

TABLE 52

Capital expenditures in the United States and for domestic R&D paid for and performed by the company, by type of expenditure, industry, and company size: 2016

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Domestic R&D				
			Total	Structures	Equipment	Capitalized software	All other
All industries	21-23, 31-33, 42-81	560,900	25,248	3,072	11,839	6,793	3,543
Manufacturing industries	31-33	235,923	14,948	2,471	8,376	1,850	2,251 i
Food	311	20,370	313	103	188	7	16
Beverages and tobacco products	312	4,976	109	32	70	5	2
Textiles, apparel, and leather products	313-16	2,941 i	86 i	17 i	24 i	45 i	* i
Wood products	321	1,472	18	2	15	*	*
Paper	322	2,535	45	*	45	0	*
Printing and related support activities	323	1,318	71	*	19	52	0
Petroleum and coal products	324	7,565	63	47	15	*	1
Chemicals	325	40,570	4,336	1,364	1,982	629	361
Basic chemicals	3251	12,499	201	33	158	3	7
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,960	58 i	10 i	41 i	2 i	5 i
Pesticides, fertilizers, and other agricultural chemicals	3253	1,652 i	74 i	13 i	60 i	* i	1 i
Pharmaceuticals and medicines	3254	16,577	3,511	1,242	1,410	545	314
Soaps, cleaning compounds, and toilet preparations	3256	4,967	236	12	164	39	22
Paints, coatings, adhesives, and other chemicals	3255, 3259	2,915	254	55	147	40	12
Plastics and rubber products	326	14,268	386	14	303	2	67
Nonmetallic mineral products	327	3,291	247	7	144	*	95
Primary metals	331	3,983 i	80 i	6 i	38 i	2 i	33 i
Fabricated metal products	332	4,616 i	140 i	12 i	101 i	3 i	24 i
Machinery	333	11,037	1,096	85	825	101	85
Agricultural implements	33311	1,076	59	22	21	1	16
Semiconductor machinery	333242	789	328	*	270	36	22
Engines, turbines, and power transmission equipment	3336	920	110	20	64	19	7
Other machinery	other 333	8,252	599	43	470	45	41
Computer and electronic products	334	35,960	4,441	149	2,812	528	953 i
Communications equipment	3342	3,711	427 i	30 i	343 i	29 i	26 i
Semiconductors and other electronic components	3344	16,786 i	1,965 i	47 i	1,087 i	100 i	731 i
Navigational, measuring, electromedical, and control instruments	3345	4,864	653	20 i	375 i	118	139 i
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	866 i	197 i	D	118 i	22 i	D
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	1,529	220	D	155	41	D
Other measuring and controlling devices	other 3345	2,469	237	8	102 i	55	72
Other computer and electronic products	other 334	10,599	1,397	52	1,008	281	56
Electrical equipment, appliances, and components	335	3,260	179	18	103	7	51
Transportation equipment	336	66,588	2,513	600	1,235	250	427
Automobiles, bodies, trailers, and parts	3361-63	45,894	1,444	103	884	181	275
Aerospace products and parts	3364	17,904	890	494	277	63	55
Aircraft, aircraft engines, and aircraft parts	336411-13	17,141	887	494	275	63	54

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Industry and company size	NAICS code	Total	Domestic R&D				
			Total	Structures	Equipment	Capitalized software	All other
Guided missiles, space vehicles, and related parts	336414-15, 336419	764	4	*	2	0	2
Military armored vehicles, tanks, and tank components	336992	4	*	*	*	*	*
Other transportation	other 336	2,786	179	3	73	6	97
Furniture and related products	337	1,184	48	*	38	7	4
Miscellaneous	339	9,989	776	14	418	213	131
Medical equipment and supplies	3391	7,544	647	13	358	210	66
Other miscellaneous manufacturing	3399	2,445	129	1	60	3	66
Nonmanufacturing industries	21-23, 42-81	324,977	10,299	602	3,463	4,943	1,292
Mining, extraction, and support activities	21	24,583	339	139	90	81	29
Utilities	22	86,048	86	6	37	*	42
Wholesale trade	42	31,670	9	*	9	*	*
Electronic shopping and electronic auctions	454111-12	10,838	238	12	184	36	6
Transportation and warehousing	48-49	20,649	52	0	2	49	1
Information	51	95,151	4,807	288	1,843	2,027	649
Publishing	511	13,762	1,656	177	915	187	377
Newspaper, periodical, book, and directory publishers	5111	221	14	1	7	2	3
Software publishers	5112	13,541	1,642	176	907	185	374
Telecommunications	517	58,713	1,559	1	450	1,073	36
Data processing, hosting, and related services	518	7,577	961	38	215	594	115
Other information	other 51	15,100	631	72	263	174	121
Finance and insurance	52	14,385	2,187	36	189	1,696	265
Real estate and rental and leasing	53	799	50	*	1	49	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	12	1	*	*	1	*
Other real estate and rental and leasing	other 53	787	50	*	1	48	*
Professional, scientific, and technical services	54	19,514	2,152	114	934	809	296
Architectural, engineering, and related services	5413	1,521	39	2	15	19	4
Computer systems design and related services	5415	7,215	1,464	66	670	586	143
Scientific research and development services	5417	1,552	348	39	186	16	107
Biotechnology research and development	541711	577	D	12	61	D	11
Physical, engineering, and life sciences (except biotechnology) research and development	541712	959	255	27	121	11	96
Social sciences and humanities research and development	541720	16	D	1	3	D	1
Other professional, scientific, and technical services	other 54	9,226	301	7	63	188	42
Health care services	621-23	2,300	150	5	110	35	*
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	19,040	228	1	64	160	3
All companies (number of domestic employees)	-	560,900	25,248	3,072	11,839	6,793	3,543
Micro companies ^a							
5-9	-	556	75	9	44	6	16
Small companies							
10-19	-	2,967	315	20	186	26	83
20-49	-	8,005	542	41	283	119	99

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			Total	Structures	Equipment	Capitalized software	All other	
Medium companies								
50-99	-	13,984	i 520	60	254	102		104
100-249	-	20,113	i 1,212	86	489	170	i	468
Large companies								
250-499	-	26,216	i 1,337	116	597	371		253
500-999	-	17,807	1,110	66	i 546	279		218
1,000-4,999	-	64,733	4,208	606	1,967	1,136		499
5,000-9,999	-	53,985	2,849	445	1,466	587	i	351
10,000-24,999	-	105,334	5,326	804	1,928	1,532		1,062
25,000 or more	-	247,200	7,754	820	4,079	2,465		390

* = 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.

^a 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. The "undistributed" column shown in prior years is no longer necessary because of processing improvements implemented beginning in 2015.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2016.