

Table SRD-2

Business R&D performed in the United States, by industry: 2010–19

(Millions of dollars and percent)

Industry and NAICS code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Millions of dollars										
All industries, 21–33, 42–81	278,977	294,093	302,250	322,528	340,728	355,821	374,685	400,100	441,036	492,956
Manufacturing industries, 31–33	196,712	201,361	208,415	221,476	232,815	236,132	250,553	257,227	274,075	285,674
Chemicals, 325	58,038	55,324	57,225	61,664	66,301	68,196	73,575	74,977	84,137	97,063
Pharmaceuticals and medicines, 3254	49,415	45,949	48,146	52,426	56,612	58,675	64,628	66,202	74,592	87,619
Other 325	8,623	9,375	9,079	9,238	9,689	9,521	8,947	8,775	9,545	9,444
Machinery, 333	9,955	14,709	14,254	12,650	12,128	13,426	12,585	13,197	14,799	15,184
Computer and electronic products, 334	59,875	62,704	65,068	67,205	73,891	72,110	77,385	78,575	83,697	86,729
Electrical equipment, appliance, and components, 335	3,321	3,595	3,087	4,136	4,365	4,335	4,771	4,291	4,487	5,263
Transportation equipment, 336	42,913	40,880	42,305	45,972	46,746	49,274	51,275	53,292	52,629	45,375
Motor vehicles, bodies, trailers, and parts, 3361–63	D	D	D	16,729	18,404	19,078	22,042	23,881	25,586	24,117
Aerospace products and parts, 3364	29,854	26,054	24,817	27,114	26,181	27,464	26,645	26,383	24,291	18,358
Other 336	D	D	D	2,129	2,161	2,732	2,588	3,028	2,752	2,900
Manufacturing nec, other 31–33	22,610	24,149	26,476	29,849	29,384	28,791	30,962	32,895	34,326	36,060
Nonmanufacturing industries, 21–23, 42–81	82,265	92,731	93,835	101,052	107,913	119,690	124,132	142,874	166,961	207,283
Information, 51	36,853	41,865	46,805	57,207	63,773	65,513	70,748	80,252	94,349	110,227
Software publishers, 5112	26,982	27,965	28,745	35,333	36,052	33,248	33,495	34,264	32,639	32,958
Other 51	9,871	13,900	18,060	21,874	27,721	32,265	37,253	45,988	61,710	77,269
Finance and insurance, 52	2,109	3,457	3,519	4,308	4,122	5,366	7,331	7,616	7,471	8,917
Professional, scientific, and technical services, 54	33,690	38,219	34,309	31,017	30,975	38,626	37,595	36,922	44,860	53,233
Computer systems design and related services, 5415	11,050	13,259	11,251	9,268	11,019	14,333	15,747	13,327	15,923	21,046
Scientific research and development services, 5417	12,140	15,301	16,544	14,201	12,807	16,329	14,842	17,321	20,185	21,669
Other 54	10,500	9,659	6,514	7,548	7,149	7,964	7,006	6,274	8,752	10,518
Nonmanufacturing nec, other 21–23, 42–81	9,613	9,190	9,202	8,520	9,043	10,185	8,458	18,084	20,281	34,906
Percent change from preceding period										
All industries, 21–33, 42–81		5.4	2.8	6.7	5.6	4.4	5.3	6.8	10.2	11.8
Manufacturing industries, 31–33		2.4	3.5	6.3	5.1	1.4	6.1	2.7	6.5	4.2
Chemicals, 325		-4.7	3.4	7.8	7.5	2.9	7.9	1.9	12.2	15.4
Pharmaceuticals and medicines, 3254		-7.0	4.8	8.9	8.0	3.6	10.1	2.4	12.7	17.5
Other 325		8.7	-3.2	1.8	4.9	-1.7	-6.0	-1.9	8.8	-1.1
Machinery, 333		47.8	-3.1	-11.3	-4.1	10.7	-6.3	4.9	12.1	2.6
Computer and electronic products, 334		4.7	3.8	3.3	9.9	-2.4	7.3	1.5	6.5	3.6
Electrical equipment, appliance, and components, 335		8.3	-14.1	34.0	5.5	-0.7	10.1	-10.1	4.6	17.3
Transportation equipment, 336		-4.7	3.5	8.7	1.7	5.4	4.1	3.9	-1.2	-13.8
Motor vehicles, bodies, trailers, and parts, 3361–63		D	D	D	10.0	3.7	15.5	8.3	7.1	-5.7
Aerospace products and parts, 3364		-12.7	-4.7	9.3	-3.4	4.9	-3.0	-1.0	-7.9	-24.4

