Table 63. Foreign sales for companies located in the United States that performed or funded R&D, by business activity: 2008–24

(Millions of U.S. dollars)

Business activity[a]	Business code[b]	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
All business activities	21100–81000	3,180,177	2,773,429	3,373,035	3,814,885	3,715,718	3,615,226	3,624,553	3,116,806	3,095,167	3,294,934	3,812,880	3,647,303	3,557,296	4,319,886	4,672,742	4,544,832	4,368,191
Oil and gas extraction	21100	143,705	92,357	126,671	152,394	147,415	130,389	116,693	70,302	59,489	57,150	86,746	58,356	39,035	70,696	111,278	76,365	68,347
Mining	21200	NA	D	5,230	19,552	19,020	16,261	D	D	10,528	5,473	19,044	2,191	1,391	48,060 i	462	292	157
Support activities for mining, including oil and gas	21300	NA	22,162	26,223	25,878	28,461	27,621	32,686	26,711 i	18,880	24,865 i	29,837	36,898	24,913 i	15,275	86,936 i	16,469	22,027
Utilities	22100	NA	D	9,155	10,892	9,320	8,068	8,229	10,468	4,473	6,948	4,779	4,874	1,573	3,705	4,320	6,606	6,705
Construction	23000	NA	15,107	11,664	18,660	43,283	33,541	24,672	14,571	6,703	4,932	7,639	8,303	10,410	4,322	4,553	6,703	3,566
Food manufacturing	31100	81,184	127,453	193,432	196,015	184,889	247,871	235,909	202,761	184,474	172,554	190,856	214,757	229,247	242,709	267,872	295,515	218,578
Beverage manufacturing	31210	59,317	50,655	56,495	84,916	83,229	57,690	57,147	D	44,029	49,885	46,313	41,260	46,736	58,836	75,166	79,742	68,134
Tobacco manufacturing	31220	290	102,541	102,636	111,353	103,052	33,327	D	D	30,782	36,346	31,938	32,447	31,001	37,174	34,143	42,259	38,729
Textile, apparel, and leather products manufacturing	31990	NA	10,239	11,625	13,883	20,542	15,193	15,014	13,065	20,278	22,083	25,521	24,173	23,862	21,091	20,327	30,004	32,648
Wood products manufacturing	32100	6,381	1,613	3,101 i	1,821	4,144	5,769	7,172	4,715	0 - 163,991	4,290	6,131	6,111	3,130	5,297	5,145	6,150	6,807
Paper manufacturing	32200	39,895	30,504	36,481	40,196	41,303	40,349	42,619	D	33,888	36,393	39,708	0 - 585,012	33,357	32,569	33,418	32,488	31,577
Printing and related support activities	32300	3,748	4,212	5,234	6,013	5,885	3,296	5,049	7,829 i	4,501	8,418	4,995	10,337 i	3,615	4,963	6,347	7,127	6,839
Petroleum refineries	32401	NA	NA	297,333	372,811	333,710	328,477	266,321	175,953	170,110	0 - 408,784	254,128	203,583	143,144	220,963	302,595	273,729	263,297
Asphalt paving, roofing, and saturated materials manufacturing	32402	NA	NA	17	91	74 i	1,244	2,278	630	3,234	3,312	6,373	5,800	2,928	4,171	1,095	1,105	545
