

TABLE 46

Worldwide, foreign, and domestic capital expenditures and capital expenditures for R&D paid for and performed by the company, by type of expenditure, industry, and company size: 2022

(Millions of U.S. dollars)

Industry and company size	NAICS code	Worldwide capital expenditures			Foreign capital expenditures			Domestic capital expenditures			Domestic capital expenditures for R&D			Domestic capital expenditures for R&D (type of property)					
		Total	Property, plant, and equipment	Identifiable intangible assets	Total	Property, plant, and equipment	Identifiable intangible assets	Total	Property, plant, and equipment	Identifiable intangible assets	Total	Property, plant, and equipment	Identifiable intangible assets	Land acquisition	Buildings and land improvement	Machinery and equipment	Capitalized software	Other intellectual property	All other
All industries	21-23, 31-33, 42-81	1,088,280	993,314	94,965	218,741	203,823	14,919	869,538	789,492	80,047	36,069	31,655	4,414	155	5,135	22,228	2,743	3,726	2,082
Manufacturing industries	31-33	446,684	415,504	31,180	136,573	130,849	5,725	310,111	284,655	25,456	23,717	20,988	2,729	100	3,790	14,713	1,466	2,144	1,504
Food	311	45,943	43,461	2,481	11,102	10,483	619	34,841	32,978	1,863	544	542	2	4	141	382	3	1	12
Beverage and tobacco products	312	8,780	7,965	815	2,738	2,705	33	6,041	5,260	782	76	74	2	*	7	66	2	*	1
Textile, apparel, and leather products	313-16	3,578	3,372	205	981	958	23	2,596	2,415	182	44	42	2	*	15	24	2	1	1
Wood products	321	3,032	3,030	2	76	76	0	2,956	2,954	2	40	39	1	0	2	34	2	*	2
Paper	322	5,474	5,471	3	436	436	*	5,037	5,035	3	266	266	*	0	2	264	*	0	*
Printing and related support activities	323	1,311	1,177	135	91	91	*	1,220	1,085	135	12	12	*	0	0	11	*	0	*
Petroleum and coal products	324	30,051	D	D	D	D	D	D	D	D	142	141	1	0	16	119	2	*	5
Chemicals	325	87,797	79,451	8,346	24,865	22,232	2,633	62,932	57,219	5,713	6,121	5,180	941	52	1,611	2,988	323	884	263
Basic chemicals	3251	25,088	22,971	2,117	7,543	5,995	1,548	17,545	16,976	569	392	390	2	10	159	216	1	3	4
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	6,029	5,964	65	1,349	1,348	1	4,680	4,617	63	171	168	3	*	11	137	17	*	6
Pesticide, fertilizer, and other agricultural chemicals	3253	2,620	2,398	223	217	D	D	2,403	D	D	55	54	1	1	7	44	*	2	1
Pharmaceuticals and medicines	3254	39,960	35,786	4,173	11,481	10,712	769	28,479	25,074	3,404	5,234	4,303	931	41	1,332	2,453	290	877	241
Soap, cleaning compound, and toilet preparations	3256	10,073	9,235	838	3,140	3,140	0	6,933	6,095	838	195	194	1	0	92	84	13	0	7
Paint, coating, adhesive, and other chemicals	3255, 3259	4,027	3,096	931	1,136	D	D	2,891	D	D	73	70	3	0	10	54	3	3	4
Plastics and rubber products	326	15,663	15,198	465	2,886	2,850	36	12,777	12,348	429	320	312	8	13	48	225	11	5	17
Nonmetallic mineral products	327	6,968	6,912	56	2,037	2,036	1	4,931	4,876	56	70	68	1	0	31	37	*	1	1
Primary metals	331	10,608	9,028	1,580	505	504	1	10,103	8,524	1,579	225	225	*	7	75	142	1	0	0
Fabricated metal products	332	8,412	7,975	437	892	873	19	7,520	7,102	418	300	274	27	2	10	251	5	17	16
Machinery	333	24,218	22,366	1,852	7,894	7,568	326	16,324	14,798	1,526	1,788	1,409	379	1	255	978	167	39	349

