

Table RD-9

Funds spent for business R&D performed in the United States, by source of funds and selected industry: 2019

(Millions of dollars and percent share)

Industry and NAICS code	All R&D ^a	Paid for by the company ^b	Paid for by others				
			Total	Federal	Companies		All other organizations ^d
					Domestic	Foreign ^c	
Millions of dollars							
All industries, 21–33, 42–81	492,956	428,968	63,989	21,941	21,461	19,554	1,033
Manufacturing industries, 31–33	285,674	248,109	37,564	16,023	5,470	15,749	322
Chemicals, 325	97,063	87,288	9,775	289	1,967	7,459	60
Pharmaceuticals and medicines, 3254	87,619	78,652	8,966	269	1,938	6,707	52
Other 325	9,444	8,636	809	20	29	752	8
Machinery, 333	15,184	13,930	1,254	193	371	689	1
Computer and electronic products, 334	86,729	75,570	11,159	5,802	1,679	3,604	74
Electrical equipment, appliances, and components, 335	5,263	4,886	377	27	30	317	3
Transportation equipment, 336	45,375	31,505	13,870	9,652	1,031	3,020	167
Motor vehicles, trailers, and parts, 3361–63	24,117	20,883	3,233	38 - 481	0 - 374	2,754	D
Aerospace products and parts, 3364	18,358	8,900	9,458	8,454	658	176 - 257	D
Other 336	2,900	1,722	1,179	D	D	D	D
Manufacturing nec, other 31–33	36,060	34,930	1,129	60	392	660	17
Nonmanufacturing industries, 21–23, 42–81	207,283	180,858	26,425	5,918	15,991	3,805	711
Information, 51	110,227	109,062	1,165	185	81	860	39
Software publishers, 5112	32,958	32,386	572	57	4	476	35
Other 51	77,269	76,676	593	128	77	384	4
Finance and insurance, 52	8,917	8,890	28	0	28	0	0
Professional, scientific, and technical services, 54	53,233	29,131	24,103	5,685	15,076	2,674	668
Computer systems design and related services, 5415	21,046	18,395	2,651	454	489	1,503	205
Scientific R&D services, 5417	21,669	3,265	18,403	3,343	13,741	1,002	317
Other 54	10,518	7,471	3,049	1,888	846	169	146
Nonmanufacturing nec, other 21–23, 42–81	34,906	33,775	1,129	48	806	271	4
Percent							
All industries, 21–33, 42–81	100.0	87.0	13.0	4.5	4.4	4.0	0.2
Manufacturing industries, 31–33	100.0	86.9	13.1	5.6	1.9	5.5	0.1
Chemicals, 325	100.0	89.9	10.1	0.3	2.0	7.7	0.1
Pharmaceuticals and medicines, 3254	100.0	89.8	10.2	0.3	2.2	7.7	0.1
Other 325	100.0	91.4	8.6	0.2	0.3	8.0	0.1
Machinery, 333	100.0	91.7	8.3	1.3	2.4	4.5	0.0
Computer and electronic products, 334	100.0	87.1	12.9	6.7	1.9	4.2	0.1
Electrical equipment, appliances, and components, 335	100.0	92.8	7.2	0.5	0.6	6.0	0.1
Transportation equipment, 336	100.0	69.4	30.6	21.3	2.3	6.7	0.4
Motor vehicles, trailers, and parts, 3361–63	100.0	86.6	13.4	0.2 - 2.0	0.0 - 1.6	11.4	D
Aerospace products and parts, 3364	100.0	48.5	51.5	46.1	3.6	1.0 - 1.4	D
Other 336	100.0	59.4	40.7	D	D	D	D
Manufacturing nec, other 31–33	100.0	96.9	3.1	0.2	1.1	1.8	0.0
Nonmanufacturing industries, 21–23, 42–81	100.0	87.3	12.7	2.9	7.7	1.8	0.3
Information, 51	100.0	98.9	1.1	0.2	0.1	0.8	0.0
Software publishers, 5112	100.0	98.3	1.7	0.2	0.0	1.4	0.1
Other 51	100.0	99.2	0.8	0.2	0.1	0.5	0.0
Finance and insurance, 52	100.0	99.7	0.3	0.0	0.3	0.0	0.0

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			Total	Federal	Companies		All other organizations ^d
					Domestic	Foreign ^c	
Professional, scientific, and technical services, 54	100.0	54.7	45.3	10.7	28.3	5.0	1.3
Computer systems design and related services, 5415	100.0	87.4	12.6	2.2	2.3	7.1	1.0
Scientific R&D services, 5417	100.0	15.1	84.9	15.4	63.4	4.6	1.5
Other 54	100.0	71.0	29.0	18.0	8.0	1.6	1.4
Nonmanufacturing nec, other 21–23, 42–81	100.0	96.8	3.2	0.1	2.3	0.8	0.0

D = suppressed to avoid disclosure of confidential information; 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.

^a All R&D is the cost of R&D paid for and performed by the respondent company and paid for by others outside of the company and performed by the respondent company.

^b Includes foreign subsidiaries of U.S. companies (\$27.1 billion).

^c Includes foreign parent companies of U.S. subsidiaries (\$17.6 billion) and unaffiliated companies (\$2.0 billion). Excludes funds from foreign subsidiaries to U.S. companies paid for through intercompany transactions (\$27.1 billion).

^d Includes U.S. state government agencies and laboratories (< \$0.2 billion); U.S. universities, colleges, and academic researchers (\$0.05 billion); and all other organizations located inside (< \$0.8 billion) and outside the United States (< \$0.05 billion).

Note(s):

Detail may not add to total because of rounding. Beginning in survey year 2018, companies that performed or funded less than \$50,000 of R&D were excluded from tabulation. These companies in aggregate represented a very small share of total R&D expenditures in prior years. Had the companies under this threshold been included in the 2018 estimates, they would have contributed approximately \$90 million to overall R&D expenditures. Industry classification was 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. Excludes data for federally funded research and development centers. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies. The Business Enterprise Research and Development Survey includes only companies with 10 or more domestic employees.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Enterprise Research and Development Survey, 2019.

Science and Engineering Indicators