Other petroleum and coal products manufacturing, including motor oil, hydraulic fluid, and charcoal	32403	NA	NA	10,623	23,005	D	9,703	9,496	8,643	5,100	4,968	2,770	981	471	3,091	4,841	1,167	1,410
Basic chemicals manufacturing	32510	115,189	75,544	92,953	92,754	129,151	79,818	75,221	58,600	59,714	67,172	80,961	0 - 228,985	0 - 563,442	102,289	106,073	96,370	89,706
Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	32520	29,537	33,110	44,009	30,499	29,307	27,404	35,325	30,979	33,055	36,203	51,259	40,023	39,322	57,112	60,354	49,692	45,875
Pesticide, fertilizer, and other agricultural chemicals manufacturing	32530	12,327	23,686	10,412	14,001	16,929	22,163 i	13,617	D	16,513	18,587	30,225	12,170	10,865	9,438	14,696	11,572	17,848
Pharmaceutical, medicinal, botanical, and biological products (except diagnostic substances) manufacturing[c]	32541	136,925	128,937	147,497	163,323	165,908	162,730	155,814	153,415	144,820	149,280	159,641	170,480	168,105	222,522	225,990	181,391	194,652
In vitro diagnostic substances manufacturing[c]	32542	6,964	7,135	7,802	11,270	12,376	5,730	11,359	7,940	0 - 163,991	6,700	8,931 i	0 - 585,012	6,846	8,916	10,371 i	7,083	7,551
Biotechnology-based pharmaceutical and biological products (except diagnostic substances)	32543	NA	NA	NA	NA	NA	3,553	8,035	13,232	0 - 163,991	0 - 90,420	13,346	15,602	11,239	37,959	D	24,024	25,303
Soap, cleaning compound, and toilet preparations manufacturing	32591	72,271	80,113	86,107	99,565	84,423	98,232	95,193	86,186	81,727	85,732	84,362	79,648	81,725	78,327	90,984	84,447	70,722
Paint, adhesive, and other chemical manufacturing	32592	49,968	41,584	42,946	55,746	49,627	45,604	54,754	39,126	45,439	45,358	45,691	42,428	43,283	46,113	58,046	46,835	47,551
Plastics and rubber products manufacturing	32600	43,878	46,866	55,694	70,156	71,055	65,315	76,697	45,131	56,942	66,455	55,679	60,034	61,140	69,608	72,330	54,259	56,011
Clay and glass products manufacturing	32710	12,023	8,789	12,710	12,430	16,796	16,378	13,287	15,938	16,850	14,053	18,837	15,547 i	14,387	14,973	20,939	14,347	15,437
Cement, concrete, lime, gypsum, and other nonmetallic mineral products manufacturing	32790	5,307	3,931	7,648	8,629	6,833	9,164	9,381	7,494	6,333	4,163	5,504	5,799	6,143	7,153	5,676	5,858	5,655
Primary metal manufacturing	33100	NA	26,985	35,756	30,648	22,619	24,443	24,114	12,138	15,437	17,605	33,370	37,994	24,103	21,288	24,843	25,901	18,602

