

Table 45. Worldwide, foreign, and domestic capital expenditures and domestic capital expenditures for R&D paid for and performed by the company, by type of expenditure, industry, and company size: 2024

(Millions of U.S. dollars)

Industry and company size	NAICS code	Worldwide capital assets				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	Goodwill	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	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	14,973,468	7,339,111	4,774,062	2,860,295	1,349,873	1,224,642	125,231	242,831	225,939	16,892	i	1,107,042	998,703	108,339	44,908	38,950	5,958	109		5,743		27,488		4,153		3,368		4,047													
Manufacturing industries	31–33	6,876,184	2,986,941	2,364,816	1,524,427	546,940	494,947	51,993	148,677	139,875	8,801		398,263	355,071	43,192	27,213	23,664	3,549	55		4,350		15,707		2,050		2,431		2,620													
Food	311	647,926	243,020	231,020	173,886	41,119	39,804	1,314	5,988	5,918	70	i	35,131	33,887	1,244	563	527	36	1		160		338		35	i	10		18													
Beverage and tobacco products	312	368,776	103,648	130,093	135,035	16,043	15,950	93	5,687	5,687	0		10,356	10,263	93	102	102	*	r	0		25		59		18		*	r	* r												
Textile, apparel, and leather products	313–16	46,156	24,860	11,894	9,403	3,564	3,364	200	670	668	2	i	2,894	2,697	197	105	99	6	i	*		20		72		6	i	4	i	2												
Wood products	321	31,666	26,783	3,556	1,327	4,116	3,858	258	108	103	4		4,008	3,755	254	50	i	49	i	2	i	*	i	14	i	34	i	1	i	1	i											
Paper	322	110,372	79,133	21,848	9,391	9,226	9,054	172	1,286	1,249	37		7,940	7,805	135	97	97	*	i	0		0		96		*	r	*	i	0												
Printing and related support activities	323	11,576	6,305	3,219	2,052	2,384	2,152	232	71	i	71	i	1		2,312	2,081	231	33	31	2	i	0		*	i	30		1	i	1	i	*	i									
Petroleum and coal products	324	445,653	421,783	14,065	9,805	40,371	38,103	2,268	16,279	i	15,525		754	i	24,092	i	22,578	1,514	52	49	3		0		4		33		3		*	i	12									
Chemicals	325	1,808,717	626,770	606,336	575,611	109,558	101,704	7,854	29,621	28,470	1,151		79,937	73,234	6,703	8,951	7,155	1,795	23		2,157		4,249		339		1,609		575													
Basic chemicals	3251	327,721	233,121	63,614	30,986	33,071	31,838	1,232	11,719	11,326	394		21,351	20,513	839	291	253	38	2		38		200		5		23		23													
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	78,058	59,458	13,961	4,638	8,664	8,312	352	1,907	1,832	75		6,757	6,480	278	196	192	3	i	0		16		160		9		*	i	10												
Pesticide, fertilizer, and other agricultural chemicals	3253	50,477	31,010	12,249	7,218	4,092	3,735	357	137	108	30		3,955	3,627	328	115	101	14	i	1		8		85		8	i	7	i	7												
Pharmaceuticals and medicines	3254	1,110,888	226,303	415,260	469,325	49,692	44,649	5,043	11,334	10,900	434		38,358	33,749	4,609	8,021	6,300	1,720	20	i	2,016		3,589		314		1,565		517													
Soap, cleaning compound, and toilet preparations	3256	173,857	52,123	72,540	49,194	8,723	8,495	228	3,376	3,340	36	i	5,347	5,155	192	184	182	2	i	0		51		120		3	r	1	i	9												
Paint, coating, adhesive, and other chemicals	3255, 3259	67,716	24,754	28,712	14,250	5,316	4,675	641	1,148	964	184		4,168	3,711	457	144	127	18	i	1		28		94		*		13	i	8												
Plastics and rubber products	326	162,500	109,503	34,913	18,084	15,753	13,675	2,078	3,628	2,564	i	1,064	12,125	11,111	1,013	281	272	9	i	*		35		199		4		4	i	39												
Nonmetallic mineral products	327	63,022	49,536	8,613	4,874	7,785	6,943	842	2,869	i	2,467	i	401	4,916	4,475	440	76	70	6	r	*		24		44		*	r	1		6	r										
Primary metals	331	84,736	68,928	10,226	5,583	9,665	9,534	131	1,395	1,394	2		8,270	8,140	130	171	170	*	i	*		29		137		2		1		3												
Fabricated metal products	332	153,482	85,335	44,921	23,226	15,321	12,843	2,478	2,258	1,944	315		13,063	10,899	2,164	623	i	530	i	92	i	*	i	66	i	436	i	51	i	27	i	42										
Machinery	333	445,715	159,766	192,925	93,024	33,054	27,083	5,971	9,053	8,093	959		24,001	18,989	5,012	2,314	2,085	229	*		542		1,387		144		77		164													
Agricultural implement	33311	41,820	19,361	15,927	6,532	3,689	3,382	307	1,293	1,293	1		2,396	2,090	306	114	53	60	0		16		31		D		D		D													
Semiconductor machinery	333242	41,152	22,583	14,004	4,565	3,891	3,791	100	1,694	1,684	9		2,197	2,106	91	1,184	1,162	22	0		D		668		D		*		D													
Engine, turbine, and power transmission equipment	3336	53,179	32,703	14,986	5,490	6,825	6,184	641	2,272	1,935	337		4,553	4,249	304	360	341	19	i	0		49		234		25		D		D												
Other machinery	other 333	309,563	85,120	148,007	76,436	18,649	13,725	4,924	3,793	3,181	612		14,856	10,544	4,312	656	528	128	*		D		454		83		19		D													
Computer and electronic products	334	1,031,508	380,648	470,716	180,144	100,920	93,941	6,979	39,931	i	38,977	i	954	i	60,989	54,964	6,025	i	6,901	6,281	620	4		289		5,138		660		271		540										
Communications equipment	3342	152,344	39,940	88,339	24,065	11,694	8,301	3,393	1,003	i	909	i	94	i	10,691	i	7,392	i	3,299	i	455	399	56	i	2		D		35	i	D		D									
Semiconductor and other electronic components	3344	468,641	235,023	178,158	55,460	60,346	59,239	1,106	28,557	i	28,440	i	117		31,789	i	30,799	i	990	3,077	i	2,871	i	206		0		48	i	2,670	i	185		38		137	i					
Navigational, measuring, electromedical, and control instruments	3345	210,525	32,591	119,536	58,398	7,103	6,350	753	2,862		2,626		236	i	4,241		3,724		518		783	612	171		2	i	158		394		50		26		152							
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	27,147	4,112	13,491	9,544	1,002	i	747		255	i	254	i	152	i	102	i	748	i	595	i	153	i	211	i	120	i	90		1	i	28	i	72	i	5		2		102	i	
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	55,185	8,886	33,856	12,443	1,167		1,120		47		62	i	46	i	16	i	1,105		1,074		31		213		206		8		0		69	i	126		3		2		13		