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Industry and company size	NAICS code	Worldwide capital expenditures			Foreign capital expenditures			Domestic capital expenditures			Domestic capital expenditures for R&D			Domestic capital expenditures for R&D (type of property)					
		Total	Property, plant, and equipment	Identifiable intangible assets	Total	Property, plant, and equipment	Identifiable intangible assets	Total	Property, plant, and equipment	Identifiable intangible assets	Total	Property, plant, and equipment	Identifiable intangible assets	Land acquisition	Buildings and land improvement	Machinery and equipment	Capitalized software	Other intellectual property	All other
Agricultural implement	33311	2,915	2,532	383	890	889	1	2,026	1,643	383	141	121	20	0	12	106	15	7	1
Semiconductor machinery	333242	3,340	3,188	152	1,869	1,867	1	1,471	1,321	151	581	573	8	0	108	346	49	1	77
Engine, turbine, and power transmission equipment	3336	4,170	3,947	223	1,372	1,364	8	2,798	2,583	215	144	142	2	0	7	127	2	2	6
Other machinery	other 333	13,793	12,700	1,094	3,764	3,448	317	10,029	9,252	777	922	572	350	1	128	399	101	30	264
Computer and electronic products	334	90,642	86,611	4,031	43,084	42,671	413	47,559	43,940	3,619	8,444	7,749	695	2	721	6,106	514	788	312
Communications equipment	3342	4,728	3,053	1,675	873	749	123	3,855	2,304	1,551	482	384	99	1	D	307	71	D	D
Semiconductor and other electronic components	3344	58,413	57,302	1,111	31,979	31,928	51	26,434	25,374	1,060	4,981	4,666	315	1	185	3,846	239	491	220
Navigational, measuring, electromedical, and control instruments	3345	6,291	5,798	493	1,567	1,330	237	4,724	4,468	256	479	453	26	0	41	370	29	D	D
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	1,513	1,301	212	294	218	76	1,219	1,083	136	149	141	8	0	7	118	19	D	D
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	985	975	9	70	70	0	914	905	9	134	131	4	0	22	96	D	D	D
Other measuring and controlling devices	other 3345	3,793	3,521	272	1,202	1,042	161	2,591	2,480	111	195	181	14	0	12	156	D	D	D
Other computer and electronic products	other 334	21,210	20,458	753	8,665	8,663	2	12,545	11,794	751	2,503	2,247	256	0	D	1,583	175	D	D
Electrical equipment, appliances, and components	335	9,159	8,023	1,136	2,483	2,225	258	6,676	5,798	878	675	645	30	*	44	495	28	14	94
Transportation equipment	336	71,114	64,079	7,034	14,737	14,402	335	56,376	49,677	6,699	3,128	2,693	435	12	542	1,892	245	253	183
Motor vehicles, bodies, trailers, and parts	3361-63	54,675	48,240	6,435	11,949	11,892	57	42,726	36,348	6,378	2,159	1,761	398	8	339	1,218	193	250	152
Aerospace products and parts	3364	13,237	12,683	554	2,455	2,177	278	10,782	10,506	276	819	794	25	4	168	574	49	2	22
Aircraft, aircraft engine, and aircraft parts	336411-13	7,958	7,830	128	785	773	11	7,173	7,056	117	408	391	17	4	50	313	26	2	13