Table 63. Foreign sales for companies located in the United States that performed or funded R&D, by business activity: 2008–24

(Millions of U.S. dollars)

Business activity[a]	Business code[b]	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Fabricated metal products manufacturing	33200	45,571	29,870	42,347	49,138	52,129	39,319	67,646	43,238	35,404	47,454	53,830	50,382	49,793	76,212	65,269	53,558	48,217
Agricultural machinery and equipment manufacturing	33311	20,642	21,025	24,042 i	14,152	23,984	23,076	26,760	21,505	21,684	21,146	30,017	0 - 585,012	21,007	24,924	29,813	32,757	26,613
Construction machinery manufacturing	33312	13,881	10,015	11,205	17,120	11,502	20,431	24,092	20,423	14,283	21,099	29,451	30,626	25,473	29,585	31,176	26,815	25,992
Mining, oil, and gas field machinery and equipment manufacturing	33319	NA	35,907	36,300	48,499	49,800	37,434	32,935	36,375	26,418	34,098	40,208	27,371	32,383	23,093	25,397	24,922	28,692
Semiconductor machinery manufacturing	33321	10,928	5,740	9,670	10,941	3,134	13,613	16,266	16,438	15,074	18,206	25,323	0 - 585,012	22,989	38,109	45,259	49,591	53,035
Industrial machinery manufacturing (except semiconductor machinery)	33322	7,532	5,996	8,961	14,930	11,492	10,092	16,537	6,590	12,341	11,149	12,740	9,699	11,163	12,857	10,693	16,515	15,582
Photographic and photocopying equipment manufacturing	33331	NA	2,080	D	D	D	618	1,915	1,477	0 - 163,991	857	0 - 242,771	127	0 - 563,442	195	194	245	166
Commercial, service industry, temperature control, and air-flow control machinery manufacturing	33332	NA	16,053	28,404	30,270	36,451	33,652	40,045	27,712	37,396	32,672	38,473	35,358	26,891	34,928	38,488	41,998	37,705
Digital cameras manufacturing	33333	NA	NA	NA	NA	NA	NA	0	D	0 - 5,580 i	4,524 i	0 - 242,771	1,610	0 - 563,442	92	111	102	109
Engine, turbine, and power transmission equipment manufacturing	33360	28,100	16,787	37,994	44,319	45,968	56,604	D	35,258	36,775	48,658 i	45,700	0 - 585,012	50,998	62,627	59,483	61,620	64,982
Metalworking and other general purpose machinery manufacturing	33390	36,061	22,352	36,485	41,866	39,237	23,995	51,377	41,166	38,528	39,516	38,439	26,329	25,014	38,490	36,122	36,197	34,717
Computers and peripheral equipment manufacturing and magnetic and optical media[d]	33412	NA	136,763	162,729	167,518	160,818	127,377	131,576	129,679	203,226	255,629	264,980	242,284	239,607	305,149	324,380	313,415	328,178
Telephone apparatus manufacturing, including routers, modems, and gateways	33421	22,369	30,531	46,528	32,477	29,869	36,859	32,417	109,988 i	32,209	32,943	36,643	0 - 585,012	29,345	32,518	31,701	D	32,836
Radio, television, and wireless communication equipment manufacturing	33422	29,526	18,039	18,034	37,667	54,443	54,074 i	72,211 i	15,183	0 - 163,991	5,839	0 - 242,771	6,439 i	6,721	7,226	8,179	7,050	6,838
Other communication equipment manufacturing (except radio, television, and wireless communication equipment)	33429	6,791	4,680	4,015	8,552	2,041	6,695 i	1,747	1,326	0 - 163,991	2,019	0 - 242,771	1,476	2,225	2,838	2,971	D	5,002
Audio and video equipment manufacturing	33430	2,243	4,112	3,100	4,180	3,294	4,764	5,171	D	9,734	3,725	5,308	8,187	3,261	3,145	2,817	3,909	3,884
Semiconductor and other electronic components manufacturing	33440	100,661	79,098	157,934	185,199	186,007	197,516	188,661	D	163,360	191,123	232,485	0 - 585,012	180,433	D	246,750	273,991	270,108
Electromedical, electrotherapeutic, and irradiation apparatus manufacturing	33451	12,419	8,728	9,394	13,503	11,985	11,882	14,588	15,589	14,752	20,106 i	22,814 i	18,118 i	17,058	14,056	14,097	16,084	16,331
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments manufacturing	33452	5,126	9,629	11,268	7,329	10,300	13,337	12,013	9,882 i	11,779	12,359 i	9,889	10,658	16,076	2,921	14,218	5,529	8,030
Measuring and control instruments manufacturing (not listed elsewhere)	33459	20,381	35,476	37,663	34,616	40,865	44,169	46,955	39,940	39,568	30,855	28,163	28,865	31,658	39,682	38,940	42,843	45,920
Electrical equipment, appliances, and components manufacturing	33500	47,654	43,416	54,549	58,580	54,904	49,253	56,905	51,633	73,973	65,117	74,039	74,152	69,495	71,293	56,251	47,426	47,864
Motor vehicles manufacturing	33610	174,950	124,140	146,852	166,401	166,616	155,415	153,493	119,588	132,355	0 - 408,784	120,673	122,714	105,124	134,404	D	205,574	167,712
Motor vehicle body and trailer manufacturing	33620	D	504	937	903	2,302	187	573	145	384	763	603	3,589	4,591	4,676	4,370	5,651	1,758
Motor vehicle parts manufacturing	33630	66,559	49,109	95,944	98,857	98,046	113,842	134,544	101,485	89,740	84,753	82,209	95,607 i	85,627	115,060	117,377	99,998	89,056

Table 63. Foreign sales for companies located in the United States that performed or funded R&D, by business activity: 2008–24

(Millions of U.S. dollars)