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Other 336		D	D	D	1.5	26.4	-5.3	17.0	-9.1	5.4
Manufacturing nec, other 31–33		6.8	9.6	12.7	-1.6	-2.0	7.5	6.2	4.4	5.1
Nonmanufacturing industries, 21–23, 42–81		12.7	1.2	7.7	6.8	10.9	3.7	15.1	16.9	24.2
Information, 51		13.6	11.8	22.2	11.5	2.7	8.0	13.4	17.6	16.8
Software publishers, 5112		3.6	2.8	22.9	2.0	-7.8	0.7	2.3	-4.7	1.0
Other 51		40.8	29.9	21.1	26.7	16.4	15.5	23.4	34.2	25.2
Finance and insurance, 52		63.9	1.8	22.4	-4.3	30.2	36.6	3.9	-1.9	19.4
Professional, scientific, and technical services, 54		13.4	-10.2	-9.6	-0.1	24.7	-2.7	-1.8	21.5	18.7
Computer systems design and related services, 5415		20.0	-15.1	-17.6	18.9	30.1	9.9	-15.4	19.5	32.2
Scientific research and development services, 5417		26.0	8.1	-14.2	-9.8	27.5	-9.1	16.7	16.5	7.4
Other 54		-8.0	-32.6	15.9	-5.3	11.4	-12.0	-10.4	39.5	20.2
Nonmanufacturing nec, other 21–23, 42–81		-4.4	0.1	-7.4	6.1	12.6	-17.0	113.8	12.1	72.1
Industry share of business R&D (%)										
All industries, 21–33, 42–81	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manufacturing industries, 31–33	70.5	68.5	69.0	68.7	68.3	66.4	66.9	64.3	62.1	58.0
Chemicals, 325	20.8	18.8	18.9	19.1	19.5	19.2	19.6	18.7	19.1	19.7
Pharmaceuticals and medicines, 3254	17.7	15.6	15.9	16.3	16.6	16.5	17.2	16.5	16.9	17.8
Other 325	3.1	3.2	3.0	2.9	2.8	2.7	2.4	2.2	2.2	1.9
Machinery, 333	3.6	5.0	4.7	3.9	3.6	3.8	3.4	3.3	3.4	3.1
Computer and electronic products, 334	21.5	21.3	21.5	20.8	21.7	20.3	20.7	19.6	19.0	17.6
Electrical equipment, appliance, and components, 335	1.2	1.2	1.0	1.3	1.3	1.2	1.3	1.1	1.0	1.1
Transportation equipment, 336	15.4	13.9	14.0	14.3	13.7	13.8	13.7	13.3	11.9	9.2
Motor vehicles, bodies, trailers, and parts, 3361–63	D	D	D	5.2	5.4	5.4	5.9	6.0	5.8	4.9
Aerospace products and parts, 3364	10.7	8.9	8.2	8.4	7.7	7.7	7.1	6.6	5.5	3.7
Other 336	D	D	D	0.7	0.6	0.8	0.7	0.8	0.6	0.6
Manufacturing nec, other 31–33	8.1	8.2	8.8	9.3	8.6	8.1	8.3	8.2	7.8	7.3
Nonmanufacturing industries, 21–23, 42–81	29.5	31.5	31.0	31.3	31.7	33.6	33.1	35.7	37.9	42.0
Information, 51	13.2	14.2	15.5	17.7	18.7	18.4	18.9	20.1	21.4	22.4
Software publishers, 5112	9.7	9.5	9.5	11.0	10.6	9.3	8.9	8.6	7.4	6.7
Other 51	3.5	4.7	6.0	6.8	8.1	9.1	9.9	11.5	14.0	15.7
Finance and insurance, 52	0.8	1.2	1.2	1.3	1.2	1.5	2.0	1.9	1.7	1.8
Professional, scientific, and technical services, 54	12.1	13.0	11.4	9.6	9.1	10.9	10.0	9.2	10.2	10.8
Computer systems design and related services, 5415	4.0	4.5	3.7	2.9	3.2	4.0	4.2	3.3	3.6	4.3
Scientific research and development services, 5417	4.4	5.2	5.5	4.4	3.8	4.6	4.0	4.3	4.6	4.4
Other 54	3.8	3.3	2.2	2.3	2.1	2.2	1.9	1.6	2.0	2.1

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Industry and NAICS code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nonmanufacturing nec, other 21–23, 42–81	3.4	3.1	3.0	2.6	2.7	2.9	2.3	4.5	4.6	7.1

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.

NAICS = North American Industry Classification System; nec = not elsewhere classified.

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. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. For survey years 2010–13, industry classification was based on the 2007 NAICS, whereas for survey years 2014–18, industry classification was based on the 2012 NAICS. The 2010–16 data come from the Business R&D and Innovation Survey and do not include companies with fewer than 5 domestic employees. Data for 2017–18 come from the Business Research and Development Survey and do not include companies with fewer than 10 domestic employees. Data for 2019 come from the Business Enterprise Research and Development Survey and also do not include companies with fewer than 10 domestic employees.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business R&D and Innovation Survey (BRDIS), Business Research and Development Survey (BRDS), and Business Enterprise Research and Development Survey (BERD).

Science and Engineering Indicators