

TABLE 40

Domestic R&D paid for by sources located outside the United States and performed by the company, by source of funds, industry, and company size: 2022

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Foreign companies					Foreign government agencies	Foreign universities, colleges, and academic researchers	All other
			Subsidiaries ^a	Company's parent	Unaffiliated companies					
All industries	21-23, 31-33, 42-81	53,933	30,161	21,005	2,599		104	10	52	
Manufacturing industries	31-33	34,413	19,950	12,732	1,628		95	2	6	
Food	311	493	D	269	D		0	0	0	
Beverage and tobacco products	312	106	i 0	106	i *	i 0	0	0	0	
Textile, apparel, and leather products	313-16	4	D	3	D		0	0	0	
Wood products	321	28	r 23	r 5	0		0	0	0	
Paper	322	*	0	*	0		0	0	0	
Printing and related support activities	323	0	0	0	0		0	0	0	
Petroleum and coal products	324	D	D	0	*		0	0	0	
Chemicals	325	12,340	3,390	8,176	770		0	*	i 4	
Basic chemicals	3251	172	37	124	11		0	*	0	
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	70	i 0	62	i 8	0	0	0	*	
Pesticide, fertilizer, and other agricultural chemicals	3253	D	0	D	*		0	0	0	
Pharmaceuticals and medicines	3254	11,534	3,335	7,447	748		0	0	4	
Soap, cleaning compound, and toilet preparations	3256	243	13	229	0		0	0	0	
Paint, coating, adhesive, and other chemicals	3255, 3259	10	4	4	3		0	*	i 0	
Plastics and rubber products	326	154	42	112	*		0	0	0	
Nonmetallic mineral products	327	25	0	16	9		0	0	0	
Primary metals	331	5	2	3	0		0	*	0	
Fabricated metal products	332	63	i 1	61	i 1	r 0	0	0	0	
Machinery	333	639	280	203	155		*	1	r 0	
Agricultural implement	33311	D	D	D	D		0	0	0	
Semiconductor machinery	333242	61	27	34	* i		0	*	i 0	
Engine, turbine, and power transmission equipment	3336	19	D	9	5		*	D	0	
Other machinery	other 333	D	245	D	D		0	D	0	
Computer and electronic products	334	16,831	14,546	1,976	287		21	*	1 r	
Communications equipment	3342	D	D	D	D		2	i 0	0	
Semiconductor and other electronic components	3344	D	D	1,515	262		0	0	* r	
Navigational, measuring, electromedical, and control instruments	3345	D	D	245	15		19	*	*	
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	D	D	197	0		0	*	*	
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	37	*	3	15		19	0	0	
Other measuring and controlling devices	other 3345	D	D	46	*		0	*	r 0	

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Other computer and electronic products	other 334	D	D	D	D	0	0	0	
Electrical equipment, appliances, and components	335	469	i 100	361	i 8	0	0	0	
Transportation equipment	336	1,965	214	1,348	328	i 73	0	2 r	
Motor vehicles, bodies, trailers, and parts	3361-63	1,768	209	1,322	237	i *	i 0	* i	
Aerospace products and parts	3364	182	5	12	91	73	0	1	
Aircraft, aircraft engine, and aircraft parts	336411-13	D	5	12	71	D	0	1	
Guided missile, space vehicle, and related parts	336414-15, 336419	D	0	0	20	D	0	0	
Military armored vehicle, tank, and tank components	336992	0	0	0	0	0	0	0	
Other transportation	other 336	15	0	14	0	0	0	1 r	
Furniture and related products	337	65	65	0	0	0	0	0	
Miscellaneous	339	D	D	94	57	*	0	0	
Medical equipment and supplies	3391	993	865	83	45	0	0	0	
Other miscellaneous manufacturing	3399	D	D	11	12	*	0	0	
Nonmanufacturing industries	21-23, 42-81	19,520	i 10,211	i 8,273	i 972	i 9	9	46	
Mining, quarrying, oil and gas extraction, and support activities	21	D	D	0	21	i 0	0	0	
Utilities	22	0	0	0	0	0	0	0	
Wholesale trade	42	35	3	32	0	0	0	0	
Electronic shopping and electronic auctions	454111-12	D	D	0	0	0	0	0	
Transportation and warehousing	48-49	0	0	0	0	0	0	0	
Information	51	9,164	i 8,742	i 375	38	0	0	10	
Publishing	511	D	D	261	0	0	0	10	
Newspaper, periodical, book, and directory publishers	5111	1	0	1	0	0	0	0	
Software publishers	5112	D	D	260	0	0	0	10	
Telecommunications	517	D	49	D	0	0	0	0	
Data processing, hosting, and related services	518	284	197	49	38	0	0	0	
Other information	other 51	D	D	D	0	0	0	0	
Finance and insurance	52	D	D	0	0	0	0	0	
Real estate and rental and leasing	53	0	0	0	0	0	0	0	
Lessors of nonfinancial intangible assets (except copyrighted works)	533	0	0	0	0	0	0	0	
Other real estate and rental and leasing	other 53	0	0	0	0	0	0	0	
Professional, scientific, and technical services	54	8,952	i 149	7,837	i 911	i 9	9	36	
Architectural, engineering, and related services	5413	67	5	53	6	3	r *	*	

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Computer systems design and related services	5415	2,357	79	2,277	1	*	0	0
Scientific research and development services	5417	6,244	i 24	5,285	i 885	i 6	8	36
Research and development in nanotechnology	541713	14	9	5	1	0	0	0
Research and development in biotechnology (except nanobiotechnology)	541714	243	3	i 204	14	0	0	22
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	5,977	i 12	5,077	i 870	i 1	4	14
Research and development in the social sciences and humanities	541720	9	0	0	0	5	3	0
Other professional, scientific, and technical services	other 54	285	41	222	20	*	1	* r
Health care services	621-23	*	0	0	*	0	*	0
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	56	25	28	2	0	0	0
All companies (number of domestic employees)	-	53,933	30,161	21,005	2,599	104	10	52
Small companies								
10-19 ^b	-	264	17	211	31	1	1	2
20-49	-	618	128	r 412	63	D	2	r D
Medium companies								
50-99	-	909	91	745	69	3	r *	1
100-249	-	1,052	102	r 832	114	3	*	0
Large companies								
250-499	-	1,874	256	1,250	338	0	4	26
500-999	-	2,145	1,057	1,015	73	*	0	0
1,000-4,999	-	9,254	3,477	5,203	575	*	i *	* i
5,000-9,999	-	1,777	1,049	384	329	12	i 3	* i
10,000-24,999	-	13,795	i 1,852	10,954	i 926	i D	*	i D
25,000 or more	-	22,245	22,133	0	82	29	0	1

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse; r = relative standard error is more than 50%.

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 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. In all other tables, R&D costs of foreign-company subsidiaries of U.S. companies are included in company-funded U.S. domestic R&D totals. Only in this table are such R&D costs classified as being part of R&D paid for by sources located outside of the United States.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2022.