Business activity[a]	Business code[b]	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Aircraft manufacturing	33641	S	6,959	7,569	9,732 i	5,939	8,600 i	7,452	9,077	5,821	6,995	8,989	5,758	6,175	D	5,086	7,686	7,486
Aircraft engine and engine parts manufacturing	33642	7,773	12,349	9,361	15,023	13,670	7,406	7,083 i	D	1,316	1,784	24,974	21,585	13,163	30,464	17,494	28,546	35,413
Other aircraft parts and auxiliary equipment manufacturing	33643	9,178	9,959	10,547	12,611	10,015	12,933	16,421	19,962	17,048	20,212	11,827	10,607	0 - 68,810	8,589	10,386	11,974	15,451
Guided missiles, space vehicles, and related parts manufacturing	33644	D	D	D	D	1,899	2,431	2,366	2,434 i	339	1,480 i	4,265	2,774	5,309	2,767	2,326	16,680 i	17,604 i
Railroad rolling stock manufacturing	33651	894	875	1,980	1,666	2,455	1,764	3,557 i	3,253	3,760	5,164	5,507	5,415 i	7,433	3,630 i	4,694	7,518	5,837
Ship and boat building	33660	1,581	D	D	D	1,188 i	1,919 i	6,971 i	1,858	0 - 100,602 i	1,677	1,979	2,069	1,866	2,150	2,027	2,306	2,494
Motorcycle, bicycle, and parts manufacturing	33691	345	395	565	1,526	762	926	1,365	1,381	3,231 i	3,684	4,254	4,031	4,158	6,664	6,158	5,921	3,882
Military armored vehicle, tank, and tank components manufacturing	33692	249	462	D	484	224	164	2,608	D	78	1,644 i	2,678	1,557	1,367	1,793 i	800	669	827
All other transportation equipment manufacturing	33699	2,382	895	1,929	2,349	2,212	13,125	D	3,093	2,495	3,104	3,294	1,539	1,880	2,124	2,459	3,749	4,124
Furniture and related products manufacturing	33700	7,183	4,342	4,610	6,151	6,272	5,960	6,085	5,506	5,625	3,866	4,438	5,317	7,203	7,431	4,763	6,428	8,073
Medical equipment and supplies manufacturing	33910	58,419	57,025	73,646	79,038	80,885	77,466	78,288	81,056	78,407	85,432	0 - 242,771	101,069	112,337	120,823	124,275	123,268	128,874
Miscellaneous manufacturing not listed elsewhere (games, office supplies, slot machines, etc.)	33990	41,981	29,242	30,526	D	37,781	47,716	43,898	D	45,531 i	38,962	65,941 i	29,707	0 - 563,442	48,001	31,974	27,410	26,290
Merchant wholesalers, durable goods	42300	174,168	116,754	127,763	42,957	25,213	25,149 i	18,514	27,926	26,876	22,686	22,567	16,769	25,347	26,378	18,051	27,272	34,151
Merchant wholesalers, nondurable goods	42400	66,765	33,733	33,672	229,921	237,186	208,777	240,437	160,432	152,996	156,369	178,950	155,095	131,942	196,408	215,278	122,688	99,494
Wholesale electronic markets and agents and brokers (business to business)	42500	119	D	16	1,714 i	50,376 i	20,233	20,653	20,376	544	312	436	251	732	285	282	691	395
Retail trade (except electronic shopping and electronic auctions)	44000	NA	D	27,253	34,498	42,738	28,360	42,336	13,516	17,264	16,756	55,879	80,367	77,183	46,998	45,811	42,106	45,787
Electronic shopping and electronic auctions	45411	NA	NA	D	D	34,500	37,403	D	D	0 - 163,991	0 - 198,757	0 - 242,771 i	0 - 585,012 i	0 - 563,442 i	D	88,349	99,364 i	24,140 i
Transportation	48000	NA	D	86,945	25,930	32,403	8,708	5,691	D	0 - 163,991	54,889	58,580	88,742	41,227	56,182	80,954	79,239	92,879
Couriers, messengers, and express delivery services	49200	D	D	11,199	D	0	30,192	47,478	D	45,916	33,435	22,049	20	0 - 563,442	D	47,388	D	D
Warehousing and storage	49300	2,512	240	474	975	826	1,295	614	D	1,294	5,837	0 - 242,771	7,536	5,701	D	2,385	D	864
Newspaper, periodical, book, and directory publishers (except Internet)	51110	4,670	8,159	7,754	8,343	7,008 i	2,953 i	2,040	1,265	1,441	1,628	0 - 242,771	1,562	1,491	1,689	1,406	1,396	1,782
Software publishers (except Internet)[e]	51120	89,158	77,832	84,710	97,929	100,697	112,350	115,101	113,255	101,226	97,898	96,171	94,590	89,112	100,167	109,857	109,602	142,824
Motion picture and sound recording (except Internet)	51200	6,721	6,341	6,635	5,141	2,185	7,140	D	1,939	2,490	2,583	4,452	3,265	2,081	1,129	1,365	D	D
Broadcasting (except Internet)	51500	NA	5,624	7,533	4,466	7,504 i	8,215	D	10,083	14,710	16,825	25,106	39,683	36,550	35,744	25,442	31,166	32,657
Wired telecommunications carriers	51710	D	D	1,214	6,862	7,093	865	2,852	2,667	2,665	2,349	2,328	2,226	3,923 i	3,920 i	3,301	2,198	2,015
Wireless telecommunications carriers (except satellite)	51720	1,085	745	6	171	154 i	D	45	D	59	84	3 i	5	1,645 i	688 i	5,074	4,577	5,066
Satellite telecommunications	51740	5,325	5,919 i	176	353 i	234	D	63	587	305	296	90	70	192	1,208	574	1,522	1,341
Other telecommunications (not listed elsewhere)	51790	1,230	1,015	515	2,875	3,193 i	2,179	534	893	840	1,898	0 - 242,771	0 - 585,012	0 - 563,442	767	552	8,693	5,709
Data processing, hosting, and related services[e]	51800	NA	6,292	7,107	9,443	12,874	9,301	13,891	14,101	16,853	20,676	26,815	28,779	33,130	47,461	31,364	31,980	40,346

