

TABLE 12
Domestic sales and domestic R&D performed by the company as a percentage of domestic sales, by selected industry and company size, for companies with 1–9 employees: 2022

(Thousands of U.S. dollars and percent)

Industry	NAICS code	All companies		1–4 employees		5–9 employees	
		Total sales (\$thousands)	R&D as percentage of sales	Total sales (\$thousands)	R&D as percentage of sales	Total sales (\$thousands)	R&D as percentage of sales
All selected industries	31–33, 42, 51, 5413, 5415, 5417	13,457,203	42	6,158,829	41	7,298,374	44
Manufacturing industries	31–33	1,778,853	39	669,257	33	1,109,595	42
Food, beverage, and tobacco products	311–12	43,398	r 40	8,985	r 77	34,413	r 31
Textile, apparel, and leather products	313–16	1,262	r 735	1,262	r 100	0	0
Wood products	321	0	0	0	0	0	0
Paper	322	1,033	r 87	0	0	1,033	r 87
Printing and related support activities	323	0	0	0	0	0	0
Petroleum and coal products	324	254	63	254	63	0	0
Chemicals	325	254,888	66	88,378	81	166,509	58
Pharmaceuticals and medicines	3254	101,394	124	21,279	r 244	80,116	r 92
Chemicals, excluding pharmaceuticals	other 325	153,493	28	67,099	30	86,394	r 27
Plastics and rubber products	326	160,154	r 9	136,703	r 5	23,451	r 35
Nonmetallic mineral products	327	7,008	r 51	182	101	6,827	r 50
Primary metals	331	7,572	r 42	5,433	r 41	2,139	45
Fabricated metal products	332	60,271	r 74	32,746	r 31	27,525	r 127
Machinery	333	97,566	r 45	66,158	r 25	31,409	r 89
Computer and electronic products	334	736,513	23	255,560	24	480,953	23
Semiconductor and other electronic components	3344	161,473	r 29	60,794	r 34	100,679	r 25
Navigational, measuring, electromedical, and control instruments	3345	446,621	21	123,512	24	323,109	20
Other computer and electronic products	other 334	128,419	24	71,254	14	57,165	r 36
Electrical equipment, appliances, and components	335	72,558	20	25,428	r 21	47,130	20
Transportation equipment	336	70,317	52	14,955	65	55,362	49
Aerospace products and parts	3364	36,764	54	7,812	r 75	28,952	r 49
Other transportation equipment	other 336	33,553	50	7,143	r 56	26,410	r 49
Furniture and related products	337	1,944	11	0	0	1,944	11
Miscellaneous manufacturing	339	264,117	r 62	33,215	98	230,901	r 57
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	11,678,351	43	5,489,572	42	6,188,779	44
Wholesale trade	42	1,025,414	r 30	485,588	r 31	539,826	r 29
Information	51	1,901,767	34	875,290	31	1,026,477	37
Software publishers	5112	1,265,726	38	542,483	33	723,243	42
Information, excluding software publishers	51 less 5112	636,041	28	332,807	28	303,234	r 27
Architectural, engineering, and related services	5413	1,104,971	35	657,966	26	447,005	48
Computer systems design and related services	5415	5,445,668	26	2,436,868	28	3,008,799	25
Scientific research and development services	5417	2,200,531	102	1,033,859	100	1,166,672	105
Research and development in nanotechnology	541713	146,178	94	61,858	97	84,319	92

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Research and development in biotechnology (except nanobiotechnology)	541714	653,428	155	340,191	142	313,238	168
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	1,360,356	80	616,435	78	743,922	81
Social sciences and humanities research and development	541720	40,569	49	15,376	67	25,193	38

r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding or unavailable NAICS detail for select records beyond the 4-digit industry classification. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2023 Annual Business Survey: Data Year 2022.