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(Millions of U.S. dollars)

Industry and company size	NAICS code	Worldwide capital assets				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	Goodwill	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	Total	Property, plant, and equipment	Identifiable intangible assets	Land acquisition	Buildings and land improvement	Machinery and equipment	Capitalized software	Other intellectual property	All other																				
Other measuring and controlling devices	other 3345	128,193	19,594	72,189	36,410	4,935	4,483	451	2,546	2,429	118	2,388	2,055	334	359	286	73	1	r	61	196	42	22	37																			
Other computer and electronic products	other 334	199,998	73,093	84,683	42,222	21,777	20,051	1,727	7,509	7,002	508	14,268	13,049	1,219	2,586	2,399	187	0		D	1,723	390	D	D																			
Electrical equipment, appliances, and components	335	130,549	39,016	65,384	26,150	11,645	8,672	2,973	2,223	i	2,108	i	114	i	9,422	6,563	2,859	767	726	41	i	2	81																				
Transportation equipment	336	758,482	410,575	230,185	117,723	89,751	80,452	9,299	16,466	15,674	791	73,286	64,778	8,508	i	4,402	4,195	208	23	703	i	2,325	478	136	738																		
Motor vehicles, bodies, trailers, and parts	3361–63	360,934	291,401	28,875	40,659	70,786	63,133	7,653	i	12,891	12,748	143	57,894	50,384	7,510	i	2,955	2,814	141	D	513	i	1,443	i	438	120	D																
Aerospace products and parts	3364	329,400	93,043	166,808	69,548	15,870	14,276	1,594	3,097	2,452	i	645	12,773	11,824	949	1,188	1,134	54	D	134	749	37	3	i	D																		
Aircraft, aircraft engine, and aircraft parts	336411–13	184,649	D	D	D	11,579	10,726	853	D	D	D	D	D	D	D	805	D	0		40	577	17	2	i	D																		
Guided missile, space vehicle, and related parts	336414–15, 336419	144,751	D	D	D	4,291	3,550	741	D	D	D	D	D	D	D	329	D	D		94	172	20	1	i	D																		
Military armored vehicle, tank, and tank components	336992	818	272	72	474	31	19	12	0	0	0	31	19	12	14	2	12	0		*	i	2	0	12	*	i																	
Other transportation	other 336	67,331	25,859	34,429	7,043	3,064	3,025	40	478	475	3	i	2,587	2,550	36	245	i	244	i	1	i	0	*	i	54	i																	
Furniture and related products	337	25,017	11,173	7,263	6,581	1,403	1,111	291	153	97	56	1,250	1,014	235	27	27	*	i	0	1	19	3	*	i	4																		
Miscellaneous	339	550,330	140,160	277,640	132,530	35,263	26,704	8,559	10,992	i	8,867	i	2,124	i	24,271	17,837	6,434	1,697	1,200	498	1	i	182	616	235	269	395																
Medical equipment and supplies	3391	486,189	118,286	250,355	117,548	27,720	20,282	7,437	8,927	i	7,123	1,804	i	18,793	13,159	5,634	1,465	994	471	*	167	459	201	265	372																		
Other miscellaneous manufacturing	3399	64,141	21,874	27,285	14,982	7,543	6,422	1,121	2,065	i	1,744	i	321	i	5,478	4,677	801	233	206	27	1	i	15	157	33	3	23	i															