Table 63. Foreign sales for companies located in the United States that performed or funded R&D, by business activity: 2008–24

(Millions of U.S. dollars)

Business activity[a]	Business code[b]	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cloud computing applications and Internet-based software services	51801	NA	NA	NA	NA	NA	7,987 i	D	7,138	13,012	20,668	35,853	49,309	96,722	112,222	114,748	152,683	117,451
Other information services, including Internet publishing, broadcasting, and Web search portals[e]	51910	NA	13,753	29,921	11,126	16,969	28,521	44,849 i	40,718	37,792	60,390	77,032	93,598	0 - 563,442	152,479	169,117	215,603	251,385
Finance: banking and credit intermediation	52200	NA	45,027	76,052 i	29,501	41,335	41,144	47,077	64,668	58,050	72,381	56,472	52,099	63,767	D	74,125	86,175	101,862
Securities, commodity contracts, and other financial investments and related activities, including funds and trusts	52310	NA	D	34,345	35,268	16,671	23,114	19,687	15,087 i	17,046	18,774	20,890	30,062	35,216	32,486	34,864	44,506	50,690
Insurance carriers and related activities	52400	NA	11,594	16,234	14,985	8,907	34,172 i	32,407 i	21,780 i	19,060 i	18,456 i	0 - 242,771 i	37,830 i	30,746 i	17,753	21,458 i	28,671 i	25,859 i
Real estate	53100	D	D	D	D	D	D	D	88	57	0 - 10,116	583	223	1	1	*	*	162
Rental and leasing services	53200	NA	D	8,580 i	5,232 i	7,232	8,873	6,656	5,390	0 - 14,237	8,019	3,608	4,473	3,186	9,682	9,712	12,110	13,958
Lessors of nonfinancial intangible assets, including patent licensing	53300	D	352	225	359	764	640	517	168	82	729	0 - 80,926 i	56	0 - 563,442	1,838	1,150	1,464	1,607
Legal, accounting, tax preparation, bookkeeping, and payroll services	54111	NA	864 i	1,623	D	2,222	2,614	3,816 i	3,720	2,818	2,755	2,902	3,148	2,323	2,697	2,192	4,251	4,730
Architectural, engineering, and related services	54130	4,931	14,969	33,706	36,917	19,373	45,064	49,007	49,180	26,789	19,248	18,151	16,522	14,317	15,897	16,702	16,445	16,011
Specialized design services	54140	D	D	454	228	345	900	678	D	68	2,229 i	18,371	8,921	0 - 563,442	55	D	D	21
Computer systems design and related services[e]	54150	86,084	76,243	80,239	153,776 i	104,306	90,742	104,143	78,373	73,013	70,600	96,552	86,379	0 - 225,490	79,708	91,892	88,470 i	45,671
Management, scientific, and technical consulting services	54160	18,909	23,315	14,838	24,421	27,236	22,327	8,247	16,452	7,535	6,959	19,754	7,997 i	5,267	6,184	17,824	D	19,950
Research and development services in the social sciences and humanities	54172	NA	2	2	7	D	4	22	D	7	5	7	89	13	1	6	4	4
Research and development services in biotechnology[c,f]	54173	NA	3,663 i	1,299	1,269	1,547	1,701	1,671	1,581	2,478 i	2,864	3,773	4,160	4,095	6,144	5,063	5,831	3,732
Research and development services in the physical, engineering, and life sciences (except biotechnology)	54174	NA	3,817	2,994	4,352	5,625	4,814	5,253	5,194	7,260	9,736	10,193 i	10,902 i	13,029 i	15,402 i	14,966 i	14,991 i	14,528
Research and development services in nanotechnology	54175	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	2	2	171	642
Advertising and related services	54180	D	D	1,656	D	25,263	D	D	D	0 - 163,991	54,756	67,297	0 - 585,012	0 - 563,442	D	D	D	D
Professional, scientific, and technical services (not listed elsewhere)	54190	3,456	2,025	2,186	4,901	9,285	8,417	8,004	2,749	0 - 163,991	2,049	4,823	3,988 i	2,695	3,112	4,244	3,664	7,867
Management of companies and enterprises	55100	76	23	266	5,428	1,304	887	716	D	622	1,592	1,726	40	206 i	104 i	21	131	76
Administrative and support services	56100	NA	6,821	19,476	10,588	11,810	17,023	29,314	26,456	28,098	22,603	28,430	27,044	8,212	9,268	13,197	14,649	43,921
Waste management and remediation services	56200	NA	D	201	959	484	595	614	1,827	1,910	1,402	4,360	281	0 - 563,442	608	3	86	681
Offices of physicians	62110	0	* i	0	0	0	0	0	0	0	1	0	0	0	0	22	*	67
Medical and diagnostic laboratories	62150	1,037	857	1,662	1,269	1,383	887	895	1,488 i	1,925 i	1,275	4,320 i	4,132 i	4,245 i	5,676 i	7,991 i	5,402 i	4,795 i
Other ambulatory health care services (ambulance, dental, home health care)	62199	NA	D	154	D	27	0	0	0	0	455	177	193	3,636	D	543	D	618
Hospitals and nursing care facilities	62200	NA	0	D	D	D	D	0	131	287	0	1 i	0	0	0	0	0	100

