10	0		0		0	0		0		0		0			
Chemicals	325	11,692	2,696		7,115	1,592		205		0-26	0-4		3		0-23		0-26	31-60		
Basic chemicals	3251	181	6		129-169	0-39		6		0	0		0		0		* i	0		
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	16	2		13	*	i	*	i	0	0		0		0		*	i		
Pesticide, fertilizer, and other agricultural chemicals	3253	284-383	0-5	i	231-383	0-39	i	0-14		*	i		0		0-4	i	0-4	i		
Pharmaceuticals and medicines	3254	10,973	2,685		6,465	1,554		186		0-25	0-4		3		0-23		0-25	31-60		
Soap, cleaning compound, and toilet preparation	3256	118-213	1	i	111-212	*	i	*	i	*	i		0		*	i	0-4	i		
Paint, coating, adhesive, and other chemicals	3255, 3259	23	0-5		0-24	*	i	0-14		0	0		0		0-4		0			
Plastics and rubber products	326	117	102		11	*		1		0	0		0		3		0			
Nonmetallic mineral products	327	30	i	15	i	0-14		0-14	i	2	i	0-14	i		0		*	i	0-14	i
Primary metals	331	8	0-4	i	0-2	i	*	i	5	i	0		0		0-2		0-4	i	0-2	i
Fabricated metal products	332	107	37	i	4	*	i	59	i	0	0		0-9	i	0		0-9	i	*	i

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Machinery	333	940	130	i	621	19	i	170	1	i	0	*	0	0	*	i			
Agricultural implement	33311	59	i	*	50	6	i	3	0	0	0	0	0	0	0	0			
Semiconductor machinery	333242	465	4	i	449	5	i	7	0	0	0	0	0	0	0	0			
Engine, turbine, and power transmission equipment	3336	159	0 - 76		9	*	i	75 - 151	0	0	0	0	0	0	0	0			
Other machinery	other 333	257	49 - 127	i	113	8		7 - 86	i	1	i	0	*	0	0	*	i		
Computer and electronic products	334	8,633	1,043 - 1,358		2,889	326 - 352		3,937	0 - 27		0 - 4	0 - 48	i	0 - 23	i	7 - 290	39 - 94		
Communications equipment	3342	1,715	i	0 - 283	i	628	0 - 30	805	i	0	0 - 4	0	0	0	0	0 - 283	i	*	i
Semiconductor and other electronic components	3344	2,289	218		1,754	214		80	*		0	*	0 - 23	i	1	0 - 24			
Navigational, measuring, electromedical, and control instruments	3345	4,420	826		418	109		2,963	0 - 27		0	0 - 48	i	*	6 - 91	14 - 79			
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	150	18		92	6		27	0		0	0	0	0	7	0			
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	4,083	697 - 809		193 - 327	0 - 104		2,880	0 - 27		0	0 - 48	i	*	0 - 84	14 - 79			
Other measuring and controlling device	other 3345	187	0 - 110		0 - 132	0 - 104		56	0		0	0	0	0	0	0	0		
Other computer and electronic products	other 334	209	0 - 32		89	0 - 30		89	*		0	0	0	0	1	0			
Electrical equipment, appliances, and components	335	181	65		77	*	i	38	0		0	0	0	0	1	i	0		
Transportation equipment	336	18,663	i	1,701 - 2,013	i	2,073	146	14,433	i	0 - 27	0 - 4	i	0 - 48	0	0 - 283	i	0 - 55	i	
Automobiles, bodies, trailers, and parts	3361-63	2,745	0 - 804		0 - 2,074	0 - 147		0 - 2,745	0 - 27		0 - 4	0	0	0	0 - 283	0 - 55			
Aerospace products and parts	3364	14,480	i	1,209	i	0 - 2,012	0 - 147	11,259 - 13,070	i	0	0 - 4	i	0 - 48	0	0 - 283	i	0 - 55	i	
Aircraft, aircraft engine, and aircraft parts	336411-13	13,103	i	1,185 - 1,210	i	0 - 2,012	0 - 147	9,905 - 11,715	i	0	0 - 4	i	0 - 48	0	0 - 283	i	0 - 55	i	

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Guided missile, space vehicle, and related parts	336414-15, 336419	1,377	0 - 23	0	*	1,355	0	0	0 - 23	0	0	0
Military armored vehicle, tank, and tank component	336992	5	0 - 4	0	0	2	0 - 4	0	0	0	0	0
Other transportation	other 336	1,433	0 - 804	0 - 1,434	0 - 147	0 - 1,434	0	0	0	0	0	0
Furniture and related products	337	3	2	*	*	1	0	0	0	0	0	* i
Miscellaneous	339	285	63 - 103	138 - 169	9	27 - 42	0 - 27	0	0	0	*	i 0
Medical equipment and supplies	3391	240	64	132	8	7 - 38	0 - 27	0	0	0	*	i 0
Other miscellaneous manufacturing	3399	44	0 - 38	6 - 37	1	0 - 35	*	0	0	0	0	0
Nonmanufacturing industries	21-23, 42-81	19,993	11,265	i 2,111	859	5,388	95	4	19	2	228	21 i
Mining, extraction, and support activities	21	309	89	6	213	0	0	0	0	0	0	0
Utilities	22	36	i 4	4	0	27	i *	i 0	0	0	1	*
Wholesale trade	42	31	8	i 22	i 1	0	0	0	0	0	*	i 0
Electronic shopping and electronic auctions	454111-12	0	0	0	0	0	0	0	0	0	0	0
Transportation and warehousing	48-49	31	30	0	0	0	1	0	0	0	0	0
Information	51	1,354	117	1,047	91	98	0	0	0	0	0	1
Publishing	511	1,062	66	843	90	62	0	0	0	0	0	1
Newspaper, periodical, book, and directory publishers	5111	0	0	0	0	0	0	0	0	0	0	0
Software publishers	5112	1,062	66	843	90	62	0	0	0	0	0	1
Telecommunications	517	40 - 163	0 - 17	21 - 158	0	0 - 3	i 0	0	0	0	0	0
Data processing, hosting, and related services	518	119	36	48	*	35	0	0	0	0	0	0
Other information	other 51	11 - 134	0 - 17	0 - 134	*	0 - 3	i 0	0	0	0	0	* i

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10-19 ^a	-	909	0 - 286 i	59	0 - 54	485	25	2	3	*	i	0 - 286	0 - 54		
20-49	-	1,842	632	434	97	605	15	1	3	21	i	30	5		
Medium companies															
50-99	-	2,071	668	494	105	659	6	1	i	2	1	89	47		
100-249	-	3,703	866	1,426	98	1,241	14	*	i	15	1	28	15 i		
Large companies															
250-499	-	2,331	834	668	195	592	20	1	0 - 21	*		0 - 21	3		
500-999	-	1,576	311	795	243	221	1	*	2	1		1 i	1 i		
1,000-4,999	-	12,771	2,724	7,446	1,085	1,461	30	2	*	i	*	18	6		
5,000-9,999	-	7,497	4,938 i	909	102 i	1,525	8	0	0 - 17	*		0 - 17	* i		
10,000-24,999	-	10,070	2,627 i	2,987	930	3,514	*	0	2	0		9	0		
25,000 or more	-	18,295 i	3,603 - 3,899	209	64 - 127	13,976	i	3	1	i	1 - 46	i	0	21 - 350 i	12 - 74

* = amount < \$500,000; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Business Research and Development Survey does not include companies with fewer than 10 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. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s)

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2017.