Nonmanufacturing industries	21–23, 42–81	8,097,284	4,352,170	2,409,246	1,335,868	802,933	729,695	73,238	94,154	86,063	8,091	i	708,779	643,632	65,147	17,695	15,286	2,409	54	i	1,394	11,781	2,103	937	1,427																		
Mining, quarrying, oil and gas extraction, and support activities	21	477,280	447,288	24,558	5,435	51,669	51,224	446	12,684	i	12,644	i	40	38,985	i	38,580	i	406	203	174	29	*	10	140	1	27	i	26															
Utilities	22	1,601,924	1,536,188	51,521	14,214	176,662	175,335	1,327	635	635	0	176,027	174,700	1,327	3	3	*	0		0	2	0	0	1																			
Wholesale trade	42	121,517	i	62,256	i	35,312	23,949	i	D	D	D	D	10,416	i	8,179	i	2,237	i	198	i	181	i	17	i	5	i	27	i	124	i	20	i	9	i	13	i							
Electronic shopping and electronic auctions	454111–12	331,626	D	30,175	D	D	D	D	D	D	D	D	64,988	D	D	722	i	594	i	128	i	24	i	25	i	461	i	125	i	3	i	84	i										
Transportation and warehousing	48–49	370,271	309,737	49,118	11,415	31,679	31,291	388	i	3,217	3,182	35	i	28,462	28,109	353	i	701	672	29	i	0	343	195	47	1	i	116															
Information	51	3,374,140	1,157,187	1,274,538	942,415	330,801	304,048	26,753	48,221	45,728	2,492	282,581	258,320	24,261	12,081	10,956	1,126	2	377	9,308	962	702	730																				
Publishing	511	805,287	246,704	415,196	143,387	86,880	82,627	4,253	26,051	25,385	666	i	60,828	57,242	3,586	4,390	4,013	378	1	169	3,635	211	238	136																			
Newspaper, periodical, book, and directory publishers	5111	2,184	i	436	i	1,568	i	180	i	69	i	44	i	25	i	9	i	5	i	4	i	60	i	39	i	21	6	i	4	i	1	i	0	*	i	2	i	3	i	*	i	*	i
Software publishers	5112	803,103	246,268	413,628	143,207	86,810	82,583	4,228	26,042	25,380	662	i	60,768	57,203	3,566	4,385	4,008	377	1	169	3,633	207	238	136																			
Telecommunications	517	1,141,957	415,554	184,992	541,411	76,830	68,017	8,813	1,543	1,534	9	75,287	66,483	8,805	375	i	307	i	68	i	0	8	271	i	72	1	23																
Data processing, hosting, and related services	518	637,053	77,389	431,492	128,172	42,676	35,390	7,286	5,019	3,892	1,126	i	37,657	31,497	6,160	2,558	i	2,053	i	505	*	i	66	1,769	i	496	D	D															
Other information	other 51	789,843	417,540	242,858	129,445	124,416	118,015	6,401	15,607	14,917	691	108,809	103,099	5,710	4,757	4,583	175	*	133	3,634	183	D	D																				
Finance and insurance	52	704,487	133,531	458,588	112,367	36,696	24,199	12,497	4,182	3,083	1,100	32,513	21,117	11,397	249	141	107	0	6	68	i	156	4	14																			
Real estate and rental and leasing	53	52,015	45,181	4,922	1,912	6,807	6,763	44	415	414	1	6,392	6,348	43	18	i	18	i	*	i	0	1	i	16	i	1	0	*	i														
Lessors of nonfinancial intangible assets (except copyrighted works)	533	265	i	15	i	233	i	17	8	8	0	0	8	8	0	*	i	*	i	0	0	*	*	i	0	0	*																
Other real estate and rental and leasing	other 53	51,750	45,166	4,689	1,895	6,799	6,755	44	415	414	1	6,384	6,340	43	18	i	18	i	*	i	0	1	i	15	i	1	0	*	i														