Table 63. Foreign sales for companies located in the United States that performed or funded R&D, by business activity: 2008–24

(Millions of U.S. dollars)

Business activity[a]	Business code[b]	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Social assistance services	62400	D	D	0	0	0	29	2	0	0	0	0	0	0	0	0	0	0
Arts, entertainment, and recreation	71000	NA	3,074	3,169	3,297	3,096	D	D	2,540	0 - 163,991	5,595	8,134	5,730	0 - 563,442	1,879	3,830	D	D
Accommodation and food services	72000	NA	9,891	32,256	11,945	34,612	49,347	14,564	32,394	34,445	4,924	20,830	28,004	17,863	22,216	5,204	5,314	6,169
Other services (not listed elsewhere)	81000	NA	5,946	7,784	10,816	12,789	21,571	17,416	19,528	64,593	0 - 408,784	0 - 242,771	18,846 i	20,963	D	D	87,632 i	37,996
Less: intersegment eliminations	–	161,647	127,244	101,536	164,044	172,709	165,075	156,556	113,257	97,136	64,324	102,225	65,462	62,651	95,382	85,357	200,004	81,635
Undistributed[g]	–	335,723	452,404	103,862	147,756 i	58,997 i	D	2,657	D	0	0	0	0	0	0	0	0	0

* = 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; NA = not available.

[a] Business activity data are tabulated independent of the industry classification of the company. Companies were asked to report their sales and R&D activity in one or more business activity codes.
[b] Business codes and descriptions are based on 2017 North American Industry Classification System (NAICS) industry definitions.
[c] Estimates for this business code may not be comparable to those from prior years due to the introduction of a related business code for survey year 2013 and beyond: 32543, Biotechnology-based pharmaceutical and biological products (except diagnostic substances).
[d] Estimates for this business code may not be comparable to those from prior years due to the introduction of a related business code for survey year 2014 and beyond: 33333, Digital cameras manufacturing.
[e] Estimates for this business code may not be comparable to those from prior years due to the introduction of a related business code for survey year 2013 and beyond: 51801, Cloud computing applications and Internet-based software services.
[f] Estimates for this business code may not be comparable to those from prior years due to the introduction of a related business code for survey year 2020 and beyond: 54175, Research and development services in nanotechnology.
[g] Undistributed includes data reported that were not allocated to a business activity.

Note(s):
Detail may not add to total because of rounding. 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. For survey year 2008, industry classification was based on the 2002 NAICS. For survey years 2009–13, industry classification was based on the 2007 NAICS. For survey years 2014–19, industry classification was based on the 2012 NAICS. For survey years beginning in 2020, classification was based on the 2017 NAICS. Most statistics for years prior to 2024 have been revised since original publication. Revised statistics include adjustments based on information obtained after the original statistics were prepared. 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.