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		Total	Property, plant, and equipment	Identifiable intangible assets	Total	Property, plant, and equipment	Identifiable intangible assets	Total	Property, plant, and equipment	Identifiable intangible assets	Total	Property, plant, and equipment	Identifiable intangible assets	Land acquisition	Buildings and land improvement	Machinery and equipment	Capitalized software	Other intellectual property	All other
Guided missile, space vehicle, and related parts	336414-15, 336419	5,279	4,853	426	1,671	1,404	267	3,609	3,449	160	411	403	9	0	118	261	23	0	10
Military armored vehicle, tank, and tank components	336992	45	D	D	0	0	0	45	D	D	* i	* i	* i	0	* i	* i	* i	* i	* i
Other transportation	other 336	3,157	D	D	334	334	0	2,824	D	D	150	138	12 r	1	35	100	3	1 i	9
Furniture and related products	337	964	937	28	76	76	0	889	861	28	19	19	*	*	6	9	1	* r	4
Miscellaneous	339	22,971	D	D	D	D	D	D	D	D	1,503	1,299	204	7 i	264	689	161	139	243
Medical equipment and supplies	3391	17,410	16,223	1,187	5,993	5,787	206	11,416	10,436	980	1,259	1,075	183	7 i	246	525	111	134	236
Other miscellaneous manufacturing	3399	5,561	D	D	D	D	D	D	D	D	244	224	20 i	0	18	164	49 i	5 i	8 i
Nonmanufacturing industries	21-23, 42-81	641,595	577,810	63,785	82,168	72,974	9,194	559,428	504,837	54,591	12,353	10,667	1,686	55 i	1,345 i	7,515	1,277 i	1,582 i	578
Mining, quarrying, oil and gas extraction, and support activities	21	41,127	40,873 i	254 i	9,429 i	9,348 i	81 i	31,698	31,525 i	173 i	D	231 i	D	0	D	186 i	86 i	D	D
Utilities	22	129,020	127,887	1,133	1,473	1,473	0	127,547	126,414	1,133	D	D	20 i	0	0	D	31 i	0	D
Wholesale trade	42	7,813 i	7,691 i	122 i	D	D	2	D	D	121 i	49	44 i	5	* r	4	22 i	17 i	D	D
Electronic shopping and electronic auctions	454111-12	D	D	1,577	D	D	D	D	D	D	D	D	D	0	0	D	24 i	D	0
Transportation and warehousing	48-49	30,013	27,010	3,003 i	2,899 i	521	2,378 i	27,114	26,490	625 i	303	302	1 i	0	79	132	13	*	79
Information	51	256,553	216,635	39,918	38,299	32,489	5,810	218,255	184,146	34,108	7,889	7,088	802 i	13 i	765 i	5,062	878 i	886 i	285
Publishing	511	52,966	38,328	14,638	20,806	16,972	3,834	32,160	21,356	10,804	2,916	2,814	103 i	9 i	67 i	2,477	214	D	D
Newspaper, periodical, book, and directory publishers	5111	47	32	15	0	0	0	47	32	15	1 i	1 i	* r	0	0	* i	1 i	0	* i
Software publishers	5112	52,919	38,296	14,623	20,806	16,972	3,834	32,114	21,324	10,789	2,915	2,813	103 i	9 i	67 i	2,477	214	D	D
Telecommunications	517	93,881	78,985	14,897	464	426	38 i	93,417	78,558	14,859	487 i	178 i	309 i	0	61 i	116 i	309 i	0	*
Data processing, hosting, and related services	518	27,744	21,566	6,178	6,190	5,251	939 i	21,554	16,315	5,239	1,053	686	367 i	4	188	368	304	138 i	52 i
Other information	other 51	81,962	77,756	4,206	10,839	9,840	999	71,123	67,916	3,207	3,433 i	3,410 i	23	* i	449 i	2,101	50	D	D
Finance and insurance	52	29,255	20,891	8,363	2,614	2,377	237	26,641	18,515	8,126	59 i	48 i	11	0	6	39	5 i	8	1 i