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Professional, scientific, and technical services	54	612,794	87,231	380,673	144,890	28,130	17,644	10,487	3,966	3,281	685	i	24,164	14,362	9,802	3,146	2,246	900	22		588	1,252	698	180	405												
Architectural, engineering, and related services	5413	39,216	16,906	10,103	12,207	3,051	2,114	937	269	i	215	54	i	2,783	1,899	883	433	333	101	*		122	160	19	5	127											
Computer systems design and related services	5415	284,191	28,391	197,856	57,944	8,878	4,433	4,444	1,287	798	489	i	7,591	3,635	3,956	899	545	354	*	i	118	337	305	68	i	72											
Scientific research and development services	5417	189,309	25,777	117,862	45,671	9,027	7,212	1,815	2,158	2,069	89		6,869	5,143	1,726	1,286	1,065	221	21		290	612	138	80	146												
Research and development in nanotechnology	541713	4,783	722	2,733	1,328	407	400	7	6	6	0		401	394	7	52	45	6	0		17	20	1	0	13												
Research and development in biotechnology (except nanobiotechnology)	541714	43,570	5,207	23,257	15,105	3,322	2,319	1,003	505	466	39		2,817	1,853	964	194	179	15	12		32	123	1	10	16												
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	140,710	19,624	91,851	29,235	5,266	4,462	804	1,647	1,597	50		3,619	2,866	753	1,039	841	199	9		241	i	468	136	70	116											
Research and development in the social sciences and humanities	541720	247	224	20	2	32	i	30	i	2	i	0	0	0	32	i	30	i	2	i	1	1	*	0	0	*	*	*									
Other professional, scientific, and technical services	other 54	100,078	16,158	54,852	29,068	7,175	3,884	3,290	252	199	53		6,922	3,685	3,237	528	i	303	i	225	i	1	i	57	i	143	i	237	i	28	60						
Health care services	621–23	55,251	D	20,467	D	3,882	D	D	64	46	19		3,818	D	D	101	86	15	i	0		5	36	38	1	i	21										
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	395,979	261,282	79,373	55,325	41,052	36,947	4,105	619	583	36		40,433	36,364	4,069	271	i	214	i	57	*	i	13	i	178	i	53		9	17	i						
All companies (number of domestic employees)	–	14,973,468	7,339,111	4,774,062	2,860,295	1,349,873	1,224,642	125,231	242,831	225,939	16,892	i	1,107,042	998,703	108,339	44,908	38,950	5,958	109		5,743	27,488	4,153	3,368	4,047												
Small companies																																					
10–19 ^a	–	26,647	7,386	4,194	i	15,067	1,858	1,181	677	84	48	i	36	1,774	1,133	641	382	239	143	*		22	i	185	30	i	52	92									
20–49	–	64,211	46,054	8,621	i	9,536	24,411	i	22,165	i	2,245		975	602	372	23,436	i	21,563	i	1,873	2,223	i	1,986	i	237	i	1	i	131		1,744	i	88	i	101	i	157
Medium companies																																					
50–99	–	137,650	82,390	r	30,515	24,745	9,563	7,674	1,889	1,315	1,133	181	r	8,248	6,541	1,708	1,291	1,118	173	12		267	653	128	78	153											
100–249	–	179,840	79,451	64,365	36,025	19,702	15,596	4,106	1,367	982	385		18,334	14,614	3,721	2,100	1,485	615	7		296	977	437	115	267												
Large companies																																					
250–499	–	257,699	107,471	92,911	57,317	27,555	18,726	8,829	2,945	2,425	521		24,609	16,301	8,308	1,993	1,489	504	4		386	829	441	138	196												
500–999	–	454,381	189,810	171,897	92,674	36,830	30,062	6,768	4,313	2,888	1,425		32,517	27,174	5,343	2,863	2,261	602	3	i	398	1,005	457	177	i	823											
1,000–4,999	–	2,010,053	816,634	755,624	437,795	133,050	111,332	21,718	28,384	24,513	3,871		104,665	86,819	17,846	4,960	4,202	759	8		795	2,840	612	303	402												
5,000–9,999	–	1,728,435	971,226	486,045	271,164	159,034	149,253	9,781	34,536	32,934	1,602		124,498	116,319	8,179	4,163	2,988	1,175	1	i	378	2,426	276	947	135	i											
10,000–24,999	–	3,969,070	2,086,909	1,193,394	688,768	316,200	299,794	16,406	55,754	i	53,158	2,596	i	260,446	246,637	13,809	6,956	5,852	1,104	12	i	1,665	3,641	403	871	365	i										
25,000 or more	–	6,145,482	2,951,780	1,966,497	1,227,206	621,671	568,858	52,814	113,158	107,255	5,903	i	508,514	461,603	46,911	17,976	17,331	645	60		1,404	13,188	1,280	586	1,458												

* = 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.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2024.