

TABLE 41

Domestic R&D paid for by the company's foreign subsidiaries and performed by the company, by type of R&D, industry, and company size: 2020

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total ^a	Basic research ^b	Applied research ^b	Development ^b
All industries	21-23, 31-33, 42-81	27,038	740	2,999	23,298
Manufacturing industries	31-33	18,984	685	2,605	15,694
Food	311	552	0 - 169	140 - 322	60 - 242
Beverage and tobacco products	312	31	3	5	23
Textile, apparel, and leather products	313-16	1	0	0	1
Wood products	321	0	0	0	0
Paper	322	*	0	*	0
Printing and related support activities	323	*	*	*	*
Petroleum and coal products	324	0 - 172	0 - 169	0 - 172	0 - 172
Chemicals	325	3,595	321	595	2,678
Basic chemicals	3251	5	1	2	2
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	0	0	0	0
Pesticide, fertilizer, and other agricultural chemicals	3253	0	0	0	0
Pharmaceuticals and medicines	3254	3,572	318	591	2,663
Soap, cleaning compound, and toilet preparation	3256	17	2	2	13
Paint, coating, adhesive, and other chemicals	3255, 3259	1	*	*	*
Plastics and rubber products	326	35	7	0	28
Nonmetallic mineral products	327	1	*	*	1
Primary metals	331	1	*	*	1
Fabricated metal products	332	4	*	*	4
Machinery	333	37	3	2	31
Agricultural implement	33311	5 - 11	0 - 4	*	6
Semiconductor machinery	333242	0	0	0	0
Engine, turbine, and power transmission equipment	3336	0	0	0	0
Other machinery	other 333	26 - 32	0 - 4	2	25
Computer and electronic products	334	13,594	132	1,626	11,836
Communications equipment	3342	0 - 10,756	0 - 133	0 - 790	0 - 9,835
Semiconductor and other electronic components	3344	1,367	0 - 133	0 - 1,368	0 - 1,368
Navigational, measuring, electromedical, and control instruments	3345	84 - 4,730	0 - 133	1 - 566	81 - 4,032
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	81	*	2	78
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	4	*	*	4
Other measuring and controlling device	other 3345	0 - 4,644	0 - 133	0 - 563	0 - 3,949
Other computer and electronic products	other 334	0 - 12,144	0 - 133	0 - 1,625	0 - 11,756
Electrical equipment, appliances, and components	335	162	1	3	158
Transportation equipment	336	413	13	12	388

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Motor vehicles, bodies, trailers, and parts	3361-63	9 - 401	0 - 13	10	0 - 379
Aerospace products and parts	3364	13	1	2	10
Aircraft, aircraft engine, and aircraft parts	336411-13	13	1	2	10
Guided missile, space vehicle, and related parts	336414-15, 336419	0	0	0	0
Military armored vehicle, tank, and tank component	336992	0	0	0	0
Other transportation	other 336	0 - 392	0 - 13	*	0 - 379
Furniture and related products	337	0 - 172	0	0 - 100	0 - 172
Miscellaneous	339	392 - 565	40	44	308 - 482
Medical equipment and supplies	3391	393	40	44	309
Other miscellaneous manufacturing	3399	0 - 172	0	0	0 - 172
Nonmanufacturing industries	21-23, 42-81	8,054	56	394	7,605
Mining, quarrying, oil and gas extraction, and support activities	21	31 - 59	0 - 36	0 - 59	0 - 59
Utilities	22	3	0	1	2
Wholesale trade	42	1	*	*	1
Electronic shopping and electronic auctions	454111-12	204 - 2,535	0	171 - 275	0 - 2,298
Transportation and warehousing	48-49	0	0	0	0
Information	51	5,454	18 - 54	118 - 156	5,281
Publishing	511	1,001	19	91	891
Newspaper, periodical, book, and directory publishers	5111	0	0	0	0
Software publishers	5112	1,001	19	91	891
Telecommunications	517	0	0	0	0
Data processing, hosting, and related services	518	404 - 421	0 - 36	0 - 65	339 - 421
Other information	other 51	4,031 - 4,050	0 - 36	0 - 65	3,968 - 4,050
Finance and insurance	52	0 - 2,298	0	0	0 - 2,298
Real estate and rental and leasing	53	0	0	0	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	0	0	0	0
Other real estate and rental and leasing	other 53	0	0	0	0
Professional, scientific, and technical services	54	32	2 - 7	1 - 6	25
Architectural, engineering, and related services	5413	4	*	*	3
Computer systems design and related services	5415	12	1	*	11
Scientific research and development services	5417	11	2	2	7
Research and development in nanotechnology	541713	0	0	0	0
Research and development in biotechnology (except nanobiotechnology)	541714	0	0	0	0
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	11	2	2	7

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Research and development in the social sciences and humanities	541720	0	0	0	0
Other professional, scientific, and technical services	other 54	6	0 - 3	0 - 3	4
Health care services	621-23	0	0	0	0
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	0	0	0	0
All companies (number of domestic employees)	-	27,038	740	2,999	23,298
Small companies					
10-19 ^c	-	23	0	2	21
20-49	-	42	4	7	32
Medium companies					
50-99	-	47	3	4	39
100-249	-	277	3	115	160
Large companies					
250-499	-	547	36	188	323
500-999	-	708	9	25	674
1,000-4,999	-	1,976	18	136	1,822
5,000-9,999	-	1,544	183	329	1,032
10,000-24,999	-	3,173	297	129	2,747
25,000 or more	-	18,700	188	2,066	16,447

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

NAICS = 2017 North American Industry Classification System.

^a Statistics are based on companies in the United States that reported to the survey. No systematic item imputation was applied. These statistics include an adjustment to the weight to account for unit nonresponse.

^b Respondent was not asked to report categorical breakouts of research and development paid for by foreign subsidiaries. Rather, ratios of the company's basic research, applied research, and development were calculated as proportions of the overall domestic R&D performance paid for by the company. These ratios were applied to the company's domestic R&D performance paid for by foreign subsidiaries to get estimates of a company's basic research, applied research, and development paid for by foreign subsidiaries.

^c The Business Enterprise 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 \$50,000 or more of R&D and are not comparable 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 Census Bureau, Business Enterprise Research and Development Survey, 2020.