

TABLE 37

Domestic R&D paid for by others and performed by the company, by source of funds, industry, and company size: 2018

(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	63,230	19,087	15,775	2,558	24,685	103	248	66	5	366	337	i			
Manufacturing industries	31-33	39,393	5,323	12,871	1,752	18,980	33	183 - 230	12	*	81	108 - 159				
Food	311	242	3	235	*	i	*	i	0	0	3	0				
Beverage and tobacco products	312	109	1	i	106	0	0	0	0	0	2	i	0			
Textile, apparel, and leather products	313-16	4	*	i	*	i	0	0	0	0	3	0				
Wood products	321	4	*	i	4	*	i	*	i	0	*	i	*	i		
Paper	322	2	1	i	1	0	0	0	0	0	0	0				
Printing and related support activities	323	4	1	3	*	i	*	i	*	i	0	*	i	*	i	
Petroleum and coal products	324	23	5	18	1	*	0	0	0	0	0	0				
Chemicals	325	10,553	2,277	6,811	1,190	204	15	0	8	*	29	19				
Basic chemicals	3251	192	12	168	12	1	i	0	0	0	0	0				
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	85	5	i	71 - 80	0 - 7	i	1	i	*	i	0	*	i	*	i
Pesticide, fertilizer, and other agricultural chemicals	3253	326	0 - 5	i	310 - 323	0 - 7	i	3	*	i	0	*	i	*	i	
Pharmaceuticals and medicines	3254	9,792	2,257	6,103	1,173	188	15	0	8	*	29	18				
Soap, cleaning compound, and toilet preparation	3256	137	0 - 5	i	125 - 138	0 - 7	i	*	i	*	i	0	*	i	*	i
Paint, coating, adhesive, and other chemicals	3255, 3259	21	0 - 5	i	0 - 11	0 - 7	i	11	*	i	0	*	i	*	i	
Plastics and rubber products	326	83	68	11	*	2	0	0	*	0	2	0				
Nonmetallic mineral products	327	24	7	15	*	2	*	0	0	0	0	0				
Primary metals	331	22	i	5	5	i	7	2	i	2	*	*	0	*	i	0
Fabricated metal products	332	105	55	46	*	i	3	i	0	*	i	0	*	i	*	i
Machinery	333	1,034	187	598 - 666	0 - 66	175	2	i	0	*	4	0				
Agricultural implement	33311	10	*	0 - 8	0 - 8	2	0	0	0	0	0	0				

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Semiconductor machinery	333242	543	3 i	473 - 541	0 - 66	* i	* i	0	0	0	* i	0
Engine, turbine, and power transmission equipment	3336	173	13	15	0	145	0	0	0	0	*	0
Other machinery	other 333	307	171	36 - 104	0 - 66	28	2 i	0	*	0	4	0
Computer and electronic products	334	9,775	1,499	2,645	321	5,174	0 - 16	0 - 47	2	*	7 - 29 i	59 - 110
Communications equipment	3342	1,285 i	340 i	109	8	821 i	* i	* i	* i	0	3 i	3
Semiconductor and other electronic components	3344	2,410	270	1,879	194	50	*	0 - 10	0 - 3	*	4 - 12 i	0 - 10
Navigational, measuring, electromedical, and control instruments	3345	5,863	870	561 - 659	23 - 121	4,198	0 - 16	0 - 47	0 - 3	0	0 - 12	45 - 108
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	163	0 - 12	151	* i	1 i	* i	0	0	0	0 - 12	* i
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	5,455	798 - 871	210 - 417	0 - 121	4,152	0 - 16	0 - 47	0 - 3	0	0	45 - 108
Other measuring and controlling device	other 3345	245	0 - 60	20 - 200	0 - 121	46	* i	0	0 - 3	0	* i	0
Other computer and electronic products	other 334	217	18	0 - 94	0 - 94	105	*	0	0	0	1	0
Electrical equipment, appliances, and components	335	266	23	191	11	39	* i	0	0	0	1 i	0
Transportation equipment	336	16,735	1,118	1,906	151	13,321 i	0 - 16	184	1	0	6 - 28	29
Motor vehicles, bodies, trailers, and parts	3361-63	2,506	436	1,882	96	64 - 88	0 - 16	0	0	0	0 - 25	*
Aerospace products and parts	3364	13,131 i	680	0 - 16	55	12,167 i	0	184	1	0	2 - 18	29
Aircraft, aircraft engine, and aircraft parts	336411-13	12,222 i	651 - 667	0 - 16	55	11,286 i	0	184	1	0	3	29
Guided missile, space vehicle, and related parts	336414-15, 336419	909	12 - 29	0	0	881	0	0	* i	0	0 - 16	0

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50-99	-	1,875	550	522	121	561	15	* i	15	*	82	9
100-249	-	3,921	920	1,457	58	1,378	8	10	13	1	73	4
Large companies												
250-499	-	3,041	622	1,084	233	1,016	26	* i	2	* i	51	8
500-999	-	2,096	467	909	382	128	* i	* i	1 i	* i	1 i	209 i
1,000-4,999	-	10,068	1,202	6,842	493	1,462	28	*	1	*	25	15
5,000-9,999	-	9,063	7,064 i	359	443	1,175	* i	0	1	0	21	* i
10,000-24,999	-	9,997	3,259	3,881	677	2,161	9	0	0	0	10	0
25,000 or more	-	20,423	4,161	243	76	15,583	6	214	*	0	52	87

* = 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. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018. 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, 2018.