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Real estate and rental and leasing	53	22,173	22,134	39	1,088	1,088	0	21,085	21,046	39	145	143	2	0	7	135	3	0	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	9	5	4	0	0	0	9	5	4	*	*	*	0	*	*	*	0	0
Other real estate and rental and leasing	other 53	22,164	22,129	35	1,088	1,088	0	21,076	21,041	35	145	142	2	0	7	135	3	0	*
Professional, scientific, and technical services	54	32,407	24,935	7,473	4,886	4,705	181	27,522	20,230	7,292	2,370	2,102	269	42	479	1,311	216	165	158
Architectural, engineering, and related services	5413	3,685	3,316	368	210	209	1	3,475	3,107	368	91	83	8	0	5	62	11	2	11
Computer systems design and related services	5415	12,835	10,563	2,272	2,417	2,279	139	10,418	8,284	2,133	528	456	72	0	19	362	81	27	40
Scientific research and development services	5417	11,166	8,310	2,856	1,901	1,884	17	9,266	6,426	2,839	1,423	1,324	98	41	426	737	54	68	97
Research and development in nanotechnology	541713	157	143	14	30	22	8	127	121	5	21	17	4	*	*	16	*	4	0
Research and development in biotechnology (except nanobiotechnology)	541714	3,093	1,466	1,628	26	26	0	3,067	1,440	1,628	345	340	5	8	130	161	26	2	17
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	7,897	6,689	1,208	1,845	1,836	9	6,052	4,854	1,199	1,055	966	90	32	295	558	28	61	80
Research and development in the social sciences and humanities	541720	19	12	7	*	*	0	19	12	7	2	2	*	0	*	2	0	*	0
Other professional, scientific, and technical services	other 54	4,721	2,746	1,976	357	333	24	4,364	2,412	1,952	329	239	89	1	29	150	70	68	10
Health care services	621-23	2,660	2,412	248	87	77	10	2,573	2,336	238	38	34	3	0	*	20	2	15	*

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Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	D	D	1,654	D	D	D	D	D	D	D	D	1	i	0	D	D	2	i	D	19	i												
All companies (number of domestic employees)	–	1,088,280	993,314	94,965	218,741	203,823	14,919	869,538	789,492	80,047	36,069	31,655	4,414	155	5,135	22,228	2,743	3,726	2,082															
Small companies																																		
10–19 ^a	–	1,446	i	1,177	i	269	i	97	i	67	i	30	i	1,349	i	1,110	i	239	i	204	i	171	i	33	2	i	26	122	i	23	i	13	17	
20–49	–	7,440		6,250		1,190		742		707		35		6,698		5,543		1,154		847		734		114	18		87	583	48	i	50	62		
Medium companies																																		
50–99	–	10,908		9,326		1,582	i	270		246		25		10,638		9,080		1,558	i	887		826		61	i	16	186	541	65	i	27	i	52	
100–249	–	18,109		15,656		2,453		2,810		2,727		83		15,299		12,928		2,371		1,540		1,351		190	8	i	268	949	125	110	80			
Large companies																																		
250–499	–	19,195		16,566		2,629		3,808		3,598		210		15,387		12,967		2,419		1,322		1,155		167	3	i	262	724	132	123	78			
500–999	–	30,289		26,822		3,467		2,712		2,270		442		27,577		24,552		3,025		1,729		1,496		233	22		234	974	178	115	206			
1,000–4,999	–	112,088		102,051		10,036		20,756		19,330		1,426		91,332		82,722		8,611		4,944		4,421		523	40		878	2,933	i	473	i	325	296	
5,000–9,999	–	122,426		115,102		7,324		36,736		33,976		2,761		85,689		81,126		4,563		3,152		2,886		266	i	5	i	301	2,254	360	113	i	119	
10,000–24,999	–	251,493		230,683		20,810		46,829		42,073		4,756		204,664		188,610		16,054		7,313		6,066		1,246	26		1,226	4,286	429	999	346			
25,000 or more	–	514,887		469,682		45,204		103,981		98,830		5,151		410,906		370,853		40,053		14,131	i	12,551	i	1,581	16	i	1,666	i	8,863	909	i	1,850	i	826

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

Source(s):

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